Competency Standards for Caribbean Vocational Qualifications (CVQ)

CCLMF21306 Level II in Interior Decorating

Unit Number	Unit Title	Mandatory /Elective	Hours
LMFCOR0011A	Follow safe working policies and practices	Mandatory	20
LMFCOR0021A	Communicate in the work place	Mandatory	30
LMFCOR0031A	Carry out measurement and calculations	Mandatory	20
LMFCOR0041A	Work effectively with others	Mandatory	20
LMFCOR0071A	Read and interpret work documents	Mandatory	30
LMFFMK0212A	Prepare and apply furniture decorative finishes	Mandatory	40
LMFFIN0522A	Enhance finishes	Mandatory	20
LMFFIN0532A	Repair and touch up surfaces	Mandatory	40
LMFFIN0542A	Applying graining and decorative finishes	Mandatory	30
LMFUPH0712A	Apply finishing techniques to upholstered furniture	Mandatory	30
LMFPTF0912A	Mount artwork	Mandatory	20
LMFPTF0962A	De-frame artwork	Mandatory	10
LMFPTF0992A	Prepare textile for framing	Mandatory	30
LMFPTF1052A	Design and construct ornamental frames	Mandatory	30
LMFSOF1392A	Machine sew using specific techniques	Mandatory	10
LMFSOF1422A	Calculate fabric quantities for window coverings	Mandatory	15
LMFSOF1472A	Fit and adjust window treatment hardware	Mandatory	15
LMFSOF1492A	Dress windows	Mandatory	10
LMFFCF2042A	Complete simple floor covering installation	Mandatory	40
LMFFCF2273A	Provide advice to customers on resilient floor coverings	Mandatory	10
LMFCOR1353A	Estimate and cost jobs	Mandatory	50
LMFFMK0041A	Assemble furnishing components	Elective	20
LMFFIN0421A	Remove surface coatings	Elective	20
LMFFIN0451A	Apply surface coatings by spray gun	Elective	20
LMFFIN0461A	Apply stains, fillers and bleach	Elective	20
LMFFIN0471A	Apply surface coatings by hand	Elective	20
LMFPTF0871A	Frame a simple art work	Elective	20
LMFIND0062A	Mount wall coverings	Elective	25
LMFFIN0431A	Prepare surface for finishing	Elective	30
LMFFMK0052A	Select and apply hardware	Elective	40
LMFUPH0742A	Cut, sew and fit and/or fill cushions	Elective	30
LMFSOF1402A	Hand sew soft furnishings	Elective	10
LMFSOF1412A	Operate a steam press	Elective	10
LMFSOF1432A	Construct unlined curtains/drapes	Elective	15
LMFSOF1442A	Construct lined curtains/drapes	Elective	15
LMFSOF1452A	Construct padded pelmets	Elective	15
LMFFCF2062A	Remove existing floor coverings	Elective	20

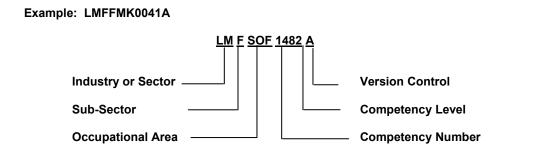
Copyright © **2007** Caribbean Association of National Training Agencies (CANTA) All rights reserved. No part of this document may be reproduced in any form or by any means without the prior permission of the publishers.

Unit Number	Unit Title	Mandatory /Elective	Hours
LMFFCF2102A	Install soft underlays and carpet gripper strips	Elective	20
LMFFCF2112A	Install conventional unjoined carpet floor coverings	Elective	20
LMFFCF2122A	Lay flat resilient flooring	Elective	20
LMFFCF2132A	Install pre-finished and manufactured/engineered timber flooring	Elective	20
LMFFCF2152A	Install carpet tiles	Elective	20
LMFFCF2162A	Install adhesive fixed carpet	Elective	20
LMFFCF2172A	Install joined carpet floor coverings	Elective	20
LMFFCF2182A	Install carpet floor coverings to stairs	Elective	10
LMFFCF2212A	Install resilient tiles	Elective	20
LMFFCF2222A	Install rubber floor coverings	Elective	10
LMFFCF2242A	Install anti-static resilient floor coverings	Elective	15
LMFFCF2252A	Install conductive resilient floor coverings	Elective	15
LMFFCF2262A	Cut and install resilient floor coverings to stairs	Elective	15
LMFWHC0012A	Develop design, prepare and transfer patterns	Elective	50
LMFIND0022A	Apply surface coating by brush/rollers	Elective	30
LMFIND0052A	Mount/install mirrors	Elective	30
LMFPTF1013A	Prepare design requirements for framing	Elective	30
LMFFPM1313A	Construct prototypes and samples	Elective	40
LMFSOF1613A	Advise customers on interior decoration	Elective	20
LMFSOF1633A	Follow patterns to produce soft furnishing accessories	Elective	10
LMFFCF2143A	Inspect sub-floor	Elective	15
LMFFCF2283A	Mix and apply epoxy and seamless floor coverings	Elective	30
LMFFCF2293A	Install parquetry flooring	Elective	40
LMFFCF2303A	Install cork tiles	Elective	30
LMFFCF2363A	Apply finishes to timber, parquetry and cork floors	Elective	20
LMFIND0083A	Adjust and install shower screens	Elective	40
LMFIND00073A	Mix and match paint colours	Elective	15
LMFIND0093A	Decorate glass surfaces	Elective	60
LMFIND0102A	Laminate glass	Elective	15

To be awarded this Caribbean Vocational Qualification (CVQ) all core competency standards must be achieved. Electives achieved with the qualification will be awarded unit statement of competency.

The nominal training hours are a guide for planning the delivery of Training Programmes.

Legend to Code



Key: Man – Mandatory; FMK – Furniture Making; FIN – Furniture Finishing; PTF – Picture Framing; GGL – Glass & Glazing; SBM – Small Business Management; ITI – Information Technology (Information); BSB – Business Service (Business); LMF – Light Manufacturing (Furnishing); HOF – Home and Office Furnishing

LMFCOR0011A:		Follow safe working policies and practices				
Competency Descriptor:			This unit deals with the skills and knowledge required to satisfy safe work practices within the furnishing industry.			
Com	petency Field:	Timb	er Furni	ture Manufacturing		
Ele	MENT OF COMPETEN	CY	PERFO	DRMANCE CRITERIA		
1.	Follow workplace procedu for hazard identification ar risk control		1.1	Hazards in the work area are recognised and reported to designate personnel according to workplace procedures.		
			1.2	Workplace procedures and work instructions for assessing and controlling risks are followed accurately.		
			1.3	Personal protective measures are followed in accordance with workplace procedures.		
			1.4	Safe manual handling methods are followed in accordance with authorised codes of practice and workplace procedures.		
			1.5	Workplace procedure for dealing with accidents, fires and emergencies are followed whenever necessary.		
2.	Maintain personal well-be	ing	2.1	Standards of fitness and well-being are maintained in accordance with workplace medical requirements.		
			2.2	Risks to personal well-being are identified and preventative strategies are adopted.		
			2.3	Situations, which may endanger the individual or other workers are identified and corrected or reported.		
			2.4	Organisation's policy on smoking, alcohol and drug use is identified, clarified and followed.		
3.	Apply emergency respons first aid	e	3.1	Emergency response first aid is administered in accordance with authorised procedures.		
			3.2	Details of first aid administered are reported in accordance with enterprise and/or workplace procedures.		

- 4. Contribute to the workplace 4.1 management of occupational health and safety
- Workplace incident and injury statistics are understood.
- 4.2 Incidents and injuries are reported to designated personnel in accordance with workplace procedures.
- 4.3 Contribution to and participation in occupational health and safety management is made in accordance with workplace procedures and the scope of responsibilities and competencies.

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment.

The following variables may be present for this particular unit:

Hazardous situations:

- risks associated with tools and equipment
- moving parts and guarding systems
- lighting
- electricity and water
- toxic and hazardous substances
- packaging material or containers
- inflammable materials and fire hazards
- lifting practices
- spillage
- waste and debris

Relevant information:

- OH&S regulations and of practice, environmental legislation and practice relating to hazards in the workplace
- obligations under relevant safety and health legislation
- provisions relating to roles and responsibilities of health and safety representatives and/or Occupational Health and Safety committees
- provisions relating to Occupational Health and Safety issue resolution

Relevant workplace policies and procedures:

- risk management policies and procedures
- first aid procedures
- safe manual handling and lifting procedures
- emergency
- fire and accident procedures
- materials safety procedures
- personal safety procedures
- procedures for the use of personal protective equipment
- use of motor vehicles
- issue resolution procedures
- job procedures and work instructions

Hazard identification and risk control:

- checking equipment or the work area before work commences and during work
- identifying hazards
- assessing risks
- treating (including avoiding) risks
- workplace inspections
- housekeeping

Participative arrangements:

- formal and informal meetings which include coverage of safety and health
- safety committees (by whatever titles)
- other committees, for example, consultative, planning and purchasing
- health and safety representatives
- suggestions, requests, reports and concerns put forward by employees to management (verbal or written)

Emergency procedure may include that related to:

- sudden illness
- accidents
- fire or workplace evacuation involving staff or customers

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

(1) Critical Aspects of Evidence

- Accurately follow workplace procedures relevant to assessing, reporting and dealing with risks in the workplace.
- Identify and respond to threats to personal well-being.
- Apply emergency response first aid.
- Operate workplace fire fighting equipment
- Accurately report incidents (including near-misses, and accidents)

(2) Pre-requisite Relationship of Units

Pre-requisite for this unit is:

• Nil

Designated personnel may include:

- supervisors
- managers
- team leaders
- specified Occupational Health and Safety personnel
- other persons authorised or nominated by the enterprise or industry to perform, approve, inspect and direct specified work

(3) Underpinning Knowledge and Skills

<u>Knowledge</u> Knowledge of:

- obligations of all workplace parties under legislation, regulations and codes of practice
- the implications of workplace safety on efficiency, morale and customer relations
- basic risk management and control processes
- Occupational Health and Safety regulations/requirements, equipment, material and personal safety requirements.
- the purpose and use of safety Standards
- safe manual handling theory and practice
- the selection and applications of workplace fire fighting equipment
- material safety management systems, dangerous goods and hazardous chemicals handling processes
- workplace reporting procedures

Skills The ability to:

- collect, organise and analyse information related to workplace health and safety systems and procedures and the application of these to work situations
- use first aid skills to the emergency response level
- communicate ideas and information on workplace safety issues including the recording and reporting of incidents/accidents, and the framing of suggestions for improvements
- plan and organise activities including the inspection of their workplace, the safe layout of their work materials and the planning of their own safe work sequences
- work with others and in a team to the level which recognises dependencies and uses co-operative approaches to achieve workplace safety
- use mathematical ideas and techniques to correctly complete measurements and calculations associated with risk analysis, safety distances and work planning
- use problem solving skills to conduct basic risk analysis and control activities aimed at self-protection and system improvements
- use the workplace technology related to the reporting, recording and responding to safety threats and emergencies

(4) **Resource Implications**

- relevant environmental and health and safety legislation, regulations and codes of practice
- organisation's health and safety policies and procedures
- personal protective equipment
- relevant work areas for identification of hazards and control measures

(5) Method of Assessment

To ensure that the contingency management component (ability to deal with irregularities and breakdowns) of competency is adequately assessed, evidence needs to be gathered across a range of workplace operations and circumstances that the individual would be expected to deal with in the workplace. This could be either in an actual workplace or in a simulation of realistic workplace conditions.

When assessing entry-level workers, assessment techniques that allow collection of evidence from relevant workplace experience should be used.

Techniques for assessment could include:

- observation
- simulation
- case studies
- interviews
- written tests
- workplace projects

(6) Context of Assessment

This unit should be assessed by a combination of workplace and realistic workplace simulations and off-the-job assessment. The context of assessment should ensure that evidence relating to the contingency management components (ability to deal with irregularities and breakdowns) of the competency can be collected.

Evidence must include observation in the workplace as well as off-the-job techniques such as interviews and simulations.

Conditions for simulations should:

- accurately simulate the range of activities and circumstances that the individual would be expected to deal with in the workplace
- allow for discussion
- ensure that the relevant documents and resources are available
- in particular, evidence of ability to follow emergency procedures and contribute to participative arrangements may be gathered through simulations
- the assessor should have recognised expertise in managing Occupational Health and Safety in the industry or work in an assessment team with such a person

CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency				
Level 1.	Level 2.	Level 3.		
 Carries out established processes Makes judgement of quality using given criteria 	 Manages process Selects the criteria for the evaluation process 	 Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation 		

Collect, analyse and organise information	Level 1	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 1	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 1	
Use technology	Level 1	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

ELEMENT OF COMPETENCY

LMFCOR0021A: Communicate in the work place

Competency Descriptor:	This unit deals the skills and knowledge required to communicate
	in a furnishing industry workplace. It covers the activities of
	gathering, conveying and receiving information together with
	completing routine written correspondence.

Competency Field: Timber Furniture Manufacturing

	EVIENT OF COMILETENCI	I LAIV	JAMANCE CRITERIA
1.	Gather, convey and receive information and ideas	1.1	Information to achieve work responsibilities is collected from appropriate sources.
		1.2	The methods/equipment used to communicate ideas and information is appropriate to the audience.
		1.3	Effective listening and speaking skills are used in oral communication.
		1.4	Input from internal and external sources is sought, and used to develop and refine new ideas and approaches.
		1.5	Instructions or enquiries are responded to promptly and in accordance with organisational requirements.
2.	Draft routine correspondence	2.1	Written information and ideas are presented in clear and concise language and recipient understands the intended meaning of correspondence.
		2.2	Correspondence is drafted and presented within designated timelines.
		2.3	Presentation of written information meets organisational standards of style, format and accuracy.

PERFORMANCE CRITERIA

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment.

The following variables may be present for this particular unit:

The furnishing industry will require communication to be carried out in workplaces involved in the manufacture, repair or maintenance of:

- domestic furniture
- commercial furniture
- furniture components

Communication may therefore be under testing noise and respiratory safety conditions

Communication equipment may include but is not limited to:

- network systems
- telephones
- keyboard equipment including mouse, touchpad, keyboard
- pens
- pencils
- information technology components including hardware, software and communication packages
- facsimile machines

Written information may include but is not limited to:

- handwritten and printed materials
- e-mail
- internal memos
- briefing notes
- facsimiles
- general correspondence
- telephone messages

Oral communication may include but is not limited to:

- answering telephone calls
- requests from colleagues
- use of voice mail
- informal discussions
- answering enquiries from clients

Organisational requirements may be included in:

- quality assurance and/or procedures manual
- goals, objectives, plans, systems and processes
- business and performance plans
- legal and organisation policy/guidelines and requirements
- access and equity principles and practice
- ethical standards
- OH&S policies, procedures and programmes
- quality and continuous improvement processes and standards
- defined resource parameters

Standards may include:

- standards set by work group
- organisational policies and procedures
- specified work standards
- legislation

Correspondence may include but is not limited to:

- memoranda
- messages
- proformas
- e-mails
- standard/form letters

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

In order to achieve consistency of performance, evidence should be collected over a set period of time, which is sufficient to include dealings with an appropriate range and variety of situations.

(1) Critical Aspects of Evidence

- communication methods used are appropriate to the audience
- communications are in the language of the industry/sector
- messages and written communication are clear, concise and correct
- requests for information are responded to promptly
- information is given to clients in a clear and concise format
- correspondence produced is relevant to request

(2) **Pre-requisite Relationship of Units**

Pre-requisite for this unit is:

• Nil

(3) Underpinning Knowledge and Skills

Knowledge of:

- the relevant requirements from all agencies of government that affect furnishing operations, especially in regard to OH&S and environmental issues, equal opportunity, industrial relations and anti-discrimination
- the industry/sector terminology and language
- the organisation's policies, plans and procedures, especially style guide
- attention to standard turnaround times
- spelling, grammar and punctuation
- principles of effective communication in relation to listening, questioning and non-verbal communication

Skills The ability to:

- use literacy skills to identify work requirements and understand and process basic, relevant workplace documentation
- use communication skills to request advice, receive feedback and work with a team
- use planning skills to organise work priorities and arrangements
- apply problem solving skills to solve routine problems
- use technology skills including the ability to select and use technology appropriate to a task
- use reading skills sufficient to understand basic workplace documentation
- relate to people from a range of social, cultural and ethnic backgrounds and physical and mental abilities

(4) **Resource Implications**

- access to appropriate documentation and resources normally used in the workplace

(5) Method of Assessment

Competence should be assessed through direct questions related to underpinning knowledge and skills.

Competency in this unit may be determined concurrently, based upon project work.

Competency shall be assessed while work is being done under general guidance, checking at various stages of the process and at the completion of the activity, against the performance criteria and specifications.

(6) Context of Assessment

Competency is demonstrated by performance of all stated criteria, including paying particular attention to the critical aspects and the knowledge and skills elaborated in the Evidence Guide, and within the scope as defined by the Range Statement.

Assessment of performance requirements in this unit should be undertaken in an actual workplace or simulated environment.

Assessment should reinforce the integration of the key competencies

CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency				
Level 1.	Level 2.	Level 3.		
 Carries out established processes Makes judgement of quality using given criteria 	 Manages process Selects the criteria for the evaluation process 	 Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation 		

Collect, analyse and organise information	Level 1	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 1	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 1	
Use technology	Level 1	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

LMFCOR0031A: Carry out measurements and calculations

Competency Descriptor:	This unit deals with the skills and knowledge required to accurately
	complete measurements and calculations of materials relevant to the
	work requirements.

Competency Field:	Timber Furniture Manufacturing
-------------------	--------------------------------

ELEMENT OF COMPETENCY		PEI	RFORMANCE CRITERIA
1.	Obtain measurements	1.1	The purpose of obtaining measurements is clarified and confirmed.
		1.2	The most appropriate method of obtaining the measurement is selected and applied.
		1.3	Accurate measurements are obtained, confirmed and recorded.
		1.4	Quality assurance requirements, standards and tolerances associated with the company's operations are recognised and adhered to.
2.	Perform simple calculations	2.1	The purpose of performing the calculations is clarified and confirmed.
		2.2	The method or formula for achieving the required result is selected.
		2.3	Simple calculations involving length, perimeter, mass and volume are carried out.
		2.4	The results are confirmed and recorded.
3.	Estimate approximate quantities	3.1	The types and standard unit packaging of materials are identified from workplace documentation.
		3.2	The dimensions of the job are obtained from workplace documentation/plans.
		3.3	Quantities of materials suitable for the work to be undertaken are calculated, confirmed and recorded.
		3.4	Material costs for simple jobs are estimated to within % specified.

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment.

Work is carried out in accordance with statutory obligations, environmental legislation, relevant health regulations, manual handling procedures and organisation insurance requirements.

The following variables may be present for this particular unit.

This unit applies to simple measurements and calculations applicable to:

- furniture manufacture
- manufacture and installation of cabinets
- processing and installation of glass
- construction and fitting of soft furnishings
- upholstery
- picture framing
- installation of floor coverings
- manufacture of musical instruments

Measurements are:

- to be in metric scale
- cover all dimensions of furnishing
- involve the use of rulers, tape measures,
- and squares
- may involve laser or equivalent technology

Materials include:

 all materials utilised in the production of furniture and furnishings applicable to the sector

Information and procedures:

- workplace procedures relating to the use of tools and equipment
- work instructions, including job sheets, cutting lists, plans, drawings and designs
- workplace procedures relating to reporting and communication
- manufacturers' specifications and operational procedures

Calculations to include:

- area
- perimeter
- volume
- mass
- scales
- ratios (ingredients/elements and triangulation)
- the application of addition, subtraction, multiplication and division processes

OH&S requirements may include:

- relevant statutory requirements
- material safety management systems
- hazardous substances and dangerous goods codes safe operating procedures

Calculations are to be performed both:

- manually
- with the aid of a calculator

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

(1) Critical Aspects of Evidence

- identify the factors relevant to the measurements and calculations
- communicate effectively to enable accurate calculations and measurements
- accurately measure and record particulars for routinely required sector sites and materials
- accurately perform calculations related to routine sector requirements
- estimate quantities and basic costs of job materials

(2) Pre-requisite Relationship of Units

Pre-requisite for this unit is:

• Nil

(3) Underpinning Knowledge and Skills

Knowledge Knowledge of:

- basic analysis of drawings, specifications and job detail
- materials relevant to the furnishing industry
- basic operations in simple geometry and measurement
- the theory and practice of calculations (addition, subtraction, multiplication, division)
- costing processes relative to the sector activities

<u>Skills</u>

The ability to:

- collect, organise and understand information related to work orders, plans and safety procedures
- communicate ideas and information to enable confirmation of work requirements and specifications and the reporting of work outcomes and problems
- plan and organise activities to avoid any back tracking or work flow interruptions
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise work flow
- use mathematical ideas and techniques to correctly complete measurements, calculate area, perimeter, volume, mass, scales and ratios and estimate material requirements
- use pre-checking techniques to anticipate calculation and measurement problems and avoid reworking
- use workplace technology related to calculation and measurement including tools, equipment, calculators and measuring devices

(4) **Resource Implications**

 information on the subjects for measurement and calculation, suitable work area appropriate to the activity, suitable site plans/drawings and/or specifications, and measuring and calculating devices.

(5) Method of Assessment

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts.

Assessment should be by direct observation of tasks and questioning on underpinning knowledge.

Assessment should be conducted over time and may be in conjunction with assessment of other units of competency

(6) Context of Assessment

Assessment may occur on the job or in a workplace simulated facility with relevant process equipment, materials, work instructions and deadlines.

CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency					
Level 1.	Level 2.	Level 3.			
 Carries out established processes Makes judgement of quality using given criteria 	 Manages process Selects the criteria for the evaluation process 	 Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation 			

Collect, analyse and organise information	Level 2	
Communicate ideas and information	Level 2	
Plan and organise activities	Level 1	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 2	
Solve problems	Level 1	
Use technology	Level 1	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

LM	FCOR0041A:	Work e	effec	tively with others
Com	petency Descriptor:	group er	nviron	s with the skills and knowledge required to work in a ment requiring group commitment and co-operation so ther group members.
Com	petency Field:	Timber I	Furnit	ture Manufacturing
Ele	MENT OF COMPETEN	ICY	PER	FORMANCE CRITERIA
1.	Develop effective workpla relationships	се	1.1	Responsibilities and duties are undertaken in a positive manner to promote cooperation and good relationships.
			1.2	Assistance is sought from workgroup members when difficulties arise and these are addressed through discussions.
			1.3	Constructive feedback provided by others in the workgroup is encouraged, acknowledged and acted upon.
			1.4	Differences in personal values and beliefs are respected and their value acknowledged in the development of relationships.
2.	Contribute to workgroup activities		2.1	Support is provided to team members to ensure workgroup goals are met.
			2.2	Constructive contributions to workgroup goals and tasks are made according to organisational requirements.
			2.3	Information relevant to work is shared with workgroup to ensure designated goals are met.
			2.4	Strategies/opportunities for improvement of the workgroup are identified and planned in liaison with workgroup.

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment.

Effective work practices will be required in workplaces involved in the manufacture, repair or maintenance of domestic furniture, commercial furniture and/or furniture components.

The following variables may be present for this particular unit:

Organisational requirements may be included in:

- goals, objectives, plans, systems and processes
- legal and organisation policy/guidelines and requirements
- OH&S policies, procedures and programs
- business and performance plans
- anti-discrimination and related policy
- access and equity principles and practice
- ethical standards
- quality and continuous improvement processes and standards
- defined resource parameters

Workgroup members may include but are not limited to:

- coach/mentor
- supervisor or manager
- peers/work colleagues/team/enterprise
- other members of the organisation

Feedback on performance may include:

- formal/informal performance appraisals
- obtaining feedback from supervisors and colleagues
- obtaining feedback from clients
- personal, reflective behaviour strategies
- routine organisational methods for monitoring service delivery

Strategies/opportunities for improvement may include:

- coaching, mentoring and/or supervision
- formal/informal learning programs
- internal/external training provision
- work experience/exchange/opportunities
- personal study
- career planning/development
- performance appraisals
- workplace skills assessment
- recognition of Prior Learning/initial assessment

Responsibilities and duties may include:

- job description and employment arrangements
- organisation's policy relevant to work role
- team structures
- supervision and accountability requirements including OH&S
- skills, training and competencies
- code of conduct

Providing support to team members may include:

- explaining/clarifying
- helping colleagues
- problem solving
- providing encouragement
- providing feedback to another team member
- undertaking extra tasks if necessary

Information to be shared may include:

- assisting a colleague
- clarifying the organisation's preferred task completion methods
- open communication channels
- encouraging colleagues
- acknowledging satisfactory performance
- workplace hazards, risks and controls
- acknowledging unsatisfactory performance

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement

In order to achieve consistency of performance, evidence should be collected over a set period of time, which is sufficient to include dealings with an appropriate range and variety of situations.

(1) Critical Aspects of Evidence

- applies key aspects of the industry and sector context, practices and language to their role
- is proactive and positive within the group
- provides support to team members to ensure goals are met
- seeks and acts on feedback from clients and colleagues
- accesses learning opportunities to extend own personal work competencies to enhance team goals and outcomes

(2) **Pre-requisite Relationship of Units**

Pre-requisite for this unit is:

• LMFCOR0021A: Communicate in the work place

(3) Underpinning Knowledge and Skills

Knowledge of:

- the industry and sector context including history, evolution, language, current structure, economic importance and probable future trends
- the relevant legislation from all levels of government that affect business operation, especially in regard to OH&S and environmental issues, equal opportunity, industrial relations and antidiscrimination
- why co-operation and good relationships are important
- the organisation's policies, plans and procedures
- how to elicit and interpret feedback
- techniques to develop personal plans and establish priorities
- how to identify and prioritise personal development opportunities and options
- workgroup members' responsibilities and duties
- importance of demonstrating respect and empathy in dealings with colleagues

<u>Skills</u>

The ability to:

- use literacy skills to identify work requirements and understand and process basic, relevant workplace documentation
- use communication skills to request advice, receive feedback and work with a team
- apply planning skills to organise work priorities and arrangements
- use technology skills including the ability to select and use technology appropriate to a task.
- relate to people from a range of social, cultural and ethnic backgrounds and physical and mental abilities

(4) Resource Implications

• the learner and trainer should have access to appropriate documentation and resources normally used in the workplace.

(5) Method of Assessment

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts.

Assessment should be by direct observation of tasks and questioning on underpinning knowledge.

Assessment should be conducted over time and may be in conjunction with assessment of other units of competency.

(6) Context of Assessment

Competency is demonstrated by performance of all stated criteria, including paying particular attention to the critical aspects and the knowledge and skills elaborated in the Evidence Guide, and within the scope as defined by the Range Statement.

Assessment of performance requirements in this unit should be undertaken in an actual workplace or simulated environment.

Assessment should reinforce the integration of the key competencies

CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency					
Level 1.	Level 2.	Level 3.			
 Carries out established processes Makes judgement of quality using given criteria 	 Manages process Selects the criteria for the evaluation process 	 Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation 			

Collect, analyse and organise information	Level 1	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 1	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 1	
Use technology	Level 1	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

LMFCOR0071A: Read and interpret work documents

Competency Descriptor:	This unit deals with the skills and knowledge required to interpret
	work documents including cutting lists, standards, drawings and
	specifications to produce or repair furnishings and to install
	furnishing items.

Competency Field: Timber Furniture Manufacturing

ELF	EMENT OF COMPETENCY	PEF	RFORMANCE CRITERIA
1.	Identify document type and purpose	1.1	Key information is identified, such as title, version, scale, legend and keys.
		1.2	Any relevant explanatory or additional information needed to interpret the document is located.
		1.3	Clarification is sought to confirm the intention of information.
2.	Read and interpret the document	2.1	Information such as symbols, abbreviations, acronyms and technical terms are identified and interpreted in terms of:
			 the work to be completed any statutory requirements the equipment and tools to be used the items to be produced or repaired
		2.2	Document information is compared to component or supplier recommendations for use of the materials and, where appropriate, relevant statutory requirements.
		2.3	Design and style features shown in drawings are identified by industry recognised terms.
3.	Plan own work sequence	3.1	Work sequence, required tools and equipment and tasks to be performed are identified from the documents.
		3.2	Work sequence is planned, identifying stages where checks against specifications must be made.
		3.3	Specifications noted in the work plan are checked for accuracy against the drawings and specifications, and any

errors are rectified.

- 4. Maintain document files
- 4.1 Plans and documents are handled carefully and maintained intact.
- 4.2 Any explanatory documentation, additional information and/or modification information is kept with the work plan and original documentation according to workplace procedures.
- 4.3 All documentation replaced in workplace filing or storage system for retrieval by others as required.

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between school shops and workplaces. It relates to the unit as a whole and facilitates holistic assessment.

Work is to be carried out in accordance with statutory obligations, environmental legislation, relevant health regulations, and organisation insurance requirements.

Work requires individuals to demonstrate some discretion, judgement and problem solving skills in the reading of work documents and the preparation of work plans.

The following variables may be present for this particular unit.

Competency may be determined in workplaces involved in the manufacture and or installation of:

- domestic furniture
- commercial furniture
- kitchen and bathroom cabinets
- furniture components, picture frames
- soft furnishings
- floor covering and finishing
- glass and glazing

Work documents to be considered are to include but may not be limited to:

- standards
- drawings
- cutting lists
- job specifications and architects'/builders' plans or equivalent, and
- manufacturers' specifications and/or operating instructions
- Work documents are to include hard copy and may include computerised versions

OH&S requirements include:

- relevant statutory requirements
- material safety management systems
- hazardous substances and dangerous goods
- safe operating procedures

Information and procedures:

- workplace plans, drawings and specifications applicable to all sectors of the industry
- relevant statutory requirements applicable to the industry sectors
- workplace procedures relating to the preparation of own work plans and the maintenance of work documentation
- suppliers' and manufacturer's technical data and information
- workplace procedures relating to reporting and communication

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

(1) Critical Aspects of Evidence

- recognise and explain the meanings of symbols, technical terms and conventions of specifications and plans
- check accuracy of copied specifications
- maintain condition of documentation
- locate, read and interpret a minimum of 10 selected/specified work documents which must include:
 - statutory requirements relevant to the sector
 - manufacturers' technical instructions and specifications
- real or simulated local work documents including:
- work plans
- material safety data sheets
- relevant building codes, where appropriate
- job procedures
- safe work instructions or equivalent
- work effectively with others
- modify activities to cater for variations in workplace context and environment

(2) Pre-requisite Relationship of Units

Pre-requisites for this unit are:

• Nil

(3) Underpinning Knowledge and Skills

<u>Knowledge</u> Knowledge of:

- different types of work documents used in the furnishing industry, and their function
- conventions and symbols of plans, drawings and specifications
- workplace procedures for maintenance of documentation

<u>Skills</u>

The ability to:

- collect, organise and understand information related to the range of work documents relevant to the sector
- communicate ideas and information to enable confirmation of work requirements and specifications
- plan and organise activities to avoid any back tracking, work flow interruptions or wastage
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise information management
- use mathematical ideas and techniques to correctly interpret the content of work documents
- identify alternative methods of accessing and sources of work information
- use workplace technology related to work documentation, its access and storage

(4) **Resource Implications**

 access to a range of drawings, standards, plans, specifications and cutting lists relevant to the work

(5) Method of Assessment

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts.

Assessment should be by direct observation of tasks and questioning on underpinning knowledge.

Assessment should be conducted over time and generally be in conjunction with assessment of other units of competency.

(6) Context of Assessment

Assessment may occur on the job or in a workplace simulated facility with relevant process, equipment, materials, work instructions and deadlines.

CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency				
Level 1.	Level 2.	Level 3.		
 Carries out established processes Makes judgement of quality using given criteria 	 Manages process Selects the criteria for the evaluation process 	 Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation 		

Collect, analyse and organise information	Level 2	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 2	
Work with others and in team	Level 2	
Use mathematical ideas and techniques	Level 3	
Solve problems	Level 2	
Use technology	Level 2	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

LMFFMK0212A: Prepare and apply furniture decorative finishes

Competency Descriptor:

This unit deals with the skills and knowledge required to prepare, construct and apply veneers and inlays.

Competency Field: Timber Furniture Manufacturing

EL	EMENT OF COMPETENCY	Pei	RFORMANCE CRITERIA
1.	Prepare for work	1.1	Work instructions are used to determine job requirements, including design, quality, materials, equipment, and quantities.
		1.2	Workplace health and safety requirements, including personal protection needs, are observed throughout the work.
		1.3	Construction sequence is planned.
		1.4	Procedures are determined for checking quality at each stage of the process.
		1.5	Suitable work area is selected for the task.
		1.6	Tools and equipment suitable for construction are identified and checked for safe and effective operation.
2.	Layout and prepare materials	2.1	Materials are selected and checked for flaws following work instructions.
		2.2	Materials are laid out to requirements.
		2.3	Suitable joining points are selected.
		2.4	Material is prepared for cutting.
3.	Construct and apply decorative surfaces	3.1	Material is cut to size and required thickness.
		3.2	Materials are laid out in the required design.
		3.3	Machinery is used in accordance with workplace procedures, including use of personal protective equipment.
		3.4	Items are cut to requirements.

Finalise operation and maintain

- 3.5 Joining process is undertaken according to workplace procedures.
- 3.6 Adhesives are applied according to workplace procedures and/or manufacturers' instructions.
- 3.7 Work is checked against required quality standards.
- 3.8 Any non-conformity with the required quality standards is rectified.
- 4.1 Work area is cleaned, hand and/or power tools and equipment are cleaned, maintained and stored in accordance with workplace procedures.
 - 4.2 Machinery is cleaned and left in a safe mode.
 - 4.3 Faulty and/or defective equipment is tagged and reported in accordance with workplace practices.
 - 4.4 Off-cuts and unused materials are collected and stored for reuse or disposal following workplace procedures.
 - 4.5 Waste and scrap materials are dealt with following workplace procedures.

RANGE STATEMENT

equipment

4.

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between school shops and workplaces. It relates to the unit as a whole and facilitates holistic assessment.

Work is to be carried out in accordance with statutory obligations, environmental legislation, relevant health regulations, manual handling procedures and organisation insurance requirements.

Work requires individuals to demonstrate some discretion, judgement and problem solving skills in preparation and application of decorative surfaces.

The following variables may be present for this particular unit.

Decorative surfaces are to include veneers and inlays.

OH&S requirements include:

- relevant statutory requirements
- material safety management systems
- hazardous substances and dangerous goods
- safe operating procedures

Tools and equipment may include, but are not limited to:

- measuring tapes or rulers
- knives
- mallets
- squares
- bevels
- chisels
- planes
- clamps
- portable vacuum presses

Competency may be demonstrated in workplaces involved in the manufacture of:

- domestic furniture
- commercial furniture
- kitchen and bathroom cabinets
- furniture components

Machines may include, but are not limited to:

- band saws
- mitre saws
- panel saws
- sanders
- presses and veneer guillotines
- trimmers

Personal protective equipment to include:

- coverall
- safety boots
- gloves
- dust mask
- safety helmet
- goggles

Materials to be used may include but are not limited to:

- timber
- manufactured board
- veneer
- brass
- other alloys
- adhesives
- perspex
- decorative laminates

Information and procedures

- workplace procedures relating to the use of tools and equipment
- work instructions, including job sheets, cutting lists, plans, drawings and designs
- workplace procedures relating to reporting and communication
- manufacturers' specifications and operational procedures

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

(1) Critical aspects of evidence

Read and interpret cutting lists and job specifications to prepare for work. Apply safe handling requirements for equipment, products and materials, including use of personal protective equipment. Identify materials used in the work process

Follow work instructions, operating procedures and inspection practices to:

- minimise the risk of injury to self or others
- prevent damage and wastage of goods, equipment and products
- maintain required production output and product quality
- Prepare and apply a minimum of three different decorative surfaces to various substrates.
- Work effectively with others.
- Modify activities to cater for variations in workplace contexts and environment.

(2) **Pre-requisite Relationship of units:**

Pre-requisites for this unit are:

- LMFFMK0031A: Use furniture making hand and power tools
- LMFFMK0021A: Operate basic woodworking machines

(3) Underpinning knowledge and skills

Knowledge Knowledge of:

- types, characteristics, uses and limitations of decorative surfaces
- the interpretation of plan representation of furniture design
- the preparation of drawings/set-outs
- identification of hand and/or power tools, materials, equipment, processes and procedures
- workflow in relation to furniture production

<u>Skills</u>

The ability to:

- collect, organise and understand information related to work orders, basic plans and safety procedures
- communicate ideas and information to enable confirmation of work requirements and specifications, co-ordination of work with supervisor, other workers and customers, and the reporting of work outcomes and problems
- plan and organise activities, including the preparation and layout of the work area and the
 obtaining of equipment and materials to avoid any back tracking, workflow interruptions or
 wastage
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise workflow and productivity
- use mathematical ideas and techniques to correctly complete measurements and estimate material requirements
- use pre-checking and inspection techniques to anticipate assembly problems, avoid reworking and avoid wastage
- use the limited workplace technology related to the assembly, including tools, equipment, materials and measuring devices

(4) Resource implications

The following resources should be provided:

- access to plans
- hand and/or power tools
- equipment
- cauls and jigs
- materials
- woodworking machinery
- work area

((5) Method of assessment

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts.

Assessment should be by direct observation of tasks and questioning on underpinning knowledge.

Assessment should be conducted over time and may be in conjunction with assessment of other units of competency.

(6) Context of assessment

Assessment may occur on the job or in a workplace-simulated facility with relevant process equipment, materials, work instructions and deadlines.

CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency					
Level 1.	Leve	l 2.	Level 3.		
 Carries out established processes Makes judgement of quality using given criteria 	 Manages process Selects the criteria for the evaluation process 		 Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation 		
Collect, analyse and organise information		Level 2			
Communicate ideas and infor	mation	Level 1			
Plan and organise activities		Level 2			
Work with others and in team		Level 2			
Use mathematical ideas and techniques		Level 2			
Solve problems		Level 2			
Use technology		Level 1			

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

LM	IFFIN0522A:	Enhance	finishes
Competency Descriptor:			
This unit deals with skills and knowledge required to cut and buff and to apply materials to a coated surface by hand to enhance the finish.Competency Field:Timber Furniture Manufacturing			
ELEMENT OF COMPETENCY		e Per	FORMANCE CRITERIA
1.	Prepare for work	1.1	Workplace information, including materials application, safety information and material safety data sheets, is used to inform work practices.
		1.2	Characteristics of the surface and the required surface finish are identified from work orders or instructions.
		1.3	Processing and application techniques, time and safety requirements are identified and used for work planning.
		1.4	Occupational Health & Safety (OH&S) requirements, including ventilation requirements and personal protection needs, are observed throughout the work.
		1.5	Tools, equipment and accessories are identified and checked for safe and effective operation for the surface-finishing task.
2.1	Prepare for application of materials	2.1	Surfaces are checked for contamination and correct preparation according to workplace procedures and standards.
		2.2	Products with surface or other faults are identified and faults repaired as appropriate.
		2.3	Finishing materials required are identified and prepared for the task.
		2.4	Trial applications of surface materials are made to check equipment operation, materials consistency and specified surface finish.
		2.5	Faults are identified and workplace procedures for rectification are followed.

- Techniques for hand application of materials are identified. 3.1 Apply finishing materials 3.1 3.2 Finishing materials are applied according to job instructions, material manufacturers' specifications and workplace procedures. 3.3 Finished products are inspected and approved for suitability for further processing. 3.4 Products, which do not meet quality specifications are refinished or tagged for further investigation. Clean work area and maintain Equipment used is cleaned and inspected for serviceable 4.1 4.1 condition and stored appropriately. equipment 4.2 Unserviceable equipment is tagged, faults are identified and appropriate personnel are informed. 4.3 Work area is cleaned and returned to approved condition.
 - 4.4 Workplace records are completed.

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment.

Work is carried out in accordance with legislative obligations, environmental legislation, relevant health regulations, manual handling procedures and organisation insurance requirements.

Work requires individuals to demonstrate some discretion, judgement and problem solving skills in the enhancement of finishes.

The following variables may be present for this particular unit.

Surfaces may include but are not limited to:

- solid timber
- manufactured board
- metal

- OH&S requirements include:
- legislation
- building codes
- material safety management systems
- hazardous substances and dangerous goods code
- local safe operating procedures

Personal protective equipment to include:

- coverall
- safety boots
- gloves
- dust mask
- safety helmet

Information and procedures

- workplace procedures relating to the use and operation of tools and equipment.
- work instructions, including job sheets, plans, drawing and designs.
- workplace procedures relating to reporting and communication.
- manufacturers' specifications and operational procedures.

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

(1) Critical Aspects of Evidence

- interpret work order and locate and apply relevant information
- apply safe handling requirements for equipment, products and materials, including use of personal protective equipment
- follow work instructions, operating procedures and inspection practices to:
- minimise the risk of injury to self and others
- prevent damage to goods, equipment and products
- maintain required production output and product quality
- on two occasions, one including a curved surface, enhance existing finishes by
- cutting down
- pulling in, and
- compounding and buffing

(2) **Pre-requisite Relationship of Units**

Pre-requisite for this unit is:

• LMFFIN0401A: Use furniture finishing hand and power tools

(3) Underpinning Knowledge and Skills

Knowledge Knowledge of:

- identification of hand application techniques
- the functions and safety requirements of hand and power tools, particularly in wet working environments
- characteristics of compounds, waxes and oils in terms of toxicity, reactivity, flammability, required viscosity
- the methods to prevent contamination of surfaces during and after finishing
- workflow in relation to the application of finishing material

<u>Skills</u>

The ability to:

- collect, organise and understand information related to coating materials, cleaning materials, work orders and safety procedures
- communicate ideas and information to enable confirmation of work requirements and specifications, co-ordination of work with site supervisor, other workers and customers, and the reporting of work outcomes and problems
- plan and organise activities, including the preparation and layout of the worksite and the obtaining of coating equipment and materials to avoid any back tracking, workflow interruptions or wastage
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise workflow and productivity
- use mathematical ideas and techniques to correctly complete measurements, calculate area and estimate paint and other material requirements
- use pre-checking and inspection techniques to anticipate coating problems, avoid reworking and avoid wastage
- use the limited workplace technology related to coating, including tools, equipment and measuring devices

(4) Resource Implications

• hand finishing application equipment, compounds, waxes and oils and finishes requiring enhancement

(5) Method of Assessment

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts.

Assessment should be by direct observation of tasks and questioning on underpinning knowledge.

Assessment should be conducted over time may be in conjunction with assessment of other relevant units of competency.

(6) Context of assessment

Assessment may occur on the job or in a workplace simulated facility with relevant process equipment, materials, work instructions and deadlines.

CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency						
Level 1.	Level 2.	Level 3.				
 Carries out established processes Makes judgement of quality using given criteria 	 Manages process Selects the criteria for the evaluation process 	 Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation 				

Collect, analyse and organise information	Level 1	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 1	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level -	
Solve problems	Level 1	
Use technology	Level 1	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

LMFFIN0532A: Repair and touch up surfaces

Competency Descriptor:

This unit deals with the skills and knowledge required to apply techniques to repair and touch up damaged furniture surfaces.

Competency Field: Timber Furniture Manufacture

ELEMENT OF COMPETENCY		Pei	RFORMANCE CRITERIA
1.	Prepare for work	1.1	Workplace information, including materials application and safety information, material safety data sheets, is used to inform work practices.
		1.2	Characteristics of the surface and the required surface coating are identified from work orders or instructions.
		1.3	Processing and application techniques, time and safety requirements are identified and used for work planning.
		1.4	Processing and application techniques, time and safety requirements are identified and used for work planning.
		1.5	Tools, equipment and accessories are selected and checked for safe and effective operation for the surface coating task.
2.	Repair surfaces	2.1	Surfaces are checked for contamination and correct preparation according to workplace procedures and standards.
		2.2	Products with surface or other faults are identified and assessed.
		2.3	Materials required for repair are selected and prepared.
		2.4	Repairs are completed to manufacturers' standards and/or industry practices.
3.	Prepare for application of materials	3.1	Techniques for hand application of materials are identified and selected.
		3.2	Coating materials required are identified and prepared for the surface coating task.
		3.3	Trial applications of surface materials are made to check equipment operation, materials consistency and specified surface finish.

Clean work area and maintain

- 3.4 Faults are identified and workplace procedures for rectification are followed.
- Apply surface coating
 4.1 Surface coatings are applied according to job instructions, material manufacturers' specifications and workplace procedures.
 - 4.2 Coated products are inspected and approved for suitability for further processing.
 - 4.3 Products, which do not meet quality specifications are recoated or tagged for further investigation.
 - 5.1 Equipment used is cleaned and inspected for serviceable condition and stored appropriately.
 - 5.2 Unserviceable equipment is tagged, faults are identified and appropriate personnel are informed.
 - 5.3 Work area, including painting locations, is cleaned and returned to approved condition.
 - 5.4 Workplace records are completed.

RANGE STATEMENT

equipment

5.

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment.

Work is carried out in accordance with statutory obligations, environmental legislation, relevant health regulations, manual handling procedures and organisation insurance requirements.

Work requires individuals to demonstrate some discretion, judgement and problem solving skills in the application of surface coatings.

The following variables may be present for this particular unit.

Surface faults may include:

- machine marks
- bruising
- pencil marks
- grease
- cross-sanding marks
- scratches
- glue marks
- dirt marks

- insect and termite holes
- holes
- knots
- blisters
- rubber marks
- burns or tears
- ropiness, and
- foreign matter in the polish

Repair techniques are to include:

- decontamination and repair
- stripping
- wash off
- stopping (epoxy, button lac, water putty, wax)
- plugs and refinishing

Tools and equipment may include, but are not limited to:

- brushes
- rollers
- soup rubbers
- paint trays
- power agitators
- sanders
- liquid containers
- scrapers
- quirk sticks
- sandpapers
- cotton rags
- hessian
- steel wool
- sandpaper
- abrasive papers

Personal protective equipment to include:

- coverall
- safety boots
- gloves
- dust mask
- safety helmet

OH&S requirements include:

- relevant statutory requirements
- material safety management systems
- hazardous substances and dangerous goods safe operating procedures

Surfaces may include but are not limited to:

- solid timber
- manufactured board
- metal

Materials to be applied may include but are not limited to:

- lacquers
- paints
- acrylics
- enamels
- one-pot polyurethane
- mentholated spirits
- pigments
- spirit colours

Information and procedures:

- workplace procedures relating to the use and operation of tools and equipment
- workplace instructions, including job sheets, plans, drawings and designs
- workplace procedures relating to reporting and communications
- manufacturers' instructions for the use of equipment and materials

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be determined to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

(1) Critical Aspects of Evidence

Interpret work order and locate and apply relevant information.

Apply safe handling requirements for equipment, products and materials, including use of personal protective equipment.

Follow work instructions, operating procedures and inspection practices to:

- minimise the risk of injury to self or others
- prevent damage to goods, equipment or products
- maintain required production output and product quality
- ٠

Repair and finish a minimum of four damaged surfaces, including:

- a strip off and refinish
- two touch ups involving different repair techniques,
- with only one being a metal surface

Maintain application equipment.

Work effectively with others.

Modify activities to cater for variations in workplace contexts and environment

(2) **Pre-requisite Relationship of Units**

Pre-requisite for this unit is:

• LMFFIN0401A: Use furniture finishing hand and power tools

(3) Underpinning Knowledge and Skills

Knowledge

Knowledge of:

- repair and touch up techniques
- decontamination materials, techniques and safety requirements
- identification of application techniques
- characteristics of coatings and base materials in terms of toxicity, reactivity, flammability, required viscosity and recoat ability
- the methods to prevent contamination of surfaces during and after surface coating
- workflow in relation to the application of surface coatings

<u>Skills</u>

The ability to:

- collect, organise and understand information related to coating materials, cleaning materials, work orders and safety procedures
- communicate ideas and information to enable confirmation of work requirements and specifications, co-ordination of work with site supervisor, other workers and customers, and the reporting of work outcomes and problems
- plan and organise activities including the preparation and layout of the worksite and the obtaining of coating equipment and materials to avoid any back tracking, work flow interruptions or wastage
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise workflow and productivity
- use mathematical ideas and techniques to correctly complete measurements, calculate area, estimate paint requirements and estimate material requirements
- use pre-checking and inspection techniques to anticipate coating problems, avoid reworking and avoid wastage
- use the limited workplace technology related to coating including tools, equipment and measuring devices

(4) **Resource Implications**

• surface coating application equipment, coatings, other consumables, and materials to be repaired

(5) Method of Assessment

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts.

Assessment should be by direct observation of tasks and questioning on underpinning knowledge.

Assessment should be conducted over time and will generally be in conjunction with assessment of other relevant units of competency.

(6) Context of Assessment

Assessment may occur on the job or in a workplace simulated facility with relevant process equipment, materials, work instructions and deadlines.

CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency						
Level 1.	Level 2.	Level 3.				
 Carries out established processes Makes judgement of quality using given criteria 	 Manages process Selects the criteria for the evaluation process 	 Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation 				

Collect, analyse and organise information	Level 1	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 1	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 2	
Use technology	Level 1	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

LMFFIN0542A: Applying graining and decorative finishes

Competency Descriptor: This unit deals with the skills and knowledge required to apply materials to a surface to imitate timber grain and decorative (faux) finishes.

Competency Field: Timber Furniture Manufacture

EL	EMENT OF COMPETENCY	PER	RFORMANCE CRITERIA
1	Prepare for work	1.1	Workplace information, including materials application and safety information, material safety data sheets, is used to inform work practices.
		1.2	Characteristics of the surface and the required surface treatment are identified from work orders or instructions.
		1.3	Processing and application techniques, time and safety requirements are identified and used for work planning.
		1.4	Occupational Health & Safety (OH&S) requirements, including ventilation requirements and personal protection needs, are observed throughout the work.
		1.5	Tools, equipment and accessories are identified and checked for safe and effective operation for the task.
2.	Prepare for application of materials	2.1	Surfaces are checked for contamination and correct preparation according to workplace procedures and standards.
		2.2	Products with surface or other faults are identified and faults repaired as appropriate.
		2.3	Materials required to complete the task are identified and prepared.
		2.4	Trial applications of material are made to check equipment operation, materials consistency, viscosity and sample match.
		2.5	Faults and or inconsistencies in colour and surface appearance are identified and workplace procedures for rectification and adjustment are followed.

- Apply finishing materials 3.1 Techniques for application of graining solution and other 3. finishes are identified. 3.2 Materials are applied according to job instructions, material manufacturers' specifications and workplace procedures. Finished products are inspected and approved for 3.3 suitability for further processing. 3.4 Products, which do not meet quality specifications, are rectified or tagged for further investigation. 4. Clean work area and maintain 4.1 Equipment used is cleaned and inspected for serviceable equipment condition and stored appropriately. 4.2 Unserviceable equipment is tagged, faults are identified and appropriate personnel are informed. 4.3 Work area is cleaned and returned to approved condition, all areas used for bleaching are washed down with water.
 - 4.4 Workplace records are completed.

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between school shops and workplaces. It relates to the unit as a whole and facilitates holistic assessment.

Work is carried out in accordance with statutory obligations, environmental legislation, relevant health regulations, manual handling procedures and organisation insurance requirements.

Work requires individuals to demonstrate some discretion, judgement and problem solving skills in the application of surface coatings.

The following variables may be present for this particular unit

Graining and decorative finishes are to include graining and marbling, and may include:

- ragging
- stippling
- ageing
- distressing and others

Surfaces may include but are not limited to:

- solid timber
- manufactured board
- metal

OH&S requirements include:

- relevant legislation
- material safety management systems
- hazardous substances and dangerous goods code
- safe operating procedures

Tools and equipment may include, but are not limited to:

- liquid containers
- rubber gloves
- face masks
- spray booths
- spray guns
- compressor
- air lines
- brushes
- sanding block
- brushes
- graining tools

Personal protective equipment to include:

- coverall
- safety boots
- gloves
- dust mask
- safety helmet

Materials to be applied may include but are not limited to:

- water
- abrasive papers
- cotton rags
- hessian
- lacquer-based wiping stain
- polyurethane wiping stain
- spirit stain
- pigment oil stain
 - proprietary brand stains
- pigments
- acrylic paint enamel

Information and procedures:

- workplace procedures relating to the use and operation of tools and equipment
- workplace instructions, including job sheets, plans, drawings and designs
- workplace procedures relating to reporting and communications
- manufacturers' recommendations for the use of equipment and materials

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

(1) Critical Aspects of Evidence

Interpret work order and locate and apply relevant information.

Apply safe handling requirements for equipment, products and materials.

Follow work instructions, operating procedures and inspection practices to:

- minimise the risk of injury to self and others
- prevent damage to goods, equipment and products
- maintain required production output and product quality

Apply graining solution to imitate a minimum of two different timber species.

Apply material to imitate a marble finish and one other finish type.

Maintain application equipment.

Work effectively with others.

Modify activities to cater for variations in workplace contexts and environment

(2) Pre-requisite Relationship of Units

Pre-requisites for this unit are:

- LMFFIN0031A: Use furniture finishing Hand and power tools
- LMFFIN0431A: Prepare surface for finishing

(3) Underpinning Knowledge and Skills

Knowledge of:

- identification of application techniques
- characteristics of graining and coating materials in terms of toxicity, reactivity, flammability, viscosity
- the methods to prevent contamination of surfaces during and after processing
- workflow in relation to the application stains, fillers and bleaches

<u>Skills</u>

The ability to:

- collect, organise and understand information related to coating materials, cleaning materials, work orders and safety procedures
- communicate ideas and information to convince customers of the appropriateness of particular products to their needs
- plan and organise activities including the preparation and layout of the worksite and the obtaining of coating equipment and materials to avoid any back tracking, workflow interruptions or wastage
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise workflow productivity
- use mathematical ideas and techniques to correctly complete measurements, calculate area and estimate paint requirements and other material requirements
- use pre-checking and inspection techniques to anticipate coating problems, avoid reworking and avoid wastage
- use the limited workplace technology related to coating, including tools, equipment and measuring devices

(4) **Resource Implications**

• hand application equipment, graining solution and coating materials

(5) Method of Assessment

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts.

Assessment should be by direct observation of tasks and questioning on underpinning knowledge.

Assessment should be conducted over time and will generally be in conjunction with assessment of other relevant units of competency.

(6) Context of Assessment

Assessment may occur on the job or in a workplace simulated facility with relevant process equipment, materials, work instructions and deadlines

CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency						
Level 1.	Level 2.	Level 3.				
 Carries out established processes Makes judgement of quality using given criteria 	 Manages process Selects the criteria for the evaluation process 	 Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation 				

Collect, analyse and organise information	Level 1	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 1	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 1	
Use technology	Level 1	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

LMFUPH0712A: Apply finishing techniques to upholstered furniture

Competency Descriptor:

This unit deals with the skills and knowledge required to hand finished upholstered furniture by the application of concealed and decorative finishing techniques.

Competency Field: Upholstery

EL	ELEMENT OF COMPETENCY		FORMANCE CRITERIA
1.	Prepare for work	1.1	Job requirement is identified from work order or other instructions, which will include any special requirements for finishing.
		1.2	Required materials, upholstered components to be finished and appropriate tools and equipment are identified from work order.
		1.3	Workplace health and safety requirements, including personal protection needs, are observed throughout the work.
		1.4	Items to be finished are assembled in an appropriate work area and inspected for appropriate quality.
		1.5	Appropriate tools, equipment and finishing materials and hardware are selected.
2.	Apply finishing techniques	2.1	Finishing techniques are applied in accordance with workplace procedures.
		2.2	Problems are notified following workplace procedures.
		2.3	Finished upholstered item is inspected against work requirement with unsatisfactory finish being redirected for reworking.
3.	Complete work	3.1	Finished work is packaged/stored/tagged and despatched to the next process following workplace procedures.
		3.2	Any required documentation is completed and processed following workplace procedures.
		3.3	Tools and equipment used are cleaned, maintained as required and stored in accordance with workplace procedures.

3.4 Work area is cleaned with waste and scrap removed and/or recycled in accordance with workplace procedures.

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment.

Work is carried out in accordance with statutory obligations, relevant health regulations, manual handling procedures and organisation insurance requirements.

Work requires individuals to demonstrate some discretion, judgement and problem solving skills in the finishing of upholstered furniture.

The following variables may be present for this particular unit.

Finishing techniques may be:

- decorative techniques, which include, but are not limited to braiding, gimping, close and open studding, single and double piping and banding
- concealed techniques, which include, but are not limited to straight edge and shark's teeth
- hand sewing techniques, which may be used in both decorative and concealed finishing. These
 include, but are not limited to flange cord, cord and ruching and the closure of items such as cushions
 and external backs of upholstered furnishings

Workplace health and safety requirements may include:

- relevant statutory requirements
- material safety management systems
- hazardous substances and dangerous goods
- safe operating procedures

Materials to be used in finishing items may include but are not limited to:

- fabrics
- leather
- upholstery nails
- gimping
- metal trim
- piping
- vinyl

Tools and equipment may include:

- a range of needles and threads
- tack hammers
- hammers
- hot melt glue gun

Personal protective equipment may include:

- safety glasses/goggles
- hair nets
- ear muffs/plugs
- gloves,
- footwear
- protective clothing

Information and procedures:

- workplace procedures relating to the setting and operation of machinery and use of tools and equipment
- work instructions, including job sheets, plans, drawings and designs
- workplace procedures relating to reporting and communication

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

(1) Critical Aspects of Evidence

- Apply safe handling practices for equipment, products and materials.
- Identify materials used and any special sewing requirements for the materials to be sewn.
- Interpret work order, copy samples and locate and apply relevant information.
- Follow work instructions, operating procedures and inspection practices to:
 - prevent damage to goods, equipment or products
 - maintain required production output and product quality
 - minimise the risk of injury to self or others
- As a minimum:
 - hand sew at least two different items of upholstered furniture using differing sewing techniques, such as cushion mouth and outback
 - apply two other finishing techniques to items of upholstered furniture, one concealed and one decorative
- Work effectively with others.
- Modify activities to cater for variations in workplace contexts and environment.

(2) Pre-requisite Relationship of Units

Pre-requisites for this unit are:

• LMFUPH0581A: Use upholstery hand and power tools

(3) Underpinning Knowledge and Skills

Knowledge

Knowledge of:

- work requirements including workplace standards
- identification of techniques and procedures for the finishing processes
- fabric types, common faults and inspection procedures
- methods to be used with different fabric types
- design features of the upholstered items in relation to the finishing techniques to be used

<u>Skills</u>

The ability to:

- collect, organise and understand information related to work orders, basic plans and safety procedures
- communicate ideas and information to enable confirmation of work requirements and specifications, co-ordination of work with work supervisor, other workers and customers, and the reporting of work outcomes and problems
- plan and organise activities including the preparation and layout of the work area and the
 obtaining of equipment and materials to avoid any back tracking, workflow interruptions or
 wastage
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise workflow and productivity
- use mathematical ideas and techniques to correctly complete measurements and estimate material requirements
- use pre-checking and inspection techniques to anticipate sewing problems, avoid reworking and avoid wastage
- use the limited workplace technology related to the finishing of upholstered furniture

(4) **Resource Implications**

Appropriate sewing equipment, hardware, fabrics, and work order, workplace information including work procedures.

(5) Method of Assessment

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts.

Assessment should be by direct observation of tasks and questioning on underpinning knowledge.

Assessment should be conducted over time and may be in conjunction with assessment of other units of competency, which together form a part of the job role.

(6) Context of Assessment

Assessment may occur on the job or in a workplace simulated facility with relevant process equipment, materials, work instructions and deadlines.

CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency					
Level 1.	Level 1. Level 2. Level 3.				
 Carries out established processes Makes judgement of quality using given criteria 	 Manages process Selects the criteria for the evaluation process 	 Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation 			

Collect, analyse and organise information	Level 2	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 1	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 1	
Use technology	Level 1	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

LMFPTF0912A: Mount artwork

Competency Descriptor: This unit deals with the skills and knowledge required to mount artwork to substrates prior to framing. It includes dry and wet mounting, pressure rolling, laminating and hinging of artwork.

Competency Field: Picture Framing

ELEMENT OF COMPETENCY		PEF	RFORMANCE CRITERIA
1.	Prepare for work	1.1	Artwork is assessed to determine the most appropriate mounting process, including the composition of substrate and fixing materials.
		1.2	Work requirements are identified from drawings/specifications/instructions and/or workplace practices.
		1.3	Quality assurance requirements are identified and observed throughout the process in accordance with industry standards and workplace practices.
		1.4	Workplace health and safety requirements, including personal protection needs, are observed throughout the work.
		1.5	Tools, equipment and materials are selected and checked prior to use to ensure that they are appropriate for the work in terms of quality, serviceability and safety.
		1.6	Materials required are cut to size and assembled to industry standard and workplace procedures.
		1.7	Fixing agents (adhesives/plastic film/tissue) are positioned in accordance with workplace procedures.
2.	Dry mount artwork	2.1	Mounting equipment is set up according to operating procedures and workplace practices.
		2.2	Artwork is positioned on substrate according to job requirements and placed in mounting press.
		2.3	Mounting press is operated in accordance with manufacturers' instructions, ensuring correct mounting

temperature and/or pressing period.

		2.4	Assembled artwork is removed from press, inspected for quality and stored in accordance with workplace procedures.
3.	Wet mount artwork	3.1	Mounting equipment is set up according to operating procedures and workplace practices.
		3.2	Selected adhesive is prepared and applied to the substrate with regard for the type and composition of artwork to be mounted.
		3.3	Artwork is wet mounted to substrate according to job requirements and placed in vacuum press.
		3.4	Mounting press is operated in accordance with manufacturers' instructions, ensuring correct pressing period.
		3.5	Assembled artwork is removed from press, inspected for quality and stored in accordance with workplace procedures.
4.	Pressure roller mount artwork	4.1	Rolling equipment is set up according to manufacturers' instructions and workplace practices.
		4.2	Artwork is laminated using cold film in accordance with job requirements and workplace practices.
		4.3	Assembled artwork is inspected for quality and stored in accordance with workplace procedures.
5.	Laminate artwork	5.1	Laminating equipment is set up according to manufacturers' instructions and workplace practices.
		5.2	Artwork is laminated in accordance with job requirements and workplace practices.
		5.3	Laminated artwork is inspected for quality and stored in accordance with workplace procedures.
6.	Hinge artwork to substrate	6.1	Hinging paper/pre-made hinging tape is assessed for compliance with job requirements.
		6.2	Starch paste is mixed to correct consistency and applied in conformance with workplace practices.
		6.3	Hinging paper is torn and fixed to artwork and substrate in accordance with workplace procedures.
		6.4	Hinged artwork is inspected for quality and positioned for further processing in accordance with workplace procedures.

7. Complete work
7.1 Defective work is reported in accordance with workplace procedures.
7.2 Scraps and off-cuts are removed for disposal/recycling as required by workplace procedures.
7.3 Equipment and work area are cleaned in accordance with workplace procedures.
7.4 Workplace documentation is completed as required.

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between school-shops and workplaces. It relates to the unit as a whole and facilitates holistic assessment.

Work is carried out in accordance with statutory requirements, environment legislation, manual handling procedures and relevant regulations and organisation insurance requirements.

Work requires individuals to demonstrate some discretion, judgement and problem solving skills in the mounting of artwork.

The following variables may be present for this particular unit.

Artwork may be mounted to selected substrates by:

- dry mounting paper-based artwork using heat press and cold press
- wet mounting paper and canvas-based artwork using adhesives and vacuum press
- laminating paper-based artwork using pressure roller or laminating equipment
- hinging, prefabricated or custom made

Work may be performed in workplaces, which are involved in the framing of a wide range of items, including, but not limited to:

- for dry mounting:
- original paper-based artwork
- reproduction artwork
- photographs
- photographic reproduction
- documents, and
- posters
- for wet mounting/laminating:
- reproduction artwork
- promotional materials

OH&S requirements may include:

- safe working practices
- use of tools and equipment
- use of power tools
- safe handling, and
- storage of materials in accordance with enterprise procedures

For laminating, tools and equipment are to include:

- cold roller laminator
- laminating equipment
- cutting blades
- measuring tapes, and
- marking out tools

Tools and equipment for mounting artwork:

For dry mounting, tools and equipment are to include:

- hard bed heat press
- soft bed heat press
- tacking iron
- piercing tool
- cutting blades
- measuring tapes marking out tools
- overlay effect sheets
- silicone release paper
- Teflon, and
- foam plastic blankets

For pressure mounting, tools and equipment are to include:

- pressure rolling equipment
- cold film
- cutting blades
- measuring tapes, and
- marking out tools

Materials for mounting artwork:

For dry mounting, materials may include, but not limited to:

- medium density fibreboard (MDF)
- foam core
- screen board
- mat board
- heat and pressure sensitive films and tissues

For hinging, materials may include, but not limited to:

- hinging paper (mulberry paper and rice paper)
- pre-made hinging tape
- wheat starch
- distilled water
- methyl cellulose

For wet mounting, tools and equipment are to include:

- vacuum press
- cutting blades
- measuring tapes
- marking out tools
- scrapers, and
- glue/adhesive applicators (rollers and spray guns)

For hinging, tools and equipment are to include:

- straight edge
- thin brush
- weight bags
- mixing vessel and swizzle
- steam generator, and
- microwave oven

For wet mounting, materials may include, but not limited to:

- medium density fibreboard (MDF)
- foam core
- screen board
- glues, and
- adhesives

For laminating, materials may include, but not limited to:

• plastic film

Personal protective equipment to include:

- gloves
- safety glasses
- breathing protection
- safety footwear
- aprons or
- overalls

Adhesives are to include:

- ethyl vinyl adhesive (EVA)
- poly vinyl adhesive (PVA)
- starch paste
- heat and pressure sensitive tissues and films

Defects in artwork may include but not be limited to:

- lumps and bumps
- adhesive migration
- misalignment
- use of incorrect adhesive

Information and procedures:

- workplace procedures relating to the use and operation of tools and equipment
- manufacturers' instructions for the use of equipment and materials
- workplace procedures relating to OH&S, reporting and communications
- work instructions, including job sheets, plans, drawings and designs

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

(1) Critical Aspects of Evidence

Identify, adjust and safely operate equipment.

Identify materials, ensuring quality and aesthetics, to be used in the work process.

Interpret work order and locate and apply relevant information to set up, operate, adjust and monitor equipment used to appropriately mount artwork.

Apply safe handling requirements for equipment, products and materials, including use of personal protective equipment, safety and environmental protection equipment.

Follow work instructions, operating procedures and inspection practices to:

- minimise the risk of injury to self and others
- prevent damage to goods, equipment and products
- maintain required production output and product quality

As a minimum, mount items of artwork in each form of mounting: wet, dry, laminating, pressure roller and hinging.

Work effectively with others.

Modify activities to cater for variations in workplace contexts and environment.

(2) Pre-requisite Relationship of Units

Pre-requisite for this unit is:

LMFPTF0881A: Use picture framing sector hand and power tools

(3) Underpinning Knowledge and Skills

Knowledge of:

- the type, characteristics, uses and limitations of the various methods of mounting artwork
- the techniques, method, equipment and materials used to mount artwork
- types of artwork suitable for the various techniques of mounting artwork and the characteristics and interactions between the materials used
- quality and aesthetic requirements in mounting artwork
- workplace safety system requirements related to mounting artwork
- workflow in relation to mounting artwork
- awareness of the effect of this process on the artwork

<u>Skills</u> The ability to:

- information collect, organise and understand information related to work orders, basic plans, and safety procedures
- communicate ideas and information to enable confirmation of work requirements and specifications, coordination of work with work supervisor, other workers and customers, and the reporting of work outcomes and problems
- plan and organise activities, including the preparation and layout of the work area and the obtaining of equipment and materials to avoid any back tracking, workflow interruptions or wastage
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise workflow and productivity
- use mathematical ideas and techniques to correctly complete measurements, calculate quantities and estimate material requirements
- use pre-checking and inspection techniques to anticipate mounting problems, avoid reworking and avoid wastage
- use the limited workplace technology related to mounting artwork, including tools, equipment, calculators and measuring devices

(4) **Resource Implications**

- appropriate mounting and/or laminating equipment for the technique being assessed
- artwork
- consumables
- standard operating procedures
- work area

(5) Method of Assessment

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts.

Assessment should be by direct observation of tasks and questioning on underpinning knowledge.

Assessment should be conducted over time and may be in conjunction with assessment of other units of competency, which together form a part of the job role.

(6) Context of Assessment

Assessment may occur on the job or in a workplace simulated facility with relevant mounting equipment, materials, work instructions and deadlines.

CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency					
Level 1.	Level 2.	Level 3.			
 Carries out established processes Makes judgement of quality using given criteria 	 Manages process Selects the criteria for the evaluation process 	 Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation 			

Collect, analyse and organise information	Level 2	
Communicate ideas and information	Level 2	
Plan and organise activities	Level 2	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 2	
Use technology	Level 1	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

LMFPTF0962A: De-frame artwork

Competency Descriptor: This unit deals with the skills and knowledge required to dismantle and remove the frame from artwork, including its documentation. Artwork includes any object that can be framed, including memorabilia.

Competency Field: Picture Framing

ELEMENT OF COMPETENCY		Pef	PERFORMANCE CRITERIA	
1.	Prepare for work	1.1	Work instructions are used to identify reasons for de- framing the item and parts of the framed item or the original framing materials to be retained.	
		1.2	Workplace health and safety requirements, including personal protection needs, are observed throughout the work.	
		1.3	Frame is examined to identify:	
			 its composition, condition and type of construction production techniques type of and the fixing and fasteners used de-framing and restoration procedures 	
		1.4	Tools and equipment are selected to match construction and fastener type and checked prior to use to ensure that they are appropriate for the work.	
		1.5	Safe and suitable work area is selected/prepared to de- frame, sort and protect the items.	
		1.6	Dismantling sequence and handling techniques are determined.	
2.	De-frame artwork	2.1	Original frame assembly is dismantled to the extent required in the work instructions using appropriate tools and procedures.	
		2.2	Labels, fasteners and attachments are removed and stored.	
		2.3	Components are separated, protected, tagged and stored following workplace procedures.	
		2.4	Condition of de-framed object is examined and noted for the work order.	
		2.5	Relevant historical information is collated and filed.	

- 3. Clean work area and complete operations
- 3.1 Equipment is cleaned, inspected for serviceable condition and stored appropriately.
- 3.2 Equipment faults are identified, tagged and reported to appropriate personnel.
- 3.3 Work area is cleaned and rubbish disposed of as appropriate.
- 3.4 Workplace documentation is completed as required.

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between school-shops and workplaces. It relates to the unit as a whole and facilitates holistic assessment.

Work is carried out in accordance with statutory requirements, environment legislation, manual handling procedures and relevant regulations and organisation insurance requirements.

Artwork includes all items, which may be framed, including three-dimensional objects, textiles, photographs, paper-based artwork and canvas artwork, for the purposes of repair, restoration or reframing.

Work requires individuals to demonstrate discretion, judgement and problem solving skills in the deframing of framed objects.

De-frame artwork addresses the work required to remove the frame from artwork.

The following variables may be present for this particular unit.

Mounting methods may include:

- hinging
- lacing, and
- direct mounting

Documentation

 as frame is dissembled, relevant materials and their positioning are to be clearly recorded for reference Frame constructions may include but are not limited to:

- timber
- metal/alloys extrusion
- composite construction and other frame material
- paper
- cardboard
- fabric
- mat board
- backing material
- glass

Work may be performed in workplaces, which are involved in the de-framing, repair, restoration and framing of a wide range of items, including, but not limited to:

- original artwork
- reproductions
- photographs
- documents
- three-dimensional items

Personal protective equipment to include:

- gloves
- safety glasses
- safety footwear
- aprons or
- overalls

Information and procedures:

- workplace procedures relating to the use and operation of tools and equipment
- workplace instructions, including job sheets, plans, drawings and designs
- equipment manufacturers' specifications and operational procedures
- workplace procedures relating to OH&S, equipment operations, reporting and communication
- work instructions, including job sheets, plans, drawings and designs

OH&S requirements may include:

- safe working practices
- use of tools and equipment
- use of power tools
- safe handling
- storage of materials in accordance with enterprise procedures

Tools and equipment are to include hand-operated tools, including:

- cutting blades
- screwdrivers
- pincers
- pliers
- marking out tools

Materials to be used may include but are not limited to:

- timber
- metal/alloys
- paper
- cardboard
- laminates
- composites
- adhesives, and
- artwork

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

(1) Critical Aspects of Evidence

Interpret work order and locate and apply relevant information to de-frame artwork.

Apply safe handling requirements for equipment, products and materials, including use of personal protective equipment, safety and environmental protection equipment.

Follow work instructions, operating procedures and inspection practices to:

- minimise the risk of injury to self and others
- prevent damage to goods, equipment and products
- maintain required production output and product quality

As a minimum, de-frame and document five items of 2 and/or 3 dimensional framed artwork of various media and era.

Work effectively with others.

Modify activities to cater for variations in workplace contexts and environment.

(2) Pre-requisite Relationship of Units

Pre-requisite for this unit is:

• LMFPTF0881A: Use picture framing sector hand and power tools

(3) Underpinning Knowledge and Skills

Knowledge Knowledge of:

- workflow in relation to dismantling frames
- artwork conservation techniques
- identification of materials, equipment, processes and procedures appropriate for de-framing artwork
- frame construction techniques and processes for constructing frame packages
- the types, uses and operation of tools used to de-frame artwork
- workplace safety system requirements related to de-framing artwork
- understand the effect of this process on the artwork

<u>Skills</u>

The ability to:

- collect, organise and understand information related to work orders, basic plans, and safety procedures
- communicate ideas and information to enable confirmation of work requirements and specifications, co-ordination of work with work supervisor, other workers and customers, and the reporting of work outcomes and problems
- plan and organise activities, including the preparation and layout of the work area and the
 obtaining of equipment and materials to avoid any back tracking, workflow interruptions or
 wastage
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise workflow and productivity

- use mathematical ideas and techniques to correctly complete measurements, calculate quantities and estimate material requirements
- use pre-checking and inspection techniques to anticipate cutting problems, avoid reworking and avoid wastage
- use the limited workplace technology related to the de-framing of artwork, including drawing aids, tools, equipment, calculators and measuring devices

(4) **Resource Implications**

- artwork for dismantling
- work instructions
- tools
- equipment
- standard operating procedures
- work area

(5) Method of Assessment

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts.

Assessment should be by direct observation of tasks and questioning on underpinning knowledge.

Assessment should be conducted over time and may be in conjunction with assessment of other units of competency, which form a part of the job role.

(6) Context of Assessment

Assessment may occur on the job or in a workplace simulated facility with relevant dismantling equipment, materials, work instructions and deadlines.

CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency					
Level 1.	Level 2.	Level 3.			
 Carries out established processes Makes judgement of quality using given criteria 	 Manages process Selects the criteria for the evaluation process 	 Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation 			

Collect, analyse and organise information	Level 1
Communicate ideas and information	Level 1
Plan and organise activities	Level 1
Work with others and in team	Level 1
Use mathematical ideas and techniques	Level 1
Solve problems	Level 1
Use technology	Level 1

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

LMFPTF0992A: Prepare textile for framing

Competency Descriptor:	This unit deals with the skills and knowledge required to prepare
	and mount textiles for framing. It includes lacing, couching,
	blocking, stretching and straining of textiles and stitching to
	backing of textiles.

Competency Field: Picture Framing

ELEMENT OF COMPETENCY		PER	PERFORMANCE CRITERIA	
1.	Prepare for work	1.1	Type of fabric used in textile is identified and work requirements established.	
		1.2	Quality assurance requirements are identified and observed throughout the process in accordance with industry standards and workplace practice.	
		1.3	Workplace health and safety requirements, including personal protection needs, are observed throughout the work.	
		1.4	Textile is analysed to ensure its compatibility with the mounting process, including the type of mounting and the composition of the substrate material.	
		1.5	Work requirements are confirmed from drawing/specifications/instructions and workplace procedures to ensure they are within workplace capability.	
		1.6	Tools, equipment and materials are selected and checked prior to use to ensure that they are appropriate for the work in terms of quality, serviceability and safety.	
2.	Lace textiles	2.1	Textile is laced into position on compatible backing according to industry practice and workplace procedures to be free of creases and overstretching marks and showing correct proportioning of images.	
		2.2	Laced textile is inspected for quality and either stored or, if faulty, is reprocessed in accordance with work procedures.	
3.	Couch textiles	3.1	Textile is couched into position on compatible backing/mounting fabric according to industry practice and workplace procedures to be free of creases and overstretching marks and showing correct proportioning of images.	

		3.2	Couched textile is inspected for quality and either stored or reprocessed in accordance with work procedures.
4.	Stretch/strain textiles	4.1	Stretching or straining frame selected appropriate for material being prepared.
		4.2	Textile is stretched/strained into position according to industry practice and workplace procedures to be free of creases and overstretching marks and showing correct proportioning of images.
		4.3	Stretched/strained textile is inspected for quality and either stored or reprocessed in accordance with work procedures.
5.	Stitch textiles	5.1	Textile is stitched into specified position onto compatible backing/mounting board according to workplace procedures.
		5.2	Stitched textile is padded if required in accordance with workplace procedures.
		5.3	Stitched textile is inspected for quality and either stored or reprocessed in accordance with work procedures.
6.	Block textiles	6.1	Blocking process is identified according to type, composition and condition of textile according to workplace procedures.
		6.2	Blocking process is used to return textile back into required position prior to lacing, couching or stretching/straining.
		6.3	Textile is inspected for quality and either stored or reprocessed in accordance with work procedures.
7.	Complete work	7.1	Defective work is reported in accordance with workplace procedures.
		7.2	Scraps and off-cuts are removed for disposal/recycling as required by workplace procedures.
		7.3	Equipment and work area are cleaned in accordance with workplace procedures.
		7.4	Workplace documentation is completed as required.

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment.

Work is carried out in accordance with statutory requirements, environment legislation, manual handling procedures and relevant regulations and organisation insurance requirements.

Work requires individuals to demonstrate some discretion, judgement and problem solving skills in preparing textiles for framing.

The following variables may be present for this particular unit.

Textiles include, but are not limited to:

- painted canvas
- weavings
- tapestries
- cross stitch
- appliqué
- silk work
- clothing items

OH&S requirements may include:

- safe working practices
- use of tools and equipment
- use of power tools
- safe handling
- storage of materials in accordance with enterprise procedures

Materials may include:

- timber
- compatible substrates
- thread
- foam core
- composites

Types of fabric include:

- cotton
- wool
- nylon
- silk

Information and procedures:

- workplace procedures relating to the use and operation of tools and equipment
- manufacturers' instructions for the use of equipment and materials
- workplace procedures relating to OH&S, reporting and communications
- work instructions, including job sheets, plans, drawings and designs

Tools and equipment must include:

- needle
- stretching pliers
- measuring tape, and
- stapler

Personal protective equipment to include:

- gloves
- safety glasses
- safety footwear
- aprons or
- overalls

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

(1) Critical Aspects of Evidence

Interpret work order and locate and apply relevant information to set up, operate, adjust and monitor equipment used to prepare textiles for framing.

Identify materials, ensuring quality and aesthetics, to be used in the work process.

Apply safe handling requirements for equipment, products and materials, including use of personal protective equipment, safety and environmental protection equipment.

Follow work instructions, operating procedures and inspection practices to:

- minimise the risk of injury to self and others
- prevent damage to goods, equipment and products
- maintain required production output and product quality

As a minimum, using the five preparation techniques, prepare representative items from each of the following textiles for framing:

- canvas works, including paintings and tapestries
- needle art, including cross stitch, appliqué-long stitch and embroidery,
- items of clothing

Work effectively with others.

Modify activities to cater for variations in workplace contexts and environment

(2) Pre-requisite Relationship of Units

Pre-requisite for this unit is:

• LMFPTF0881A: Use picture framing sector hand and power tools

(3) Underpinning Knowledge and Skills

Knowledge of:

- the type, characteristics, uses and limitations of the various methods of preparing textiles for framing
- the techniques, method, equipment and materials used to prepare textiles for framing
- quality and aesthetic requirements in preparing textiles for framing
- workplace safety system requirements related to preparing textiles for framing
- workflow in relation to preparing textiles for framing
- understand the effect of this process on the artwork

<u>Skills</u>

The ability to:

- collect, organise and understand information related to work orders, basic plans, and safety procedures
- communicate ideas and information to enable confirmation of work requirements and specifications, co-ordination of work with work supervisor, other workers and customers, and the reporting of work outcomes and problems
- plan and organise activities, including the preparation and layout of the work area and the obtaining of equipment and materials to avoid any back tracking, workflow interruptions or wastage
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise workflow and productivity
- use mathematical ideas and techniques to correctly complete measurements, calculate quantities and estimate material requirements
- use pre-checking and inspection techniques to anticipate mounting problems, avoid reworking and avoid wastage
- use the limited workplace technology related to preparing textiles for framing, including tools, equipment and emerging processes

(4) **Resource Implications**

- appropriate textile mounting equipment for the technique being assessed
- textiles for framing
- consumables
- standard operating procedures
- work area

(5) Method of Assessment

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts.

Assessment should be by direct observation of tasks and questioning on underpinning knowledge.

Assessment should be conducted over time and may be in conjunction with assessment of other units of competency, which form a part of the job role.

(6) Context of Assessment

Assessment may occur on the job or in a workplace simulated facility with relevant textile preparation equipment, materials, work instructions and deadlines.

CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency						
Level 1.	Level 2.	Level 3.				
 Carries out established processes Makes judgement of quality using given criteria 	 Manages process Selects the criteria for the evaluation process 	 Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation 				

Collect, analyse and organise information	Level 1	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 1	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 1	
Use technology	Level 1	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

LMFPTF1052A: Design and construct ornamental frames

Competency Descriptor:

This unit deals with the skills and knowledge required to design and construct ornamental frames.

Competency Field: Picture Framing

EL	EMENT OF COMPETENCY	Per	FORMANCE CRITERIA
1.	Identify design requirements	1.1	Customer requirements relating to the display of the artwork and frame features are determined.
		1.2	Work area is cleaned and prepared to handle artwork in accordance with workplace standards.
		1.3	Workplace health and safety requirements, including personal protection needs, are observed throughout the work.
		1.4	Workplace quality assurance requirements are recognised and adhered to throughout the work.
		1.5	Artwork is handled in accordance with industry recognised handling methods and workplace procedures.
		1.6	Artwork is assessed for colour qualities to identify:
			 primary, secondary, tertiary, harmonic and contrasting colours by colour wheel aesthetic/mood evoking nature (warmth, lightness, brightness, etc.)
		1.7	Artwork is assessed against the elements and principles of design and their impact on preservation/restoration and framing selection determined.
		1.8	A design concept is developed and confirmed with the customer.
2.	Develop frame design	2.1	Historic, sentimental or monetary value of artwork ascertained through examination, research and/or consultation with customer.
		2.2	Artwork is assessed to identify any impact preservation/restoration will have on frame design.

- 2.3 Compatibility of framing materials with the artwork is determined from manufacturers' and industry information.
- 2.4 Principles of colour design applied to select mat and framing materials to complement artwork.
- 2.5 A provisional design package is developed for presentation and discussion with customer.
- 2.6 Design package is revised to reflect customer requirements.
- 3.1 Tools, equipment and materials are selected and checked prior to use to ensure that they are appropriate for the work in terms of quality, serviceability and safety.
- 3.2 Machinery is used in accordance with workplace procedures throughout the work, including use of personal protective equipment.
- 3.3 Material is cut to size and laid out in the required design.
- 3.4 Specialised/ornamental components are moulded/turned/carved/manufactured in accordance with workplace procedures.
- 3.5 Frame components are finished in compliance with the design specifications and assessed for fit and aesthetic appearance.
- 3.6 Frame is joined to comply with design in accordance with workplace procedures.
- 3.7 Finish to the frame and its fittings are applied to comply with design in accordance with workplace procedures.
- 3.8 Work is checked against required quality standards with any non-conformity being rectified.
- 3.9 Customer endorsement of finished frame is sought and any modifications identified and implemented.

3. Construct ornamental frame

4. Complete work
4.1 Scraps and off-cuts are removed for disposal/recycling as required by workplace procedures.
4.2 Work area is cleaned and rubbish disposed of as appropriate.
4.3 Workplace documentation is completed as required.
4.4 Tools, equipment and unused materials are cleaned and stored following workplace procedures.

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between school-shops and workplaces. It relates to the unit as a whole and facilitates holistic assessment.

Work is carried out in accordance with statutory requirements, environment legislation, manual handling procedures and relevant regulations and organisation insurance requirements.

Work requires individuals to demonstrate discretion, judgement and problem solving skills in the recognition and handling of artwork, and in identifying design requirements for framing.

Frame design addresses the requirement to consider elements and principles of design to maintain/enhance the historic, sentimental or monetary value of artwork.

Work may be performed in workplaces, which are involved in the framing of artwork of sufficient value to require the application of framing design.

Ornamental frames are those required for artwork where its aesthetics and/or value deem it necessary. Artwork may be 2 or 3D, and the frame fitted with ornate/elaborate embellishment.

The following variables may be present for this particular unit

Elements of design include:

- line
- direction
- shape
- size
- texture
- value
- colour

Principles of design include:

- repetition
- alteration
- harmony
- graduation
- contrast (or opposition or conflict)
- dominance
- unity, and
- balance

Influences on compatibility of frame design include:

- frame package design to suit required level of preservation
- framing style to match image quality and aesthetic value
- mouldings, fittings and attachments to suit framing and hanging requirements

Construction technique includes:

- moulding of composite
- creating moulds
- frame preparation
- application of composite to frame and carving/ornamentation/decoration as required

Tools and equipment are to include:

- saws (circular, drop, docking and mitre)
- chisels
- underpinners
- screwdrivers
- marking out tools
- pincers
- pliers
- touch-up material
- glues, and
- finishing tools, including files and sandpaper

Information and procedures

- customer requirements
- industry preservation standards and requirements, including legal implications
- work instructions, including job sheets, plans, drawings and designs
- literature relating to the history and preservation of artwork
- workplace procedures relating to reporting and communication

OH&S requirements may include:

- safe working practices
- use of tools and equipment
- use of power tools
- safe handling
- storage of materials in accordance with enterprise procedures

Frame constructions may include but are not limited to:

- timber
- metal/alloys extrusion
- synthetic and composite construction

Personal protection equipment may include, but not limited to:

- safety glasses/goggles
- hair nets
- ear muffs/plugs
- footwear
- gloves
- respiratory masks
- protective clothing

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

(1) Critical Aspects of Evidence

Recognise the basic categories of art and the medium used in their production.

Recognise frames and the medium used in their production.

Identify the elements and principles of design and apply them to designing an appropriate complex ornamental frame.

Apply safe handling requirements for equipment, products and materials, including use of personal protective equipment, safety and environmental protection equipment.

Follow work instructions, operating procedures and inspection practices to:

- minimise the risk of injury to self and others
- prevent damage to goods, equipment and products
- maintain required production output and product quality

As a minimum, design and construct a frame incorporating three types of materials, displaying techniques of moulded and carved finishes and including at least one alternate joining technique (such as fingers, biscuits, dowel, etc.).

Work effectively with others.

Modify activities to cater for variations in workplace contexts and environment.

(2) Pre-requisite Relationship of Units

Pre-requisite for this unit is:

LMFPTF0881A: Use picture framing sector hand and power tools

(3) Underpinning Knowledge and Skills

Knowledge of:

- major categories of art media
- liabilities and obligations relating to framing artwork
- framing materials and techniques of frame building
- · elements and principles of design and the qualities/influence of colour
- materials used in artworks
- chemical reactions between artworks and framing materials
- restoration/preservation techniques
- operation requirements of equipment and work systems in work area

• understand the effect of this process on the artwork

<u>Skills</u>

The ability to:

- collect, organise and understand information related to the history and techniques of art and framing artwork, restoration/preservation techniques and safety procedures
- communicate ideas and information to enable confirmation of work requirements and specifications, co-ordination of work with work supervisor, other workers and customers, and the reporting of work outcomes and problems
- plan and organise activities, including the preparation and layout of the work area and the
 obtaining of equipment and materials to avoid any back tracking, workflow interruptions or
 wastage
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise workflow and productivity
- use mathematical ideas and techniques to correctly complete measurements, calculate quantities and estimate material requirements
- use pre-checking and inspection techniques to anticipate cutting problems, avoid reworking and avoid wastage
- use the workplace technology related to the design and construction requirements of complex ornamental frames

(4) **Resource Implications**

- customer/work requirement
- design facilities
- woodworking and joining tools and equipment
- frame assembly and finishing requirements
- workplace procedures and work area

(5) Method of Assessment

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts.

Assessment should be by direct observation of tasks and questioning on underpinning knowledge.

Assessment should be conducted over time and may be in conjunction with assessment of other units of competency, which form a part of the job role.

(6) Context of Assessment

Assessment may occur on the job or in a workplace simulated facility with relevant artwork requiring framing, equipment, simulated work instructions and deadlines.

CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency					
Level 1.	Level 2.	Level 3.			
 Carries out established processes Makes judgement of quality using given criteria 	 Manages process Selects the criteria for the evaluation process 	 Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation 			

Collect, analyse and organise information	Level 2	
Communicate ideas and information	Level 2	
Plan and organise activities	Level 1	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 2	
Solve problems	Level 2	
Use technology	Level 2	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

LMFSOF1392A: Machine sew using specific techniques

Competency Descriptor: This unit deals with the skills and knowledge required to use specific sewing machine techniques, with attachments as required, to produce specialised sewn products

Competency Field: Soft Furnishing

ELI	EMENT OF COMPETENCY	PER	RFORMANCE CRITERIA
1.	Identify sewing machine equipment controls and procedures	1.1	Job requirements are identified from work instructions.
		1.2	OH&S requirements, including ergonomic criteria and personal protection needs, are observed throughout the work.
		1.3	Equipment operations, components and controls are identified.
		1.4	Operating procedures are checked to identify approved procedures and adjustments.
		1.5	Inspection procedure for materials quality and equipment condition is identified.
		1.6	The process for obtaining materials and moving products to the next process is identified.
2.	Prepare for work	2.1	Work order or sample is checked to identify exact sewing specification.
		2.2	Materials are inspected before use and any materials or part constructed products, which do not meet the job order requirements are identified and reported.
		2.3	Work pieces are laid out in sequence in accordance with specifications and workplace procedures.
		2.4	Any required supplementary equipment is identified for routine lubrication and adjustments.
3.	Adjust and control sewing machine operations	3.1	Sewing machine (including attachments as required) set up requirements and adjustments are identified and followed.
		3.2	Machine sewing maintains required product quality and outputs.

- 3.3 Reusable material is collected and stored, and waste and scrap removed in accordance with workplace procedures.
- 3.4 Equipment and work area clean up are completed following workplace procedures.
- 4. Maintain quality requirements 4.1
 - 1 Sewing machine operations and fabrics are monitored and anything, which may affect quality, is reported.
 - 4.2 Finished sewn products are checked for required quality and moved to the next process.
 - 4.3 Authorised changes in operating procedures and work requirements are implemented.
- 5. Dispatch completed work
- 5.1 Production records and/or packing slips are completed in accordance with workplace procedures.
- 5.2 Completed work in directed to the next operation in accordance with workplace procedures.

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between school-shop and workplaces. It relates to the unit as a whole and facilitates holistic assessment.

Work is carried out in accordance with statutory obligations, environmental legislation, relevant health regulations, manual handling procedures and organisation insurance requirements.

Work requires individuals to demonstrate discretion, judgement and problem solving skills in the set up and operation of machines.

This unit covers work involving the operation of industrial sewing machines to produce specialised products in soft furnishing, upholstery and mattress and base making.

Materials to be machined may include but are not limited to fabrics and leathers.

The following variables may be present for this particular unit.

Sewing specifications include:

- required materials
- threads
- additional work features
- shape and special requirements for the gathered item
- any required workplace documentation to be completed

OH&S requirements may include:

- relevant statutory requirements
- material safety management systems
- hazardous and dangerous goods codes
- safe operating procedures

Specific and specialised techniques and products include:

 sewing decorative finishes, including: patchwork and flat bed quilting; appliqué and freehand embroidery; and top stitching, invisible zips, mitre corners, capping and sewing labels

- sewing with specialised attachments, including: rolled hems, ribboning, gathering, embroidery hoops, bias binding
- sewing fasteners and attachments, including sewing of: zips, hooks, rings, velcro, press studs, buttons, buttonholes, tapes and attachments appropriate for the furnishing industry
- operating an outline sewing machine

Information and procedures:

- machine manufacturers' specifications and operational procedures
- workplace procedures relating to the setting and operation of machinery
- work instructions, including job sheets, plans, drawings and designs

workplace procedures relating to reporting and communication

Machines may include, but are not limited to:

- flange
- over-locker
- flat bed
- blind hemming
- gathering
- tape edging

Sewing machine set up and adjustment includes:

- threading machine and winding bobbin
- setting required tensions
- selecting required machine settings
- lubricating and adjusting the machine (where required), and
- testing operations for work order
- requirements

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

(1) Critical Aspects of Evidence

Apply safe handling practices for equipment, products and materials to be assessed as competent in at least one of the following.

Sewing decorative finishes (competence must be achieved in at least one finish).

Sewing with specialised attachments (competence must be achieved in at least three attachments/processes).

Sewing fasteners and attachments.

Operating an outline sewing machine.

Assessment must confirm appropriate knowledge and skills to:

- identify and operate sewing machines
- set up sewing machine for operations and monitor quality of output
- interpret work order and locate and apply relevant information

Follow work instructions, operating procedures and inspection practices to:

- prevent damage to goods, equipment or products
- maintain required production output and product quality
- minimise the risk of injury to self or others

Work effectively with others.

Modify activities to cater for variations in workplace contexts and environment.

(2) **Pre-requisite Relationship of Units**

Pre-requisite for this unit is:

• LMFSOF1501A: Use soft furnishing sector hand and power tools

(3) Underpinning Knowledge and Skills

Knowledge of:

- types, characteristics, uses and limitations of sewing machines
- characteristics of materials used and finished products
- safety and environmental aspects of sewing machine operations
- quality systems and standards
- workflow requirements for sewing process
- operation of work systems and sewing equipment
- causes of faults and repair methods
- procedure for reporting damaged or imperfect products or interruption to workflow
- workplace procedures

<u>Skills</u>

The ability to:

- collect, organise and understand information related to work orders, basic plans and safety procedures
- communicate ideas and information to enable confirmation of work requirements and specifications, co-ordination of work with site supervisor, other workers and customers, and the reporting of work outcomes and problems
- plan and organise activities, including the preparation and layout of the worksite and the obtaining of equipment and materials to avoid any back tracking, workflow interruptions or wastage
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise workflow and productivity

<u>Skills</u>

The ability to: (cont'd)

- use mathematical ideas and techniques to correctly complete measurements and estimate material requirements
- use pre-checking and inspection techniques to anticipate sewing problems, avoid reworking and avoid wastage
- use the workplace technology related to the sewing, including tools, equipment, and measuring devices

(4) **Resource Implications**

Appropriate sewing machine, work orders, operating procedures, materials and threads.

(5) Method of Assessment

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts.

Assessment should be by direct observation of tasks and questioning on underpinning knowledge.

Assessment should be conducted over time and will generally be in conjunction with assessment of other units of competency

(6) Context of Assessment

Assessment may occur on the job or in a workplace simulated facility with relevant process equipment, materials, work instructions and deadlines.

CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency						
Level 1.	Level 2.	Level 3.				
 Carries out established processes Makes judgement of quality using given criteria 	 Manages process Selects the criteria for the evaluation process 	 Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation 				

Collect, analyse and organise information	Level 1
Communicate ideas and information	Level 1
Plan and organise activities	Level 1
Work with others and in team	Level 1
Use mathematical ideas and techniques	Level 1
Solve problems	Level 1
Use technology	Level 1

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

LMFSOF1422A: Calculate fabric quantities for window coverings

Competency Descriptor: This unit deals with the skills and knowledge required to calculate fabric quantities for window coverings

Competency Field: Soft Furnishing

EL	EMENT OF COMPETENCY	PER	RFORMANCE CRITERIA
1	Prepare for calculations	1.1	Measuring and calculating equipment are collected.
		1.2	Mathematical processes and guide charts required are identified.
		1.3	Drape requirements, fabric types and lining/interlining requirements are noted from work order.
2.	Calculate drape fabric requirements	2.1	Occupational Health & Safety (OH&S) requirements, including ergonomic criteria and personal protection needs, are observed throughout the work.
		2.2	Fabric repeats are measured for customer selected fabrics and recorded.
		2.3	Fabric width is checked taking note of any wider than usual selvages.
		2.4	Finished length of window covering is identified from order.
		2.5	Heading type is identified from order and fullness ratio is identified.
		2.6	Number of fabric drops per curtain is calculated.
		2.7	Length of each fabric drop is calculated based on finished length plus hem and heading allowances and pattern repeats.
		2.8	Allowances for seams, hems, headings, drape fullness or heading type is noted on the work order.
3.	Calculate lining and interlining quantities	3.1	Width of lining (and, where required, interlining fabrics) is noted.
		3.2	Number of lining/interlining widths is calculated based on required number of drape drops.

- 3.3 Length of lining/interlining drops is calculated, including hem allowances.
- 3.4 Amount of lining/interlining fabric is calculated and marked on work order.
- 3.5 Procedures for minimising waste fabric are identified and used.
- 4.1 Work orders for cutting and machining are completed following workplace procedures.
- 4.2 Documentation is forwarded to appropriate work areas and filed as required.

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between school-shops and workplaces. It relates to the unit as a whole and facilitates holistic assessment.

Work is carried out in accordance with statutory obligations, environmental legislation, relevant health regulations, manual handling procedures and organisation insurance requirements.

Work requires individuals to demonstrate some discretion, judgement and problem solving skills in the measurement and calculation of fabric quantities.

Window covering calculations cover work involved in the calculations for fabric and lining quantities for all curtains, Austrians, Romans and festoon blinds.

The following variables may be present for this particular unit.

Calculation of the number of drops is based on:

- useable drapery fabric width
- fullness requirements for heading type
- size of returns and overlaps
- track width identified in customer order

Tools and equipment may include measuring and calculating equipment, including:

- tapes
- rulers
- calculators
- computers

OH&S requirements may include:

- relevant statutory requirements
- material safety management systems
- hazardous and dangerous goods codes
- safe operating procedures

Materials may include all forms of:

• curtaining and other window covering material

4. Complete documentation

Information and procedures:

- manufacturers' specifications and operational procedures
- workplace procedures relating to measuring and cutting of fabric
- work instructions, including job sheets, plans, drawings and designs
- workplace procedures relating to reporting and communication

Personal protective equipment may include:

- safety goggles/glasses
- hair nets
- ear muffs/plugs, gloves
- footwear
- protective clothing

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

(1) Critical Aspects of Evidence

Identify materials used and any special handling requirements for those materials.

Apply safe handling practices for equipment, products and materials.

Interpret work order and locate and apply relevant information.

Measure and accurately calculate fabric quantities to minimise waste and produce consistent quality drapes for at least five different types of window coverings.

Identify materials used and any special marking out requirements.

Follow work instructions, operating procedures and inspection practices to:

- prevent damage to goods, equipment or products
- maintain required production output and product quality
- minimise the risk of injury to self or others

Work effectively with others.

Modify activities to cater for variations in workplace contexts and environment.

Report process or materials faults, damaged products or equipment.

(2) Pre-requisite Relationship of Units

Pre-requisite for this unit is:

• Nil

(3) Underpinning Knowledge and Skills

Knowledge of:

- fabric types, common faults and inspection procedures
- design features of the fabrics and finished curtains in relation to attractive draping requirements
- work requirements, including workplace standards

Skills The ability to:

- collect, organise and understand information related to work orders, basic plans and safety procedures
- communicate ideas and information to enable confirmation of work requirements and specifications, co-ordination of work with site supervisor, other workers and customers, and the reporting of work outcomes and problems
- plan and organise activities, including the preparation and layout of the worksite and the obtaining of materials to avoid any back tracking, workflow interruptions or wastage
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise workflow
- use mathematical ideas and techniques to correctly complete measurements and estimate material requirements
- use pre-checking and inspection techniques to anticipate calculation problems, avoid reworking and avoid wastage
- use workplace technology related to the task, including calculators and measuring devices

(4) **Resource Implications**

• work orders, fabrics, including linings and interlinings, calculator and, where available, workplace pleat calculating charts

(5) Method of Assessment

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts.

Assessment should be by direct observation of tasks and questioning on underpinning knowledge.

Assessment should be conducted over time and will generally be in conjunction with assessment of other units of competency.

(6) Context of Assessment

Assessment may occur on the job or in a workplace simulated facility with relevant process equipment, materials, work instructions and deadlines.

CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

	Levels of Compete	ncy
Level 1.	Level 2.	Level 3.
 Carries out established processes Makes judgement of quality using given criteria 	 Manages process Selects the criteria for the evaluation process 	 Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation

Collect, analyse and organise information	Level 2
Communicate ideas and information	Level 1
Plan and organise activities	Level 1
Work with others and in team	Level 1
Use mathematical ideas and techniques	Level 2
Solve problems	Level 1
Use technology	Level 2

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

LMFSOF1472A: Fit and adjust window treatment hardware

Competency Descriptor:	This deals with the skills and knowledge required to fit and adjust		
	tracking, rods, poles and other curtain hardware.		

Competency Field: Soft Furnishing

ELEMENT OF COMPETENCY		PER	PERFORMANCE CRITERIA	
1.	Identify products, fittings and attachments to be used	1.1	Type of tracks, rods or poles to be fitted and work order requirements are identified.	
		1.2	Attachments, required materials and tools are identified from work instructions and, where necessary, site inspection.	
		1.3	The effect of the fitting process on overall finished window is identified.	
2.	Plan process for fitting attachments to products	2.1	Occupational Health & Safety (OH&S) requirements, including ergonomic criteria and personal protection needs, are observed throughout the work.	
		2.2	Appropriate equipment is identified to minimise risks of damage to customers' premises or injuries to self.	
		2.3	Manufacturers' information on products used is located and used to plan work.	
		2.4	Attachment process is planned to conform to quality requirements, minimise time, economically use materials and maximise appearance of the finished work.	
		2.5	Materials, tools and equipment are assembled and checked for suitability for purpose.	
		2.6	Track/pole/rod width and projection is set up to correctly match work order requirements.	
3.	Complete fitting operations	3.1	Work plan is followed ensuring compliance with workplace procedures and OH&S requirements.	
		3.2	Tracks/rods/poles are installed and tested for correct operation.	

Clean work area and prepare 4.1 Work site and any equipment used is cleaned and stored 4. products for the next process appropriately. 4.2 Unserviceable equipment is tagged, faults are identified and appropriate personnel are informed. 4.3 Completed work is inspected and compared to workplace quality requirements. Fittings, which do not meet quality specifications are 4.4 repaired on-site or returned to the workroom for repair. 4.5 Appropriate documentation is completed.

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment.

Work is carried out in accordance with statutory obligations, environmental legislation, relevant health regulations, manual handling procedures and organisation insurance requirements.

Work requires individuals to demonstrate some discretion, judgement and problem solving skills in the set up and operation of machines. This may be demonstrated either individually or in a team environment.

Fitting and adjustment covers work involved in the fitting, customising and adjustment of tracks, decorative rods, poles and conduit for window coverings that are hand-drawn, manually cord-drawn or fixed.

The following variables may be present for this particular unit.

Curtain hardware may include:

- hand-drawn or cord-drawn tracks
- decorative rods
- poles
- cord tensioners
- conduit

Tools and equipment may include, but are not limited to:

- drills
- hammers
- screwdrivers

OH&S requirements may include:

- relevant statutory requirements
- material safety management systems
- hazardous and dangerous goods codes
- safe operating procedures

Width and projection set up is to provide for:

- stacking space
- overlap
- projection
- return
- number of rings/hooks
- guides/runners
- other fittings

Information and procedures:

- Machine manufacturers' specifications and operational procedures.
- Workplace procedures relating to the setting and operation of machinery.
- Work instructions, including job sheets, plans, drawings and designs.
- Workplace procedures relating to reporting and communication

Personal protective equipment may include:

- safety goggles/glasses
- hair nets
- ear muffs/plugs
- gloves
- footwear
- protective clothing

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

(1) Critical Aspects of Evidence

Interpret work order and locate and apply relevant information.

Apply safe handling practices for equipment, products and materials.

Follow work instructions, operating procedures and inspection practices to:

- prevent damage to goods, equipment or products
- maintain required production output and product quality
- minimise the risk of injury to self or others

Ft and adjust at least five different types of window tracks, which must include at least one corddrawn, one decorative pole and one conduit. This must include at least one ceiling fitted and one face fitted.

Work effectively with others.

Modify activities to cater for variations in workplace contexts and environment.

(2) Pre-requisite Relationship of Units

Pre-requisite for this unit is:

• LMFSOF1501A: Use soft furnishing sector hand and power tools

(3) Underpinning Knowledge and Skills

Knowledge of:

- workflow in relation to fitting, customising and adjusting curtain tracks, poles and other hardware, including bending of tracks
- Identification of equipment, processes and procedures

<u>Skills</u> The ability to

- collect, organise and understand information related to work orders, plans and safety procedures
- communicate ideas and information to enable confirmation of work requirements and specifications, coordination of work with site supervisor, other workers and customers, and the reporting of work outcomes and problems
- plan and organise activities, including the preparation and layout of the worksite and the obtaining of equipment and materials to avoid any back tracking, workflow interruptions or wastage
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise workflow and productivity
- use mathematical ideas and techniques to correctly complete measurements, calculate area, avoid wastage and estimate material requirements
- use pre-checking and inspection techniques to anticipate fitting and adjustment problems, avoid reworking and avoid wastage
- use the limited workplace technology related to the fitting and adjusting tasks, including tools, equipment, calculators and measuring devices

(4) **Resource Implications**

- tracks
- rods
- poles
- conduit
- tools and equipment
- appropriate quality specifications and work instructions

(5) Method of Assessment

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts.

Assessment should be by direct observation of tasks and questioning on underpinning knowledge.

Assessment should be conducted over time and will generally be in conjunction with assessment of other units of competency.

(6) Context of Assessment

Assessment may occur on the job or in a workplace simulated facility with relevant process equipment, materials, work instructions and deadlines.

CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency					
Level 1.	Level 2.	Level 3.			
 Carries out established processes Makes judgement of quality using given criteria 	 Manages process Selects the criteria for the evaluation process 	 Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation 			

Collect, analyse and organise information	Level 1	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 1	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 1	
Use technology	Level 1	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

LMFSOF1492A: Dress windows

Competency Descriptor:	This unit deals with the skills and knowledge required to
	decoratively install and adjust window finishing.

Competency Field: Soft Furnishing

ELEMENT OF COMPETENCY		PER	PERFORMANCE CRITERIA		
1.	Identify window finishing to be installed	1.1	Type of window finishing to be fitted and work order requirements are identified.		
		1.2	Materials and tools are identified from work instructions and, where necessary, site inspection.		
		1.3	The effect of the fitting process on overall finished window is identified.		
 Plan process for c window 	Plan process for dressing window	dressing 2.1	Occupational Health & Safety (OH&S) requirements, including ergonomic criteria and personal protection needs, are observed throughout the work.		
		2.2	Appropriate equipment is identified to minimise risks of damage to customers premises or injuries to self.		
		2.3	Manufacturers' information on products used is located and used to plan work.		
		2.4	Decorator's specifications (if any) are used to plan work.		
		2.5	Attachment process is planned to conform to quality requirements, minimise time, economically use materials and maximise appearance of the finished work.		
		2.6	Tools, equipment and materials are selected and checked prior to use to ensure that they are appropriate for the work, serviceable and in a safe condition.		
3.	Complete fitting operations	3.1	Backing is attached, where appropriate, to the curtain using appropriate fittings.		
		3.2	Required number of glides are identified, matched between window finishing and tracks and added or removed as required.		

		3.3	Curtains are attached to tracks and checked for smooth and even operation and hanging.
		3.4	Curtain height and floor clearance is checked and compared to work order requirement.
		3.5	Pelmets, valances, swags, pull-backs or tie-back holders are fitted using appropriate hardware and adjusted for fall, neatness and appearance.
		3.6	Where required, pleats are folded and tied to maintain required pleating.
4.	Clean work area	4.1	Work site and any equipment used is cleaned and stored appropriately.
		4.2	Unserviceable equipment is tagged, faults are identified and appropriate personnel are informed.
		4.3	Completed work is inspected and compared to workplace quality requirements.
		4.4	Fittings and curtains, which do not meet quality specifications are repaired on-site or returned to the workroom for repair.
		4.5	Appropriate documentation or reporting is completed.

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment.

Work is carried out in accordance with statutory obligations, environmental legislation, relevant health regulations, manual handling procedures and organisation insurance requirements.

Work requires individuals to demonstrate some discretion, judgement and problem solving skills in the installation and adjustment of window finishing. This may be demonstrated either individually or in a team environment.

The following variables may be present for this particular unit.

Window finishing may include:

- curtains
- sheers
- swags
- pelmets
- valances
- tie-backs, and
- hold-backs

Tools and equipment may include, but are not limited to:

- drills
- hammers
- screwdrivers

OH&S requirements may include:

- relevant statutory requirements
- material safety management systems
- hazardous and dangerous goods codes
- safe operating procedures

Personal protective equipment may include:

- safety goggles/glasses
- hair nets
- ear muffs/plugs
- gloves
- footwear
- protective clothing

Information and procedures:

- machine manufacturers' specifications and operational procedures
- workplace procedures relating to the setting and operation of machinery
- work instructions, including job sheets, plans, drawings and designs
- workplace procedures relating to reporting and communication

EVIDENCE GUIDE

(1) Critical Aspects of Evidence

Interpret work order and locate and apply relevant information.

Apply safe handling practices for equipment, products and materials.

Follow work instructions, operating procedures and inspection practices to:

- prevent damage to goods, equipment or products
- maintain required production output and product quality
- minimise the risk of injury to self or others

Install at least four different types of window dressings, which must include curtains and tiebacks.

Work effectively with others.

Modify activities to cater for variations in workplace contexts and environment.

(2) **Pre-requisite Relationship of Units**

Pre-requisite for this unit is:

LMFSOF1501A: Use soft furnishing sector hand and power tools

(3) Underpinning Knowledge and Skills

Knowledge of:

- window dressing and fitting materials and techniques
- identification of equipment, processes and procedures
- workflow in relation to fitting curtains, valances, swags and other window treatments

<u>Skills</u>

The ability to

- collect, organise and understand information related to work orders, plans and safety procedures
- communicate ideas and information to enable confirmation of work requirements and specifications, co-ordination of work with site supervisor, other workers and customers, and the reporting of work outcomes and problems
- plan and organise activities, including the preparation and layout of the worksite and the obtaining of equipment and materials to avoid any back tracking, workflow interruptions or wastage
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise workflow and productivity
- use mathematical ideas and techniques to correctly complete measurements, avoid wastage and estimate material requirements
- use pre-checking and inspection techniques to anticipate window dressing problems, avoid reworking and avoid wastage
- use workplace technology related to the dressing of windows, including tools, equipment, calculators and measuring devices

(4) **Resource Implications**

- curtains
- tracks
- decorative window finishing
- tools and equipment
- appropriate quality specifications and work instructions

(5) Method of Assessment

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts

Assessment should be by direct observation of tasks and questioning on underpinning knowledge

Assessment should be conducted over time and will generally be in conjunction with assessment of other units of competency

(6) Context of Assessment

Assessment may occur on the job or in a workplace simulated facility with relevant process equipment, materials, work instructions and deadlines.

CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency					
Level 1.	Level 2.	Level 3.			
 Carries out established processes Makes judgement of quality using given criteria 	 Manages process Selects the criteria for the evaluation process 	 Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation 			

Collect, analyse and organise information	Level 2	
Communicate ideas and information	Level 2	
Plan and organise activities	Level 2	
Work with others and in team	Level 2	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 2	
Use technology	Level 1	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

LMFFCF2042A: Complete simple floor covering installation

Competency Descriptor:

This unit deals with the skills and knowledge required to complete installation of timber, carpet or resilient floor coverings in a simple context.

Competency Field: Floor Covering and Finishing

ELEMENT OF COMPETENCY		PER	FORMANCE CRITERIA
1.	Lay out materials	1.1	Plans and/or drawings are read and interpreted.
		1.2	Workplace health and safety requirements, including personal protection needs, are observed throughout the work.
		1.3	Tools, equipment and materials are selected and checked prior to use to ensure that they are appropriate for the work, serviceable and in a safe condition.
		1.4	Suitable adhesives, trims and accessories are selected if required.
		1.5	Materials are laid out to meet specification requirements and minimise waste and joins.
2.	Prepare materials for installation	2.1	Sequence of work is planned to ensure lay out and fixing is in logical order.
		2.2	Underlay is cut to specification.
		2.3	Materials are cut to shape, length and size for final laying.
		2.4	Adhesives and edge strips are prepared for use as required.
3.	Lay flooring	3.1	Instructions and sequence for laying and fixing are followed.
		3.2	Appropriate underlay is laid according to manufacturers' recommendations.
		3.3	Materials for fixing are organised and used in accordance with relevant safety management requirements.
		3.4	Fixing methods and equipment are used following manufacturers' recommendations.

- 3.5 Finished job is inspected and any imperfections are rectified following workplace procedures.
- 4. Complete housekeeping
- 4.1 Unused materials are stored or recycled as required.
- 4.2 Tools and equipment are cleaned and stored appropriately.
- 4.3 Work area is cleaned and rubbish disposed of appropriately.
- 4.4 Workplace documentation is completed.

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between school shops and workplaces. It relates to the unit as a whole and facilitates holistic assessment.

This unit is established for VoTec. in Schools or equivalent programme where the level of supervision is likely to be more direct than under normal working conditions.

This unit is to be satisfied by completing a simple floor-covering project to satisfy an established design or participation as a member of a work team in the completion of a supervised installation in a domestic or commercial setting.

Work requires individuals to demonstrate discretion, judgement and problem solving skills in installing floor coverings.

Work is carried out in accordance with legislative obligations environmental legislation, relevant health regulations, manual handling procedures and organisation insurance requirements.

The following variables may be present for this particular unit:

Simple floor covering contexts include those where:

Timber flooring may include:

- strip timber flooring (non-structural)
- parquetry
- sub-floor preparations are not required or have been completed
- the area to be covered is rectangular or square
- no pattern, border design or colour matching is required

Carpet flooring may include:

- tufted carpet
- woven carpet
- needle punch carpet

Resilient flooring may include:

- homogenous/heterogeneous backed PVC
- linoleum sheet
- rubber sheet

Tools and equipment for timber floor covering installation may include:

- drop saw
- jig saw
- hand saw
- undercut saw
- plunge saw
- nail gun
- straight edge
- cramps
- clamps
- hammer
- bar scriber
- tape measure and utility knife

Tools and equipment for carpet floor covering installation may include:

- carpet knee kicker
- power stretcher
- carpet wall trimmer
- trolley
- hammer
- trimming knife
- spiked carpet roller
- weight or seam roller
- awl
- carpet spreader
- carpet shears
- napping shears and tape measure

OH&S requirements may include:

- relevant legislation
- relevant building codes
- material safety management systems
- hazardous substance and dangerous goods codes
- safe operating procedures

Tools and equipment for resilient floor covering installation may include:

- utility knife
- straight edge
- square
- chalk and chalk-line
- tape measure
- hacksaw
- serrated trowel
- hammer
- scribing bar
- divider
 - roller
 - gas bottle and gun
- rubber mallet
- paint brush and bucket
- spatula knife
- trolley and wall trimmer

Materials may include but are not limited to:

- flooring materials
- underlay
- edge strips
- reducing strips
- tapes
- adhesives
- adhesive
- tapes
- skirting
- domestic carpet gripper strips
- heat seam tape
- hessian tape and thread

Personal protective equipment to include:

- safety goggles/glasses
- ear muffs/plugs
- safety helmet
- gloves
- footwear
- protective clothing

Information and procedures:

- workplace procedures relating to the use and operation of tools and equipment
- workplace instructions, including job sheets, plans, drawings and designs
- workplace procedures relating to reporting and communications
- manufacturers' instructions for the use of equipment and materials

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

(1) Critical Aspects of Evidence

- interpret work order and locate and apply relevant information
- apply safe handling requirements for equipment, products and materials, including use of personal protective equipment
- follow work instructions, operating procedures and inspection practices to:
 - minimise the risk of injury to self and others
 - prevent damage to goods, equipment and products
 - maintain required production output and product quality
- to complete a minimum of one simple floor covering installation, which may be either timber, carpet or resilient, or
- participate as a member of a supervised work team in the completion of an installation in a domestic or commercial setting
- work effectively with others
- modify activities to cater for variations in workplace contexts and environment

(2) **Pre-requisite Relationship of Units**

Pre-requisite required for this unit is

LMFFCF2051A: Use flooring sector hand and power tools

(3) Underpinning Knowledge and Skills

Knowledge of:

- the type, characteristics, uses and limitations of flooring materials
- the types and uses of installation tools and equipment
- the type, characteristics, uses and limitations of fixing methods and adhesives
- the type, characteristics, uses and limitations of underlay
- workplace safety system requirements related to flooring installation

• workflow in relation to flooring installation operations

Skills

The ability to:

- information related to work orders, basic plans, and safety procedures
- communicate ideas and information to enable confirmation of work requirements and specifications, coordination of work with site supervisor, other workers and customers, and the reporting of work outcomes and problems
- plan and organise activities including the preparation and layout of the worksite and the obtaining of equipment and materials to avoid any back tracking, workflow interruptions or wastage
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise workflow and productivity
- use mathematical ideas and techniques to correctly complete measurements, calculate area, estimate flooring requirements and other material requirements
- use pre-checking and inspection techniques to anticipate installation problems, avoid reworking and avoid wastage
- use the limited workplace technology related to the installation including tools, equipment, calculators and measuring devices

(4) Resource Implications

- timber
- carpet or resilient flooring materials
- timber
- carpet or resilient flooring tools and equipment,
- installation materials
- and area requiring flooring

(5) Method of Assessment

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts.

Assessment should be by direct observation of tasks and questioning on underpinning knowledge.

Assessment may be in conjunction with assessment of other relevant units of competency.

(6) Context of Assessment

Assessment may occur on the job or in a workplace-simulated facility with relevant timber, carpet or resilient flooring installation equipment, materials, work instructions and deadlines.

CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency				
Level 1.	Level 2.	Level 3.		
 Carries out established processes Makes judgement of quality using given criteria 	 Manages process Selects the criteria for the evaluation process 	 Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation 		

Collect, analyse and organise information	Level 1	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 1	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 1	
Use technology	Level 1	

LMFFCF2273A :	Provide advice to customers on resilient floor
	coverings

Competency Descriptor:	This unit deals with the skills and knowledge required to provide
	advice to customers on resilient floor coverings requirement.

Competency Field: Floor Covering and Finishing

ELEMENT OF COMPETENCY		PERFORMANCE CRITERIA		
1.	Develop and maintain knowledge of products and services	1.1	Workplace health and safety requirements are observed throughout the work.	
		1.2	Current information on resilient floor covering products and services is researched from authoritative sources.	
		1.3	Characteristics of resilient floor covering products and services are identified and understood using available product and service documentation.	
		1.4	Information on resilient floor covering products and services is accurately documented and maintained in a format consistent with organisational requirements.	
		1.5	Acquired knowledge is applied to improve quality within personal work areas.	
2.	Recommend products and services	2.1	Recommendations on resilient floor covering products and services are in line with organisational requirements.	
		2.2	Recommendations emphasise resilient floor covering product and service issues relevant to client needs.	
		2.3	Evidence in support of recommendations is verifiable and presented in a suitable format.	
		2.4	Impact of activities is estimated from verifiable customer feedback sources.	

RANGE STATEMENTS

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between school shops and workplaces. It relates to the unit as a whole and facilitates holistic assessment.

Work is carried out in accordance with legislative obligations, environmental legislation, relevant health regulations, manual handling procedures and organisation insurance requirements.

Work requires individuals to demonstrate discretion, judgement and problem solving skills in providing advice to

The following variables may be present for this particular unit:

Advice on products may include:

- types and applications of available resilient floor coverings
- colours and patterns

OH&S requirements may include:

- relevant legislation
- relevant building codes
- material safety management systems
- hazardous and dangerous goods codes
- safe operating procedures
- manufacturers' recommendations

Authoritative sources may include:

- industry associations
- authorised suppliers
- industry conferences and recognised industry media sources

Advice on services may include:

- methods and techniques for resilient flooring installation
- care and maintenance

Product and service documentation may include:

- operational guidelines
- marketing data
- colleague's knowledge
- consumer reports
- industry reports
- sales figures

Tools and equipment are measuring and calculating equipment including:

- tapes
- rulers
- calculators
- computers

Information may include:

- competitive features of products or services, product trends,
- sales trends
- problems with products or services
- innovations
- cost and production data
- distribution process,
- sales records (monthly forecasts, targets achieved)

Information and procedures:

- workplace procedures relating to the use and operation of tools and equipment
- workplace instructions, including job sheets, plans, drawings and designs
- workplace procedures relating to reporting and communications
- manufacturers' recommendations for the use of equipment and materials

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

(1) Critical Aspects and Evidence

It is essential that competence be observed in the following aspects:

- interpret work order and locate and apply relevant information
- apply safe handling requirements for equipment, products and materials
- follow work instructions, operating procedures and inspection practices to:
 - prevent damage to goods, equipment and products
 - minimise the risk of injury to self and others
- to provide advice to customers or resilient floor covering types under at least three different contexts
- work effectively with others
- modify activities to cater for variations in workplace contexts and environment
- identify faults/problems and identify and carry out corrective action

(2) Pre-requisite Relationship of Units

• Nil

(3) Underpinning Knowledge and Skills

Knowledge of:

- the type, characteristics, uses and limitation of resilient floor coverings
- the type, characteristics, uses and limitation of resilient floor covering products and services
- workplace safety systems related to resilient floor coverings
- workflow in relation to seeking information from customers and providing advice

Skill

The ability to:

- collect, organise and understand information related to customer requests, product definition, work orders, basic plans and safety procedures
- communicate ideas and information to convince customers of the appropriateness of particular products to their needs
- plan and organise activities to interest customers and to ensure the product is viewed in a favourable way
- work with others and in a team by recognising dependencies and using cooperative approaches to promote the image of the enterprise and produce range
- use mathematical ideas and techniques to correctly complete measurements, calculate area and estimate material requirements
- apply analytical techniques to correctly match customer needs with carpet products
- use the limited workplace technology related to providing advice to customers including tools, materials, calculators and measuring devices

(4) **Resource Implications**

Tools, materials and customers requiring advice about resilient floor coverings

(5) Method of Assessment

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts.

Assessment should be by direct observation of tasks and questioning on underpinning knowledge.

Assessment should be conducted over time and will generally be in conjunction with assessment of other units of competency.

(6) Context of Assessment

Assessment may occur on the job or in a workplace simulated facility with relevant customers, materials, work instructions and deadlines.

CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualification Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency					
Level 1.	Level 2.	Level 3.			
 Carries out established processes Makes judgement of quality using given criteria 	 Manages process Selects the criteria for the evaluation process 	 Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation 			

Collect, analyse and organise information	Level 2	
Communicate ideas and information	Level 2	
Plan and organise activities	Level 2	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 2	
Use technology	Level 1	

LN	IFCOR1353A:	Estim	Estimate and cost job	
Cor	npetency Descriptor:	materials, labour		s with the skills and knowledge required to estimate our and time requirements and establish costs for ervices or products.
Competency Field: Timber Furniture Manufacturing			iture Manufacturing	
EL	EMENT OF COMPETE	NCY	Pei	RFORMANCE CRITERIA
1.	Gather information		1.1	Details of customer requirements are obtained through discussion with customer or from information supplied.
			1.2	Details of products and/or services to be provided are developed.
			1.3	Details are recorded in accordance with enterprise practice.
2.	2. Estimate materials, time and labour		2.1	Types and quantities of materials required for product manufacture are estimated.
			2.2	Labour requirements to achieve product manufacture and perform required services are estimated.
			2.3	Time requirements to manufacture and/or install item and perform required services are estimated.
3.	Calculate costs		3.1	Total materials, labour and overhead costs are calculated in accordance with organisational procedures.
			3.2	Total job cost is calculated, including overheads and mark- up percentages and statutory deductions.
			3.3	Final cost to customer is calculated.
4.	Document details and ve where necessary	erify	4.1	Details of costs and charges are documented in accordance with organisational practice.
			4.2	Costs, calculations or other details are verified in accordance with organisational practice.
			4.3	Customer quotation is prepared.
			4.4	Details are documented for future reference in accordance with organisational practice.

EVIDENCE GUIDE

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between school shops and workplaces. It relates to the unit as a whole and facilitates holistic assessment.

Work is to be carried out in accordance with statutory obligations, environmental legislation, relevant health regulations, and organisation insurance requirements.

The estimation and job costing covered here is to be that undertaken by a craft-person in relation to a furniture product for a single client or customer.

The client or customer may be external or internal.

The following variables may be present for this particular unit.

Estimation and costing is to include:

- overheads
- labour
- materials
- government/taxes

Work organisation procedures and practices relating to the:

- provision of information
- preparation of quotations

Oral, written or visual communication including:

- completion of standard forms
- interpretation of information and instructions associated with workplace activities
- recording and reporting of work outcomes
- use of calculators and/or computers running appropriate software for estimating and calculating necessary details

OH&S requirements include:

- relevant statutory requirements
- material safety management systems
- hazardous substances and dangerous goods
- safe operating procedures

Reporting actions, which may include:

 verbal and written communication in accordance with enterprise policies and procedures

Information and procedures

- organisation's work orders and instructions
- industry codes and symbols
- product designs, patterns and prototype.
- building/architectural plans
- relevant statutory quality standards and procedures
- work scheduling documentation
- job procedures

•

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

(1) Critical aspects of evidence

- interpret specifications and instructions for products and materials to be used
- interpret work orders
- document and communicate work-related information including: customer requirements, products, materials and labour required, costing calculations for products, materials and labour, and special conditions
- use of calculators, computer programs and other aids in the estimation and cost calculation processes
- estimate and cost three varied jobs including:
 - estimate quantities of material required
 - determine the types and amount of labour required to complete the work
 - estimate time required to complete the work
 - estimate overheads associated with the job

(2) **Pre-requisite Relationship of units:**

Pre-requisites for this unit are:

• Nil

(3) Underpinning knowledge and skills

Knowledge Knowledge of:

- range of products and services offered by the enterprise
- enterprise or equivalent costing procedures
- components of overheads costs
- components of labour costs
- labour rates and approximate costs of products and materials
- basic mathematical processes

<u>Skills</u>

The ability to:

- collect, organise and understand information related to work orders, costs and government charges
- communicate ideas and information to enable confirmation of work requirements and specifications and the reporting of work outcomes and problems
- complete an outline plan of activities including the preparation and layout of the worksite, the obtaining of equipment and materials, and the avoidance of back tracking, work flow interruptions or wastage
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise work flow and productivity
- use mathematical ideas and techniques to correctly complete measurements, estimate material, labour and overhead requirements and accurately cost the product/service
- use checking techniques to anticipate and overcome costing problems
- use workplace technology related to the estimation and validation of job costs.

(4) Resource implications

- access is required to real or appropriately simulated situations involving estimation and costing of products and services
- access is required to specifications and costs of relevant of products, equipment and materials and information on labour costs and availability, safety procedures, regulations, quality standards, and enterprise procedures
- access is required to all necessary facilities and associated equipment including calculators, computers and relevant software

(5) Method of assessment

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts.

Assessment should be by direct observation of tasks and questioning on underpinning knowledge.

Assessment should be conducted over time and may be in conjunction with assessment of other units of competency.

(6) Context of Assessment

Assessment may occur on the job or in a workplace-simulated facility with relevant process, equipment, materials, work instructions and deadlines.

CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency				
Level 1.	Level 2.	Level 3.		
 Carries out established processes Makes judgement of quality using given criteria 	 Manages process Selects the criteria for the evaluation process 	 Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation 		

Collect, analyse and organise information	Level 3	
Communicate ideas and information	Level 2	
Plan and organise activities	Level 2	
Work with others and in team	Level 2	
Use mathematical ideas and techniques	Level 2	
Solve problems	Level 2	
Use technology	Level 2	

LMFFMK0041A: Assemble furnishing components

Competency Descriptor:	This unit deals with the skills and knowledge required to
	assemble timber components to produce furniture frames
	or complete furniture units.

Competency Field: Timber Furniture Manufacturing

El	ELEMENT OF COMPETENCY		PERFORMANCE CRITERIA		
1.	Prepare for assembly	1.1	Work instructions are used to determine job requirements, including design, tolerances, process, materials, finish and quantity.		
		1.2	Assembly sequence is planned.		
		1.3	Procedures are determined for checking quality at each stage of the process.		
		1.4	Workplace health and safety requirements, including personal protection needs, are observed throughout the work.		
		1.5	Suitable work area is selected for the task.		
		1.6	Tools and equipment suitable to the fixing method are selected and checked for safe operation.		
		1.7	Components, hardware, fittings and attachments are collected.		
		1.8	Fixing and joining devices are selected in line with work instructions and type of materials to be joined.		
		1.9	Jigs are selected and checked for suitability of purpose.		
2.	Assemble components	2.1	Components are laid out and joined using jigs and appropriate fastenings.		
		2.2	Hand and/or power tools and equipment are used as required.		
		2.3	Assembled frame is checked for compliance with specifications.		

- 2.4 Components are prepared, assembled and fitted as per specification.
- 2.5 Frames, which do not meet quality specifications are repaired or tagged for further processing or recycling/disposal.
- 2.6 Finished products are organised and stored in holding area.
- 3. Clean work area and maintain 3.1 equipment
 - 3.1 Faulty and/or defective equipment is tagged and reported in accordance with workplace procedures.
 - 3.2 Waste and scrap are removed following workplace procedures.
 - 3.3 Tools and equipment used are cleaned, inspected for serviceable condition and stored appropriately in accordance with workplace procedures.
 - 3.4 Equipment and work area clean-up is maintained in accordance with workplace procedures.

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between school-shops and workplaces. It relates to the unit as a whole and facilitates holistic assessment.

Work is to be carried out in accordance with statutory obligations, environmental legislation, relevant health regulations, manual handling procedures and organisation insurance requirements.

Work requires individuals to demonstrate some discretion, judgement and problem solving skills in the assembly of furnishing components.

The following variables may be present for this particular unit.

Furnishing components may include, but are not limited to:

- carcasses
- doors
- drawers
- frames
- shelves
- ends
- tops
- limited basic end items

Work to be carried out in workplaces involved in the manufacture of:

- solid timber furniture
- domestic furniture
- commercial furniture
- kitchen and bathroom cabinets
- furniture components

Tools and equipment include, but are not limited to:

- measuring tapes or rulers
- hammers
- mallets
- squares
- bevels
- chisels
- planes

Personal protective equipment to include:

- coverall
- safety boots
- gloves
- dust mask
- safety helmet
- goggles

- Materials to be used may include, but are not limited to:
- timber
- manufactured board
- glues
- screws
- nails
- dowels
- knock-down fittings
- biscuits

OH&S requirements include:

- relevant statutory requirements
- material safety management systems
- hazardous substances and dangerous goods
- safe operating procedures
- hand saws
- power saws
- power drills/screwdrivers
- clamps
- screwdrivers
- pincers
- pneumatic tools

Assembled component checking process is to cover:

- alignment
- squareness
- correct number and fitting of fasteners
- hardware, fittings and attachments
- conformity to work instruction and quality requirements

Information and procedures:

- workplace procedures relating to the use of tools and equipment
- work instructions, including job sheets, cutting lists, plans, drawings and designs
- work instructions, including job sheets, cutting lists, plans, drawings and designs
- manufacturers' specifications and operational procedures

Storage of finished products must ensure that there is:

- no obstruction to traffic
- components are not damaged in storage
- incompatible items are not stored together
- products are arranged to match the sequence of work

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

(1) Critical aspects of evidence

Interpret work order and locate and apply relevant information.

Apply safe handling requirements for equipment, products and materials, including use of personal protective equipment.

Follow work instructions, operating procedures and inspection practices to:

- minimise the risk of injury to self or others
- prevent damage to goods, equipment and products
- maintain required production output and product quality

Assemble at least four furnishing components from the list in the Range Statement.

Work effectively with others.

Modify activities to cater for variations in workplace context and environment.

(2) **Pre-requisite Relationship of units:**

Pre-requisites for this unit are:

- LMFFMK0031A: Use furniture making hand and power tools
- LMFFMK0021A: operate basic woodworking machines

(3) Underpinning knowledge and skills

Knowledge of:

- types, characteristics, uses and limitations of common furnishing components
- the interpretation of basic furniture plans
- identification of hand and/or power tools, materials, equipment, processes and procedures
- workflow in relation to furniture production

<u>Skills</u>

The ability to:

- collect, organise and understand information related to work orders, basic plans and safety procedures
- communicate ideas and information to enable confirmation of work requirements and specifications, co-ordination of work with supervisor, other workers and customers, and the reporting of work outcomes and problems
- plan and organise activities, including the preparation and layout of the work area and the
 obtaining of equipment and materials to avoid any back tracking, workflow interruptions or
 wastage
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise workflow and productivity
- use mathematical ideas and techniques to correctly complete measurements and estimate material requirements
- use pre-checking and inspection techniques to anticipate assembly problems, avoid reworking and avoid wastage
- use the limited workplace technology related to the assembly, including tools, equipment, materials and measuring devices

(4) **Resource implications**

The following resources should be provided:

 access to plans, hand and/or power tools, equipment, materials, cauls and jigs, woodworking machinery, and a work area

(5) Method of assessment

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts.

Assessment should be by direct observation of tasks and questioning on underpinning Knowledge.

Assessment should be conducted over time and may be in conjunction with assessment of other units of competency.

(6) Context of assessment

Assessment may occur on the job or in a workplace simulated facility with relevant process equipment, materials, work instructions and deadlines.

CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency							
Level 1.	Level 2.	Level 3.					
 Carries out established processes Makes judgement of quality using given criteria 	 Manages process Selects the criteria for the evaluation process 	 Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation 					

Collect, analyse and organise information	Level 1
Communicate ideas and information	Level 1
Plan and organise activities	Level 1
Work with others and in team	Level 1
Use mathematical ideas and techniques	Level 1
Solve problems	Level 1
Use technology	Level 1

LM	FFIN0421A:	Remov		rface coatings	
Com	petency Descriptor:	remov	ve surfac	s with the skills and knowledge required to safely ce coatings by hand or chemical means in preparation ation of new surface coatings.	
Competency Field: Timber Furniture Manufacture					
Ele	MENT OF COMPETEN	NCY	PERF	FORMANCE CRITERIA	
1.	Prepare for surface coatir removal	ng	1.1	Materials safety data sheets and/or product application and safety information are read and used to inform work practices.	
			1.2	Occupational Health & Safety (OH&S) requirements, including ventilation requirements and personal protection needs, are observed throughout the work.	
			1.3	Surface coating is tested to identify the type of material and methods required remove the coating.	
			1.4	Tools, equipment and materials suitable for the removal tasks are selected and checked for safe operation/application.	
			1.5	Accessories and consumables are identified for the removal tasks.	
2.	Remove surface coatings		2.1	Sequence of work is identified, maximising potential of any chemical for the removal operation.	
			2.2	Equipment, chemicals and abrasives are used within manufacturers' specifications and workplace procedures.	
			2.3	Surface coating is removed according to workplace procedures and specifications.	
			2.4	Surfaces are inspected to ensure removal of surface coating is to workplace standard.	
			2.5	Defects found after removal of surface coating are dealt with and/or reported in accordance with workplace procedures.	

- 3. Clean work area and maintain equipment
- 3.1 Item is stored and labelled ready for next process.
- 3.2 Equipment is cleaned and inspected for serviceable condition and stored appropriately.
- 3.3 Unserviceable equipment is tagged, faults are identified and appropriate personnel are informed.
- 3.4 Chemicals and other materials are stored or disposed of correctly according to regulations.
- 3.5 Work area is cleaned ready for next process or task.

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between school shop and workplaces. It relates to the unit as a whole and facilitates holistic assessment.

Work is carried out in accordance with statutory obligations, environmental legislation, relevant health regulations, manual handling procedures and organisation insurance requirements.

Work requires individuals to demonstrate some discretion, judgement and problem solving skills in the removal of surface coatings.

The following variables may be present for this particular unit.

Coated surfaces may include but are not limited to:

- solid timber
- manufactured board
- metal

OH&S requirements may include:

- relevant legislation
- material safety management systems
- hazardous and dangerous goods codes, and
- safe operating procedures

Tools and equipment may include, but are not limited to:

- liquid containers
- brushes
- scrapers
- scrubbing brush
- steel wool
- sanding blocks
- heat guns
- high pressure water cleaners

- dipping tanks
- stainless steel stripping bench
- steam iron
- plane
- chisels
- power sanders
- air compressor and hoses

Materials to be used may include but are not limited to:

- caustic soda
- thinners
- turpentine
- mentholated spirits

- gel stripper
- hot water
- abrasive paper
- mentholated

Personal protective equipment to include:

- coverall
- safety boots
- gloves
- dust mask
- safety helmet
- respirator

- Information and procedures:
- workplace procedures relating to the use of tools and equipment
- work instructions, including job sheets, plans, drawings and designs
- workplace procedures relating to reporting and communication
- manufacturers' specifications and operational procedures

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

(1) Critical Aspects of Evidence

Interpret work order and locate relevant information.

Apply safe handling requirements for equipment, products and materials, including use of personal protective equipment.

Follow work instructions, operating procedures and inspection practices to:

- minimise the risk of injury to self or others
- prevent damage to goods, tools, equipment or products
- maintain required production output and product quality

Remove surface coating from timber and metal surfaces, and apply appropriate techniques to remove coatings from flat, vertical, carved and curved surfaces, using a minimum of four different removal techniques and materials.

Work effectively with others.

Modify activities to cater for variations in workplace contexts.

(2) Pre-requisite Relationship of Units

Pre-requisite for this unit is:

LMFFIN0401A: Use furniture finishing hand and power tools

(3) Underpinning Knowledge and Skills

Knowledge of:

<u>Skills</u>

The ability to:

- workflow in relation to the removal of surface coatings
- the types, properties and characteristics of coatings
- coating removal techniques, materials, applications and limitations material safety management systems

 collect, organise and understand information related to hardware identification and selection, work orders, plans and safety procedures

- communicate ideas and information to enable confirmation of work requirements and specifications, co-ordination of work with shop supervisor, other workers and customers, and the reporting of work outcomes and problems
- plan and organise activities, including the preparation and layout of the worksite and the obtaining of equipment and materials to avoid any back tracking, workflow interruptions or wastage
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise workflow and productivity
- use mathematical ideas and techniques to correctly complete measurements, calculate area and estimate material requirements
- use pre-checking and inspection techniques to anticipate removal problems, avoid reworking and avoid wastage
- use the limited workplace technology related to the selection and application, including hardware options, tools, equipment and measuring devices

(4) **Resource Implications**

• range of surfaces to be removed, removal methods, tools, equipment and consumables

(5) Method of Assessment

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts.

Assessment should be by direct observation of tasks and questioning on underpinning knowledge.

Assessment should be conducted over time and may be in conjunction with assessment of other units of competency.

(6) Context of Assessment

Assessment may occur on the job or in a workplace simulated facility with relevant process equipment, materials, work instructions and deadlines.

CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency						
Level 1.	Level 2.	Level 3.				
 Carries out established processes Makes judgement of quality using given criteria 	 Manages process Selects the criteria for the evaluation process 	 Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation 				

Collect, analyse and organise information	Level 1	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 1	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 1	
Use technology	Level 1	

LMFFIN0451A: Competency Descriptor:		Apply surface coatings by spray gun			
		This unit deals with the skills and knowledge required to apply surface coatings by hand-held spray gun operations			
Competency Field: Tim		Timber Fur	niture Manufacture		
ELE	MENT OF COMPETEN	NCY PERI	FORMANCE CRITERIA		
1.	Prepare for work	1.1	Characteristics of the surface and the required surface coating are identified from work orders or instructions.		
		1.2	Processing and application techniques, time and safety requirements are identified and used for work planning.		
		1.3	Occupational Health & Safety (OH&S) requirements, including ventilation requirements and personal protection needs, are observed throughout the work.		
		1.4	Tools, equipment and accessories are identified and checked for safe and effective operation for the surface coating task.		
		1.5	Stains, lacquers, polish, enamels, acrylics, one-part polyurethane and water-based coatings are identified and prepared as required for the surface coating tasks.		
2.	Check and prepare for spraying	2.1	Products with surface or other faults are identified and faults reported or repaired as appropriate.		
		2.2	Other products and equipment in the workplace are protected from over-spray.		
		2.3	Trial applications of surface materials are made to check condition of spray system, spray patterns, equipment operation, materials viscosity and specified surface finish.		
		2.4	Unserviceable components are cleaned or replaced and spray system reassembled.		
		2.5	Spray pattern faults are identified and rectified in accordance with workplace procedures.		
		2.6	Material faults are identified and workplace procedures for rectification are followed.		

3. Apply surface coating 3.1 Surfaces are kept free of contamination. 3.2 Surface coatings are applied according to workplace procedures. Surface build and coverage is checked against workplace 3.3 requirements for even spread and thickness. 3.4 Rectification of surface faults is made in accordance with workplace procedures. 3.5 Products are inspected and approved for suitability for further processing. Equipment is cleaned and inspected for serviceable 4. Clean work area and maintain 4.1 condition and stored appropriately. equipment 4.2 Unserviceable equipment is tagged, faults are identified and appropriate personnel are informed. 4.3 Work area, including spray booth is cleaned and returned to approved condition. Workplace records are completed. 4.4

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between school shop and workplaces. It relates to the unit as a whole and facilitates holistic assessment.

Work is carried out in accordance with statutory obligations, environmental legislation, relevant health regulations, manual handling procedures and organisation insurance requirements.

Work requires individuals to demonstrate some discretion, judgement and problem solving skills in the application of surface coatings.

The following variables may be present for this particular unit.

Spray guns to include:

- conventional air spray guns
- airless spray guns
- may include HVLP and air-assisted
- airless spray gun

Material to be applied may include but are not limited to:

- stains
- lacquers
- acrylics
- one-part polyurethane
- water-based coatings

Tools and equipment may include but are not limited to:

- pressure feed systems
- spray booth
- liquid containers
- air compressor and hoses
- air regulator

Personal protective equipment to include:

- coverall
- safety boots
- gloves
- dust mask
- safety helmet
- respirator

Coatings are to include:

- pre-catalysed lacquer
- acid catalysed lacquer
- may include nitro-cellulose lacquer, one-part polyurethane and water-based coatings

OH&S requirements may include:

- relevant legislation
- material safety management systems
- hazardous and dangerous goods codes, and
- safe operating procedures
- positive pressure air-wash masks
- canister-type face masks
- screwdrivers
- adjustable spanner
- spanners

Information and procedures:

- workplace procedures relating to the use of tools and equipment.
- work instructions, including job sheets, plans, drawings and designs.
- workplace procedures relating to reporting and communication.
- manufacturers' specifications and operational procedures

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

(1) Critical Aspects of Evidence

Locate, interpret and apply information relevant to the materials being applied and the application equipment.

Apply safe handling requirements for equipment, products and materials, including use of personal protective equipment.

Follow work instructions, operating procedures and inspection practices to:

- minimise the risk of injury to self and others
- prevent damage to goods, equipment and products
- · maintain required production output and product quality

Select and apply surface coatings, including the adjustment of spray equipment to effect required spray pattern for a minimum of three different surface types and shapes.

Maintain spray equipment and work area, including spray booth.

Work effectively with others.

Modify activities to cater for variations in workplace contexts and environment.

(2) Pre-requisite Relationship of Units

Pre-requisite for this unit is:

LMFFIN0401A: Use furniture finishing hand and power tools LMFFIN0431A: Prepare surface for finishing LMFFIN0461A: Apply stains, fillers and bleaches

(3) Underpinning Knowledge and Skills

Knowledge of:

- identification of spray equipment, processes and procedures
- characteristics of the coatings and base materials in terms of toxicity, reactivity, flammability, required viscosity and recoat ability
- effects of the fumes, heat and other radiations on surface coatings
- the methods to prevent contamination of surfaces during and after surface coating workflow in relation to spraying operations

Skills The ability to:

- collect, organise and understand information related to spray equipment and painting materials, work orders, basic plans, and safety procedures
- communicate ideas and information to enable confirmation of work requirements and specifications, co-ordination of work with shop supervisor, other workers and customers, and the reporting of work outcomes and problems
- plan and organise activities, including the preparation and layout of the worksite and the obtaining of equipment and materials to avoid any back tracking, workflow interruptions or wastage
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise workflow and productivity
- use mathematical ideas and techniques to correctly complete measurements, calculate area and estimate material requirements
- use pre-checking and inspection techniques to anticipate coating problems, avoid reworking and avoid wastage
- use the workplace technology related to spraying operations including tools, equipment and measuring devices

(4) Resource Implications

• spray equipment, spray booth, coatings and cleaning products

(5) Method of Assessment

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts.

Assessment should be by direct observation of tasks and questioning on underpinning knowledge.

Assessment may be in conjunction with assessment of other relevant units of competency.

(6) Context of Assessment

Assessment may occur on the job or in a workplace simulated facility with relevant process equipment, materials, work instructions and deadlines.

CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency							
Level 1.	Level 2.	Level 3.					
 Carries out established processes Makes judgement of quality using given criteria 	 Manages process Selects the criteria for the evaluation process 	 Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation 					

Collect, analyse and organise information	Level 1	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 1	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 2	
Use technology	Level 1	

LMFFIN0461A:		Apply stains, fillers and bleach			
				s with the skills and knowledge required to apply and bleach to timber surfaces.	
Com	petency Field:	Timber 1	Furnit	ture Manufacture	
ELE	CMENT OF COMPETEN	CY	PER	FORMANCE CRITERIA	
1.	Prepare for work		1.1	Workplace information, including materials application and safety information, material safety data sheets, is used to inform work practices.	
			1.2	Characteristics of the surface and the required surface treatment are identified from work orders or instructions.	
			1.3	Processing and application techniques, time and safety requirements are identified and used for work planning.	
			1.4	Occupational Health & Safety (OH&S) requirements, including ventilation requirements and personal protection needs, are observed throughout the work.	
			1.5	Tools, equipment and accessories are identified and checked for safe and effective operation for the staining, filling or bleaching task.	
2.	Prepare for application of materials		2.1	Surfaces are checked for contamination and correct preparation according to workplace procedures and standards.	
			2.2	Products with surface or other faults are identified and faults repaired as appropriate.	
			2.3	Materials required to stain and fill in are identified and prepared for the task.	
			2.4	Trial applications of stains and or fillers are made to check equipment operation, materials consistency, viscosity and specified colour.	
			2.5	Faults and or inconsistencies in colour are identified and workplace procedures for rectification and adjustment are followed.	
			2.6	Materials required for bleaching are identified and labelled to prevent cross-contamination of bulk material during application.	

Apply finishing materials 3.1 Techniques for application of stain, filler or bleach are 3. identified. 3.2 Materials are applied according to job instructions, material manufacturers' specifications and workplace procedures. Bleached items are appropriately stored for drying. 3.3 3.4 Finished products are inspected and approved for suitability for further processing. 3.5 Products, which do not meet quality specifications are restrained, filled, bleached or tagged for further investigation. 4. Clean work area and maintain 4.1 Equipment used is cleaned and inspected for serviceable condition and stored appropriately. equipment 4.2 Unserviceable equipment is tagged, faults are identified and appropriate personnel are informed. 4.3 Bleaching materials are disposed of in accordance with environmental concerns and workplace procedures. Unused material must not be returned to bulk stock. Work area is cleaned and returned to approved condition, 4.4 all areas used for bleaching are washed down with water. 4.5 Workplace records are completed.

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between school shop and workplaces. It relates to the unit as a whole and facilitates holistic assessment.

Work is carried out in accordance with statutory obligations, environmental legislation, relevant health regulations, manual handling procedures and organisation insurance requirements.

Work requires individuals to demonstrate some discretion, judgement and problem solving skills in the application of stains, fillers and bleach.

The following variables may be present for this particular unit.

Stains are to include:

- lacquer-based
- wiping stain and spirit-based
- may include water and oil-based

Bleach to include:

- two-solution bleach
- may include oxalic acid bleach

OH&S requirements may include:

- relevant legislation
- material safety management systems
- hazardous and dangerous goods codes
- safe operating procedures

Fillers are to include:

- oil-based
- water-based
- plastic (one-pot) filler

Surfaces include:

- solid timber
- manufactured board

Materials to be applied may include but are not limited to:

- stains
- fillers
- bleaches
- water
- abrasive papers
- cotton rags
- hessian

Tools and equipment may include, but are not limited to:

- liquid containers
- rubber gloves
- face masks
- spray booths
- spray guns

Personal protective equipment to include:

- coverall
- safety boots
- gloves
- dust mask
- safety helmet

- compressor
- air lines
- brushes
- sanding block

Information and procedures:

- workplace procedures relating to the use of tools and equipment.
- work instructions, including job sheets, plans, drawings and designs.
- workplace procedures relating to reporting and communication.
- manufacturers' specifications and operational procedures

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be determined to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

(1) Critical Aspects of Evidence

Apply safe handling requirements for equipment, products and materials, including use of personal protective equipment.

Follow work instructions, operating procedures and inspection practices to:

- prevent damage to goods, equipment and products
- prevent damage to goods, equipment or products
- maintain required production output and product quality

Select and apply a minimum of three types of stains, including:

- lacquer-based
- spirit-based
- apply fillers to a minimum of a flat surface and a curved surface
- bleach two different types of timber
- maintain application equipment
- work effectively with others
- · modify activities to cater for variations in workplace contexts and environment

(2) **Pre-requisite Relationship of Units**

Pre-requisite for this unit is:

- LMFFIN0401A: Use furniture finishing hand and power tools.
- LMFFIN0431A: Prepare surface for finishing.

(3) Underpinning Knowledge and Skills

Knowledge of:

- identification of application techniques
- characteristics of stains, fillers and bleaches in terms of toxicity, reactivity, flammability, viscosity
- the methods to prevent contamination of surfaces during and after processing
- workflow in relation to the application stains, fillers and bleach

<u>Skills</u>

The ability to:

- collect, organise and understand information related to coating materials, cleaning materials, work orders and safety procedures
- communicate ideas and information to enable confirmation of work requirements and specifications, co-ordination of work with shop supervisor, other workers and customers, and the reporting of work outcomes and problems
- plan and organise activities, including the preparation and layout of the workshop and the obtaining of coating equipment and materials to avoid any back tracking, workflow interruptions or wastage
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise workflow and productivity
- use mathematical ideas and techniques to correctly complete measurements, calculate area and estimate material requirements
- use pre-checking and inspection techniques to anticipate coating problems, avoid reworking and avoid wastage
- use the limited workplace technology related to coating, including tools, equipment and measuring devices

(4) Resource Implications

• hand application equipment, stains, fillers and bleaches

(5) Method of Assessment

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts.

Assessment should be by direct observation of tasks and questioning on underpinning knowledge.

Assessment should be conducted over time and will generally be in conjunction with assessment of other relevant units of competency.

(6) Context of Assessment

Assessment may occur on the job or in a workplace simulated facility with relevant process equipment, materials, work instructions and deadlines.

CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency						
Level 1.	Level 2.	Level 3.				
 Carries out established processes Makes judgement of quality using given criteria 	 Manages process Selects the criteria for the evaluation process 	 Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation 				

Collect, analyse and organise information	Level 1	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 1	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 1	
Use technology	Level 1	

LM	FFIN0471:	Apply surface coatings by hand		
Com	petency Descriptor:	brush app		with the skills and knowledge required to apply on coatings, including one-pot polyurethane, cs and polish, by hand.
Competency Field: Timber Furniture Manufacture			ture Manufacture	
Ele	MENT OF COMPETEN	ICY	PER	FORMANCE CRITERIA
1.	Prepare for work		1.1	Workplace information, including materials application and safety information, material safety data sheets is used to inform work practices.
			1.2	Characteristics of the surface and the required surface finish are identified from work orders or instructions.
			1.3	Processing and application techniques, time and safety requirements are identified and used for work planning.
			1.4	Occupational Health & Safety (OH&S) requirements, including ventilation requirements and personal protection needs, are observed throughout the work.
			1.5	Tools, equipment and accessories are identified and checked for safe and effective operation for the surface coating task.
2.	Prepare for application of materials		2.1	Surfaces are checked for contamination and correct preparation according to workplace procedures and standards.
			2.2	Products with surface or other faults are identified and faults repaired as appropriate.
			2.3	Finishing materials required are identified and prepared for the task.
			2.4	Trial applications of surface materials are made to check equipment operation, materials consistency and specified surface finish.
			2.5	Faults are identified and workplace procedures for rectification are followed.

Apply finishing materials Techniques for hand application of materials are identified. 3. 3.1 3.2 Finishing materials are applied according to job instructions, material manufacturers' specifications and workplace procedures. Finished products are inspected and approved for suitability 3.3 for further processing. Products, which do not meet quality specifications are 3.4 refinished or tagged for further investigation. 4. Clean work area and maintain 4.1 Equipment used is cleaned and inspected for serviceable equipment condition and stored appropriately. 4.2 Unserviceable equipment is tagged, faults are identified and appropriate personnel are informed. 4.3 Work area is cleaned and returned to approve condition. 4.4 Workplace records are completed.

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between school shops and workplaces. It relates to the unit as a whole and facilitates holistic assessment.

Work is to be carried out in accordance with statutory obligations, environmental legislation, relevant health regulations, and organisation insurance requirements.

Work requires individuals to demonstrate some discretion, judgement and problem solving skills in the application of surface coatings.

The following variables may be present for this particular unit.

Coatings are to include:

- one-pot polyurethane
- enamel
- acrylic
- polish

Surfaces may include but are not limited to:

- solid timber
- manufactured board
- metal

Application methods are to include

• brush and swooge

OH&S requirements include:

- relevant statutory requirements
- material safety management systems
- hazardous substances and dangerous goods
- safe operating procedures.

Materials may include but are not limited to:

- water
- detergent
- wax
- oil
- enamel
- acrylic
- one-pot polyurethane
- polish

Personal protective equipment to include:

- coverall
- safety boots
- gloves
- dust mask
- safety helmet

Tools and equipment may include, but are not limited to:

- sanders
- pneumatic or low-voltage electric buff
- rubber sanding block
- brushes, and
- swooges
- mentholated spirits
- turpentine
- terebine
- abrasive papers
- cotton rags
- steel wool

Information and procedures:

- workplace procedures relating to the use and operation of tools and equipment.
- workplace instructions, including job sheets, plans, drawings and designs.
- workplace procedures relating to reporting and communications.
- manufacturers' specifications and operational procedures

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

(1) Critical Aspects of Evidence

Interpret work order and locate and apply relevant information.

Apply safe handling requirements for equipment, products and materials, including use of personal protective equipment.

Follow work instructions, operating procedures and inspection practices to:

- minimise the risk of injury to self and others
- prevent damage to goods, equipment and products
- maintain required production output and product quality

Prepare for and apply coatings by hand on a minimum of five occasions covering:

- the three surface types
- the four coatings detailed in the Range Statement
- Maintain application equipment.

Work effectively with others.

Modify activities to cater for variations in workplace contexts and environment.

(2) Pre-requisite Relationship of Units

Pre-requisites for this unit are:

- LMFFIN0031A: Use furniture finishing hand and power tools
- LMFFIN0431A: Prepare surface for finishing

(3) Underpinning Knowledge and Skills

Knowledge Knowledge of:

- identification of hand application techniques
- characteristics of coatings, waxes and oils in terms of toxicity, reactivity, flammability, required viscosity
- the methods to prevent contamination of surfaces during and after finishing workflow in relation to the application of finishing material

Skills The ability to:

- collect, organise and understand information related to coating materials, cleaning materials, work orders and safety procedures
- communicate ideas and information to enable confirmation of work requirements and specifications, co-ordination of work with site supervisor, other workers and customers, and the reporting of work outcomes and problems
- plan and organise activities, including the preparation and layout of the workshop and the obtaining of coating equipment and materials to avoid any back tracking, workflow interruptions or wastage
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise workflow and productivity
- use mathematical ideas and techniques to correctly complete measurements, calculate area, estimate paint requirements and other material requirements
- use pre-checking and inspection techniques to anticipate coating problems, avoid reworking and avoid wastage
- use the limited workplace technology related to coating, including tools, equipment and measuring devices

(4) Resource Implications

 hand finishing application equipment, coating materials, waxes and oils and surfaces to be coated

(5) Method of Assessment

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts.

Assessment should be by direct observation of tasks and questioning on underpinning knowledge.

Assessment may be in conjunction with assessment of other relevant units of competency.

(6) Context of Assessment

Assessment may occur on the job or in a workplace simulated facility with relevant process equipment, materials, work instructions and deadlines.

CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

	Levels of Competency	
Level 1.	Level 2.	Level 3.
 Carries out established processes Makes judgement of quality using given criteria 	 Manages process Selects the criteria for the evaluation process 	 Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation

Collect, analyse and organise information	Level 1	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 1	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 1	
Use technology	Level 1	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

LMFPTF0871A: Frame a simple art work

Competency Descriptor:

This unit deals with the skills and knowledge required to design, fabricate components and assemble a simple artwork package.

Competency Field: Picture Framing

Eli	ELEMENT OF COMPETENCY		PERFORMANCE CRITERIA		
1.	Design package	1.1	Artwork to be framed is identified and its qualities and framing requirements assessed.		
		1.2	A provisional design package is developed.		
		1.3	Design is modified as required and approved in accordance with workplace procedures.		
		1.4	Work sequence is planned to suit the job.		
2.	Cut and join mouldings	2.1	Workplace health and safety requirements, including personal protection needs, are observed throughout the work.		
		2.2	Tools, equipment and materials required for cutting and joining of mouldings are selected and checked prior to use to ensure that they are appropriate for the work.		
		2.3	Material is set out for cutting to length according to work instructions and workplace procedures.		
		2.4	Tools, machines and equipment are used in accordance with safety requirements and manufacturers' specifications.		
		2.5	Mouldings are cut to length and checked for quality and fit in accordance with workplace practices.		
		2.6	Components are laid out and fixed in preparation for joining according to work instructions and workplace procedures.		
		2.7	Components are joined and checked for quality, alignment and finish according to workplace practices.		

3.	Cut mat board	3.1	Tools, equipment and materials required for cutting mat board are selected and checked prior to use to ensure that they are appropriate for the work.
		3.2	Mat board material is set out for cutting according to work instructions and workplace procedures.
		3.3	Tools, machines and equipment are used in accordance with safety requirements and manufacturers' specifications.
		3.4	Mat boards are cut and checked for quality in accordance with workplace practices.
4.	Cut glass for framing	4.1	Tools, equipment and materials required for cutting glass are selected and checked prior to use to ensure that they are selected and checked are appropriate for the work in terms of quality, serviceability and safety.
		4.2	Glass is set out for cutting according to work instructions and workplace procedures.
		4.3	Tools, machines and equipment are used in accordance with safety requirements and manufacturers' specifications.
		4.4	Glass is cut and checked for quality in accordance with workplace practices.
5.	Mount artwork	5.1	Method of mounting is determined.
		5.2	Mounting equipment is set up according to operating procedures and workplace practice.
		5.3	Artwork is positioned on substrate according to job requirements and placed in mounting equipment.
		5.4	Mounting equipment is operated in accordance with manufacturers' instructions and workplace procedures.
		5.5	Assembled artwork is removed from equipment, inspected for quality in accordance with workplace

procedures.

6.	Assemble artwork package	6.1	Fabricated components are cleaned and laid out for assembly in accordance with workplace procedures.
		6.2	Artwork is attached to backing material using the selected method.
		6.3	Frame components are assembled, adjusted as required to fit and fixed.
		6.4	Frame is fitted over package and the backing is fixed in accordance with workplace procedures.
		6.5	Fittings, attachments and hanging aids are attached in accordance with workplace procedures.
		6.6	Package is inspected for quality and processed in accordance with workplace procedures.
7	Complete work	7.1	Work area is cleaned; hand and/or power tools and equipment are cleaned, maintained and stored in accordance with workplace procedures.
		7.2	Off-cuts and unused materials are collected and stored for reuse or disposed following workplace procedures.
		7.3	Waste and scrap materials are dealt with following workplace procedures.

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between school-shops and workplaces. It relates to the unit as a whole and facilitates holistic assessment.

Work is carried out in accordance with statutory obligations, environmental legislation, relevant health regulations, manual handling procedures and organisation insurance requirements.

The following variables may be present for this particular unit.

Simple artwork is flat paper-based artwork not requiring any conservation measures.

Project and design is to be determined in consultation with supervisor/teacher.

Work is conducted under supervision and guidance.

Workplace health and safety requirements include:

- OH&S requirements:
- relevant statutory requirements
- material safety management systems
- hazardous substances and dangerous goods codes
- safe operating procedures

Work involves:

- reading and interpreting plans
- developing set-outs
- using hand and power tools
- operating basic machinery
- applying quality requirements, and
- applying product finishing techniques and materials

Tools and equipment to include but are not limited to:

- guillotines
- static mounted circular saws
- drop saws
- docking saws
- mitre saws
- underpinners (V-nailers)
- screwdrivers
- hand-operated tools, including cutting blades, clamps, and marking out tools

Personal protective equipment is to include:

- gloves
- safety glasses
- gauntlets
- footwear
- earmuffs
- aprons
- overalls

- mat cutters
- appropriate mounting tools and equipment
- flat felt-covered cutting table
- glass cutters
- squares
- tape measures
- marking pens/pencils

Materials to be used may include but not limited to:

- timber
- touch-up materials
- glues
- sandpaper
- standard mat board material
- appropriate mounting materials
- glass

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

(1) Critical Aspects of Evidence

Interpret work instructions and locate and apply relevant information.

Apply safe handling requirements for equipment, products and materials, including use of personal protective equipment.

Follow work instructions, operating procedures and inspection practices to:

- minimise the risk of injury to self or others
- prevent damage to goods, equipment or products
- achieve required production output and product quality
- adapt or vary glass and glazing designs

As a minimum, design, prepare, fabricate and assemble at least one item of simple artwork work effectively with others.

Modify activities to cater for variations in workplace contexts and environment.

(2) **Pre-requisite Relationship of Units**

Pre-requisite for this unit is:

• LMFPTF0881A: Use picture framing sector hand and power tools

(3) Underpinning Knowledge and Skills

Knowledge of:

- design requirements for simple artwork
- the preparation of plans/drawings/set-outs
- workflow and steps in relation to framing simple artwork
- identification of hand and basic picture framing processing tools, materials, equipment, processes and procedures

<u>Skills</u>

The ability to:

- collect, organise and understand information related to work orders, basic plans and safety procedures
- communicate ideas and information to enable confirmation of work requirements and specifications, co-ordination with work supervisor, other workers and the reporting of work outcomes and problems
- plan and organise activities, including the preparation and layout of the work area and the
 obtaining of equipment and materials to avoid any back tracking, workflow interruptions or
 wastage
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise workflow and productivity
- use mathematical ideas and techniques to correctly complete measurements, calculate area and estimate material requirements
- use pre-checking and inspection techniques to anticipate working problems, avoid reworking and avoid wastage
- use the limited workplace technology related to the framing of simple artwork, including tools, equipment, materials and measuring devices

(4) Resource Implications

- access to plans/designs
- picture framing hand tools and/or basic processing machines
- equipment
- materials
- work area
- a specified project

(4) Method of Assessment

Assessment should be by direct observation of tasks and questioning on underpinning knowledge.

Assessment may be conducted in conjunction with assessment of the other sector specialist unit of competency where appropriate.

(6) Context of Assessment

Assessment may occur on the job or in a workplace simulated facility with relevant equipment, materials, work instructions and deadlines.

CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency							
Level 1.	Level 2.	Level 3.					
 Carries out established processes Makes judgement of quality using given criteria 	 Manages process Selects the criteria for the evaluation process 	 Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation 					

Collect, analyse and organise information	Level 1	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 1	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 1	
Use technology	Level 1	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

LMFIND0062A: Mount wall coverings

Competency Descriptor: This unit deals with the skills and knowledge required to prepare for and mount wallpaper and other wall-coverings, and applies to individuals working in Interior Decoration trade

Competency Field: Light Manufacturing Furnishing – Interior Decoration

ELI	EMENT OF COMPETENCY	PERF	FORMANCE CRITERIA
1.	Select and prepare materials and equipment	1.1	Quality Assurance requirements for company's painting and decorating operations recognised and adhered to.
		1.2	OH&S requirements for workplace environment and preparing for and application of wall covering identified and adhered to.
		1.3	Materials checked for conformity with specifications.
		1.4	Appropriate personal protective equipment selected, correctly fitted and used in accordance with safe working conditions.
		1.5	Tools and equipment selected consistent with job requirements, checked for serviceability and any faults reported and/or rectified.
		1.6	Safety hazards identified and correct procedures used to reduce risk to self and others.
2.	Erect work platform	2.1	Work platform erected to appropriate working height to job and OH&S requirements.
3.	Prepare surface and wall covering	3.1	Surface prepared as per manufacturer's specification in compliance with substrate requirements.
		3.2	Surface defects repaired to an even, sound finish and lining paper applied where required to achieve a clean, even finish.
		3.3	Application plan determined and paper selected to specification or client requirements.
		3.4	Adhesives selected as per wall covering manufacturer's specification where applicable.
		3.5	Wall covering checked for defects and shading problems and rectified where applicable.
		3.6	Size applied to surface where applicable to manufacturer's specifications.



4.	Apply wall covering	4.1	Wall covering applied to manufacturer's specifications ensuring seams are butted, paper is plumb, pattern is matched (if applicable), free of defects and trimming around fittings is precise.
5.	Clean up	5.1	Area cleaned and waste material disposed of safely.
		5.2	Unused materials stored.
		5.3	Tools and equipment safely cleaned, maintained and stored.

RANGE STATEMENT

This unit applies to the application of a range selected wall coverings to all common interior building substrates.

Application to walls and ceilings constructed of the following materials: (painted/previously painted in sound and unsound condition)

- set plaster
- paper-faced gypsum plaster board
- plaster glass
- masonry products (including clay bricks, concrete blocks, cement render)
- medium density fibre-board (MDF) and particle board
- fibre-cement products
- polystyrene

Wall covering materials may include:

- unpasted and ready-pasted wallpapers (simplex and duplex)
- washable wallpaper
- vinyl wallpaper
- lining paper
- suede grass weaves
- photomurals
- flock
- metallic foils
- front runner
- borders
- linen-backed vinyl
- commercial grade materials

Tools and equipment may include:

- lay brush
- smoothing block
- plastic spreader
- plastic trowel
- rubber roller
- scissors
- sponge
- seam roller

Elevated work platforms to include:

- step ladder
- trestles and plank
- mobile scaffold

trimming knives and cutters

- broad knife
- tape measure
- plumb bob and string line
- spirit level
- scrapers
- filling blades
- putty knives

Adhesives may include:

- cellulose
- starch
- latex
- special blends as per manufacturer's recommendation

Standards and Assessment Development Unit, NCTVET

LMF03

EVIDENCE GUIDE

Competency is to be demonstrated by the application of a range of wall coverings to a range of substrates to manufacturer and architect/client specifications.

(1) Critical Aspects of Evidence

It is essential that competence be observed in the following aspects:

- demonstrate compliance with Occupational Health and Safety regulations applicable to workplace and wall covering application operations
- indicate compliance with organisational policies and procedures
- select and use appropriate process, tools and equipment
- apply organisational quality procedures and processes within context of applying wall covering
- carry out adequate surface preparation to ensure maximum adhesion of wall covering
- use safe and effective procedures to apply standard width and commercial width wall coverings to ceilings, walls, partitions, archways
- calculate quantities of materials
- identify faults and problems that occur and corrective action taken to rectify

(2) **Pre-requisite Relationship of Units**

Pre-requisites for this unit are:

• nil

(3) Underpinning Knowledge and Skills

Knowledge of:

- workplace and equipment safety requirements
- specifications
- surface preparation for the application of wall covering
- · compatibility of preparatory materials and wall covering
- types and properties of wall coverings and their suitability to various substrates
- hazards associated with wall covering, chemicals and dust
- tools and equipment
- procedures used to apply straight pattern match, drop pattern match and random match wall coverings
- · procedures used to apply commercial width and special purpose wall coverings
- responsibilities with regard to heritage listed building conservation areas environmental requirements how to calculate quantities of materials



Skills The ability to:

- work safely, efficiently and effectively
- organise/plan work
- interpret specifications
- take off dimensions, quantities, types of materials, application requirements
- identify and select materials appropriate to job
- use tools, equipment and materials
- prepare materials
- apply wall coverings to manufacturer's specification and quality standards
- check finished work
- communicate effectively
- clean area and dispose of waste safely
- store materials/components
- respond to emergency situations
- calculate material quantities

(4) Resource Implications

The following resources should be provided:

- workplace location
- tools and equipment appropriate to processes
- materials appropriate to activity
- specifications of proposed activity

(5) Method of Assessment

Competency should be assessed through direct observation and questions related to underpinning knowledge.

Competency should be assessed under general guidance, checking at various stages of the process and at completion of the activity against performance criteria and specifications.

(6) Context of Assessment

Competency may be assessed in the workplace or simulated workplace setting.

Assessment shall be while tasks are undertaken either individually or as part of a team under limited supervision.

LMF03

CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency							
Level 1.	Level 2.	Level 3.					
 Carries out established processes Makes judgement of quality using given criteria 	 Manages process Selects the criteria for the evaluation process 	 Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation 					

Collect, analyse and organise information	Level 1	
Communicate ideas and information	Level 2	
Plan and organise activities	Level 2	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 2	
Use technology	Level	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

LM	FFIN0431A:	Prepare surface for finishing	
Com	petency Descriptor:	This unit deals with the skills and knowledge required to prepare surfaces for the application of surface coatings by hand or machine operations.	
Com	petency Field:	Timber Furniture Manufacture	
Ele	MENT OF COMPETEN	NCY PE	RFORMANCE CRITERIA
1.	Prepare for surface preparation	1.1	Characteristics of the surface and the required surface coating materials are identified.
		1.2	Occupational Health & Safety (OH&S) requirements, including personal protection needs, are observed throughout the work.
		1.3	Tools and equipment required, related engineering controls identified and set up.
		1.4	Sources of contamination in work area are identified and excluded.
		1.5	Workplace procedures for surface preparation are identified and followed according to the surface and surface coating materials being used.
2.	Prepare surfaces	2.1	Surfaces are prepared according to workplace procedures and specification.
		2.2	Surface preparation is checked for conformity with workplace specifications throughout the process.
		2.3	Rectification of surface preparation faults are made as required.
		2.4	Products are inspected and approved for suitability for further processing.
		2.5	Defects are rectified and/or reported in accordance with workplace procedures.

- 3. Clean work area and maintain 3 equipment
- 3.1 Prepared products are packed, stored and labelled ready for next process.
 - 3.2 Equipment used is cleaned and inspected for serviceable condition and stored appropriately.
 - 3.3 Unserviceable equipment is tagged, faults are identified and appropriate personnel are informed.
 - 3.4 Chemicals used are stored or disposed of correctly according to regulations.
 - 3.5 Work area is cleaned ready for next process or task.

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between school shop and workplaces. It relates to the unit as a whole and facilitates holistic assessment.

Work is carried out in accordance with statutory obligations, environmental legislation, relevant health regulations, manual handling procedures and organisation insurance requirements.

Work requires individuals to demonstrate some discretion, judgement and problem solving skills in the preparation of surfaces.

The following variables may be present for this particular unit.

Surfaces to be prepared may include but are not limited to:

- solid timber
- manufactured board
- metal

OH&S requirements may include:

- relevant legislation
- material safety management systems
- hazardous and dangerous goods codes, and
- safe operating procedures

Tools and equipment are to include:

- measuring tapes and rulers
- squares
- hammer
- nail punch
- liquid containers
- brushes
- cabinet scrapers
- fixed belt/stroke sander
- oil stone
- steel wool/scourers
- sanding blocks
- steam iron
- chisels
- power sanders
- air compressor and hoses
- file

Tools and equipment may also include:

- plane
- spanners
- screwdrivers
- clamps
- drill
- mallet
- vice
- saw

Materials to be used may include but are not limited to:

- abrasive papers
- oxalic acid
- thinners
- turpentine
- menthylated spirits
- putties
- hot water
- glues

Information and procedures:

- workplace procedures relating to the use of tools and equipment
- work instructions, including job sheets, plans, drawings and designs
- workplace procedures relating to reporting and communication
- manufacturers' specifications and operational procedures

Personal protective equipment to include:

- coverall
- safety boots
- gloves
- dust mask
- safety helmet

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

(1) Critical Aspects of Evidence

Interpret work order and locate and apply relevant information.

Apply safe handling requirements for equipment, products and materials, including use of personal protective equipment.

Follow work instructions, operating procedures and inspection practices to:

- minimise the risk of injury to self or others
- prevent damage to goods, equipment and products
- maintain required production output and product quality

Prepare surfaces on a minimum of four occasions, including:

- horizontal surface
- vertical surface
- internal surface
- curved surface (moulding)
- Surfaces are to include:
- solid hardwood
- solid softwood
- veneered board

Work effectively with others.

Modify activities to cater for variations in workplace context and environment.

(2) Pre-requisite Relationship of Units

Pre-requisite for this unit is:

• LMFFIN0401A: Use furniture finishing hand and power tools

(3) Underpinning Knowledge and Skills

Knowledge of:

- the types, properties and characteristics of coatings
- surface preparation techniques and equipment/ materials
- hazardous substances and materials used in surface preparation
- workflow in relation to the application and removal of surface coatings

Skills The ability to:

- collect, organise and understand information related to work orders, basic plans, hazardous substances and materials and safety procedures
- communicate ideas and information to enable confirmation of work requirements and specifications, co-ordination of work with site supervisor, other workers and customers, and the reporting of work outcomes and problems
- plan and organise activities, including the preparation and layout of the worksite and the obtaining of equipment and materials to avoid any back tracking, workflow interruptions or wastage
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise workflow and productivity
- use mathematical ideas and techniques to correctly complete measurements and estimate material requirements
- use pre-checking and inspection techniques to anticipate surface preparation problems, avoid reworking and avoid wastage
- use the workplace technology related to the preparation of surfaces, including manual and pressure tools, equipment and measuring devices

(4) **Resource Implications**

• range of surfaces to be prepared, preparation tools, equipment and consumables

(5) Method of Assessment

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts.

Assessment should be by direct observation of tasks and questioning on underpinning knowledge.

Assessment should be conducted over time and may be in conjunction with assessment of other relevant units of competency.

(6) Context of Assessment

Assessment may occur on the job or in a workplace simulated facility with relevant process equipment, materials, work instructions and deadlines.

CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency						
Level 1.	Level 2.	Level 3.				
 Carries out established processes Makes judgement of quality using given criteria 	 Manages process Selects the criteria for the evaluation process 	 Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation 				

Collect, analyse and organise information	Level 1	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 1	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 1	
Use technology	Level 1	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

LMFFMK0052A: Select and apply hardware

Competency Descriptor: This unit deals with the skills and knowledge required to identify, select and fix hardware to furniture items, and applies to new and refurbished furniture.

Competency Field: Timber Furniture Manufacturing

ELEMENT OF COMPETENCY		PEI	RFORMANCE CRITERIA
1.	Plan and prepare work	1.1	Work instructions are used to determine job requirements, including design, colour, finish process and required hardware quality.
		1.2	Workplace health and safety requirements, including personal protection needs, are observed throughout the work.
		1.3	Types of hardware are identified and selected for the work.
		1.4	Tools, equipment and accessories for application are identified and checked for safe and effective operation.
		1.5	Surfaces are cleaned and prepared to enable accurate colour matching.
2.	Apply/fit and install hardware	2.1	Hardware items are laid out/placed in the required design.
		2.2	Tools and equipment used in accordance with workplace procedures, including use of personal protective equipment.
		2.3	Fastening/securing process is undertaken according to workplace procedures.
		2.4	Adhesives, where used are applied according to workplace procedures and/or manufacturers' instructions.
		2.5	Work is checked against required quality standards.
3.	Finalise operation and maintain equipment	3.1	Work area cleaned, hand and/or power tools and equipment are cleaned, maintained and stored in accordance with workplace procedures.
		3.2	Machinery is cleaned and left in a safe mode.

- 3.3 Faulty and/or defective equipment is tagged and reported in accordance with workplace practices.
- 3.4 Unused hardware is collected and stored for reuse or disposal following workplace procedures.
- 3.5 Waste and scrap materials are dealt with following workplace procedures.

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between school-shops and workplaces. It relates to the unit as a whole and facilitates holistic assessment.

Work is carried out in accordance with statutory obligations, environmental legislation, relevant health regulations, manual handling procedures and organisation insurance requirements.

Work requires individuals to demonstrate some discretion, judgement and problem solving skills in selecting and applying hardware.

The following variables may be present for this particular unit.

Hardware to be covered here is to include at a minimum:

- hinges
- handles
- drawer-runners
- metal drawer systems
- sliding rail systems,
- rotating storage systems
- slide-out storage systems

Work to be carried out in workplaces involved in the manufacture of:

- solid timber furniture
- domestic furniture
- commercial furniture
- kitchen and bathroom cabinets
- furniture components

OH&S requirements include:

- relevant statutory requirements
- material safety management systems
- hazardous substances and dangerous goods
- safe operating procedures

Materials to be used may include but are not limited to:

- timber
- manufactured board
- hinges
- hardware consumables
- cleaning chemicals and materials

Tools and equipment may include, but are not limited to:

- measuring tapes or rulers
- levelling devices
- hammers
- mallets
- squares
- bevels
- chisels
- planes

Personal protective equipment to include:

- coverall
- safety boots
- gloves
- dust mask
- safety helmet

- hand saws
- power saws
- power drills/screwdrivers
- pneumatic tools
- clamps
- screwdrivers
- pincers

Information and procedures

- workplace procedures relating to the use of tools and equipment
- work instructions, including job sheets, cutting lists, plans, drawings and designs
- workplace procedures relating to reporting and communication
- manufacturers' specifications and operational procedures

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

(1) Critical aspects of evidence

Interpret work order and locate relevant information.

Apply safe handling requirements for equipment, products and materials, including use of personal protective equipment.

Follow work instructions, operating procedures and inspection practices to:

- prevent damage to goods, equipment and products
- maintain required production output and product quality
- minimise the risk of injury to self or others

Select and apply each item in the range of hardware stipulated in the Range Statement.

Work effectively with others.

Modify activities to cater for variations in workplace context and environment.

(2) **Pre-requisite Relationship of units:**

Pre-requisites for this unit are:

LMFFMK0031A: Use furniture making hand and power tools

(3) Underpinning knowledge and skills

Knowledge of:

<u>Skills</u>

The ability to:

- types, characteristics, uses and limitations of hardware
- the interpretation of plan representation of furniture design
- the preparation of drawings/set-outs
- identification of hand and/or power tools, materials, equipment, processes and procedures
- workflow in relation to furniture production

 collect, organise and understand information related to work orders, basic plans and safety procedures

- communicate ideas and information to enable confirmation of work requirements and specifications, co-ordination of work with shop supervisor, other workers and customers, and the reporting of work outcomes and problems
- plan and organise activities, including the preparation and layout of the work area and the obtaining of equipment and materials to avoid any back tracking, workflow interruptions or wastage
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise workflow and productivity
- use mathematical ideas and techniques to correctly complete measurements, calculate area and estimate material requirements
- use pre-checking and inspection techniques to anticipate application problems, avoid reworking and avoid wastage
- use the limited workplace technology related to the selection and application of hardware, including tools, equipment, calculators and measuring devices

(4) **Resource implications**

The following resources should be provided:

• access to plans, hand and/or power tools, equipment, hardware materials, woodworking machinery, and a work area

(5) Method of assessment

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts.

Assessment should be by direct observation of tasks and questioning on underpinning knowledge.

Assessment should be conducted over time and may be in conjunction with assessment of other relevant units of competency.

(6) Context of assessment

Assessment may occur on the job or in a simulated workplace facility with relevant process equipment, materials, work instructions and deadlines.

CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency					
Level 1.	Level 2.	Level 3.			
 Carries out established processes Makes judgement of quality using given criteria 	 Manages process Selects the criteria for the evaluation process 	 Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation 			

Collect, analyse and organise information	Level 1	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 1	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 1	
Use technology	Level 1	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

LMFUPH0742A: Cut, sew and fit and/ or fill cushions

Competency Descriptor:

This unit deals with the skills and knowledge required to cut, sew and fit or fill loose and fitted cushions for upholstered furniture.

Competency Field: Upholstery

ELEMENT OF COMPETENCY		PER	FORMANCE CRITERIA
1.	Plan work operations	1.1	Specifications concerning design, fabrics, accessories and finish for the cushions are confirmed with designer/customer/client, as required.
		1.2	Workplace health and safety requirements, including personal protection needs, are observed throughout the work.
		1.3	Fabrics, filling medium, work method and sequence are determined.
		1.4	Suitable work area is selected, prepared and cleaned of any contaminants.
		1.5	Appropriate equipment and tools are selected and checked for safe operation.
		1.6	Material and filling medium is selected and checked in terms of quantity, quality, contaminants, size, pattern and consistency in accordance with workplace procedures.
2.	Cut and sew cushion covers	2.1	Material is laid out on cutting table and nap/pile, direction of pattern, pattern repeat and finished side of fabric are identified.
		2.2	Patterns are laid out using registration points on the pattern and other instructions to match required fabric pattern, ensuring maximum use of the fabric.
		2.3	Fabric is cut and work inspected to ensure accuracy/tolerance in accordance with workplace procedures.
		2.4	Sewing machine set up to requirements and adjustments are identified and followed.

		2.5	Machine maintains required product quality and output.
		2.6	Finished cushion covers are checked for required quality and reprocessed if required.
3.	Fit and fill cushions	3.1	Cushion covers are checked for fit and amount of filling determined for each application.
		3.2	Cushions are filled to the appropriate size using appropriate methods.
		3.3	Final sewing of cushion is performed in accordance with workplace procedures.
		3.4	Completed cushions are inspected for quality and fit, and those not conforming to the requirement being reprocessed or disposed of in conformance with workplace practices.
4.	Complete work	4.1	Workplace documentation is completed in accordance with procedures.
		4.2	Waste and scrap are collected for disposal/recycling in accordance with workplace procedures.
		4.3	Machines and tools used are cleaned, inspected for serviceability and stored in accordance with workplace procedures.
		4.4	Equipment is maintained and work area is cleaned in accordance with workplace procedures.

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between school-shops and workplaces. It relates to the unit as a whole and facilitates holistic assessment.

Work is carried out in accordance with statutory obligations, environmental legislation, relevant health regulations, manual handling procedures and organisation insurance requirements.

Work requires individuals to demonstrate discretion, judgement and problem solving skills in the cutting, sewing and fitting or filling of cushions.

The following variables may be present for this particular unit.

This unit addresses the requirement to cut, sew and fit or fill loose or fitted cushions for upholstered furniture.

Workplace health and safety requirements may include:

- OH&S requirements
- material safety management systems
- hazardous and dangerous goods codes
- safe operating procedures

Tools and equipment may include, but are not limited to:

- cutting table
- cutting machines
- scissors
- sewing machines
- cushion filling machines

Sewing machine set up and adjustments include:

- threading machine and winding bobbin
- setting required tensions
- setting required machine settings
- lubricating and adjusting the machine,
- and testing operation for work order requirements

Filling material may include, but is not limited to:

- foam
- dacron
- flock
- crumbed foam
- wadding fibre
- linters
- feathers/down

Materials may include:

- fabric
- filling material

Sewing machines may include:

- flat bed
- walking foot
- over-locker

Personal protective equipment may include:

- safety glasses/goggles
- hair nets
- ear muffs/plugs
- gloves
- footwear, and
- protective clothing

Information and procedures:

- workflow in relation to the cutting, sewing, and fitting or filling of cushions
- workplace procedures relating to the setting and operation of machines
- work instructions, including job sheets, plans, drawings and designs
- workplace procedures relating to reporting and communication

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

(1) Critical Aspects of Evidence

Interpret work order and locate and apply relevant information.

Identify and select fabric, matching pattern/nap/pile/direction.

Follow work instructions, operating procedures and inspection practices to:

- prevent damage to goods, equipment or products
- maintain required production output and product quality
- minimise the risk of injury to self or others

As a minimum, cut, sew and fit or fill the following cushions:

- piped border cushion
- wrap around cushion
- T-cushion

Work effectively with others.

Modify activities to cater for variations in workplace contexts and environment.

(2) **Pre-requisite Relationship of Units**

- LMFUPH0581A: Use upholstery hand and power tools
- LMFUPH0612A: Machine sew upholstery final cover materials (basic)
- LMFUPH0622A: Develop cutting plan and cut single layer upholstery fabric

(3) Underpinning Knowledge and Skills

Knowledge of:

- · work requirements including workplace standards and inspection procedures
- workflow in relation to the cutting, sewing and fitting or filling of cushions
- fabric types and characteristics, common faults and inspection procedures
- design features of the finished furnishing items in relation to laying out the pattern and cutting the fabric

<u>Skills</u>

The ability to:

- collect, organise and understand information related to work orders, basic plans, and safety procedures
- communicate ideas and information to enable confirmation of work requirements and specifications, co-ordination of work with work supervisor, other workers and customers, and the reporting of work outcomes and problems
- plan and organise activities including the preparation and layout of the work area and the obtaining of equipment and materials to avoid any back tracking, workflow interruptions or wastage
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise workflow and productivity
- use mathematical ideas and techniques to correctly complete measurements, calculate work requirements, optimise component and material sizes for economical cutting and assemble required materials
- use pre-checking and inspection techniques to plan work, avoiding reworking and wastage
- use the workplace technology related to the cutting, sewing and fitting or filling of cushions

(4) **Resource Implications**

- cutting table
- material
- filling medium
- sewing machines
- cushion filling machine
- work order/furniture to be fitted
- workplace information including work procedures and/or equipment instructions

(5) Method of Assessment

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts.

Assessment should be by direct observation of tasks and questioning on underpinning knowledge.

Assessment should be conducted over time and may be in conjunction with assessment of other units of competency, which together form a part of the job role.

(6) Context of Assessment

Assessment may occur on the job or in a workplace simulated facility with relevant process equipment, materials, work instructions and deadlines.

CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency					
Level 1.	Level 2.	Level 3.			
 Carries out established processes Makes judgement of quality using given criteria 	 Manages process Selects the criteria for the evaluation process 	 Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation 			

Collect, analyse and organise information	Level 1	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 1	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 1	
Use technology	Level 1	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

LMFSOF1402A: Hand sew soft furnishings

Competency Descriptor: This unit deals with the skills and knowledge required to hand sews hems and shaped components, and hand finish work for soft furnishings.

Competency Field: Soft Furnishing

ELI	EMENT OF COMPETENCY	PER	RFORMANCE CRITERIA
1.	Identify materials and sewing requirements	1.1	Required materials are identified from work order.
		1.2	Special requirements for the stitching, including stitch type, length and end finishing requirements are identified from work order.
2.	Assemble and organise materials to be sewn	2.1	OH&S requirements, including ergonomic criteria and personal protection needs, are observed throughout the work.
		2.2	Materials to be sewn are collected and inspected for appropriate quality.
		2.3	Naps, direction of pattern and face side of the materials are identified.
		2.4	Required shape or form of the finished item is made and secured using tacking stitches, pins, adhesives or fixtures to assist in sewing operations.
		2.5	Appropriate needle types are selected and threaded.
3.	Sew by hand	3.1	Materials are held to allow for sewing in the required direction.
		3.2	Hand sewing operations are completed to ensure finished components match work requirements.
4.	Finish work	4.1	Finished stitching, including sewn area, seam width, stitch length, end finishing, allowances, shape and finish are checked.
		4.2	Topstitching or other decorative features are checked for required finish.

		4.3	Where required, stitching or seams are eased and work is pressed for the next stage.
		4.4	Raw edges are trimmed and any loose or untrimmed threads are removed.
		4.5	Any part of the work, which does not comply with work order is rectified.
		4.6	Problems are notified following workplace procedures
5.	Complete work for next process	5.1	Finished work is folded, protected and dispatched to the next process following workplace procedures.
		5.2	Any required documentation is completed and stored following workplace procedures.

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between school-shops and workplaces. It relates to the unit as a whole and facilitates holistic assessment.

Work is carried out in accordance with statutory obligations, environmental legislation, relevant health regulations, manual handling procedures and organisation insurance requirements.

Work requires individuals to demonstrate some discretion, judgement and problem solving skills in the set up and operation of machines. This may be demonstrated either individually or in a team environment.

The following variables may be present for this particular unit.

The purposes of hand sewing include:

- sewing and manipulation requirements for hand sewing a range of upholstery and other furnishing fabrics
- the joining of all types of fabrics, single or multi thickness, partly constructed materials, heavy materials, including leather
- hemming, seams, tacking, button attachment, hand finishing of trims and decorations

OH&S requirements may include:

- relevant statutory requirements
- material safety management systems
- hazardous and dangerous goods codes
- safe operating procedures

Tools and equipment may include a range of needles and threads

Materials to be sewn may include but are not limited to:

- plain and patterned fabrics for a variety of curtains, drapes and cushions
- attachments
- lining
- interlining
- webbings, or
- padding

Sewing direction is determined by:

- stitch type and location
- personal right-hand or left-hand preference of the sewer
- manipulation requirements for the bulk and slipperiness of the materials

Hand sewing work requirements must ensure that:

- beginning and end of stitching are secure
- appropriate allowances (or hem and/or other allowance), stitch type, length and visibility are used
- sewn area or hems are flat and/or appropriately shaped
- finished components match work requirements

Information and procedures:

- machine manufacturers' specifications and operational procedures
- workplace procedures relating to the setting and operation of machinery
- work instructions, including job sheets, plans, drawings and designs
- workplace procedures relating to reporting and communication

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

(1) Critical Aspects of Evidence

Apply safe handling practices for equipment, products and materials.

Identify materials used and any special sewing requirements for the materials to be sewn.

Hand sew at least five different soft furnishing products or using five different techniques.

Interpret work order, copy samples and locate and apply relevant information.

Follow work instructions, operating procedures and inspection practices to:

- prevent damage to goods, equipment or products
- maintain required production output and product quality
- minimise the risk of injury to self or others

Work effectively with others.

Modify activities to cater for variations in workplace contexts and environment.

Report process or materials faults, damaged products or equipment.

(2) Pre-requisite Relationship of Units

Pre-requisite for this unit is:

Nil

(3) Underpinning Knowledge and Skills

Knowledge Knowledge of:

- work requirements, including workplace standards
- identification of techniques and procedures for the sewing processes
- fabric types, common faults and inspection procedures
- methods to be used with different fabric types
- risks to health from repetitive actions and prevention strategies
- design features of the articles sewn in relation to the methods and stitches to be used

Skills The ability to:

- collect, organise and understand information related to work orders, basic plans and safety procedures
- communicate ideas and information to enable confirmation of work requirements and specifications, co-ordination of work with site supervisor, other workers and customers, and the reporting of work outcomes and problems
- plan and organise activities, including the preparation and layout of the worksite and the obtaining of equipment and materials to avoid any back tracking, workflow interruptions or wastage
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise workflow and productivity
- use mathematical ideas and techniques to correctly complete measurements and estimate material requirements.
- use pre-checking and inspection techniques to anticipate sewing problems, avoid reworking and avoid wastage
- use the limited workplace technology related to the sewing, including tools, equipment and measuring devices

(4) **Resource Implications**

- appropriate sewing equipment
- fabrics
- work order
- workplace information, including work procedures

(5) Method of Assessment

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts.

Assessment should be by direct observation of tasks and questioning on underpinning knowledge.

Assessment should be conducted over time and will generally be in conjunction with assessment of other units of competency

(6) Context of Assessment

Assessment may occur on the job or in a workplace simulated facility with relevant process equipment, materials, work instructions and deadlines.

CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency				
Level 1.	Level 2.	Level 3.		
 Carries out established processes Makes judgement of quality using given criteria 	 Manages process Selects the criteria for the evaluation process 	 Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation 		

Collect, analyse and organise information	Level 1	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 1	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 1	
Use technology	Level 1	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

LMFS0F1412A: Operate a steam press

Competency Descriptor: This unit deals with the skills and required knowledge of materials, product purpose and processes necessary to operate steam- pressing equipment.

Competency Field: Soft Furnishing

ELI	EMENT OF COMPETENCY	PER	FORMANCE CRITERIA
1.	Identify work requirements	1.1	Work orders, care labels, and equipment instructions are used to identify work requirements.
		1.2	Equipment, components and processes used for materials preparation and pressing process are identified.
		1.3	Operating requirements for the steam pressing equipment are identified.
		1.4	Workplace quality requirements for the final product are identified.
2.	Plan steam pressing operations	2.1	Occupational Health & Safety (OH&S) requirements, including ergonomic criteria and personal protection needs, are observed throughout the work.
		2.2	Temperatures and any particular precautions are identified from care labels and workplace instructions.
		2.3	Work sequence is planned to suit job.
		2.4	Equipment emergency stops, gauges, guards and controls are identified.
3.	Set up steam pressing equipment	3.1	Equipment information, required specifications and operating instructions are identified.
		3.2	Temperatures are set and equipment adjustments are checked against work plan.
		3.3	Fabric panels are checked for quality prior to pressing.
		3.4	Damaged or incomplete items are reported.
4.	Press fabrics	4.1	Materials are lifted and held onto the press using appropriate techniques.

- 4.2 Pressing operations are conducted following the planned work sequence.
- 4.3 Adjustments are made to press settings to improve quality of work.
- 4.4 Required quantity and quality of work is maintained.
- 4.5 Pressed items are protected from dust and other contaminants and placed in workplace approved holding areas.
- 4.6 Equipment is cleaned up and lubrications, adjustments and waste management processes are completed in accordance with workplace procedures.
- Maintain work quality 5.1 Press
- .1 Pressing process is monitored and materials and equipment operating conditions, which may affect product quality, are reported.
 - 5.2 Authorised changes in operating procedures and temperatures are implemented.

RANGE STATEMENT

5.

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between school-shop and workplaces. It relates to the unit as a whole and facilitates holistic assessment.

Work is carried out in accordance with statutory obligations, environmental legislation, relevant health regulations, manual handling procedures and organisation insurance requirements.

Work requires individuals to demonstrate some discretion, judgement and problem solving skills in the set up and operation of machines. This may be demonstrated either individually or in a team environment.

Steam pressing operations cover work involving the operation of steam pressing equipment, monitoring operations and work quality, maintaining personal safety and the safety of others.

The following variables may be present for this particular unit

OH&S requirements may include:

- relevant statutory requirements
- material safety management systems
- hazardous and dangerous goods codes
- safe operating procedures

- required temperatures and warm up/cool down times
- key parts of the materials to be pressed which require checks for quality of work
- work area housekeeping requirements
- safe and suitable work area

Task planning is to cover:

Materials to be pressed may include but are not limited to:

- plain and patterned fabrics
- lining materials, and
- leather used in the manufacture of soft furnishing items

Personal protective equipment may include:

- safety goggles/glasses
- hair nets
- ear muffs/plugs, gloves
- footwear
- protective clothing

Material lifting and holding will be impacted on by:

- machine type
- personal right-hand or left-hand preference of the operator
- manipulation requirements for the materials
- special pressing requirements for different parts of the pressed panels

Information and procedures:

- machine manufacturers' specifications and operational procedures
- workplace procedures relating to the setting and operation of machinery
- work instructions, including job sheets, plans, drawings and designs
- workplace procedures relating to reporting and communication

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

(1) Critical Aspects of Evidence

Apply safe handling practices for equipment, products and materials.

Explain the impact of machine temperature and pressure on product quality and output.

Interpret work order and locate and apply relevant information.

Press at least five different types of materials.

Follow work instructions, operating procedures and inspection practices to:

- prevent damage to goods, equipment or products
- maintain required production output and product quality
- minimise the risk of injury to self or others

Work effectively with others.

Modify activities to cater for variations in workplace contexts and environment.

Report process or materials faults, damaged products or equipment.

(2) Pre-requisite Relationship of Units

Pre-requisite for this unit is:

• Nil

(3) Underpinning Knowledge and Skills

Knowledge of:

- the types, characteristics, uses and limitations of steam presses
- the operating controls and principles which effect the steam pressing equipment
- the effect of steam on the range of materials which may be pressed
- requirements for minimising damage to and maintaining contaminant-free pressed fabrics

Skills The ability to

- collect, organise and understand information related to work orders, basic plans and safety procedures
- communicate ideas and information to enable confirmation of work requirements and specifications, co-ordination of work with site supervisor, other workers and customers, and the reporting of work outcomes and problems
- plan and organise activities, including the preparation and layout of the worksite and the obtaining of equipment and materials to avoid any back tracking, workflow interruptions or wastage
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise workflow and productivity
- use mathematical ideas and techniques to correctly complete measurements and estimate material requirements
- use pre-checking and inspection techniques to anticipate steam pressing problems, avoid reworking and avoid wastage
- use the workplace technology related to steam pressing, including pressing equipment and effects of pressing

(4) **Resource Implications**

- appropriate materials
- steam pressing equipment
- care labels
- work orders

(5) Method of Assessment

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts.

Assessment should be by direct observation of tasks and questioning on underpinning knowledge.

Assessment should be conducted over time and will generally be in conjunction with assessment of other units of competency

(6) Context of Assessment

Assessment may occur on the job or in a workplace simulated facility with relevant process equipment, materials, work instructions and deadlines.

CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency				
Level 1.	Level 2.	Level 3.		
 Carries out established processes Makes judgement of quality using given criteria 	 Manages process Selects the criteria for the evaluation process 	 Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation 		

Collect, analyse and organise information	Level 2	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 2	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 2	
Use technology	Level 2	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

LMFSOF1432A: Construct unlined curtains/drapes

Competency Descriptor:	This unit deals with the skills and knowledge required to construct			
	and machine sew unlined, pleated and gathered curtains/drapes.			

Competency Field: Soft Furnishing

Ele	EMENT OF COMPETENCY	PER	FORMANCE CRITERIA
1.	Establish work requirements and prepare for work	1.1	Occupational Health & Safety (OH&S) requirements, including ergonomic criteria and personal protection needs, are observed throughout the work.
		1.2	Work order requirements are checked and confirmed.
		1.3	Heading type is recognised to identify personal work requirements for measuring, calculating, sewing, folding and finishing.
		1.4	Correct side of fabric, naps, direction of pattern and pattern matches are identified.
		1.5	Drapery panels are checked for faults.
		1.6	Appropriate needle types for the fabric are selected and threaded.
2.	Lay out work to be sewn	2.1	Top fabric is folded bringing edges to be seamed together to match any pattern and to maintain an appropriate finished length following workplace quality requirements.
		2.2	Fabric is held together and, where required, supported with pins or other workplace approved methods.
3.	Stitch seams and form corners	3.1	Curtain fabrics are held to allow for personal right-hand or left-hand preference of the sewer, and manipulation requirements for the bulk and slipperiness of the materials.
		3.2	Machine sewing operations are completed correctly.
		3.3	Corners are folded and formed to match work order requirements, inserting any required weight bags.
		3.4	Hems are completed using any required weights, stitch type and appropriate sewing method.
		3.5	Corners are stitched and finished, trimming any threads.

4.	Construct curtain headings	4.1	Curtain heading tape is attached according to workplace approved method and job instructions.
		4.2	Sewn pleat spaces are kept uniform within drops.
		4.3	Care labels are fixed to heading or hem of curtain according to workplace standards.
5.	Finish work	5.1	Finished curtain panels, including stitch length, end finishing and final length of finished curtain panels, are checked against work requirements.
		5.2	Work is pressed for the next work stage.
		5.3	Any parts of the work, which do not comply with work order are rectified.
6.	Complete work for next process	6.1	Workplace required documentation is completed and stored following appropriate procedures.
		6.2	Finished work is folded, protected and dispatched to next process following workplace procedures.

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment.

Work is carried out in accordance with statutory obligations, environmental legislation, relevant health regulations, manual handling procedures and organisation insurance requirements.

Work requires individuals to demonstrate some discretion, judgement and problem solving skills in the set up and operation of machines. This may be demonstrated either individually or in a team environment.

Construction of unlined/coated curtains/drapes covers work involving sewing and manipulation requirements for machine sewing a range of curtain heading styles.

The following variables may be present for this particular unit.

Curtains/drapes are to include:	OH&S requirements may include:
 gathered slotted (rod pocket) pencil pleat and pinch pleat, and may include: tab top knife pleat goblet pleat, and cartridge 	 relevant statutory requirements material safety management systems hazardous and dangerous goods codes safe operating procedures
Machines may include, but are not limited to:	Work order requirements are to cover:
industrial sewing machinespressing equipment	 widths and numbers of finished curtain panels, heading style, number and spacing of pleats finishing and any filling of curtain headings
Tools and equipment may include:	Materials to be machined may include, but are not limited to:
 measuring and calculating equipment including tapes, rulers, calculators computers fabric and general cutting and sewing tools, including scissors, sewing machines hemming machines over-lockers pleating machines 	 lining interlining and curtain fabrics fasteners threads
Marking out is to cover:	Personal protective equipment may include:
 returns overlaps pleats spaces 	 safety goggles/glasses hair nets ear muffs/plugs, gloves footwear protective clothing
Machine sewing operations must ensure:	Information and procedures:
 straight stitching along marked pleat line from the top of the heading to the lower edge of the stiffening material or vice versa securing of beginning and end of threads of the stitching with even and appropriate seam stitch type, length, visibility seams are flat the inclusion of care labels and fibre content labels where required 	 machine manufacturers' specifications and operational procedures workplace procedures relating to the setting and operation of machinery work instructions, including job sheets, plans, drawings and designs workplace procedures relating to reporting and communication

• finished components match work requirements

Copyright © **2007 Caribbean Association of National Training Agencies (CANTA)** All rights reserved. No part of this document may be reproduced in any form or by any means without the prior permission of the publishers..

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

(1) Critical Aspects of Evidence

Apply safe handling practices for equipment, products and materials.

Interpret work order to manufacture the required lined curtains.

Measure accurately.

Identify materials used and any special sewing requirements for those materials.

Construct at least four different types of pleated or gathered curtains/drapes.

Follow work instructions, operating procedures and inspection practices to:

- prevent damage to goods, equipment or products
- maintain required production output and product quality
- minimise the risk of injury to self or others

Work effectively with others.

Modify activities to cater for variations in workplace contexts and environment.

Report process or materials faults, damaged products or equipment.

(2) Pre-requisite Relationship of Units

Pre-requisite for this unit is:

• LMFSOF1501A: Use soft furnishing sector hand and power tools

(3) Underpinning Knowledge and Skills

Knowledge of:

- identification of equipment, processes and procedures for the sewing operations
- fabric types, common faults and inspection procedures
- risks to health from repetitive actions and prevention strategies
- design features of the heading styles sewn in relation to work requirements
- work requirements, including workplace standards

<u>Skills</u>

The ability to

- collect, organise and understand information related to work orders, plans and safety procedures
- communicate ideas and information to enable confirmation of work requirements and specifications, co-ordination of work with site supervisor, other workers and customers, and the reporting of work outcomes and problems
- plan and organise activities, including the preparation and layout of the worksite and the obtaining of equipment and materials to avoid any back tracking, workflow interruptions or wastage
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise workflow and productivity
- use mathematical ideas and techniques to correctly complete measurements, calculate area, avoid waste and estimate material requirements
- use pre-checking and inspection techniques to anticipate construction problems, avoid reworking and avoid wastage
- use the limited workplace technology related to the construction tasks, including tools, equipment, calculators and measuring devices

(4) Resource Implications

Appropriate sewing machine, fabrics, work order, workplace information, including work procedures and/or equipment instructions.

(5) Method of Assessment

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts.

Assessment should be by direct observation of tasks and questioning on underpinning knowledge.

Assessment should be conducted over time and will generally be in conjunction with assessment of other units of competency.

(6) Context of Assessment

Assessment may occur on the job or in a workplace simulated facility with relevant process equipment, materials, work instructions and deadlines.

CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency				
Level 1.	Level 2.	Level 3.		
 Carries out established processes Makes judgement of quality using given criteria 	 Manages process Selects the criteria for the evaluation process 	 Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation 		

Collect, analyse and organise information	Level 1	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 1	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 1	
Use technology	Level 1	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

LMFSOF1442A: Construct lined curtains/drapes

Competency Descriptor:	This unit deals with the skills and knowledge required to
	construct and machine sew lined curtains/drapes.

Competency Field: Soft Furnishing

ELEMENT OF COMPETENCY		PERI	FORMANCE CRITERIA
1.	Establish work requirements and prepare for work	1.1	Occupational Health & Safety (OH&S) requirements, including ergonomic criteria and personal protection needs, are observed throughout the work.
		1.2	Work order requirements are checked and confirmed.
		1.3	Heading type is recognised to identify personal work requirements for measuring, calculating, sewing, folding and finishing.
		1.4	Correct side of fabric, naps, direction of pattern and pattern matches are identified.
		1.5	Lining attachment method is recognised to identify any attachments and fasteners, trims and sewing requirements.
		1.6	Drapery panels are checked for faults.
		1.7	Appropriate needle types for the fabric are selected and threaded.
2.	Lay out work to be sewn	2.1	Top fabric is folded bringing edges to be seamed together to match any pattern and to maintain an appropriate finished length following workplace quality requirements.
		2.2	Linings and any interlining materials are laid out and folded ready for sewing.
		2.3	Fabric is held together and, where required, supported with pins or other workplace approved methods.
3.	Stitch seams and form corners	3.1	Curtain fabrics are held to allow for personal right-hand or left-hand preference of the sewer, and manipulation requirements for the bulk and slipperiness of the materials.

		3.2	Linings to be bagged are sewn in place.
		3.3	Machine sewing operations are completed correctly.
		3.4	Corners are folded and formed to match work order requirements, inserting any required weight bags.
		3.5	Hems are completed using any required weights, stitch type and appropriate sewing method.
		3.6	Corners are stitched and finished, trimming any threads.
4.	Construct curtain headings	4.1	Curtain heading tape is attached according to workplace approved method and job instructions.
		4.2	Attached lining and interlinings are sewn into heading.
		4.3	Sewn pleat spaces are kept uniform within drops.
		4.4	Linings and interlinings are attached to curtain backs by sewing or using appropriate fasteners.
		4.5	Care labels are fixed to heading or hem of curtain according to workplace standards.
		4.6	Separate linings are sewn using appropriate heading tape and attached to curtain.
5.	Finish work	5.1	Finished curtain panels, including stitch length, end finishing and final length of finished curtain panels are checked against work requirements.
		5.2	Work is pressed for the next work stage.
		5.3	Any parts of the work, which do not comply with work order, are rectified.
6.	Complete work for next process	6.1	Workplace required documentation is completed and stored following appropriate procedures.

6.2 Finished work is folded, protected and dispatched to next process following workplace procedures.

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment.

Work is carried out in accordance with statutory obligations, environmental legislation, relevant health regulations, manual handling procedures and organisation insurance requirements.

Work requires individuals to demonstrate some discretion, judgement and problem solving skills in the set up and operation of machines. This may be demonstrated either individually or in a team environment.

Construction of lined curtains and drapes covers work involving sewing and manipulation requirements for machine sewing a range of linings, which are to include detached and sewn-in linings, and may include interlined, loose-lined and bag-lined products.

The following variables may be present for this particular unit.

OH&S requirements may include:

- relevant statutory requirements
- material safety management systems
- hazardous and dangerous goods codes
- safe operating procedures

Tools and equipment may include:

- measuring and calculating equipment, including tapes, rulers, calculators, computers
- fabric and general cutting and sewing tools, including scissors, sewing machines,
- hemming machines, over-lockers, pleating machines

Work order requirements are to cover:

- widths and numbers of finished curtain panels, heading style, number and spacing of pleats
- finishing and any filling of curtain headings

- Machines may include, but are not limited to:
- industrial sewing machines
- pressing equipment

Materials to be machined may include but are not limited to:

- lining
- interlining and curtain fabrics
- fasteners
- threads

Personal protective equipment may include:

- safety glasses/goggles
- hair nets
- ear muffs/plugs
- gloves
- footwear
- protective clothing

Machine sewing operations must ensure:

- straight stitching along seam lines from
- the top to the lower edge of the material or
- vice versa
- securing of beginning and end of threads of the stitching with even and appropriate seam stitch type, length, visibility
- seams are flat
- the inclusion of care labels and fibre content labels where required
- finished components match work requirements

Marking out to cover:

- returns
- overlaps
- pleats
- spaces

Information and procedures:

- machine manufacturers' specifications and operational procedures
- workplace procedures relating to the setting and operation of machinery
- work instructions, including job sheets, plans, drawings and designs
- workplace procedures relating to reporting and communication

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

(1) Critical Aspects of Evidence

Apply safe handling practices for equipment, products and materials.

Interpret work order to manufacture the required lined curtains.

Identify materials used and any special sewing requirements for those materials

Measure accurately.

Construct at least two different types of lined curtains/drapes.

Follow work instructions, operating procedures and inspection practices to:

- prevent damage to goods, equipment or products
- maintain required production output and product quality
- minimise the risk of injury to self or others

Work effectively with others.

Modify activities to cater for variations in workplace contexts and environment.

Report process or materials faults, damaged products or equipment.

(2) Pre-requisite Relationship of Units

Pre-requisite for this unit is:

• LMFSOF1501A: Use soft furnishing sector hand and power tools

(3) Underpinning Knowledge and Skills

Knowledge of:

- Identification of workplace standards, equipment and procedures for the sewing operations.
- Fabric types, lining and interlining materials, including common faults and inspection procedures.
- Prevention strategies for risks to health from lifting, stretching and repetitive actions.
- How the design features of the curtains effect constructing the lined curtains.

Skills The ability to:

- collect, organise and understand information related to work orders, plans and safety procedures
- communicate ideas and information to enable confirmation of work requirements and specifications, coordination of work with site supervisor, other workers and customers, and the reporting of work outcomes and problems
- plan and organise activities, including the preparation and layout of the worksite and the obtaining of equipment and materials to avoid any back tracking, workflow interruptions or wastage
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise workflow and productivity
- use mathematical ideas and techniques to correctly complete measurements, calculate area, avoid waste and estimate material requirements
- use pre-checking and inspection techniques to anticipate construction problems, avoid reworking and avoid wastage
- use the limited workplace technology related to the construction tasks, including tools, equipment, calculators and measuring devices

(4) **Resource Implications**

Appropriate sewing machine, fabrics, work order, workplace information, including work procedures and/or equipment instructions.

(5) Method of Assessment

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts.

Assessment should be by direct observation of tasks and questioning on underpinning knowledge.

Assessment should be conducted over time and will generally be in conjunction with assessment of other units of competency

(6) Context of Assessment

Assessment may occur on the job or in a workplace simulated facility with relevant process equipment, materials, work instructions and deadlines.

CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency							
Level 1.	Level 2.	Level 3.					
 Carries out established processes Makes judgement of quality using given criteria 	 Manages process Selects the criteria for the evaluation process 	 Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation 					

Collect, analyse and organise information	Level 1	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 1	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 1	
Use technology	Level 1	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

LMFSOF1452A: Construct padded pelmets

Competency Descriptor: This unit deals with the skills and knowledge required to cut, prepare and assemble timber components, attach padding, fabric and trims to pelmets.

Competency Field: Soft Furnishing

ELEMENT OF COMPETENCY		PER	PERFORMANCE CRITERIA		
1.	Identify pelmet and padding materials to be used	1.1	Type of pelmet to be padded is identified.		
		1.2	Components of the pelmet requiring padding and specifications for the work are identified from work instructions.		
		1.3	Quality and quantity requirements are identified.		
2.	Prepare for work	2.1	Occupational Health & Safety (OH&S) requirements, including ergonomic criteria and personal protection needs, are observed throughout the work.		
		2.2	Required tools and materials to complete the work are sourced, collected and checked for suitability.		
		2.3	Fixing devices or adhesives are selected in line with specifications or type of padding and headboard.		
		2.4	Required personal protection equipment is located.		
		2.5	Work is planned to conform to quality requirements, minimise time, and economically use materials.		
		2.6	Procedures are identified for checking the quality of the work.		
3.	Cut timber and pad pelmet	3.1	Timber components are measured and cut to required specifications.		
		3.2	Padding and other materials are laid out, components are assembled and attached using appropriate fastenings, tools and equipment.		
		3.3	Tools and equipment are operated in compliance with workplace procedures and OH&S requirements.		

- 3.4 Work is monitored to ensure quality of product, including correct finish, operation of any moving parts, and number and fitting of fasteners/brackets.
- 3.5 Problems occurring during work operations are identified and reported following workplace procedures.
- 3.6 Waste quantities are minimised, and reusable materials are collected and stored following workplace procedures.
- 3.7 Routine maintenance of tools and equipment is carried out according to workplace and manufacturers' instructions.
- 3.8 Waste is removed and work area is cleaned following workplace procedures.
- Prepare pelmet for next 4.1 Completed pelmets are packaged following work requirements.
 - 4.2 The package is secured, labelled and stored according to workplace procedures.
 - 4.3 Appropriate documentation is completed.

RANGE STATEMENT

process

4.

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment.

Work is to be carried out in accordance with statutory obligations, environmental legislation, relevant health regulations, manual handling procedures and organisation insurance requirements.

Work requires individuals to demonstrate some discretion, judgement and problem solving skills in the set up and operation of machines. This may be demonstrated either individually or in a team environment.

This unit covers work involved in the attachment of padding, fabric and trimming to pelmets and where necessary, the packaging, labelling and storing of products.

The following variables may be present for this particular unit.

OH&S requirements may include:

- relevant statutory requirements
- material safety management systems •
- hazardous and dangerous goods codes
- safe operating procedures

Materials to be used may include:

- curtain fabric
- timber
- adhesives, and
- padding material

Tools and equipment may include:

- tapes
- rulers
- calculators
- computers
- scissors
- staplers

hammers

sewing machines

- staple guns
- jigsaws

•

drop saws

Padding materials include:

- padding
- fabric
- linings, and
- trims

Personal protective equipment may include:

- safety goggles/glasses
- hair nets
- ear muffs/plugs, gloves
- footwear
- protective clothing

Information and procedures:

- machine manufacturers' specifications and operational procedures
- workplace procedures relating to the setting and operation of machinery
- work instructions, including job sheets, plans, drawings and designs
- workplace procedures relating to reporting and communication

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

(1) Critical Aspects of Evidence

Apply safe handling practices for equipment, products and materials.

Interpret work order and locate and apply relevant information.

Select and make up appropriate timber frame.

Select and attach appropriate padding, fabric and trims.

Construct at least three different types of padded pelmets.

Follow work instructions, operating procedures and inspection practices to:

- prevent damage to goods, equipment or products
- maintain required production output and product quality
- minimise the risk of injury to self or others

Work effectively with others.

Modify activities to cater for variations in workplace contexts and environment.

(2) Pre-requisite Relationship of Units

Pre-requisite for this unit is:

• LMFSOF1501A: Use soft furnishing sector hand and power tools

(3) Underpinning Knowledge and Skills

Knowledge

Knowledge of:

- workplace standards and procedures related to the making up of padded pelmets
- identification of equipment, materials, processes and procedures
- operation of tools and equipment used in the padding process

<u>Skills</u>

The ability to:

- collect, organise and understand information related to work orders, basic plans and safety procedures
- communicate ideas and information to enable confirmation of work requirements and specifications, co-ordination of work with site supervisor, other workers and customers, and the reporting of work outcomes and problems
- plan and organise activities, including the preparation and layout of the worksite and the
 obtaining of equipment and materials to avoid any back tracking, workflow interruptions or
 wastage
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise workflow and productivity
- use mathematical ideas and techniques to correctly complete measurements, calculate area, avoid waste and estimate material requirements
- use pre-checking and inspection techniques to anticipate construction problems, avoid reworking and avoid wastage
- use workplace technology related to the construction tasks, including tools, equipment, calculators and measuring devices

(4) **Resource Implications**

- pelmets
- padding materials
- tools and equipment
- appropriate quality specifications and work instructions

(5) Method of Assessment

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts.

Assessment should be by direct observation of tasks and questioning on underpinning knowledge.

Assessment should be conducted over time and will generally be in conjunction with assessment of other units of competency

(6) Context of Assessment

Assessment may occur on the job or in a workplace simulated facility with relevant process equipment, materials, work instructions and deadlines.

CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency						
Level 1.	Level 2.	Level 3.				
 Carries out established processes Makes judgement of quality using given criteria 	 Manages process Selects the criteria for the evaluation process 	 Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation 				

Collect, analyse and organise information	Level 1	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 1	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 1	
Use technology	Level 1	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

LMFFCF2062A: Remove existing floor coverings

Competency Descriptor: This unit deals with the skills and knowledge required to remove and dispose existing floor covering materials.

Competency Field: Floor Covering and Finishing

ELEMENT OF COMPETENCY		PER	PERFORMANCE CRITERIA		
1.	Plan work sequence	1.1	Instructions and/or plans are read and interpreted to identify process required to complete work tasks.		
		1.2	Workplace health and safety requirements, including personal protection needs, are observed throughout the work.		
		1.3	Tools, equipment and materials are selected and checked prior to use to ensure that they are appropriate for the work, serviceable and in a safe condition.		
		1.4	Sequence of work is planned to ensure removal of floor coverings is in logical order.		
2.	Remove floor coverings	2.1	Starting point is selected and first section of floor covering is removed.		
		2.2	Remaining floor covering is progressively removed.		
		2.3	Exposed floor is checked, and any protruding nails, carpet grippers, adhesives, levelling compounds and remnants of floor covering are removed.		
3.	Complete housekeeping	3.1	Materials are stored or recycled as required.		
		3.2	Tools and equipment are cleaned and stored appropriately.		
		3.3	Removed floor coverings are disposed of safely in accordance with company and environmental policies.		
		3.4	Work area is cleaned and rubbish disposed of appropriately.		
		3.5	Workplace documentation/reporting is completed where required.		

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between school shops and workplaces. It relates to the unit as a whole and facilitates holistic assessment.

Work requires individuals to demonstrate discretion and problem solving skills in removing a range of existing floor coverings.

The following variables may be present for this particular unit:

Floor coverings to be removed may include but are not limited to:

- carpet and carpet tiles
- hard and soft underlay
- resilient sheet and tiles
- parquetry
- strip timber
- floating floor
- cork tiles

Tools and equipment are to include:

- hammer
- moulding lifter
- scraper
- utility knife
- vacuum cleaner
- vinyl tile lifter

Information and procedures:

- workplace procedures relating to the use and operation of tools and equipment
- workplace instructions, including job sheets, plans, drawings and designs
- workplace procedures relating to reporting and communications
- manufacturers' instructions for the use of equipment and materials

OH&S requirements may include:

- relevant legislation
- building codes
- material safety management systems
- hazardous substance and dangerous goods requirement
- safe operating procedures

Work is carried out in accordance with:

- legislative obligations
- environmental legislation
- relevant health regulations
- manual handling procedures
- organisation insurance requirements

Personal protective equipment to include:

- safety goggles/glasses
- ear muffs/plugs
- safety helmet
- gloves
 - footwear
 - protective clothing

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

(1) Critical Aspects of Evidence

- Interpret work order and locate and apply relevant information
- Identify safe handling of equipment, products and materials, including personal protective equipment
- Follow work instructions, operating procedures and inspection practices to:
 - prevent damage to floor surface, equipment and materials
 - maintain required production output and work quality
 - minimise the risk of injury to self and others
- Remove at least one of each of the following floor coverings:
 - carpet with hard and soft underlay
 - parquetry
 - resilient sheet
 - carpet, resilient and cork tiles
- Work effectively with others
- Modify activities to cater for variations in workplace contexts and environment

(2) **Pre-requisite Relationship of Units**

Pre-requisite required for this unit is

• Nil

(3) Underpinning Knowledge and Skills

Knowledge of:

- the characteristics and techniques of fixing floor coverings
- the correct use of equipment, processes and procedures to remove floor coverings
- workplace safety system requirements related to removing floor coverings
- workflow in relation to removing floor coverings

<u>Skills</u>

The ability to:

- collect, organise and understand information related to work orders, basic plans, and safety procedures
- communicate ideas and information to enable confirmation of work requirements and specifications, co-ordination of work with site supervisor, other workers and customers, and the reporting of work outcomes and problems
- plan and organise activities including the preparation and layout of the worksite and the obtaining of equipment and materials to avoid any back tracking, workflow interruptions or wastage
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise workflow and productivity
- use mathematical ideas and techniques to correctly complete measurements
- use pre-checking and inspection techniques to plan sequence, anticipate removal problems, avoid wastage and prevent damage
- use the limited workplace technology related to the removal of floor coverings

(4) **Resource Implications**

Appropriate tools and equipment and workplaces requiring the removal of existing floor coverings

(5) Method of Assessment

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts.

Assessment should be by direct observation of tasks and questioning on underpinning knowledge.

Assessment may be in conjunction with assessment of other relevant units of competency.

(6) Context of Assessment

Assessment may occur on the job or in a workplace simulated facility with relevant process equipment, materials, work instructions and deadlines.

CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency							
Level 1.	Level 2.	Level 3.					
 Carries out established processes Makes judgement of quality using given criteria 	 Manages process Selects the criteria for the evaluation process 	 Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation 					

Collect, analyse and organise information	Level 1
Communicate ideas and information	Level 1
Plan and organise activities	Level 2
Work with others and in team	Level 1
Use mathematical ideas and techniques	Level 1
Solve problems	Level 1
Use technology	Level 1

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

LMFFCF2102A: Install soft underlays and carpet gripper strips

Competency Descriptor: This unit deals with the skills and knowledge required to prepare, lay out, cut, lay and fix soft under lays; including dual-bond methods, and carpet gripper strips in preparation for the laying of floor coverings.

Competency Field: Floor Covering and Finishing

ELEMENT OF COMPETENCY PERFORMANCE CRITERIA

1.	Lay out materials	1.1	Specifications, patterns and/or plans are read and interpreted.
		1.2	Workplace health and safety requirements, including personal protection needs, are observed throughout the work.
		1.3	Tools, equipment and materials are selected and checked prior to use to ensure that they are appropriate for the work, serviceable and in a safe condition.
		1.4	Suitable adhesives, trims and accessories are selected.
		1.5	Sub-floor condition is assessed for the type of underlay/floor covering to be installed.
		1.6	Materials are laid out to meet specification requirements and to minimise waste.
2.	Cut and fix underlay and carpet gripper strips	2.1	Sequence of work is planned to ensure cutting, laying and fitting is in logical order.
		2.2	Carpet grippers are fitted in accordance with specifications, plan and/or enterprise procedures.
		2.3	Underlay is cut to required shape with minimum waste of materials.
		2.4	Materials for fixing are organised and used in accordance with relevant safety management requirements.
		2.5	Underlay is fixed using methods and equipment, which follow manufacturers' instructions.

3.	Complete housekeeping	3.1	Unused materials are stored or recycled as required.
		3.2	Tools and equipment are cleaned and stored appropriately.
		3.3	Work area is cleaned and rubbish disposed of appropriately.
		3.4	Workplace documentation is completed.

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between school shops and workplaces. It relates to the unit as a whole and facilitates holistic assessment.

Soft underlay is a flexible or fibrous material installed as a soft base under a floor covering. They may be single fibre, composite fibre or foam rubber.

Carpet grippers are teethed metal or timber strips to which floor coverings are attached to maintain its position, tension and shape.

Work is carried out in accordance with legislative obligations, environmental legislation, relevant health regulations, manual handling procedures and organisation insurance requirements.

Work requires individuals to demonstrate discretion, judgement and problem solving skills in fitting soft under lays and carpet gripper strips.

The following variables may be present for this particular unit:

OH&S requirements may include:

- relevant legislation
- relevant building codes
- material safety management systems
- hazardous substance and dangerous goods codes
- safe operating procedures

Tools and equipment are to include:

- utility knife
- straight edge
- hammer
- heavy-duty electrical drill
- hacksaw
- carpet strip cutters
- extension hammer bar
- staple hammer
- may include pneumatic T-nailer

Personal protective equipment to include:

- safety goggles/glasses
- ear muffs/plugs
- safety helmet
- gloves
- footwear
- protective clothing

Materials are to include but are not limited to:

- soft under lays
- carpet gripper strips
- tapes
- adhesives
- nails
- plugs
- staples
- primers

Adhesives are to include:

- solvent and water-based contact
- construction adhesive
- latex/resin/acrylic

Information and procedures

- workplace procedures relating to the use and operation of tools and equipment
- workplace instructions, including job sheets, plans, drawings and designs
- workplace procedures relating to reporting and communications
- manufacturers' instructions for the use of equipment and materials

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

(1) Critical Aspects of Evidence

- interpret work order and locate and apply relevant information
- apply safe handling requirements for equipment, products and materials, including use of personal protective equipment
- follow work instructions, operating procedures and inspection practices to:
 - minimise the risk of injury to self and others
 - prevent damage to goods, equipment and products
 - maintain required production output and product quality
- to complete a minimum of two soft underlay installations with one incorporating such obstructions as doorways, fittings and irregular (obtuse/acute) angles (dual-bonded and conventional)
- work effectively with others
- modify activities to cater for variations in workplace contexts and environment
- apply safe handling requirements for equipment, products and materials, including use of personal protective equipment

(2) Pre-requisite Relationship of Units

Pre-requisite required for this unit is

• Nil

(3) Underpinning Knowledge and Skills

<u>Knowledge</u> Knowledge of:

- the type, characteristics, uses and limitations of soft underlay and carpet gripper strips
- the types and uses of soft underlay and carpet gripper strips installation tools and equipment
- workplace safety system requirements related to cutting and fitting soft underlay and gripper strips
- characteristics and requirements of sub-floor preparation
- workflow in relation to cutting and fitting soft underlay and gripper strips

Skills The ability to:

- collect, organise and understand information related to work orders, basic plans, and safety procedures
- communicate ideas and information to enable confirmation of work requirements and specifications, coordination of work with site supervisor, other workers and customers, and the reporting of work outcomes and problems
- plan and organise activities including the preparation and layout of the worksite and the obtaining of equipment and materials to avoid any back tracking, workflow interruptions or wastage
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise workflow and productivity
- use mathematical ideas and techniques to correctly complete measurements, calculate area, estimate underlay and carpet gripper requirements and other material requirements
- use pre-checking and inspection techniques to anticipate installation problems, avoid reworking and avoid wastage
- use the limited workplace technology related to the installation of underlay and gripper strips including tools, equipment, calculators and measuring devices

(4) **Resource Implications**

Soft underlay, carpet gripper strips, tools and equipment, adhesives and area requiring floor covering.

(5) Method of Assessment

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts.

Assessment should be by direct observation of tasks and questioning on underpinning knowledge.

Assessment may be in conjunction with assessment of other relevant units of competency.

(6) Context of Assessment

Assessment may occur on the job or in a workplace simulated facility with relevant soft underlay and carpet gripper installation equipment, materials, work instructions and deadlines.

CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency									
Level 1.	Level 2.	Level 3.							
 Carries out established processes Makes judgement of quality using given criteria 	 Manages process Selects the criteria for the evaluation process 	 Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation 							

Collect, analyse and organise information	Level 1	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 1	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 1	
Use technology	Level 1	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

of

Install conventional unjoined carpet floor coverings

This unit deals with the skills and knowledge required to install carpet

LMFFCF2112A:

Competency Descriptor:

		floor coverings including preparation, layout, stretching, adhering or bonding, cutting and finishing of conventional un-joined carpet.					
Competency Field: Floo		Floor (loor Covering and Finishing				
ELEMENT OF COMPETENCY		PERFORMANCE CRITERIA					
1.	Inspect work area and prepare materials		1.1	Workplace health and safety requirements, including those covering personal protection measures are observed throughout the work.			
			1.2	Tools, equipment and materials are selected and checked prior to use to ensure that they are appropriate for the work, serviceable and in a safe condition.			
			1.3	Underlay is inspected to confirm correct fitting.			
			1.4	Correct type of edge finishing, retainers and cover strips are selected following specification or work order.			
		1.5	Work area is cleared of scraps or other contaminants.				
			1.6	Carpet to be installed is checked against order.			
2. Install floor covering		2.1	Sequence of work is planned to ensure installation is in logical order.				
			2.2	Stretching and fixing methods are used following manufacturers' instructions.			
			2.3	Cover and finishing strips are suitably fixed for the type of sub-floor.			
		2.4	2.4	Carpet pieces are laid out and checked for size, direction of pile and pattern match.			
			2.5	Finished work is inspected for compliance with work order and workplace standards of finish.			

3.	Complete housekeeping	3.1	Unused materials are stored or recycled as required.
		3.2	Tools and equipment are cleaned and stored appropriately.
		3.3	Work area is cleaned and rubbish disposed of appropriately.
		3.4	Workplace documentation and/or reports are completed.

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment.

Work is carried out in accordance with legislative obligations, environmental legislation, relevant health regulations, manual handling procedures and organisation insurance requirements.

Work requires individuals to demonstrate discretion, judgement and problem solving skills in the setting out and installation of carpet floor coverings.

The following variables may be present for this particular unit:

OH&S requirements may include:

Information and procedures

- relevant legislation
- relevant building codes
- material safety management systems
- hazardous and dangerous goods codes
- safe operating procedures

workplace procedures relating to the use and operation of tools

- work instructions, including job sheets, plans, drawing and designs
- workplace procedures relating to reporting and communication
- manufacturers' instructions for the use of equipment and materials

Tools and equipment are to include:

- carpet knee kicker
- power stretcher
- carpet wall trimmer
- carpet stair tool
- trolley
- hammer
- trimming knife
- spiked carpet roller
- weight or seam roller
- awl
- carpet spreader
- carpet shears
- napping shears

Carpet floor coverings are to include:

- tufted
- woven

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be determined to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

(1) Critical Aspects of Evidence

- interpret work order and locate and apply relevant information
- apply safe handling requirements for equipment, products and materials, including use of personal protective equipment
- follow work instructions, operating procedures and inspection practices to:
 - prevent damage to goods, equipment and products
 - maintain required production output and product quality
 - minimise the risk of injury to self and others
- to complete a minimum of:
 - installation of an un-joined tufted carpet
 - installation of an un-joined woven carpet
- work effectively with others
- modify activities to cater for variations in workplace contexts and environment

Materials to be installed may include but are not limited to:

• domestic carpet gripper strips and adhesives

Personal protective equipment to include:

- safety goggles/glasses
- ear muffs/plugs
- safety helmet
- gloves
- footwear
- protective clothing

(2) **Pre-requisite Relationship of Units**

Pre-requisite required for this unit is

Nil

(3) Underpinning Knowledge and Skills

Knowledge

Knowledge of:

- the type, characteristics, uses and limitations of carpets
- the types and uses of carpet installation tools, equipment and materials
- techniques for stretching carpet
- · workplace safety system requirements related to carpet installation
- characteristics and requirements of underlay
- workflow in relation to preparation, layout, stretching, cutting and finishing of carpet

<u>Skills</u>

The ability to:

- collect, organise and understand information related to work orders, basic plans and safety procedures
- communicate ideas and information to enable confirmation of work requirements and specifications, co-ordination of work with site supervisor, other workers and customers, and the reporting of work outcomes and problems
- plan and organise activities including the preparation and layout of the worksite and the obtaining of equipment and materials to avoid any back tracking, workflow interruptions or wastage
- work with others and in a team by recognising dependencies and using co-operative approaches to optimise workflow and productivity
- use mathematical ideas and techniques to correctly complete measurements, calculate area, estimate carpet requirements and other material requirements
- use pre-checking and inspection techniques to anticipate installation problems, avoid reworking and avoid wastage
- use the limited workplace technology related to the installation of conventional un-joined carpet including tools, equipment, calculators and measuring devices

(4) **Resource Implications**

Carpet, materials, tools and equipment and access to areas suitable for carpet installation

(5) Method of Assessment

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts.

Assessment should be by direct observation of tasks and questioning on underpinning knowledge.

Assessment should be conducted over time and will generally be in conjunction with assessment of other units of competency.

(6) Context of Assessment

Assessment may occur on the job or in a workplace simulated facility with relevant carpet installation equipment, materials, work instructions and deadlines.

CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency						
Level 1.	Level 2.	Level 3.				
 Carries out established processes Makes judgement of quality using given criteria 	 Manages process Selects the criteria for the evaluation process 	 Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation 				

Collect, analyse and organise information	Level 1	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 1	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 1	
Use technology	Level 1	

LMFFCF2122A:		Lay flat resilient flooring			
Competency Descriptor:		This unit deals with the skills and knowledge required to layout, cut and fix resilient sheet floor covering that does not require joining.			
Com	petency Field:	Floor C	overir	ng and Finishing	
Ele	MENT OF COMPETE	NCY	Perf	FORMANCE CRITERIA	
1.	Lay out materials		1.1	Patterns and/or plans are read and interpreted.	
			1.2	Workplace health and safety requirements, including personal protection needs, are observed throughout the work.	
			1.3	Tools, equipment and materials are selected and checked prior to use to ensure that they are appropriate for the work, serviceable and in a safe condition.	
			1.4	Suitable adhesives, trims and accessories are selected.	
			1.5	Sub-floor condition is assessed for installation of resilient sheeting.	
			1.6	Directional sequence and patterns are matched as appropriate.	
2	Cut materials to shape	:	2.1	Sequence of work is planned to ensure lay out and fixing is in logical order.	
		:	2.2	Soft underlay (if required) is cut to specification.	
		:	2.3	Resilient flooring materials are accurately and clearly marked for cutting.	
		:	2.4	Materials are cut to required shape ensuring minimum waste.	
3.	Lay flooring	:	3.1	Instructions and sequence for laying and fixing is followed.	
		:	3.2	Materials for fixing are organised and used in accordance with relevant safety management requirements.	
		:	3.3	Fixing methods and equipment are used following manufacturers' instructions.	
		;	3.4	Completed installation meets required specifications.	

- 4. Complete housekeeping
- 4.1 Unused materials are stored or recycled as required.
- 4.2 Tools and equipment are cleaned and stored appropriately.
- 4.3 Work area is cleaned and rubbish disposed of appropriately.
- 4.4 Workplace documentation is completed.

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment.

Work involves the cutting, laying and fixing of resilient sheet floor covering for domestic and commercial use.

Work is carried out in accordance with legislative obligations, environmental legislation, relevant health regulations, manual handling procedures and organisation insurance requirements.

Work requires individuals to demonstrate discretion, judgement and problem solving skills in the laying out, cutting, coving and fixing of non-welded resilient sheet floor covering.

The following variables may be present for this particular unit:

Resilient sheet flooring includes:

• homogenous/heterogeneous

Materials are to include but are not limited to:

- linoleum sheet
- encapsulated glass fibre

resilient sheet flooring

reducing and edge strips

in-laid

•

rotogravure

skirting

tapes

pattern paper

adhesives

OH&S requirements may include:

- relevant legislation
- relevant building codes
- material safety management systems
- hazardous substance and dangerous goods codes
- safe operating procedures

Personal protective equipment to include:

- safety goggles/glasses
- ear muffs/plugs
- safety helmet
- gloves
- footwear
- protective clothing

Copyright © **2007 Caribbean Association of National Training Agencies (CANTA)** All rights reserved. No part of this document may be reproduced in any form or by any means without the prior permission of the publishers. Tools and equipment are to include:

- utility knife
- straight edge
- square
- chalk and chalk-line
- tape measure
- hacksaw
- serrated trowel
- hammer
- scribing bar
- divider
- roller
- gas bottle and gun
- rubber mallet
- paint brush and bucket
- spatula knife
- trolley
- wall trimmer

Adhesives include:

- plasticised and rubber resin
- acrylic two-part epoxy
- polyurethane and water-based and solventbased contact adhesive

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

(1) Critical Aspects of Evidence

- interpret work order and locate and apply relevant information
- apply safe handling requirements for equipment, products and materials, including use of personal protective equipment
- follow work instructions, operating procedures and inspection practices to:
 - minimise the risk of injury to self and others
 - prevent damage to goods, equipment and products
 - maintain required production output and product quality
- cut, lay and fix non-joined resilient flooring at least twice, using freehand, template and scriber
- work effectively with others
- modify activities to cater for variations in workplace contexts and environment

Information and procedures

- workplace procedures relating to the use and operation of tools and equipment
- workplace instructions, including job sheets, plans, drawings and designs
- workplace procedures relating to reporting and communications
- manufacturers' instructions for the use of equipment and materials

(2) Pre-requisite Relationship of Units

Pre-requisite required for this unit is

LMFFCF2051A: use flooring sector hand and power tools

(3) Underpinning Knowledge and Skills

Knowledge

Knowledge of:

- the type, characteristics, uses and limitations of resilient floor coverings
- the types and uses of resilient floor covering installation tools and equipment
- the type, characteristics, uses and limitations of resilient floor covering installation adhesives
- workplace safety system requirements related to resilient floor covering installation
- characteristics and requirements of sub-floor preparation
- workflow in relation to cutting and laying resilient sheet flooring

Skills The ability to:

- collect, organise and understand information related to work orders, basic plans, and safety procedures
- communicate ideas and information to enable confirmation of work requirements and specifications, co-ordination of work with site supervisor, other workers and customers, and the reporting of work outcomes and problems
- plan and organise activities including the preparation and layout of the worksite and the obtaining of equipment and materials to avoid any back tracking, workflow interruptions or wastage
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise workflow and productivity
- use mathematical ideas and techniques to correctly complete measurements, calculate area, estimate resilient floor covering requirements and other material requirements
- use pre-checking and inspection techniques to anticipate installation problems, avoid reworking and avoid wastage
- use the limited workplace technology related to the installation of resilient floor covering including tools, equipment, calculators and measuring devices

(4) **Resource Implications**

Resilient floor covering, tools and equipment, adhesives and tapes, trims, accessories and area requiring floor covering.

(5) Method of Assessment

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts.

Assessment should be by direct observation of tasks and questioning on underpinning knowledge.

Assessment may be in conjunction with assessment of other relevant units of competency.

(6) Context of Assessment

Assessment may occur on the job or in a workplace simulated facility with relevant resilient floor covering installation equipment, materials, work instructions and deadlines.

CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency							
Level 1.	Level 2.	Level 3.					
 Carries out established processes Makes judgement of quality using given criteria 	 Manages process Selects the criteria for the evaluation process 	 Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation 					

Collect, analyse and organise information	Level 1	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 1	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 1	
Use technology	Level 1	

LMFFCF2132A: Install pre-finished and manufactured/engineered timber flooring

This unit covers the competency required to install pre-finished and
manufactured/engineered timber flooring including preparation,
cutting, laying and fixing.

Competency Field: Floor Covering and Finishing

ELEMENT OF COMPETENCY		PER	PERFORMANCE CRITERIA		
1.	Lay out materials	1.1	Patterns and/or plans are read and interpreted.		
		1.2	Workplace health and safety requirements, including personal protection needs, are observed throughout the work.		
		1.3	Tools, equipment and materials are selected and checked prior to use to ensure that they are appropriate for the work, serviceable and in a safe condition.		
		1.4	Sub-floor condition is assessed for suitability for installation.		
		1.5	Suitable underlays, adhesives, trims and accessories are selected if required.		
		1.6	Materials are laid out to meet pattern and specification requirements and minimise waste and joins.		
		1.7	Materials aesthetics maximised where appropriate; matching grains and colours.		
2.	Prepare materials for installation	2.1	Sequence of work is planned to ensure lay out and fixing is in logical order.		
		2.2	Materials are cut to length and size for final laying.		
		2.3	Skirting boards or cover trims are removed if required and stored for refitting or sent for machining.		
		2.4	Adhesives and edge strips are prepared for use as required.		

3.	Lay flooring	3.1	Instructions and sequence for laying and fixing are followed.
		3.2	Appropriate underlay is laid according to manufacturers' recommend.
		3.3	Materials for fixing are organised and used in accordance with relevant safety management requirements.
		3.4	Fixing methods and equipment are used following manufacturers' recommendations.
		3.5	Appropriate field and perimeter expansion joints are allowed.
		3.6	Skirting boards or cover trims are fitted/refitted and finished.
		3.7	Finished job is inspected and any imperfections are rectified following workplace procedures.
		3.8	Any required preparations for sanding of flooring are made.
4.	Complete housekeeping	4.1	Unused materials are stored or recycled as required.
		4.2	Tools and equipment are cleaned and stored appropriately.
		4.3	Work area is cleaned and rubbish disposed of appropriately.
		4.4	Workplace documentation/reporting is completed.

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between school shops and workplaces. It relates to the unit as a whole and facilitates holistic assessment.

Work is carried out in accordance with legislative obligations, environmental legislation, relevant health regulations, manual handling procedures and organisation insurance requirements.

Work requires individuals to demonstrate discretion, judgement and problem solving skills in installing pre-finished and manufactured/engineered timber flooring.

The following variables may be present for this particular unit:

Materials may include but are not limited to:

- flooring materials
- underlay
- edge strips
- tapes
- adhesives

Tools and equipment are to include:

- drop saw
- jig saw
- hand saw
- undercut saw
- plunge saw
- hammer
- bar scriber
- utility knife
- circular saw
- straight edge
- glue gun
- staple gun
- nailers
- cramps and clamps

Pre-finished and manufactured/engineered timber flooring includes

- timber and
- laminated flooring planks

Personal protective equipment to include:

- safety goggles/glasses
- ear muffs/plugs
- safety helmet
- gloves
- footwear
- protective clothing

OH&S requirements may include:

- legislation
- building codes
- material safety management systems
- hazardous and dangerous goods codes
- local safe operating procedures

Information and procedures

- workplace procedures relating to the use and operation of tools and equipment
- workplace instructions, including job sheets, plans, drawings and designs
- workplace procedures relating to reporting and communications manufacturers' instructions for the use of equipment and materials

Adhesives are to include:

- PVAs
- epoxies
- polyurethane elastomeric

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

(1) Critical Aspects of Evidence

- interpret work order and locate and apply relevant information
- apply safe handling requirements for equipment, products and materials, including use of personal protective equipment
- apply ventilation standards
- follow work instructions, operating procedures and inspection practices to:
 - minimise the risk of injury to self and others
 - prevent damage to goods, equipment and products
 - maintain required production output and product quality

Critical Aspects of Evidence (Cont'd)

- to complete a minimum of three of the following different types of installation:
 - glue-together system
 - direct stick system
 - self-locking system
 - inserted plastic tongue system
- work effectively with others
- modify activities to cater for variations in workplace contexts and environment

(2) Pre-requisite Relationship of Units

Pre-requisite required for this unit is

• LMFFCF2051A: Use flooring sector hand and power tools

(3) Underpinning Knowledge and Skills

Knowledge of:

- the type, characteristics, uses and limitations of pre-finished and manufactured/engineered timber flooring
- the types and uses of installation tools and equipment
- the type, characteristics, uses and limitations of installation adhesives
- the type, characteristics, uses and limitations of underlay
- workplace safety system requirements related to pre-finished and manufactured/engineered timber flooring
- characteristics and requirements of sub-floor preparation
- workflow in relation to flooring installation operations

<u>Skills</u>

The ability to:

- collect, organise and understand information related to work orders, plans, and safety procedures
- communicate ideas and information to enable confirmation of work requirements and specifications, co-ordination of work with site supervisor, other workers and customers, and the reporting of work outcomes and problems
- plan and organise activities including the preparation and layout of the worksite and the obtaining of equipment and materials to avoid any back tracking, workflow interruptions or wastage
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise workflow and productivity
- use mathematical ideas and techniques to correctly complete measurements, calculate area, estimate flooring requirements and other material requirements
- use pre-checking and inspection techniques to anticipate installation problems, avoid reworking and avoid wastage
- use the limited workplace technology related to the installation including tools, equipment, calculators and measuring devices

(4) Resource Implications

• pre-finished and manufactured/engineered timber flooring tools and equipment, adhesives and area requiring flooring

(5) Method of Assessment

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts.

Assessment should be by direct observation of tasks and questioning on underpinning knowledge.

Assessment may be in conjunction with assessment of other relevant units of competency.

(6) Context of Assessment

Assessment may occur on the job or in a workplace simulated facility with relevant pre-finished and manufactured/engineered timber flooring installation equipment, materials, work instructions and deadlines.

CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency							
Level 1.	Level 2.	Level 3.					
 Carries out established processes Makes judgement of quality using given criteria 	 Manages process Selects the criteria for the evaluation process 	 Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation 					

Collect, analyse and organise information	Level 2	
Communicate ideas and information	Level 2	
Plan and organise activities	Level 1	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 1	
Use technology	Level 1	

LMFFCF2152A: Competency Descriptor:		Install carpet tiles		
		This unit deals with the skills and knowledge required to install carpet tiles including the preparation, layout, cutting, laying and fixing of soft underlay and tiles.		
Con	npetency Field:	Floor (Coveri	ng and Finishing
Eli	EMENT OF COMPETEN	NCY	PER	FORMANCE CRITERIA
1.	Lay out materials		1.1	Patterns and/or plans are read and interpreted.
			1.2	Workplace health and safety requirements, including personal protection needs, are observed throughout the work.
			1.3	Tools, equipment and materials are selected and checked prior to use to ensure that they are appropriate for the work, serviceable and in a safe condition.
			1.4	Suitable adhesives, trims and accessories are selected.
			1.5	Sub-floor condition is assessed for installation of carpet tiles.
			1.6	Material grains and patterns are matched or contrasted as appropriate.
			1.7	Materials are laid out to meet specification requirements and to minimise waste.
2.	Cut materials to shape		2.1	Sequence of work is planned to ensure lay out and fixing is in logical order.
			2.2	Soft underlay for modular carpet is cut to specification.
			2.3	Tiles are accurately and clearly marked for cutting.
			2.4	Tiles are cut to required shape with minimum waste of materials.
3.	Lay tiles		3.1	Instructions and sequence for laying and fixing are followed.
			3.2	Materials for fixing are organised and used in accordance with relevant safety management requirements.

- 3.3 Fixing methods and equipment are used following manufacturers' instructions.
- 3.4 Completed installation meets required specifications.
- 4.1 Unused materials are stored or recycled as required.
- 4.2 Tools and equipment are cleaned and stored appropriately.
- 4.3 Work area is cleaned and rubbish disposed of appropriately.
- 4.4 Workplace documentation is completed.

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between school shops and workplaces. It relates to the unit as a whole and facilitates holistic assessment.

Work is carried out in accordance with legislative obligations, environmental legislation, relevant health regulations, manual handling procedures and organisation insurance requirements.

Work requires individuals to demonstrate discretion, judgement and problem solving skills in the installation of carpet tiles.

The following variables may be present for this particular unit:

Carpet tiles may be:

- backed or un-backed
- fixed or unfixed
- wool, synthetic or combination of fibres
- pile, needle-punch, tufted, fusion bonded and woven
- modular and square to one metre

Materials are to include but are not limited to:

- underlay
- carpet tiles
- trims
- stair nosing
- skirting
- reducing and edge strips
- adhesive and tapes

OH&S requirements may include:

- relevant legislation
- relevant building codes
- material safety management systems
- hazardous substance and dangerous goods codes
- safe operating procedures

Adhesives are to include:

- pressure sensitive and wet acrylics
- water and solvent-based contacts
- double sided tape

4. Complete housekeeping

Tools and equipment are to include:

- utility knife
- straight edge
- square
- chalk-line
- tape measure
- hacksaw
- serrated trowel
- hammer, and
- napping shears
- roller

• airless spray gun knee kicker

Personal protective equipment to include:

- safety goggles/glasses
- ear muffs/plugs
- safety helmet
- gloves
- footwear
- protective clothing

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

(1) Critical Aspects of Evidence

- interpret work order and locate and apply relevant information
- apply safe handling requirements for equipment, products and materials, including use of personal protective equipment
- follow work instructions, operating procedures and inspection practices to:
 - minimise the risk of injury to self and others
 - prevent damage to goods, equipment and products
 - maintain required production output and product quality
- to complete a minimum of:
 - one full-spread installation including appropriate trims and accessories
 - · one grid-based installation including appropriate trims and accessories
 - work effectively with others
 - modify activities to cater for variations in workplace contexts and environment

Information and procedures

- workplace procedures relating to the use and operation of tools and equipment
- workplace instructions, including job sheets, plans, drawings and designs
- workplace procedures relating to reporting and communications
- manufacturers instructions for the use of equipment and materials

(2) Pre-requisite Relationship of Units

Pre-requisite required for this unit is

• LMFFCF2051A: Use flooring sector hand and power tools

(3) Underpinning Knowledge and Skills

Knowledge of:

- the type, characteristics, uses and limitations of carpet tiles
- the types and uses of tile installation tools and equipment
- the type, characteristics, uses and limitations of carpet tile installation adhesives
- workplace safety system requirements related to carpet tile laying
- characteristics and requirements of sub-floor preparation
- workflow in relation to the floor covering operations

<u>Skills</u> The ability to:

- collect, organise and understand information related to work orders, basic plans, and safety procedures
- communicate ideas and information to enable confirmation of work requirements and specifications, coordination of work with site supervisor, other workers and customers, and the reporting of work outcomes and problems
- plan and organise activities including the preparation and layout of the worksite and the obtaining of equipment and materials to avoid any back tracking, workflow interruptions or wastage
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise workflow and productivity
- use mathematical ideas and techniques to correctly complete measurements, calculate area, estimate tile requirements and estimate material requirements
- use pre-checking and inspection techniques to anticipate installation problems, avoid reworking and avoid wastage
- use the limited workplace technology related to the installation of carpet tiles including tools, equipment, calculators and measuring devices

(4) **Resource Implications**

• carpet tiles, underlay, tools and equipment, adhesives and tapes, trims and area requiring carpet tiles

(5) Method of Assessment

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts.

Assessment should be by direct observation of tasks and questioning on underpinning knowledge.

Assessment may be in conjunction with assessment of other relevant units of competency.

(6) Context of Assessment

Assessment may occur on the job or in a workplace simulated facility with relevant carpet tile installation equipment, materials, work instructions and deadlines.

CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency			
Level 1.	Level 2.	Level 3.	
 Carries out established processes Makes judgement of quality using given criteria 	 Manages process Selects the criteria for the evaluation process 	 Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation 	

Collect, analyse and organise information	Level 2	
Communicate ideas and information	Level 2	
Plan and organise activities	Level 2	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 1	
Use technology	Level 1	

LMFFCF2162A: Install adhesive fixed carpet

Competency Descriptor: This unit deals with the skills and knowledge required to install adhesive fixed carpet including preparation, cutting, laying, fixing, joining and finishing of direct stick and dual-bond.

Competency Field: Floor Covering and Finishing

EL	EMENT OF COMPETENCY	PE	RFORMANCE CRITERIA
1.	Prepare for installation	1.1	Floor inspection report is consulted to confirm suitability of floor for carpet installation.
		1.2	Workplace health and safety requirements, including those covering ventilation, respirators and other personal protection measures are observed throughout the work.
		1.3	Tools, equipment and materials are selected and checked prior to use to ensure that they are appropriate for the work, serviceable and in a safe condition.
		1.4	Suitable edge finishing, joining materials, retainers and cover strips are selected and prepared.
		1.5	Suitable adhesives are selected and prepared for the installation.
		1.6	Underlay and carpet to be installed is checked against work instruction and appropriate standards.
2.	Lay, fix and finish the carpet	2.1	Sequence of work is planned to ensure laying is in logical order.
		2.2	Underlay is cut and installed to specification.
		2.3	Carpet pieces are laid out and checked for size, direction of pile and pattern.
		2.4	Carpet is trimmed, as necessary, and installed following manufacturers' instructions.
		2.5	Adhesives are used following manufacturers' instructions.
		2.6	Cover and finishing strips are appropriately fixed for the type of sub-floor.
		2.7	Completed installation meets required specification.

3. Complete housekeeping
3.1 Unused materials are stored or recycled as required.
3.2 Tools and equipment are cleaned and stored appropriately.
3.3 Work area is cleaned and rubbish disposed of appropriately.
3.4 Workplace documentation and/or reports are completed.

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between school shops and workplaces. It relates to the unit as a whole and facilitates holistic assessment.

Work is carried out in accordance with legislative obligations, environmental legislation, relevant health regulations, manual handling procedures and organisation insurance requirements.

Work requires individuals to demonstrate discretion, judgement and problem solving skills in the setting out and installation of adhesive fixed carpets.

The following variables may be present for this particular unit:

Adhesive fixed carpet may include:

- tufted carpet
- fusion-bonded carpet
- woven carpet
- needle punched carpet
- foams backed carpet
- rubber-backed carpet
- bonded underlay

Information and procedures

- workplace procedures relating to the use and operation of tools
- work instructions, including job sheets, plans, drawing and designs
- workplace procedures relating to reporting and communication
- manufacturers' instructions for the use of equipment and materials

OH&S requirements may include:

- relevant legislation
- relevant building codes
- material safety data management systems
- hazardous and dangerous goods codes
- safe operating procedures

Personal protective equipment to include:

- safety goggles/glasses
- ear muffs/plugs
- safety helmet
- gloves
- footwear
- protective clothing

Materials may include but are not limited to:

- finishing trims
- angles
- joining tapes

Tools and equipment are to include:

- knee kicker
- water roller
- carpet trimmer
- carpet stair tool
- hammer
- tape measure
- trimming knife

Adhesives may include:

- plasticised and rubber resin acrylic
- water and solvent-based adhesives
- solvent-based contact adhesive
- spiked carpet roller
- carpet spreader
- trowels and rollers
- carpet shears
- napping shears
- loop pile cutter
- seam sealer and tapes

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

(1) Critical Aspects of Evidence

- interpret work order and locate and apply relevant information
- apply safe handling requirements for equipment, products and materials, including use of personal protective equipment
- follow work instructions, operating procedures and inspection practices to:
 - prevent damage to goods, equipment or products
 - maintain required production output and product quality
 - minimise the risk of injury to self or others
 - work effectively with others
- to complete a minimum of the following:
 - one woven dual-bond installation requiring pattern matching and joins
 - one other direct stick installation
 - · modify activities to cater for variations in workplace contexts and environment

(2) **Pre-requisite Relationship of Units**

Pre-requisite required for this unit is

• LMFFCF2051A: Use flooring sector hand and power tools

(3) Underpinning Knowledge and Skills

Knowledge of:

- the types, characteristics, uses and limitations of adhesive fixed carpets and underlay
- the types and uses of adhesive fixed carpet installation tools and equipment
- the types, characteristics, uses and limitations of installation adhesives
- workplace safety system requirements, including ventilation needs, related to the installation of adhesive fixed carpets
- characteristics and requirements of sub-floor preparation
- workflow in relation to the cutting, laying, fixing, joining and finishing of adhesive fixed carpet

Skills The ability to:

- collect, organise and understand information related to work orders, plans and safety procedures
- communicate ideas and information to enable confirmation of work requirements and specifications, coordination of work with site supervisor, other workers and customers, and the reporting of work outcomes and problems
- plan and organise activities including the preparation and layout of the worksite and the obtaining of equipment and materials to avoid any back tracking, workflow interruptions or wastage
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise workflow and productivity
- use mathematical ideas and techniques to correctly complete measurements, calculate area, estimate carpet requirements and other material requirements
- use pre-checking and inspection techniques to anticipate installation problems, avoid reworking and avoid wastage
- use the limited workplace technology related to the installation of adhesive fixed carpet including tools, equipment, calculators and measuring devices

(4) Resource Implications

Carpets, tools and equipment, adhesives, access to prepared floors requiring adhesive fixed carpet

(5) Method of Assessment

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts.

Assessment should be by direct observation of tasks and questioning on underpinning knowledge.

Assessment should be conducted over time and will generally be in conjunction with assessment of other units of competency.

(6) Context of Assessment

Assessment may occur on the job or in a workplace simulated facility with relevant adhesive fixed carpet installation equipment, materials, work instructions and deadlines.

CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency			
Level 1.	Level 2.	Level 3.	
 Carries out established processes Makes judgement of quality using given criteria 	 Manages process Selects the criteria for the evaluation process 	 Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation 	

Collect, analyse and organise information	Level 1	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 2	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 2	
Use technology	Level 1	

LMFFCF2172A: Install joined carpet floor coverings

Competency Descriptor: This unit deals with the skills and knowledge required to install carpet floor coverings including preparation, layout, stretching, cutting, joining and finishing of carpet.

Competency Field: Floor Covering and Finishing

ELEMENT OF COMPETENCY P		PER	PERFORMANCE CRITERIA	
1.	Plan installation	1.1	Work required is determined from work order/job request.	
		1.2	Resources required in terms of labour, equipment, materials and time are assessed.	
		1.3	Plans and schedules for the installation are prepared in accordance with enterprise procedures.	
		1.4	Instructions for the installation are distributed in accordance with enterprise procedures.	
2.	Inspect work area and prepare materials	2.1	Workplace health and safety requirements, including those covering personal protection measures are observed throughout the work.	
		2.2	Tools, equipment and materials are selected and checked prior to use to ensure that they are appropriate for the work, serviceable and in a safe condition.	
		2.3	Underlay is inspected to confirm correct fitting.	
		2.4	Type of edge finishing, joining materials, retainers and cover strips are selected following specification or work order.	
		2.5	Work area is cleared of scraps or other contaminants.	
		2.6	Carpet to be installed is checked against order.	
3.	Install floor covering	3.1	Sequence of work is planned to ensure installation is in logical order.	
		3.2	Cover and finishing strips are suitably fixed for the type of sub-floor.	
		3.3	Carpet pieces are laid out and checked for size, direction of pile and pattern match.	

Complete housekeeping

- 3.4 Stretching equipment, joining and fixing methods are used following manufacturers' instructions.
- 3.5 Finished work is inspected for compliance with work order and workplace standards of finish.
- 4.1 Unused materials are stored or recycled as required.
- 4.2 Tools and equipment are cleaned and stored appropriately.
- 4.3 Work area is cleaned and rubbish disposed of appropriately.
- 4.4 Workplace documentation and/or reports are completed.

RANGE STATEMENT

4.

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between school shops and workplaces. It relates to the unit as a whole and facilitates holistic assessment.

Work is carried out in accordance with legislative obligations, environmental legislation, relevant health regulations, manual handling procedures and organisation insurance requirements.

Work requires individuals to demonstrate discretion, judgement and problem solving skills in the setting out and installation of carpet floor coverings.

The following variables may be present for this particular unit:

Joined carpet floor coverings may include:

- tufted carpet
- woven carpet
- fusion bonded carpet

OH&S requirements may include:

- relevant legislation
- relevant building codes
- material safety management systems
- hazardous and dangerous goods codes
- safe operating procedures

Personal protective equipment to include:

- safety goggles/glasses
- ear muffs/plugs
- safety helmet
- gloves
- footwear
- protective clothing
- Materials to be installed may include but are not limited to:
- commercial architectural carpet gripper strips
- metal mouldings and PVC trims
- heat seam tape
- hessian tape
- thread
- adhesives

Tools and equipment are to include:

- carpet knee kicker
- power stretcher
- carpet trimmer
- carpet stair tool
- hand trucks
- carpet trolleys
- hammer
- napping shears
- trimming knife
- carpet wall trimmer
- heat seam iron
- spiked carpet roller
- weight or seam roller
- awl
- carpet spreader
- carpet shears
- loop pile cutter
- moulding lifter
- notched trowel
- sewing needle

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be determined to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

(1) Critical Aspects of Evidence

- interpret work order and locate and apply relevant information
- apply safe handling requirements for equipment, products and materials, including use of personal protective equipment
- follow work instructions, operating procedures and inspection practices to:
 - prevent damage to goods, equipment and products
 - maintain required production output and product quality
 - minimise the risk of injury to self and others
- to complete a minimum of:
 - installation of a woven carpet requiring pattern match and join, and
 - installation of one other carpet type
 - using conventional and adhesive bonding methods of installation as specified by
 - work standards
- work effectively with others
- modify activities to cater for variations in workplace contexts and environment

Information and procedures

- workplace procedures relating to the use and operation of tools
- work instructions, including job sheets, plans, drawing and designs
- workplace procedures relating to reporting and communication
- manufacturers' instructions for the use of equipment and materials

(2) Pre-requisite Relationship of Units

Pre-requisite required for this unit is

• LMFFCF2051A: Use flooring sector hand and power tools

(3) Underpinning Knowledge and Skills

Kanadan	Obille
Knowledge	Skills The shift for
Knowledge of:	The ability to:
 characteristics and requirements for under lays the type, characteristics, uses and limitations of carpets the types and uses of carpet installation tools, equipment and materials techniques for stretching and joining carpet techniques for adhesive bonding and joining of carpet techniques for the use of velcro and equivalent systems workplace safety system requirements related to carpet installation workflow in relation to preparation, layout, stretching, cutting and finishing of carpet 	 collect, organise and understand information related to work orders, plans and safety procedures communicate ideas and information to enable confirmation of work requirements and specifications, co- ordination of work with site supervisor, other workers and customers, and the reporting of work outcomes and problems plan and organise activities including the preparation and layout of the worksite and the obtaining of equipment and materials to avoid any back tracking, workflow interruptions or wastage work with others and in a team by recognising dependencies and using cooperative approaches to optimise workflow and productivity use mathematical ideas and techniques to correctly complete measurements, calculate area, estimate carpet requirements and other material requirements use pre-checking and inspection techniques to anticipate installation problems, avoid reworking and avoid wastage use the limited workplace technology related to the installation of joined carpet including tools, equipment, calculators and measuring devices

(4) **Resource Implications**

Carpet, materials, tools and equipment and access to areas suitable for carpet installation

(5) Method of Assessment

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts.

Assessment should be by direct observation of tasks and questioning on underpinning knowledge.

Assessment should be conducted over time and will generally be in conjunction with assessment of other units of competency.

(6) Context of Assessment

Assessment may occur on the job or in a workplace simulated facility with relevant carpet installation equipment, materials, work instructions and deadlines.

CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency			
Level 1.	Level 2.	Level 3.	
 Carries out established processes Makes judgement of quality using given criteria 	 Manages process Selects the criteria for the evaluation process 	 Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation 	

Collect, analyse and organise information	Level 1	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 2	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 2	
Use technology	Level 1	

LMFFCF2182A:	Install carpet floor	coverings to stairs
--------------	----------------------	---------------------

Competency Descriptor:	This unit deals with the skills and knowledge required to install
	carpet floor covering to stairs and steps including planning,
	preparation, cutting, joining and fixing.

Competency Field:	Floor Covering and Finishing
Competency Piere.	ribbi Covering and rinnshing

ELEMENT OF COMPETENCY		PERFORMANCE CRITERIA		
1.	Plan and prepare for work	1.1	Workplace health and safety requirements, including those covering personal protection measures are observed throughout the work.	
		1.2	Tools, equipment and materials are selected and checked prior to use to ensure that they are appropriate for the work, serviceable and in a safe condition.	
		1.3	Stairway or step is measured and the required amount of floor covering, including allowances for type of stairs, is calculated and obtained.	
		1.4	Materials are laid out to meet pattern and specification requirements and minimise waste.	
		1.5	Suitable adhesives, gripper strips and edge strips are selected.	
		1.6	Underlay (if required) is checked against specified type and fitting.	
		1.7	Any remedial work to stairway is carried out.	
		1.8	Sequence of work is planned to ensure lay out and fixing is in logical order.	
2.	Installing floor covering	2.1	Instructions and sequence for installing and fixing are followed.	
		2.2	Patterns are cut as required for stairs.	
		2.3	Carpet is accurately and clearly marked for cutting.	
		2.4	Carpet is cut and joined following workplace procedures.	

- 2.5 Fixing methods and equipment are used following manufacturers' instructions.
- 2.6 Installation is completed to specification.
- 2.7 Finished stairway is checked for flaws in installation and materials and flaws rectified
- 3.1 Unused materials are stored or recycled as required.
- 3.2 Tools and equipment are cleaned and stored appropriately.
- 3.3 Work area is cleaned and rubbish disposed of appropriately.
- 3.4 Workplace documentation and/or reports are completed.

RANGE STATEMENT

Complete housekeeping

3.

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between school shops and workplaces. It relates to the unit as a whole and facilitates holistic assessment.

Work is carried out in accordance with legislative obligations, environmental legislation, relevant health regulations, manual handling procedures and organisation insurance requirements.

Work requires individuals to demonstrate discretion, judgement and problem solving skills in installing floor coverings to stairs and steps.

The following variables may be present for this particular unit:

Stairway types may include:

- open newell
- bull nose steps
- circular
- recessed steps
- open tread
- box steps
- kite winder treads

OH&S requirements may include:

- relevant legislation
- relevant building codes
- material safety management systems
- hazardous and dangerous goods codes
- safe operating procedures

Carpet floor coverings may include:

- tufted carpet
- woven carpet
- needle punch carpet
- fusion bonded carpet

Materials may include but are not limited to:

- underlay
- tapes and adhesives
- trims
- nosing
- smooth edges
- accessories

Tools and equipment are to include:

- knee kicker
- stair tool
- carpet gripper cutters
- trimmer •
- hammer
- staple hammer
- hacksaws

- sewing needles
- compressor
- air staple gun
- utility knife
- straight edge
- drill

Information and procedures

Personal protective equipment to include:

- workplace procedures relating to the use and . operation of tools and equipment
- workplace instructions, including job sheets, plans, drawings and designs
- workplace procedures relating to reporting and communications
- manufacturers' instructions for the use of equipment and materials

- safety goggles/glasses •
- ear muffs/plugs
- safety helmet
- gloves
- footwear
- protective clothing

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be determined to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

(1) **Critical Aspects of Evidence**

- interpret work order and locate and apply relevant information •
- apply safe handling requirements for equipment, products and materials, including use of • personal protective equipment

To complete a minimum of the installation of carpet to:

- a box step stairway •
- a kite winder treads stairway
- a bull nose steps stairway •
- an open tread staircase •

Follow work instructions, operating procedures and inspection practices to:

- prevent damage to goods, equipment and products
- maintain required production output and product quality
- minimise the risk of injury to self and others
- work effectively with others
- modify activities to cater for variations in workplace contexts and environment

(2) **Pre-requisite Relationship of Units**

Pre-requisite required for this unit is

LMFFCF2051A: Use flooring sector hand and power tools

(3) Underpinning Knowledge and Skills

Knowledge of:

- the types and characteristics of stairways
- the types and uses of carpet installation tools, equipment and materials
- the types, uses and limitations of stairway carpet fixing techniques
- the characteristics of timber and monolithic sub-floors
- workplace safety system requirements related to stairway carpet installation
- workflow in relation to the installation of carpets on stairways

Skills The ability to:

- collect, organise and understand information related to work orders, plans and safety procedures
- communicate ideas and information to enable confirmation of work requirements and specifications, coordination of work with site supervisor, other workers and customers, and the reporting of work outcomes and problems
- plan and organise activities including the preparation and layout of the worksite and the obtaining of equipment and materials to avoid any back tracking, workflow interruptions or wastage
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise workflow and productivity
- use mathematical ideas and techniques to correctly complete measurements, calculate area, estimate carpet requirements and other material requirements
- use pre-checking and inspection techniques to anticipate installation problems, avoid reworking and avoid wastage
- use the limited workplace technology related to the installation of carpet to stairways including tools, equipment and measuring devices

(4) **Resource Implications**

Carpet and underlay, installation tools, equipment and materials and stairs requiring carpet installation

(5) Method of Assessment

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts.

Assessment should be by direct observation of tasks and questioning on underpinning knowledge.

Assessment should be conducted over time and will generally be in conjunction with assessment of other units of competency.

(6) Context of Assessment

Assessment may occur on the job or in a workplace simulated facility with relevant stairway carpet installation equipment, materials, work instructions and deadlines.

CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency									
Level 1.	Level 2.	Level 3.							
 Carries out established processes Makes judgement of quality using given criteria 	 Manages process Selects the criteria for the evaluation process 	 Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation 							

Collect, analyse and organise information	Level 1	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 2	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 2	
Use technology	Level 1	

LMFFCF2212A:		Install resilient tiles				
Competency Descriptor:		This unit deals with the skills and knowledge required to layout, cut and fix resilient tiles.				
Competency Field: Floor		Floor Cov	or Covering and Finishing			
ELEMENT OF COMPETENCY			Performance Criteria			
1.	Lay out materials	1.	1	Patterns and/or plans are read and interpreted.		
		1.	2	Workplace health and safety requirements, including personal protection needs, are observed throughout the work.		
		1.	3	Tools, equipment and materials are selected and checked prior to use to ensure that they are appropriate for the work, serviceable and in a safe condition.		
		1.	4	Suitable adhesives, trims and accessories are selected.		
		1.	5	Sub-floor condition is assessed for installation of resilient tiles.		
		1.	6	Directional sequence, colour and patterns are matched as appropriate.		
2.	Cut materials to shape	2.	1	Sequence of work is planned to ensure lay out and fixing is in logical order.		
		2.	2	Resilient tiles are laid out to meet specification requirements and to minimise waste.		
		2.	3	Resilient tiles are accurately and clearly marked for cutting.		
		2.	4	Tiles are cut to required shape ensuring minimum waste.		
3.	Lay tiles	3.	1	Instructions and sequence for laying and fixing is followed.		
		3.	2	Materials for fixing are organised and used in accordance with relevant safety management requirements.		
		3.	3	Fixing methods and equipment are used following manufacturers' instructions.		
		3.	4	Completed installation meets required specifications.		

- 4. Complete housekeeping
 4.1 Unused materials are stored or recycled as required.
 4.2 Tools and equipment are cleaned and stored appropriately.
 4.3 Work area is cleaned and rubbish disposed of appropriately.
 - 4.4 Workplace documentation is completed.

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between school shops and workplaces. It relates to the unit as a whole and facilitates holistic assessment.

Work is carried out in accordance with legislative obligations, environmental legislation, relevant health regulations, manual handling procedures and organisation insurance requirements.

Work requires individuals to demonstrate discretion, judgement and problem solving skills in the laying out, cutting and fixing of resilient tiles.

The following variables may be present for this particular unit:

Resilient tiles includes:

- homogenous/heterogeneous
- linoleum
- rubber
- semi-rigid
- rigid

OH&S requirements may include:

- relevant legislation
- relevant building codes
- material safety management systems
- hazardous substance and dangerous goods codes
- safe operating procedures

Tools and equipment are to include:

- utility knife
- straight edge
- square
- chalk and chalk-line
- tape measure
- hacksaw
- serrated trowel
- hammer
- scribing bar
- dividers
- roller
- gas bottle and gun
- rubber mallet
- paint brush and bucket
- spatula knife
- trolleys

Information and procedures

- workplace procedures relating to the use and operation of tools and equipment
- workplace instructions, including job sheets, plans, drawings and designs
- workplace procedures relating to reporting and communications
- manufacturers' instructions for the use of equipment and materials

Materials are to include but are not limited to:

- resilient tile flooring
- skirting
- reducing and edge strips
- tapes
- pattern paper
- adhesives

Adhesives include:

- acrylic and pressure sensitive adhesives
- two-part epoxy
- polyurethane
- water-based and solvent-based contact adhesive

Personal protective equipment to include:

- safety goggles/glasses
- ear muffs/plugs
- safety helmet
- gloves
- footwear
- protective clothing

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

(1) Critical Aspects of Evidence

- interpret work order and locate and apply relevant information
- apply safe handling requirements for equipment, products and materials, including use of personal protective equipment
- follow work instructions, operating procedures and inspection practices to:
 - minimise the risk of injury to self and others
 - prevent damage to goods, equipment and products
 - maintain required production output and product quality
- install resilient tiles where cutting and fixing is required:
 - on either a timber sub-floor, or
 - on a monolithic sub-floor
 - in multiple rooms with complex design requirements
- work effectively with others
- modify activities to cater for variations in workplace contexts and environment

(2) Pre-requisite Relationship of Units

Pre-requisite required for this unit is

• LMFFCF2051A: Use flooring sector hand and power tools

(3) Underpinning Knowledge and Skills

Knowledge

Knowledge of:

- the type, characteristics, uses and limitations of resilient tiles
- the types and uses of resilient tile installation tools and equipment
- the type, characteristics, uses and limitations of resilient tile installation adhesives
- workplace safety system requirements related to resilient tile installation
- characteristics and requirements of sub-floor preparation
- workflow in relation to cutting and laying resilient tiles

Skills

The ability to:

- collect, organise and understand information related to work orders, plans, and safety procedures
- communicate ideas and information to enable confirmation of work requirements and specifications, co-ordination of work with site supervisor, other workers and customers, and the reporting of work outcomes and problems
- plan and organise activities including the preparation and layout of the worksite and the obtaining of equipment and materials to avoid any back tracking, workflow interruptions or wastage
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise workflow and productivity
- use mathematical ideas and techniques to correctly complete measurements, calculate area, estimate resilient tile requirements and other material requirement.
- use pre-checking and inspection techniques to anticipate installation problems, avoid reworking and avoid wastage
- use the limited workplace technology related to the installation of resilient tiles including tools, equipment, calculators and measuring devices

(4) **Resource Implications**

 resilient tiles, tools and equipment, adhesives and tapes, trims, accessories and area requiring tiling

(5) Method of Assessment

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts.

Assessment should be by direct observation of tasks and questioning on underpinning knowledge.

Assessment may be in conjunction with assessment of other relevant units of competency.

(6) Context of Assessment

Assessment may occur on the job or in a workplace simulated facility with relevant resilient floor covering installation equipment, materials, work instructions and deadlines.

CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency						
Level 1.	Level 2.	Level 3.				
 Carries out established processes Makes judgement of quality using given criteria 	 Manages process Selects the criteria for the evaluation process 	 Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation 				

Collect, analyse and organise information	Level 1	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 2	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 2	
Use technology	Level 1	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

LM	FFCF2222A:	Install rubber floor coverings		
Com	petency Descriptor:		Is with the skills and knowledge required to install rubber gs including preparation, cutting, laying and fixing.	
Com	petency Field:	Floor Cover	ring and Finishing	
Ele	MENT OF COMPETEN	NCY PER	RFORMANCE CRITERIA	
1.	Lay out materials	1.1	Patterns and/or plans are read and interpreted.	
		1.2	Workplace health and safety requirements, including ventilation requirements and other personal protection needs, are observed throughout the work.	
		1.3	Tools, equipment and materials are selected and checked prior to use to ensure that they are appropriate for the work, serviceable and in a safe condition.	
		1.4	Sub-floor condition is assessed for suitability for installation of rubber floor covering.	
		1.5	Suitable adhesives, trims and accessories are selected if required.	
		1.6	Materials are laid out to meet pattern and specification requirements and minimise waste and joins.	
2.	Prepare materials for installation	2.1	Sequence of work is planned to ensure lay out and fixing is in logical order.	
		2.2	Rubber flooring materials are accurately and clearly marked for cutting.	
		2.3	Materials are cut to required shape ensuring minimum waste.	
		2.4	Directional sequence and patterns are matched as appropriate.	
		2.5	Adhesives and edge strips/accessories are prepared for use as required.	
3.	Lay flooring	3.1	Instructions and sequence for laying and fixing are followed.	
		3.2	Materials for fixing are organised and used in accordance with relevant safety management requirements.	

- 3.3 Fixing methods and equipment are used following manufacturers' recommendations.
- 3.4 Finished job is inspected and any imperfections are rectified following workplace procedures.
- 4.1 Unused materials are stored or recycled as required.
- 4.2 Tools and equipment are cleaned and stored appropriately.
- 4.3 Work area is cleaned and rubbish disposed of appropriately.
- 4.4 Workplace documentation is completed.

RANGE STATEMENT

Complete housekeeping

4.

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between school shops and workplaces. It relates to the unit as a whole and facilitates holistic assessment.

Work is carried out in accordance with legislative obligations, environmental legislation, relevant health regulations, manual handling procedures and organisation insurance requirements.

Work requires individuals to demonstrate discretion, judgement and problem solving skills in the cutting, laying and fixing of rubber floor coverings.

The following variables may be present for this particular unit:

OH&S requirements may include:

- relevant legislation
- relevant building codes
- material safety management systems
- hazardous and dangerous goods codes
- safe operating procedures

Personal protective equipment to include:

- safety goggles/glasses
- ear muffs/plugs
- safety helmet
- gloves
- footwear
- protective clothing

Tools and equipment are to include:

- utility knife
- straight edge
- square
- chalk and chalk-line
- tape measure
- hacksaw
- serrated trowel
- hammer
- recess scriber
- scribing bar

Information and procedures

- workplace procedures relating to the use and operation of tools and equipment
- workplace instructions, including job sheets, plans, drawings and designs
- workplace procedures relating to reporting and communications
- manufacturers' instructions for the use of equipment and materials

Adhesives are to include:

- two-part epoxy
- polyurethane
- acrylic
- contact

- divider
- hand roller
- roller
- mixing equipment (epoxy)
- paint brush and bucket
- spatula knife
- dividers
- builders pencil
- contact bucket
- brush and roller

Rubber floor covering includes:

 smooth and studded rubber in both sheet and tile, and is normally vulcanised

Materials may include but are not limited to:

- rubber floor covering (tile or sheet)
- trims and accessories
- adhesives

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

(1) Critical Aspects of Evidence

- interpret work order and locate and apply relevant information
- apply safe handling requirements for equipment, products and materials, including use of personal protective equipment
- follow work instructions, operating procedures and inspection practices to:
 - minimise the risk of injury to self and others
 - prevent damage to goods, equipment and products
 - maintain required production output and product quality
- to complete a minimum of two different types of installation, which are to include:
 - one epoxy rubber tile installation
 - one polyurethane rubber sheet installation
- work effectively with others
- modify activities to cater for variations in workplace contexts and environment

(2) **Pre-requisite Relationship of Units**

Pre-requisite required for this unit is

• LMFFCF2051A: Use flooring sector hand and power tools

(3) Underpinning Knowledge and Skills

Knowledge of:

- the type, characteristics, uses and limitations of rubber floor covering
- the types and uses of installation tools and equipment
- the type, characteristics, uses and limitations of installation adhesives
- workplace safety system requirements related to rubber floor coverings
- characteristics and requirements of sub-floor preparation
- workflow in relation to the installation of rubber floor coverings

<u>Skills</u> The ability to:

- collect, organise and understand information related to work orders, plans, and safety procedures
- communicate ideas and information to enable confirmation of work requirements and specifications, coordination of work with site supervisor, other workers and customers, and the reporting of work outcomes and problems
- plan and organise activities including the preparation and layout of the worksite and the obtaining of equipment and materials to avoid any back tracking, workflow interruptions or wastage
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise workflow and productivity
- use mathematical ideas and techniques to correctly complete measurements, calculate area, estimate rubber floor covering requirements and estimate other material requirements
- use pre-checking and inspection techniques to anticipate installation problems, avoid reworking and avoid wastage
- use the limited workplace technology related to the installation including tools, equipment, calculators and measuring devices

(4) **Resource Implications**

Rubber floor covering, appropriate tools and equipment, adhesives and area requiring rubber flooring

(5) Method of Assessment

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts.

Assessment should be by direct observation of tasks and questioning on underpinning knowledge.

Assessment may be in conjunction with assessment of other relevant units of competency.

(6) Context of Assessment

Assessment may occur on the job or in a workplace simulated facility with relevant rubber floor covering installation equipment, materials, work instructions and deadlines.

CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency						
Level 1.	Level 2.	Level 3.				
 Carries out established processes Makes judgement of quality using given criteria 	 Manages process Selects the criteria for the evaluation process 	 Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation 				

Collect, analyse and organise information	Level 1	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 2	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 1	
Use technology	Level 1	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

 serviceable and in a safe condition. 1.4 Sub-floor condition is assessed for suitability for installation of anti-static sheet vinyl floor covering. 1.5 Suitable adhesives, trims and accessories are selected if required. 1.6 Materials are laid out to meet pattern and specification requirements and minimise waste and joins. 	LM	FFCF2242A:	Install anti-static resilient floor coverings		
ELEMENT OF COMPETENCY PERFORMANCE CRITERIA 1. Lay out materials 1.1 Patterns and/or plans are read and interpreted. 1.2 Workplace health and safety requirements, including personal protection needs, are observed throughout the work. 1.3 Tools, equipment and materials are selected and checked prior to use to ensure that they are appropriate for the work serviceable and in a safe condition. 1.4 Sub-floor condition is assessed for suitability for installation of anti-static sheet vinyl floor covering. 1.5 Suitable adhesives, trims and accessories are selected if required. 1.6 Materials are laid out to meet pattern and specification requirements and minimise waste and joins. 2. Prepare materials for installation 2.1 Sequence of work is planned to ensure lay out and fixing is in logical order. 2.2 Anti-static resilient flooring materials are accurately and clearly marked for cutting. 2.3 Materials are cut to required shape ensuring minimum waste. 2.4 Directional sequence and patterns are matched as appropriate. 2.5 Adhesives and edge strips/accessories are prepared for	Com	petency Descriptor:	anti-static resilient floor coverings including preparation, cutting,		
 Lay out materials Patterns and/or plans are read and interpreted. Workplace health and safety requirements, including personal protection needs, are observed throughout the work. Tools, equipment and materials are selected and checked prior to use to ensure that they are appropriate for the work serviceable and in a safe condition. Sub-floor condition is assessed for suitability for installation of anti-static sheet vinyl floor covering. Suitable adhesives, trims and accessories are selected if required. Materials are laid out to meet pattern and specification requirements and minimise waste and joins. Prepare materials for installation of cutting. Sequence of work is planned to ensure lay out and fixing is in logical order. Anti-static resilient flooring materials are accurately and clearly marked for cutting. Materials are cut to required shape ensuring minimum waste. Directional sequence and patterns are matched as appropriate. Adhesives and edge strips/accessories are prepared for 	Com	petency Field:	Floor	Coverin	ng and Finishing
 Workplace health and safety requirements, including personal protection needs, are observed throughout the work. Tools, equipment and materials are selected and checked prior to use to ensure that they are appropriate for the work serviceable and in a safe condition. Sub-floor condition is assessed for suitability for installation of anti-static sheet vinyl floor covering. Suitable adhesives, trims and accessories are selected if required. Materials are laid out to meet pattern and specification requirements and minimise waste and joins. Prepare materials for in logical order. Sequence of work is planned to ensure lay out and fixing is in logical order. Anti-static resilient flooring materials are accurately and clearly marked for cutting. Materials are cut to required shape ensuring minimum waste. Directional sequence and patterns are matched as appropriate. Adhesives and edge strips/accessories are prepared for 	ELE	CMENT OF COMPETEN	ENCY PERFORMANCE CRITERIA		
 personal protection needs, are observed throughout the work. 1.3 Tools, equipment and materials are selected and checked prior to use to ensure that they are appropriate for the work serviceable and in a safe condition. 1.4 Sub-floor condition is assessed for suitability for installation of anti-static sheet vinyl floor covering. 1.5 Suitable adhesives, trims and accessories are selected if required. 1.6 Materials are laid out to meet pattern and specification requirements and minimise waste and joins. 2. Prepare materials for installation 2.1 Sequence of work is planned to ensure lay out and fixing is in logical order. 2.2 Anti-static resilient flooring materials are accurately and clearly marked for cutting. 2.3 Materials are cut to required shape ensuring minimum waste. 2.4 Directional sequence and patterns are matched as appropriate. 2.5 Adhesives and edge strips/accessories are prepared for 	1.	Lay out materials		1.1	Patterns and/or plans are read and interpreted.
 prior to use to ensure that they are appropriate for the work serviceable and in a safe condition. 1.4 Sub-floor condition is assessed for suitability for installation of anti-static sheet vinyl floor covering. 1.5 Suitable adhesives, trims and accessories are selected if required. 1.6 Materials are laid out to meet pattern and specification requirements and minimise waste and joins. 2. Prepare materials for installation 2.1 Sequence of work is planned to ensure lay out and fixing is in logical order. 2.2 Anti-static resilient flooring materials are accurately and clearly marked for cutting. 2.3 Materials are cut to required shape ensuring minimum waste. 2.4 Directional sequence and patterns are matched as appropriate. 2.5 Adhesives and edge strips/accessories are prepared for 				1.2	personal protection needs, are observed throughout the
of anti-static sheet vinyl floor covering. 1.5 Suitable adhesives, trims and accessories are selected if required. 1.6 Materials are laid out to meet pattern and specification requirements and minimise waste and joins. 2. Prepare materials for installation 2.1 Sequence of work is planned to ensure lay out and fixing is in logical order. 2.2 Anti-static resilient flooring materials are accurately and clearly marked for cutting. 2.3 Materials are cut to required shape ensuring minimum waste. 2.4 Directional sequence and patterns are matched as appropriate. 2.5 Adhesives and edge strips/accessories are prepared for				1.3	prior to use to ensure that they are appropriate for the work,
 required. 1.6 Materials are laid out to meet pattern and specification requirements and minimise waste and joins. 2. Prepare materials for installation 2.1 Sequence of work is planned to ensure lay out and fixing is in logical order. 2.2 Anti-static resilient flooring materials are accurately and clearly marked for cutting. 2.3 Materials are cut to required shape ensuring minimum waste. 2.4 Directional sequence and patterns are matched as appropriate. 2.5 Adhesives and edge strips/accessories are prepared for 				1.4	Sub-floor condition is assessed for suitability for installation of anti-static sheet vinyl floor covering.
 Prepare materials for installation 2.1 Sequence of work is planned to ensure lay out and fixing is in logical order. 2.2 Anti-static resilient flooring materials are accurately and clearly marked for cutting. 2.3 Materials are cut to required shape ensuring minimum waste. 2.4 Directional sequence and patterns are matched as appropriate. 2.5 Adhesives and edge strips/accessories are prepared for 				1.5	
installationin logical order.2.2Anti-static resilient flooring materials are accurately and clearly marked for cutting.2.3Materials are cut to required shape ensuring minimum waste.2.4Directional sequence and patterns are matched as appropriate.2.5Adhesives and edge strips/accessories are prepared for				1.6	
 clearly marked for cutting. 2.3 Materials are cut to required shape ensuring minimum waste. 2.4 Directional sequence and patterns are matched as appropriate. 2.5 Adhesives and edge strips/accessories are prepared for 	2.	•		2.1	Sequence of work is planned to ensure lay out and fixing is in logical order.
 waste. 2.4 Directional sequence and patterns are matched as appropriate. 2.5 Adhesives and edge strips/accessories are prepared for 				2.2	
appropriate. 2.5 Adhesives and edge strips/accessories are prepared for				2.3	
				2.4	
				2.5	

3.	Lay flooring	3.1	Instructions and sequence for laying and fixing are followed.
		3.2	Materials for fixing are organised and used in accordance with relevant safety management requirements.
		3.3	Resilient flooring is laid and fixed to meet job specifications.
		3.4	Fixing methods and equipment are used following manufacturers' recommendations.
		3.5	Finished job is inspected and any imperfections are rectified following workplace procedures.
4.	Complete housekeeping	4.1	Unused materials are stored or recycled as required.
		4.2	Tools and equipment are cleaned and stored appropriately.
		4.3	Work area is cleaned and rubbish disposed of appropriately.
		4.4	Workplace documentation is completed.

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between school shops and workplaces. It relates to the unit as a whole and facilitates holistic assessment.

Work is carried out in accordance with legislative obligations, environmental legislation, relevant health regulations, manual handling procedures and organisation insurance requirements.

Work requires individuals to demonstrate discretion, judgement and problem solving skills in the cutting, laying and fixing of anti-static resilient floor coverings.

The following variables may be present for this particular unit:

OH&S requirements may include:

• relevant legislation

- relevant building codes
- material safety management systems
- hazardous and dangerous goods codes
- safe operating procedures

 resilient flooring with a resistance rating from 108 to 1010 ohms

Anti-static resilient coverings include:

Materials may include but are not limited to:

- anti-static resilient flooring materials
- trims and accessories
- tapes and adhesives

Tools and equipment are to include:

- utility knife
- straight edge
- square
- chalk and chalk-line
- tape measure
- hacksaw
- serrated trowel
- hammer
- seam and edge trimmer
- recess scriber
- scribing bar
- welding gun and accessories
- grooving tool

Personal protective equipment to include:

- safety goggles/glasses
- ear muffs/plugs
- safety helmet
- gloves
- footwear
- protective clothing

Adhesives are to include:

- acrylic and
- conductive acrylic adhesives
- straight edge
- divider
 - hand roller
 - roller
 - gas bottle and gun
 - rubber mallet
 - paint brush and bucket
 - spatula knife
 - dividers
 - builders pencil
 - contact bucket
 - brush and roller

Information and procedures:

- workplace procedures relating to the use and operation of tools and equipment
- workplace instructions, including job sheets, plans, drawings and designs
- workplace procedures relating to reporting and communications
- manufacturers' instructions for the use of equipment and materials

Evidence Guide

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

(1) Critical Aspects of Evidence

- interpret work order and locate and apply relevant information
- apply safe handling requirements for equipment, products and materials, including use of personal protective equipment

Follow work instructions, operating procedures and inspection practices to:

- minimise the risk of injury to self and others
- prevent damage to goods, equipment and products
- maintain required production output and product quality
- to complete at least one anti-static resilient floor installation using a conductive acrylic adhesive system
- work effectively with others
- modify activities to cater for variations in workplace contexts and environment

(2) **Pre-requisite Relationship of Units**

Pre-requisite required for this unit is

• LMFFCF2051A: Use flooring sector hand and power tools

(3) Underpinning Knowledge and Skills

Knowledge of:

- the type, characteristics, uses and limitations of anti-static resilient floor coverings
- the types and uses of installation tools and equipment
- the type, characteristics, uses and limitations of installation adhesives
- workplace safety system requirements related to anti-static resilient floor coverings
- characteristics and requirements of sub-floor preparation
- workflow in relation to the installation of anti-static resilient floor coverings

<u>Skills</u> The ability to:

- collect, organise and understand information related to work orders, plans, and safety procedures
- communicate ideas and information to enable confirmation of work requirements and specifications, coordination of work with site supervisor, other workers and customers, and the reporting of work outcomes and problems
- plan and organise activities including the preparation and layout of the worksite and the obtaining of equipment and materials to avoid any back tracking, workflow interruptions or wastage
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise workflow and productivity
- use mathematical ideas and techniques to correctly complete measurements, calculate area, estimate anti-static resilient floor covering requirements and other material requirements
- use pre-checking and inspection techniques to anticipate installation problems, avoid reworking and avoid wastage
- use the limited workplace technology related to the installation including tools, equipment, calculators and measuring devices

(4) **Resource Implications**

Anti-static resilient floor covering, appropriate tools and equipment, adhesives and area requiring anti-static flooring

(5) Method of Assessment

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts.

Assessment should be by direct observation of tasks and questioning on underpinning knowledge.

Assessment may be in conjunction with assessment of other relevant units of competency.

(6) Context of Assessment

Assessment may occur on the job or in a workplace simulated facility with relevant anti-static resilient floor covering installation equipment, materials, work instructions and deadlines.

CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency						
Level 1.	Level 2.	Level 3.				
 Carries out established processes Makes judgement of quality using given criteria 	 Manages process Selects the criteria for the evaluation process 	 Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation 				

Collect, analyse and organise information	Level 1	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 2	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 1	
Use technology	Level 1	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

LMFFCF2252A:

Com	petency Descriptor:	This unit deals with the skills and knowledge required to install conductive resilient floor coverings including preparation, cutting, laying and fixing.		
Com	petency Field:	Floor Coveri	ng and Finishing	
Ele	MENT OF COMPETEN	CY PER	FORMANCE CRITERIA	
1.	Lay out materials	1.1	Patterns and/or plans are read and interpreted.	
		1.2	Workplace health and safety requirements, including personal protection needs, are observed throughout the work.	
		1.3	Tools, equipment and materials are selected and checked prior to use to ensure that they are appropriate for the work, serviceable and in a safe condition.	
		1.4	Sub-floor condition is assessed for suitability for installation of conductive resilient floor covering.	
		1.5	Suitable adhesives, trims and accessories are selected if required.	
		1.6	Materials are laid out to meet pattern and specification requirements and minimise waste and joins.	
2.	Prepare materials for installation	2.1	Sequence of work is planned to ensure lay out and fixing is in logical order.	
		2.2	Conductive resilient flooring materials are accurately and clearly marked for cutting.	
		2.3	Materials are cut to required shape ensuring minimum waste.	
		2.4	Directional sequence and patterns are matched as appropriate.	
		2.5	Adhesives and edge strips/accessories are prepared for use as required.	

Install conductive resilient floor coverings

- Lay flooring 3.1 Instructions and sequence for laying and fixing are followed. 3. 3.2 Copper grid and isolating layer are installed to specification. 3.3 Materials for fixing are organised and used in accordance with relevant safety requirements. 3.4 Resilient flooring is laid and fixed to meet job specifications. 3.5 Fixing methods and equipment are used following manufacturers' recommendations. 3.6 Finished job is inspected and any imperfections are rectified following workplace procedures. 4. Complete housekeeping 4.1 Unused materials are stored or recycled as required. 4.2 Tools and equipment are cleaned and stored appropriately. 4.3 Work area is cleaned and rubbish disposed of appropriately.
 - 4.4 Workplace documentation is completed.

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between school shops and workplaces. It relates to the unit as a whole and facilitates holistic assessment.

Work is carried out in accordance with legislative obligations, environmental legislation, relevant health regulations, manual handling procedures and organisation insurance requirements.

Work requires individuals to demonstrate discretion, judgement and problem solving skills in the cutting, laying and fixing of conductive resilient floor coverings.

The following variables may be present for this particular unit:

Conductive resilient floor coverings include static conductive covering with a resistance reading of 104 to 108 using a copper grid and isolating layer.

OH&S requirements may include:

- relevant legislation
- relevant building codes
- material safety management systems
- hazardous and dangerous goods codes
- safe operating procedures

Materials are to include but are not limited to:

- conductive resilient flooring
- trims and accessories
- adhesives
- copper earthing strips

Adhesives are to include:

• conductive adhesives

Tools and equipment are to include:

- utility knife (with hook, straight and concave blades)
- straight edge
- square
- chalk and chalk line
- tape measure
- hacksaw
- serrated trowel
- hammer
- seam and edge trimmer
- recess scriber
- scribing bar
- welding gun and accessories

Information and procedures

- workplace procedures relating to the use and operation of tools and equipment
- workplace instructions, including job sheets, plans, drawings and designs
- workplace procedures relating to reporting and communications
- manufacturers' instructions for the use of equipment and materials

- grooving tool
- divider
- hand roller
- exacto knife
- roller (65 kg)
- gas bottle and gun
- rubber mallet
- paint brush and bucket
- spatula knife
- dividers
- builders pencil
- contact bucket
- brush and roller

Personal protective equipment to include:

- safety goggles/glasses
- ear muffs/plugs
- safety helmet
- gloves
- footwear
- protective clothing

Evidence Guide

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

(1) Critical Aspects of Evidence

- interpret work order and locate and apply relevant information
- apply safe handling requirements for equipment, products and materials, including use of personal protective equipment
- follow work instructions, operating procedures and inspection practices to:
 - minimise the risk of injury to self and others
 - prevent damage to goods, equipment and products
 - maintain required production output and product quality
- complete a minimum of one installation of a static conductive resilient floor covering with an isolating layer and using conductive adhesive and earthing strip
- work effectively with others
- modify activities to cater for variations in workplace contexts and environment

(2) **Pre-requisite Relationship of Units**

Pre-requisite required for this unit is

• LMFFCF2051A: Use flooring sector hand and power tools

(3) Underpinning Knowledge and Skills

Knowledge of:

- the type, characteristics, uses and limitations of conductive resilient floor covering
- the types and uses of installation tools and equipment
- the type, characteristics, uses and limitations of conductive adhesives
- workplace safety system requirements related to conductive resilient floor coverings
- characteristics and requirements of sub-floor preparation
- workflow in relation to the installation of conductive resilient floor coverings

Skills The ability to:

- collect, organise and understand information related to work orders, plans, and safety procedures
- communicate ideas and information to enable confirmation of work requirements and specifications, coordination of work with site supervisor, other workers and customers, and the reporting of work outcomes and problems
- plan and organise activities including the preparation and layout of the worksite and the obtaining of equipment and materials to avoid any back tracking, workflow interruptions or wastage
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise workflow and productivity
- use mathematical ideas and techniques to correctly complete measurements, calculate area, estimate conductive resilient floor covering requirements and other material requirements
- use pre-checking and inspection techniques to anticipate installation problems, avoid reworking and avoid wastage
- use the limited workplace technology related to the installation including tools, equipment, calculators and measuring devices

(4) **Resource Implications**

Conductive resilient floor covering, appropriate tools and equipment, adhesives and area requiring conductive covering

(5) Method of Assessment

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts.

Assessment should be by direct observation of tasks and questioning on underpinning knowledge.

Assessment may be in conjunction with assessment of other relevant units of competency.

(6) Context of Assessment

Assessment may occur on the job or in a workplace simulated facility with relevant conductive resilient floor covering installation equipment, materials, work instructions and deadlines.

CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency					
Level 1.	Level 2.	Level 3.			
 Carries out established processes Makes judgement of quality using given criteria 	 Manages process Selects the criteria for the evaluation process 	 Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation 			

Collect, analyse and organise information	Level 1	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 2	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 1	
Use technology	Level 1	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

LMFFCF2262A:		Cut a	nd in	estall resilient floor coverings to stairs		
re		resilie	This unit deals with the skills and knowledge required to install resilient floor covering to stairs, stringers and steps including planning, preparation, cutting, welding, layout and fixing.			
Competency Field: Floor		Floor (Coveri	ng and Finishing		
ELEMENT OF COMPETENCY		NCY	PERFORMANCE CRITERIA			
1.	Plan work		1.1	Floor covering personal protection measures are observed throughout the work.		
			1.2	Tools, equipment and materials are selected and checked prior to use to ensure that they are appropriate for the work, serviceable and in a safe condition.		
			1.3	Stairway or step is measured and the required amount of floor covering, including allowances for type of stairs, is calculated and obtained.		
			1.4	Materials are laid out to meet pattern and specification requirements and minimise waste.		
			1.5	Suitable adhesives, trims and accessories are selected.		
			1.6	Underlay (if required) is checked against specified type and fitting.		
			1.7	Any remedial work to stairway is carried out.		
			1.8	Sequence of work is planned to ensure lay out and fixing is in logical order.		
2.	Install floor covering		2.1	Instructions and sequence for installing and fixing are followed.		
			2.2	Pattern are cut as required for stairs and used to accurately and clearly mark resilient flooring for cutting.		
			2.3	Materials are cut to required shape ensuring minimum waste.		

Complete housekeeping

- 2.4 Welding and fixing methods, equipment and materials are used following manufacturers' instructions.
- 2.5 Completed installation meets required specification.
- 3.1 Unused materials are stored or recycled as required.
- 3.2 Tools and equipment are cleaned and stored appropriately.
- 3.3 Work area is cleaned and rubbish disposed of appropriately.
- 3.4 Workplace documentation and/or reports are completed.

RANGE STATEMENT

3.

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between school shops and workplaces. It relates to the unit as a whole and facilitates holistic assessment.

Work is carried out in accordance with legislative obligations, environmental legislation, relevant health regulations, manual handling procedures and organisation insurance requirements.

Work requires individuals to demonstrate discretion, judgement and problem solving skills in the laying out, cutting, welding and fixing of resilient floor covering.

The following variables may be present for this particular unit:

Stairs and stairways may include:

- open newell
- bullnose steps
- circular
- recessed steps
- open tread
- box steps, and kit
- winder treads

Work involves the:

- cutting
- welding
- laying and
- fixing of resilient floor covering to stairs

Resilient flooring includes:

- homogenous/heterogeneous
- linoleum sheet
- encapsulated glass fibre
- in-laid
- rotogravure

OH&S requirements may include:

- relevant legislation
- relevant building codes
- material safety management systems
- hazardous and dangerous goods codes
- safe operating procedures

Materials are to include but are not limited to:

- resilient flooring
- skirting
- reducing and edge strips
- welding rod
- coving accessories
- tapes
- pattern paper
- adhesives

Tools and equipment may include:

- utility knife with hook
- straight and concave blades
- straight edge
- square
- chalk and chalk-line
- tape measure
- hacksaw
- serrated trowel
- hammer
- seam and edge trimmer
- recess scriber and pre-formed linoleum recess scribers
- scribing bar
- welding gun and accessories
- hot air gun

Information and procedures

- workplace procedures relating to the use and operation of tools and equipment
- workplace instructions, including job sheets, plans, drawings and designs
- workplace procedures relating to reporting and communications
- manufacturers' instructions for the use of equipment and materials

Adhesives include:

- plasticised and rubber resin acrylic
- two-part epoxy
- polyurethane
- water-based and solvent-based contact adhesive

- grooving tool
- divider
- pencil cove roller
- hand roller cove gauging tool
- roller
- gas bottle and gun
- rubber mallet
- paint brush and bucket
- spatula knife
- builders pencil
- contact bucket
- linoleum trolley
- liquid seam sealer
- seam sealer applicator, and
- wall trimmer

Personal protective equipment to include:

- safety goggles/glasses
- ear muffs/plugs
- safety helmet
- gloves
- footwear
- protective clothing

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

(1) Critical Aspects of Evidence

- interpret work order and locate and apply relevant information
- apply safe handling requirements for equipment, products and materials, including use of personal protective equipment
- to complete a minimum of the installation of resilient flooring to:
 - a box step stairway, stringer and PVC stair nosing
 - a kite winder treads stairway, and PVC stair nosing
 - a bull nose step stairway PVC stair nosing
- follow work instructions, operating procedures and inspection practices to:
 - minimise the risk of injury to self and others
 - prevent damage to goods, equipment and products
 - maintain required production output and product quality
- work effectively with others
- modify activities to cater for variations in workplace contexts and environment

(2) Pre-requisite Relationship of Units

Pre-requisite required for this unit is

• LMFFCF2051A: Use flooring sector hand and power tools

(3) Underpinning Knowledge and Skills

Knowledge

Knowledge of:

- the type, characteristics, uses and limitations of weldable resilient floor coverings
- forming and welding techniques for installing resilient floor coverings to stairs
- the types and uses of resilient floor covering installation tools and equipment
- the type, characteristics, uses and limitations of resilient floor covering installation adhesives
- workplace safety system requirements related to resilient floor covering installation
- characteristics and requirements of sub-floor preparation
- workflow in relation to cutting, welding and laying resilient flooring to stairs

<u>Skills</u>

The ability to:

- collect, organise and understand information related to work orders, plans and safety procedures
- communicate ideas and information to enable confirmation of work requirements and specifications, co-ordination of work with site supervisor, other workers and customers, and the reporting of work outcomes and problems
- plan and organise activities including the preparation and layout of the worksite and the obtaining of equipment and materials to avoid any back tracking, workflow interruptions or wastage
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise workflow and productivity
- use mathematical ideas and techniques to correctly complete measurements, calculate area, estimate resilient sheeting requirements and other material requirements
- use pre-checking and inspection techniques to anticipate installation problems, avoid reworking and avoid wastage
- use workplace technology related to the installation of resilient floor covering including tools, equipment, calculators and measuring devices

(4) **Resource Implications**

Resilient floor covering, resilient flooring welding equipment and materials, tools and equipment, adhesives and tapes, trims, accessories and stairs requiring floor covering

(5) Method of Assessment

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts.

Assessment should be by direct observation of tasks and questioning on underpinning knowledge.

Assessment may be in conjunction with assessment of other relevant units of competency.

(6) Context of Assessment

Assessment may occur on the job or in a workplace simulated facility with relevant resilient floor covering installation equipment, materials, work instructions and deadlines.

CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency					
Level 1.	Level 2.	Level 3.			
 Carries out established processes Makes judgement of quality using given criteria 	 Manages process Selects the criteria for the evaluation process 	 Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation 			

Collect, analyse and organise information	Level 1	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 2	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 2	
Use technology	Level 1	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

LMFWHC0012A: Develop design, prepare and transfer patterns

```
Competency Descriptor: This unit deals with the skills and knowledge required to develop design, prepare and transfer patterns.
```

```
Competency Field: Wood Carving
```

ELEMENT OF COMPETENCY		PERFORMANCE CRITERIA	
1.	Design package	1.1	Design to be developed and identified from sketches.
		1.2	A provisional design package is developed.
		1.3	Design is modified as required and approved in accordance with workplace procedures.
2.	Develop design	2.1	Workplace health and safety requirements, including personal protection needs, are observed throughout the work.
		2.2	Tools, equipment and materials required to develop design, prepare and transfer patterns are selected and checked prior to use to ensure that they are appropriate for the work.
		2.3	Design idea selected from sketch book.
		2.4	Drawing instruments and materials are used according to workplace and standards drawing practices.
		2.5	Drawing paper fixed to drawing board according to standard drawing practices.
		2.6	Drawing made from selected sketch includes as many details as required.
3.	Transfer pattern from drawing	3.1	Tools, equipment and materials required to transfer pattern are selected and checked prior to use to ensure that they are appropriate for the work.
		3.2	Scale drawing is prepared using standard drawing practices.
		3.3	Carbon paper we placed on the wood to be carved with inked side down.
		3.4	Scale drawing is placed on carbon with one edge secured to the wood with masking tape.

		3.5	Pattern is transferred to the wood by retracing over the outlines.
4.	Transfer patterns from books	4.1	Pattern to be transferred is selected from book.
		4.2	Thin sheet of tracing paper is laid over the pattern and outlines traced with pencil.
		4.3	One edge of the pattern is secured to the wood with masking tape.
		4.4	Carbon paper is placed on wood with inked side down and the traced pattern is placed on top of it.
		4.5	Pattern is transferred to the wood by retracing over the outlines.
5	Complete work	5.1	Transferred pattern is checked to ensure that all outline and detail lines are reproduced from drawing.
		5.2	Unused materials are collected and stored for reuse or disposed following workplace procedures.

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between school-shops and workplaces. It relates to the unit as a whole and facilitates holistic assessment.

Work is carried out in accordance with statutory obligations, environmental legislation, relevant health regulations, manual handling procedures and organisation insurance requirements

The following variables may be present for this particular unit.

Wood carving design can be simple sketch or drawing and copied from book.

Project and design are to be determined in consultation with supervisor/teacher.

Work is conducted under supervision and guidance.

Workplace health and safety requirements include:

- OH&S requirements:
- relevant statutory requirements
- material safety management systems
- hazardous substances and dangerous goods codes
- safe operating procedures

Tools and equipment to include but are not limited to:

- drawing board
- clip
- pencil
- rubber
- set squares

Types of patterns to include:

- chips carving
- relief carving
- intaglio carving
- architectural carving

Work involves:

- reading and interpreting plans
- developing set-outs
- using drawing instruments
- applying quality requirements
- rulers
- French curves
- tape measures
- marking pens/pencils

Materials to be used may include but not limited to:

- timber
- tracing paper
- carbon paper
- drawing paper masking tape

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

(1) Critical Aspects of Evidence

Interpret work instructions and locate and apply relevant information.

Follow work instructions, operating procedures and inspection practices to:

- minimise the risk of injury to self or others
- prevent damage to goods, equipment or products
- achieve required production output and product quality
- as a minimum, design, prepare, and transfer at least two wood carving design work effectively with others

Modify activities to cater for variations in workplace contexts and environment.

(2) Pre-requisite Relationship of Units

- Nil
- •

(3) Underpinning Knowledge and Skills

Knowledge of:

- design requirements for wood carving
- the preparation of plans/drawings/set-outs
- · workflow and steps in relation to wood carving
- identification of wood carving tools, materials, equipment, processes and procedures

<u>Skills</u>

The ability to:

- collect, organise and understand information related to work orders, basic plans and safety procedures
- communicate ideas and information to enable confirmation of work requirements and specifications, co-ordination with work supervisor, other workers and the reporting of work outcomes and problems
- plan and organise activities, including the preparation and layout of the work area and the
 obtaining of equipment and materials to avoid any back tracking, workflow interruptions or
 wastage
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise workflow and productivity
- use mathematical ideas and techniques to correctly complete measurements, calculate area and estimate material requirements
- use pre-checking and inspection techniques to anticipate working problems, avoid reworking and avoid wastage
- use the limited workplace technology related to woodcarving, including tools, equipment, materials and measuring devices

(4) **Resource Implications**

- access to plans/designs, book and magazines
- Wood carving tools and/or basic processing machines
- equipment
- materials
- work area
- a specified project

(4) Method of Assessment

Assessment should be by direct observation of tasks and questioning on underpinning knowledge.

Assessment may be conducted in conjunction with assessment of the other sector specialist unit of competency where appropriate.

(6) Context of Assessment

Assessment may occur on the job or in a workplace simulated facility with relevant equipment, materials, work instructions and deadlines.

CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency						
Level 1.	Level 2.	Level 3.				
 Carries out established processes Makes judgement of quality using given criteria 	 Manages process Selects the criteria for the evaluation process 	 Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation 				

Collect, analyse and organise information	Level 2
Communicate ideas and information	Level 2
Plan and organise activities	Level 2
Work with others and in team	Level 1
Use mathematical ideas and techniques	Level 1
Solve problems	Level 2
Use technology	Level 2

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

LMFIND0022A: Apply surface coating by brush/rollers

Competency Descriptor:	This unit deals with the skills and knowledge required to prepare
	and apply paint to surface using brush/roller, and applies to
	individuals working in painting and surface finishing trades

Competency Field: Light Manufacturing Furnishing – Interior Decoration

ELEMENT OF COMPETENCY		PERI	FORMANCE CRITERIA
1	Select and prepare materials and equipment	1.1	Quality Assurance requirements of company's painting operations recognised and adhered to.
		1.2	OH&S requirements for workplace environment and preparing and applying paint by brush and roller are recognised and adhered to.
		1.3	Materials checked for conformity against specifications.
		1.4	Appropriate personal protective equipment selected, correctly fitted and used in accordance with safe working standards.
		1.5	Tools and equipment selected consistent with requirements of job, checked for serviceability and any faults reported and/or rectified.
		1.6	Safety hazards identified and correct procedures used to reduce risk to self and others.
2	Prepare two-pack material	2.1	OH&S requirements for preparing and applying two-pack paint by brush and roller recognised and adhered to.
		2.2	Each component thoroughly stirred using separate stirring sticks.
		2.3	Correct amounts of each material mixed in a third container to manufacturer's specified ratio with drying time recognised.
3	Erect work platform (if required)	3.1	Work platform erected where required to appropriate working height and OH&S requirements.
4	Prepare surface for finishing	4.1	Surface prepared as per manufacturer's specification in compliance with substrate requirements.
5	Apply paint with brush/roller	5.1	Job location checked to ensure provision of adequate ventilation and precautions taken to prevent fire and/or explosion.
		5.2	Select brush, roller or brush/roller combination for job as per surface profile, size of area and type of paint and finish specified.

- 5.3 Paint applied as per job/architect/paint manufacturer specifications to achieve required level of opacity, finish texture and sheen.
- 6.1 Area cleaned.
 - 6.2 Waste and unwanted material disposed of safely.
 - 6.3 Unused materials sealed and stored.
 - 6.4 Equipment cleaned safely using the correct solvent in accordance with manufacturer's instructions.
 - 6.5 Equipment maintained and stored correctly.

RANGE OF VARIABLES

This unit applies to the application of surface coatings by brush, roller or a combination of brush and roller.

Types of paint include:

Clean up

6

- solvent-borne (alkyd, urethane, urethane/alkyd, urethane oil or modified alkyd resins)
- polyurethane clear
- two-peak epoxy and polyurethane
- chlorinated rubber
- water-repellents for timber
- water repellents for concrete or masonry
- anti-graffiti paints
- stains (water, spirit, oil or slightly pigmented varnish/polyurethane)
- grain fillers (water, spirit, oil)
- clear finishes (lacquers, single and two-pack polyurethane, long oil varnish, acrylic clear and two-pack epoxy clear)

Surfaces to be finished include horizontal or vertical surface and may be:

- floors
- panelling
- stairs
- doors
- fitments
- furniture items

These may be made of:

- ply
- building boards
- fibre cement products
- iron and steel

Products can be classified as:

- sealers
- primers
- sealer/undercoats
- undercoats/intermediate coats
- finish coats

Types of finish include:

- flat
- satin
- semi-gloss
- full gloss
- masonry products
- clay bricks
- concrete blocks
- cement render
- set plaster
- plaster glass products
- paper-faced gypsum plaster board
- paintable plastic products
- previously coated/treated surfaces in a sound or unsound condition

Standards and Assessment Development Unit, NCTVET

LMF06

- zinc coated
- zinc alloy coated steel products
- aluminium products
- copper and brass
- lead

Tools and equipment may include:

- scrapers
- filling knives/blades
- putty knives
- duster brushes
- hand sanders
- mechanical sanders
- paint stirrers
- drop sheets
- heat and flame paint removal equipment

Work platforms can include:

- ladders
- step ladders
- trestles
- planks
- hop-ups
- aluminium mobile scaffold
- scissor-lift
- cherry picker

- wire brushes
- hammer
- nail punches
- paint pots/buckets
- brush-ware and brush-ware accessories
- roller frames
- covers
- buckets
- roller accessories

OH&S requirements can include those associated with exposure to hazardous materials and situations to include:

- solvents
- lead
- chemicals
- fumes/gases
- asbestos fibres
- confined spaces
- manual handling
- falling objects
- electrical
- fire
- equipment and machinery faults
- faults associated with work access platforms
- faults related to poor "house keeping"

Personal protective equipment may include:

- safety goggles/glasses
- boots
- gloves
- respirators including cartridge and suppliedair
- ear muffs/plugs
- caps
- jacket
- overalls

National Standard for The Painting of Buildings: This standard provides a guide to procedures for the painting of buildings for general construction, commercial and (light) industrial use. This Standard should be consulted in the absence of an architect's specification or job specification as a guide to accepted procedures and products used in the painting and decorating industry.

EVIDENCE GUIDE

Competence is to be demonstrated by the application of a range of surface coatings under working conditions and over time including solvent borne, latex and two-pack to a range of surfaces consistent with the Range Statement, using brushes, rollers and a combination of brush and roller.

(1) Critical Aspects of Evidence

It is essential that competence be observed in the following aspects:

- demonstrate compliance with Occupational Health and Safety practices applicable to workplace operations
- compliance with organisational policies and procedures where applicable
- select and use appropriate processes, tools and equipment
- apply quality procedures and process within context of painting
- mix paint thoroughly prior to use
- protect surrounding surfaces by drop sheets or masking or removal of objects
- prepare surface as per manufacturer's specification in compliance with substrate requirements
- check colour and finish against specifications before applying paint
- choose correct paint system in accordance with environment, finish and substrate requirements
- identify faults and problems that occur and necessary action taken to rectify
- calculate quantities of materials

(2) **Pre-requisite Relationship of Units**

• Nil

(3) Underpinning Knowledge and Skills

Knowledge

A knowledge of:

- workplace and equipment safety requirements relating to paint application
- specifications
- surface coatings technology including specification of paint systems for interior painting projects to maximise durability, protection and aesthetic considerations
- compatibility of preparatory materials and paint systems
- hazards associated with solvents, chemicals and dust
- tools and equipment used in painting
- differences in work carried out within sectors of painting and decorating industry new building (residential/commercial/high rise) maintenance/renovation/refurbishment
 - shop-fitting
 - restoration
 - conservation
 - industrial/protective coatings
 - responsibilities with regard to:
 - heritage listed buildings,
 - conservation areas,
 - environmental requirements

(4) Resource Implications

- workplace or simulated workplace location
- tools and equipment appropriate to processes
- paint and material required for activity
- specification for proposed tasks

(5) Method of Assessment

Competency should be assessed through direct observation and questions related to underpinning knowledge.

Competency should be assessed under general guidance checking at various stages of the process and at completion of the activity against performance criteria and specifications.

<u>Skills</u> The ability to:

- work safely, efficiently and effectively
- organise work
- interpret specifications relating to dimensions, quantities, types of materials, position of materials and application requirements
- identify and select materials for application
- use tools equipment and materials
- prepare materials for painting
- apply painting materials
- check finished work
- clean an area and dispose of waste
- store materials/components
- respond to emergency situations
- communicate effectively

(6) Context of Assessment

Competency may be assessed in the workplace or simulated workplace setting.

Assessment shall be while tasks are undertaken either individually or as part of a team under limited supervision.

CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency							
Level 1.	L	evel 2.	Level 3.				
 Carries out established processes Makes judgement of quality using given criteria 			 Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation 				
Collect, analyse and organise information		Level 1					
Communicate ideas and info	ormation	Level 2					
Plan and organise activities		Level 2					
Work with others and in team		Level 1					
Use mathematical ideas and techniques		Level 1					
Solve problems		Level 2					
Use technology		Level					

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

LMF06

LM	FIND0052A:	Mount/install mirrors				
Com	petency Descriptor:		is unit deals with the skills and knowledge required mount and install mirrors.			
Com	petency Field:	Ligh	ht Manufacturing Furnishing – Interior Decoration			
ELE	MENT OF COMPETEN	NCY	PERF	ORMANCE CRITERIA		
1.	Prepare self for work		1.1	Work requirements in the form of type, pattern/plan and quantity of mirrors to be prepared and installed are identified from work instructions.		
			1.2	Workplace health and safety requirements for mounting and installing mirrors, including personal protection needs, are observed.		
2	Plan for work operation		2.1	Work sequence is planned in a logical order to suit the job.		
			2.2	Quantities of materials required are calculated from plans or work instructions or by measuring the installation site.		
			2.3	Relevant costs are accurately calculated.		
			2.4	Fixing and joining devices or materials are selected in line with specifications or type of materials to be joined and the surface on which the mirror is to be installed.		
			2.5	Tools and equipment suitable to the work method are identified.		
3	Adjust/assemble and insta mirror	all	3.1	Materials, fixings, tools and equipment needed to complete the work are selected and checked prior to use to ensure that they are appropriate for the work, serviceable and in a safe condition.		
			3.2	Components of the mirror are checked against specifications or job order for: size, quantity, finish and profile.		
			3.3	Frame, if required, is adjusted/assembled in accordance with workplace procedures and job requirements.		

Complete work

4

- 3.4 Mirror glass, if required, is cut to size in accordance with workplace procedures and job requirements.
- 3.5 Mirror is edge-worked, if required, in accordance with workplace procedures and job requirements.
- 3.6 Holes, if required, are drilled in frame or mirror in accordance with workplace procedures and job requirements.
- 3.7 Mirror is installed/mounted using appropriate fixing method in accordance with workplace procedures and job requirements.
- 3.8 Mirrors are placed at positions and in styles consistent with creating the effects desired.
- 4.1 Installed/mounted mirror is inspected for quality of work, faults identified and appropriate corrective measures taken.
- 4.2 Work area is cleaned and rubbish/waste disposed of as appropriate.
- 4.3 Unused materials are removed and stored appropriately according to workplace requirements.
- 4.4 Tools and equipment cleaned and stored appropriately according to workplace requirements.
- 4.5 Workplace documentation is completed in accordance with workplace procedures.

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between school shops and workplaces. It relates to the unit as a whole and facilitates holistic assessment.

Work requires individuals to demonstrate discretion, judgement and problem solving skills in the planning, and installation of mirrors. This may be demonstrated either individually or in a team environment.

Work is generally performed individually, with general supervision and may be part of a production process.

This unit involves the mounting/installation of mirrors to satisfy customer/work orders.

The following variables may be present.

Mirrors may include:

- framed
- frameless
- wall •
- return •
- safety and security mirrors

Tools and equipment may include:

- tungsten wheel glass cutters ٠
- speed cutters
- straight edges and squares •
- plate and running pliers •
- glass lifting
- handling and personal safety equipment •
- glass edging equipment
- diamond drills and saws .

Materials are to include but are not limited to:

- timber and metal framing materials ٠
- J-mould
- float and vinyl backed mirrors •
- fixings and fasteners

OH&S requirements include:

- material safety management systems
- hazardous substances and dangerous goods
- safe operating procedures
- water spirit, dumpy and laser levels plumb bobs chalk lines tape measures portable drills general hand tools

Fixings and fasteners include:

- adhesive tapes •
- screws and rosettes
- mirror and spring clips •
- hollow wall fasteners
- rawl plugs •
- cloth and glues, and •
- non-acidic silicones

Personal protective equipment may include:

- gauntlets
- gloves
- safety glasses
- hard hats
- safety footwear
- aprons
- overalls

Information and procedures

- workplace procedures relating to the use of tools and equipment
- work instructions, including job sheets, cutting lists, plans, drawings and designs
- workplace procedures relating to reporting and communication
- manufacturers' specifications and operational procedures

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

(1) Critical aspects of evidence

Interpret work order/job instruction and locate and apply relevant information to install mirrors.

Apply safe handling requirements for equipment, products and materials, including use of personal protective equipment.

Follow work instructions, operating procedures and inspection practices to:

- minimise the risk of injury to self and others
- prevent damage to glass, equipment and products
- maintain required production output and product quality

To complete a minimum of:

- measuring for mirror installations
- cutting and float mirror up to 6 mm including vinyl backed
- edge-working and drilling holes in mirrors
- wall preparation
- construction and fitting of mirror frames and J-mould
- identification and use of water, spirit, dumpy and laser levels
- set plumb and level lines
- fit framed, wall, safety and security mirrors including return mirrors with minimal deflection
- clean and present finished mirrors
- calculate the cost of mirrors, edgework, materials and labour

Work effectively with others.

Modify activities to cater for variations in workplace contexts and environment.

(2) Pre-requisite Relationship of units:

Nil

(3) Underpinning knowledge and skills

<u>Knowledge</u> Knowledge of:

- workflow in relation to the preparation and installation of mirrors
- workplace safety system requirements related to the fabrication and installation of mirrors
- characteristics of materials used
- identification of equipment, processes and procedures related to the installation of mirrors
- relevant safety standards
- decorators use of mirrors to create various effects where aesthetics and space utilization is concern

Skills The ability to:

- collect, organise and understand information related to work orders, basic plans, and safety procedures
- communicate ideas and information to enable confirmation of work requirements and specifications, co-ordination of work with work supervisor, other workers and customers, and the reporting of work outcomes and problems
- plan and organise activities including the preparation and layout of the work area and the obtaining of equipment and materials to avoid any back tracking, workflow interruptions or wastage
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise workflow and productivity
- use mathematical ideas to correctly complete measurements, calculate work requirements, optimise glass sizes for economical cutting and assemble required materials
- use pre-checking and inspection techniques to plan work, avoiding reworking and wastage
- use the mounting/installation of mirrors to create various effects

(4) **Resource implications**

- mirrors
- aluminium framing material
- fixing/fasteners
- workplace operating procedures
- personal protective equipment
- an appropriate work area

(5) Method of assessment

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts.

Assessment should be by direct observation of tasks and questioning on underpinning knowledge.

Assessment may be in conjunction with assessment of other relevant units of competency.

(6) Context of assessment

Assessment may occur on the job or in a workplace simulated facility with relevant fabrication and installation equipment, materials, work instructions and deadlines.

CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency								
Level 1.	Level 2.	Level 3.						
 Carries out established processes Makes judgement of quality using given criteria 	 Manages process Selects the criteria for the evaluation process 	 Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation 						

Collect, analyse and organise information	Level 1	
Communicate ideas and information	Level 2	
Plan and organise activities	Level 2	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 2	
Solve problems	Level 2	
Use technology	Level 1	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

LMFPTF1013A: Prepare design requirements for framing

Competency Descriptor:	This unit deals with the skills and knowledge required to apply the elements and principles of design to select the correct framing of
	artwork to maintain/enhance its historic, sentimental or monetary
	value.

Competency Field: Picture Framing

EL	EMENT OF COMPETENCY	Pef	RFORMANCE CRITERIA
1.	Identify design requirements	1.1	Customer requirements relating to the artwork are determined.
		1.2	Work area is cleaned and prepared to handle artwork in accordance with workplace standards.
		1.3	Workplace health and safety requirements, including personal protection needs, are observed throughout the work.
		1.4	Workplace quality assurance requirements are recognised and adhered to throughout the work.
		1.5	Tools, equipment and materials are selected and checked prior to use to ensure that they are appropriate for the work in terms of quality, serviceability and safety.
		1.6	Artwork is handled in accordance with industry recognised handling methods and workplace procedures.
		1.7	Artwork is assessed for colour qualities to identify:
			 primary, secondary, tertiary, harmonic and contrasting colours by colour wheel aesthetic/mood evoking nature (warmth, lightness, brightness, etc.)
		1.8	Artwork is assessed against the elements and principles of design and their impact on preservation/restoration and framing selection determined.
2.	Develop frame design	2.1	Customer requirements for framing are identified.
		2.2	Historical, sentimental or monetary value of artwork ascertained through examination, research and/or consultation with customer.

- 2.3 Artwork is assessed to identify any preservation/restoration work required and impact on frame design.
- 2.4 Compatibility of framing materials with the artwork is determined from manufacturers' and industry information.
- 2.5 Principles of colour design applied to select mat and framing materials to complement artwork.
- 2.6 Design package is developed for presentation and discussion with customer.

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between school-shops and workplaces. It relates to the unit as a whole and facilitates holistic assessment.

Work is carried out in accordance with statutory requirements, environment legislation, manual handling procedures and relevant regulations and organisation insurance requirements.

Work requires individuals to demonstrate discretion, judgement and problem solving skills in the recognition and handling of artwork, and in identifying design requirements for framing.

Work may be performed in workplaces, which are involved in the framing of artwork and documents of sufficient value to require the application of framing design.

Framing design addresses the requirement to consider the elements and principles of design to maintain/enhance the aesthetic and historical significance of artwork.

The following variables may be present for this particular unit.

Elements of design include:

- line
- direction
- shape
- size
- texture
- value, and
- colour

Principles of design include:

- repetition
- alteration
- harmony
- graduation
- contrast (or opposition or conflict)
- dominance
- unity and balance

Artwork may include, but is not limited to:

- original works of art
- original prints
- reproductions
- needlework
- textiles
- photographs
- certificates, and
- memorabilia (including 3D objects)

Mounting methods may include:

- hinging
- supports
- lacing
- stretching, and
- direct mounting

OH&S requirements may include:

- safe working practices
- use of tools and equipment
- safe handling
- storage of materials in accordance with enterprise procedures

Personal protective equipment to include:

- gloves
- safety glasses
- safety footwear
- aprons or
- overalls

Damage to artwork may be caused by but is not limited to:

- light
- temperature
- humidity
- physical damage
- insects
- pollution

Frame constructions may include but are not limited to:

- timber
- metal/alloys extrusion
- composite construction and other framing material such as paper/cardboard/fabric mat board
- backing materials
- acrylic
- glass

Tools and equipment are to include:

- material samples
- measuring tools
- layout table

Information and procedures:

- customer requirements
- industry preservation standards and requirements, including legal implications
- work instructions, including job sheets, plans, drawings and designs
- literature relating to the history and preservation of artwork
- workplace procedures relating to reporting and communication

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

(1) Critical Aspects of Evidence

Recognise the basic categories of art and the medium used in their production.

Recognise frames and the medium used in their production.

Identify the elements and principles of design and apply them to artwork, designing an appropriate framing package.

Apply safe handling requirements for equipment, products and materials, including use of personal protective equipment, safety and environmental protection equipment.

Follow work instructions, operating procedures and inspection practices to:

- minimise the risk of injury to self and others
- prevent damage to goods, equipment and products
- maintain required production output and product quality

As a minimum, prepare the design requirements for the framing of five items of artwork of various media and era.

Work effectively with others.

Modify activities to cater for variations in workplace contexts and environment.

(2) Pre-requisite Relationship of Units

Pre-requisite for this unit is:

• Nil

(3) Underpinning Knowledge and Skills

<u>Knowledge</u> Knowledge of:

- major categories of art media
- liabilities and obligations relating to framing artwork
- framing materials and techniques
- elements and principles of design
- principles and the qualities/influence of colour
- materials used in artworks
- chemical reactions between artworks and framing materials
- restoration/preservation techniques for artwork and frames
- operation requirements of equipment and work systems in work area
- understand the effect of this process on the artwork

<u>Skills</u>

The ability to:

- collect, organise and understand information related to the history and techniques of art and framing artwork, restoration/preservation techniques and safety procedures
- communicate ideas and information to enable confirmation of work requirements and specifications, co-ordination of work with work supervisor, other workers and customers, and the reporting of work outcomes and problems
- plan and organise activities, including the preparation and layout of the work area and the
 obtaining of equipment and materials to avoid any back tracking, workflow interruptions or
 wastage
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise workflow and productivity
- use mathematical ideas and techniques to correctly complete measurements, calculate quantities and estimate material requirements
- use pre-checking and inspection techniques to anticipate cutting problems, avoid reworking and avoid wastage
- use the workplace technology related to the design requirements for framing artwork and the restoration/preservation of objects

(4) **Resource Implications**

Historical information, manufacturers' information, colour wheel, workplace procedures, work area and artwork requiring framing design.

(5) Method of Assessment

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts.

Assessment should be by direct observation of tasks and questioning on underpinning knowledge.

Assessment should be conducted over time and may be in conjunction with assessment of other units of competency, which form a part of the job role.

(6) Context of Assessment

Assessment may occur on the job or in a workplace simulated facility with relevant artwork requiring framing, equipment, simulated work instructions and deadlines.

CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency							
Level 1.	Level 2.	Level 3.					
 Carries out established processes Makes judgement of quality using given criteria 	 Manages process Selects the criteria for the evaluation process 	 Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation 					

Collect, analyse and organise information	Level 2	
Communicate ideas and information	Level 2	
Plan and organise activities	Level 2	
Work with others and in team	Level 2	
Use mathematical ideas and techniques	Level 2	
Solve problems	Level 2	
Use technology	Level 2	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

LMFFPM1313A: Construct prototypes and samples

Competency Descriptor: This unit deals with the skills and knowledge required to construct prototypes and samples in accordance with established plans, drawings or specifications.

Competency Field: Production Operation

EL	EMENT OF COMPETENCY	PER	RFORMANCE CRITERIA
1.	Establish the work requirements	1.1	Purpose of the prototype or sample is identified from plans and drawings.
		1.2	Materials specifications for the item are identified from workplace documentation.
		1.3	Ergonomic requirements are identified, clarified and satisfied throughout the work process.
		1.4	Construction requirements and methods are identified appropriate for the materials used.
2.	Plan prototype or sample construction	2.1	Work plan for the item construction is drafted.
		2.2	Occupational Health & Safety (OH&S) requirements, including personal protection needs, are observed throughout the work.
		2.3	Compatibility of materials in specifications is checked and any discrepancies reported.
		2.4	Steps or stages in construction are identified, noting checkpoints for measurements and tests.
		2.5	Suitable work area is located and cleared ready for work.
3.	Obtain materials and equipment	3.1	Materials are selected according to specifications and assembled ready for use.
		3.2	Compatibility of materials with specifications is checked and any discrepancies reported.
		3.3	Equipment and accessories suitable for working the specified material are assembled.
		3.4	Appropriate jigs and other construction aids are identified and where required adjusted to suit the work.

4.	Construct the prototype or sample	4.1	Work plan is followed to construct the item.
		4.2	Checks are conducted at the identified points.
		4.3	Modifications to designs and plans are identified and recommended within workplace procedures.
		4.4	Modifications to the plan are documented and followed.
		4.5	Prototype or sample is checked for fitness for purpose.

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between school-shops and workplaces. It relates to the unit as a whole and facilitates holistic assessment.

Work is carried out in accordance with statutory obligations, environmental legislation, relevant health regulations, authorised handling procedures and organisation insurance requirements.

Work requires individuals to demonstrate analytical and organisational ability, discretion, judgement and problem solving skills

This unit covers the work involved in constructing prototypes and samples of products from plans and drawings.

Prototypes and samples may be produced by hand, by using appropriate machines, tools and equipment or by computer-assisted production and will reflect the finished products produced by the company.

The unit requires the use of hand and power tools, basic static and specialised machines, and the application of joinery, construction and finishing techniques.

The following variables may be present for this particular unit.

OH&S requirements include:

- statutory requirements
- building codes requirements
- material safety management systems
- hazardous substances and dangerous goods
- safe operating procedures

Machines/equipment may include:

- any machine typically used in the furnishing sector concerned
- microprocessor or computer-controlled machines
- both production and facility equipment used in the company

Workplace environment:

- the construction of prototypes and samples is undertaken in accordance with established enterprise procedures and practices
- work is generally performed with little external assistance and with minimal supervision or direction
- customers may be internal or external

Materials to be used to construct prototypes and samples will represent those normally used by the enterprise in its production processes. They may include but are not limited to:

- timber
- metal alloys
- glass
- fabrics and textiles
- plastics
- leather
- adhesives
- fillers, and
- finishes as appropriate

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

(1) Critical Aspects of Evidence

Interpret work order, plans and specifications and locate and apply relevant information.

Apply safety requirements throughout the work sequence, including the use of personal protective clothing and equipment.

Follow work instructions, operating procedures and inspection practices to:

- prevent damage to goods, equipment or products
- maintain required production output and product quality
- minimise the risk of injury to self or others

Construct a minimum of two different prototypes/samples and:

- identify compatibility/incompatibility of materials, adhesives, fittings, fasteners, for the application
- select and apply appropriate joinery, construction and finishing techniques

Information and procedures:

- work procedures/instructions
- designer's/drawer's specifications and instructions
- organisation work specifications and requirements
- regulations industry codes and practices relevant to the prototype/sample construction
- quality standards and procedures

Personal protective equipment to include:

- coverall
- safety boots
- gloves
- dust mask
- safety helmet

Critical Aspects of Evidence (Cont'd)

- select and use appropriate materials, equipment and processes for the item being constructed
- demonstrate how the design of the prototype components will influence the working lifetime of the item ensure that the prototype satisfies the original or varied specification

Modify activities to cater for variations in workplace contexts and environment. Work effectively with others.

(2) **Pre-requisite Relationship of Units**

• use of the furnishing sector hand and power tools, machinery and equipment

(3) Underpinning Knowledge and Skills

Knowledge

Knowledge of:

- characteristics of the materials used in relation to the use of the end item
- design features and requirements for the prototype or sample
- operation of tools and equipment used and the application of the finished product
- identification of equipment, processes and procedures

Skills

The ability to:

- collect, organise and understand information related to the construction requirement, including the relevant technical, regulatory, environmental and safety requirements
- communicate ideas and information to enable clarification of the construction requirements, co-ordination of work with site supervisor, other workers and customers, and the reporting of work outcomes and problems
- plan and organise activities, including the preparation and layout of the worksite and the obtaining of equipment, systems and materials to avoid any back tracking, workflow interruptions or wastage
- work with others and in a team by recognising dependencies and using co-operative approaches to optimise workflow and productivity
- use mathematical ideas and techniques to correctly complete measurements, calculate area and dimensions, create accurate and scaled drawings, and estimate material requirements
- create and apply systematic problem solving techniques to anticipate construction problems, avoid reworking and avoid wastage
- use the workplace technology related to the construction, including machinery, tools and equipment, calculators and measuring devices and computing/computer-aided systems

(4) **Resource Implications**

- materials
- work order
- specifications
- plans
- tools and equipment
- consumables

(5) Method of Assessment

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts.

Assessment should be by direct observation of tasks and/or samples of work and questioning on underpinning knowledge.

Assessment should be conducted over time and will generally be in conjunction with assessment of other units of competency.

(6) Context of Assessment

Assessment may occur on the job or in a simulated workplace facility with relevant process equipment, simulated work instructions and deadlines.

CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency							
Level 1.	Level 2.	Level 3.					
 Carries out established processes Makes judgement of quality using given criteria 	 Manages process Selects the criteria for the evaluation process 	 Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation 					

Collect, analyse and organise information	Level 3	
Communicate ideas and information	Level 3	
Plan and organise activities	Level 3	
Work with others and in team	Level 3	
Use mathematical ideas and techniques	Level 3	
Solve problems	Level 3	
Use technology	Level 3	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

LMFSOF1613A: Advise customers on interior decoration

Competency Descriptor: This unit deals with the skills and knowledge required to advise customers on colour co-ordination, fabric selection and styles in relation to soft furnishings.

Competency Field: Soft Furnishing

ELEMENT OF COMPETENCY		PER	PERFORMANCE CRITERIA		
1.	Identify work requirements	1.1	Job requirements are identified from customer's initial instructions or enquiries and work instructions.		
		1.2	Potential site problems or site-specific requirements are identified.		
		1.3	Work sequence is planned, including quality checkpoints.		
2.	Prepare for work	2.1	A range of materials and products are selected to match customer requirements, suitability for the purpose and work instructions.		
		2.2	Sample materials, products and visual aids are collected.		
		2.3	An appointment is arranged with the customer and an appropriate time plan is agreed.		
3.	Confirm customer requirements	3.1	Questioning and active listening techniques are used to clarify customer needs.		
		3.2	Customer requirements are identified professionally, courteously, with tact and without presumptions.		
		3.3	Customer requirements are fed back accurately in language that can be understood by the customer and enterprise staff.		
		3.4	Customer requirements are documented in accordance with relevant industry, legal and/or enterprise standards and procedures.		
4.	Provide advice on interior decoration options	4.1	Viable options for colour, fabric and design that are relevant to the customer's requirements are generated.		
		4.2	Relevant suppliers are contacted to research alternative options, if required.		

- 4.3 Options for colour, fabric and design are explained to and discussed with the customer to facilitate customer understanding. 4.4 Fabric or product samples and/or visual aids are made available to the customer, where appropriate, to facilitate customer understanding. 4.5 Benefits and approximate costs of each option are explained to the customer to facilitate informed decisionmaking. Customer's preferred option, including agreed delivery 5.1 Agree selection with customer timeframe, is determined. 5.2 Customer commitment to agreed option is gained, in accordance with workplace requirements. 5.3 Documentation is completed following workplace procedures, including any required specification sheets for products selected (colour, fabric, style, track type, etc.) and drawings. 5.4 Assistance with any paperwork requiring completion by customer is provided where appropriate.
 - 6.1 Sample products are returned to storage as required.
 - 6.2 Contact is maintained with customer throughout manufacture and installation process, if required.

RANGE STATEMENT

Finalise process

5.

6.

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between school-shops and workplaces. It relates to the unit as a whole and facilitates holistic assessment.

Work is carried out in accordance with statutory obligations, environmental legislation, relevant health regulations, manual handling procedures and organisation insurance requirements.

Work requires individuals to demonstrate discretion, judgement and problem solving skills in determining customer and site requirements. This may be demonstrated either individually or in a team environment.

This unit covers work involving providing advice to customers on colour co-ordination, fabric selection and styles in relation to soft furnishings.

The following variables may be present for this particular unit.

OH&S requirements may include:

- relevant statutory requirements
- material safety management systems
- hazardous and dangerous goods codes
- safe operating procedures

Materials may include:

Tools and equipment may include measuring and calculating equipment, including:

- tapes
- rulers
- calculators
- computers

Personal protective equipment may include:

- product and fabric samples, and
- visual aids (photographs, magazines, trade brochures, sketches, etc.)
- safety goggles/glasses
- hair nets
- ear muffs/plugs
- gloves
- footwear
- protective clothing

Information and procedures:

- workplace procedures relating to customer service
- product manufacturers' specifications and operational procedures
- work instructions, including job sheets, plans, drawings and designs
- workplace procedures relating to reporting and communication

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

(1) Critical Aspects of Evidence

Identify products and materials used in interior decoration and any special handling requirements for those materials.

Interpret work order and locate and apply relevant information.

Interpret plans and work instructions.

Advise customers on at least three occasions involving both fabric and colour selections. Work effectively with others.

Modify activities to cater for variations in workplace contexts and environment.

(2) **Pre-requisite Relationship of Units**

Pre-requisite for this unit is:

• Nil

(3) Underpinning Knowledge and Skills

Knowledge of:

- interpretation of plans and work sheets
- colour coordination and matching
- fabric types and applications
- current trends in soft furnishing styles

<u>Skills</u> The ability to:

- collect, organise and understand information related to work orders, and current trends and styles in interior decoration
- communicate ideas and information to enable confirmation of requirements and specifications, co-ordination of ideas with customers, and the gaining of the customer's confidence
- plan and organise activities, including the preparation and layout of the worksite and the obtaining of equipment and materials to avoid any back tracking, advisory services
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise workflow and productivity
- use mathematical ideas and techniques to correctly complete measurements, calculate area and estimate material requirements
- apply analytical techniques to many customers' requirements with preferred options
- use workplace technology related to locating and analysing options for the client

(4) **Resource Implications**

- sample fabrics and products
- visual aids
- tools and equipment

(5) Method of Assessment

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts.

Assessment should be by direct observation of tasks and questioning on underpinning knowledge.

Assessment should be conducted over time and will generally be in conjunction with assessment of other units of competency.

(6) Context of Assessment

Assessment may occur on the job or in a workplace simulated facility with relevant process equipment, materials, work instructions and deadlines.

CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency						
Level 1.	Level 2.	Level 3.				
 Carries out established processes Makes judgement of quality using given criteria 	 Manages process Selects the criteria for the evaluation process 	 Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation 				

Collect, analyse and organise information	Level 3	
Communicate ideas and information	Level 3	
Plan and organise activities	Level 2	
Work with others and in team	Level 2	
Use mathematical ideas and techniques	Level 2	
Solve problems	Level 2	
Use technology	Level 3	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

LMFSOF1633A: Follow patterns to produce soft furnishing accessories

Competency Descriptor:	This unit deals with the skills and knowledge required to produce soft furnishing accessories such as cushions, tie backs, bolsters and other decorative items, following the requirements of patterns.

Competency Field: Soft Furnishing

ELEMENT OF COMPETENCY		PERFORMANCE CRITERIA			
1.	Identify work requirements	1.1	Job requirements are identified from work instructions and patterns.		
		1.2	Pattern is interpreted to determine work specifications.		
		1.3	Instructions for sequencing of work, particular measurements or adjustments are interpreted.		
		1.4	Work sequence is planned, including quality checkpoints.		
2.	Prepare for work	2.1	Occupational Health & Safety (OH&S) requirements, including ergonomic criteria and personal protection needs, are observed throughout the work.		
		2.2	Suitable work area is selected for the tasks.		
		2.3	Materials are selected to match customer requirements, suitability for the purpose and the work instructions.		
		2.4	Potential hazards are identified from observation of the tools, equipment, materials and workplace reference material.		
		2.5	Tools, equipment and materials are selected and checked prior to use to ensure that they are appropriate for the work, serviceable and in a safe condition.		
3.	Complete production	3.1	Soft furnishing accessories are produced following work instructions.		
		3.2	Work is checked against patterns and work sheets at the identified checkpoints.		
		3.3	Non-conformity with the required quality standards is rectified.		

4. Finalise operations
4.1 Completed work is checked against required quality standard.
4.2 Documentation or reporting is completed following workplace procedures.
4.3 Work area is cleaned, tools and equipment are returned to storage.
4.4 Unused materials are returned to storage and waste and scrap is dealt with following workplace procedures.

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between school-shops and workplaces. It relates to the unit as a whole and facilitates holistic assessment.

Work is carried out in accordance with statutory obligations, environmental legislation, relevant health regulations, manual handling procedures and organisation insurance requirements.

Work requires individuals to demonstrate discretion, judgement and problem solving skills in the reading and interpreting of patterns, plans and instructions. This may be demonstrated either individually or in a team environment.

This unit covers work involving the production of soft furnishing accessories by reading and interpreting patterns, plans and work instructions.

The following variables may be present for this particular unit.

Soft furnishings may include:

- cushions
- tie-backs
- bolsters
- soft tableware
- slip-on covers

Tools and equipment may include:

- measuring and calculating equipment
- including tapes
- rulers
- calculators
- computers
- fabric and general cutting and sewing tools, including scissors, saws, drills, staplers,
- sewing machines, hemming machines, overlockers, glue guns

OH&S requirements may include:

- relevant statutory requirements
- material safety management systems
- hazardous and dangerous goods codes
- safe operating procedures

Materials may include:

- plain and patterned fabric
- velvet
- vinyl
- piping cords
- wadding
- foam
- zips
- fasteners

Pattern interpretation is to identify or determine:

- type of material specified
- required tools and equipment for the task
- number and type of soft furnishing accessories to be produced

quality requirements

Personal protective equipment may include:

- safety goggles/glasses
- hair nets
- ear muffs/plugs
- gloves
- footwear
- protective clothing

Information and procedures:

- workplace procedures relating to the production of soft furnishing items
- work instructions, including job sheets, patterns, plans, drawings and designs
- workplace procedures relating to reporting and communication

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

(1) Critical Aspects of Evidence

Identify materials used and any special sewing or handling requirements for those materials.

Interpret work order and patterns and locate and apply relevant information.

Apply safe handling practices for equipment, products and materials.

Produce at least three different types of soft furniture accessories, which are to include a padded, piped and shaped tie back, a piped cushion and a bolster.

Select and use tools and equipment appropriate to the task follow work instructions, operating procedures and inspection practices to:

- prevent damage to goods, equipment or products
- maintain required production output and product quality
- minimise the risk of injury to self or others

Work effectively with others.

Modify activities to cater for variations in workplace contexts and environment.

Report process or materials faults, damaged products or equipment.

(2) **Pre-requisite Relationship of Units**

Pre-requisites for this unit are:

- LMFSOF1381A: Cut single layer fabrics
- LMFSOF1381A: Machine sew materials
- LMFSOF1501A: Use soft furnishing sector hand and power tools

(3) Underpinning Knowledge and Skills

Knowledge of:

- the types, characteristics and production requirements for soft furnishing accessories
- the process for the interpretation of patterns
- identification of equipment, processes and procedures
- workflow in relation to soft furnishing accessory production

Skills The ability to:

- collect, organise and understand information related to work orders, plans and safety procedures
- communicate ideas and information to enable confirmation of work requirements and specifications, co-ordination of work with site supervisor, other workers and customers, and the reporting of work outcomes and problems
- plan and organise activities, including the preparation and layout of the worksite and the obtaining of equipment and materials to avoid any back tracking, workflow interruptions or wastage
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise workflow and productivity
- use mathematical ideas and techniques to correctly complete measurements, calculate area and estimate material requirements
- use pre-checking and inspection techniques to anticipate production problems, avoid reworking and avoid wastage
- use the limited workplace technology related to the production of accessories, including tools, equipment, materials and measuring devices

(4) **Resource Implications**

- patterns
- materials
- tools and equipment

(5) Method of Assessment

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts.

Assessment should be by direct observation of tasks and questioning on underpinning knowledge.

Assessment should be conducted over time and will generally be in conjunction with assessment of other units of competency.

(6) Context of Assessment

Assessment may occur on the job or in a workplace simulated facility with relevant process equipment, materials, work instructions and deadlines.

CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency						
Level 1.	Level 2.	Level 3.				
 Carries out established processes Makes judgement of quality using given criteria 	 Manages process Selects the criteria for the evaluation process 	 Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation 				

Collect, analyse and organise information	Level 2	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 2	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 1	
Use technology	Level 1	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

LMFFCF2143A: Insp		Inspec	pect sub-floor				
Com	npetency Descriptor:			als with the skills and knowledge required to conduct spections and notify findings to the relevant personnel.			
Con	petency Field:	Floor Co	over	and Finishing			
ELF	EMENT OF COMPETEN	NCY P	PERFORMANCE CRITERIA				
1.	Prepare for work	1.	1	Workplace health and safety requirements, including personal protection needs, are observed throughout the work.			
		1.	2	Customer order is consulted to determine the type of proposed floor covering and other work requirements.			
		1.	3	Floor surface requirements for the proposed coverings are determined from manufacturer or workplace information.			
		1.	4	Existing floor coverings are removed and floor surface cleaned.			
2.	Conduct inspection	2.	1	The type of floor construction and the building floor structure and substructure are identified.			
		2.	2	Datum lines are run and checked to confirm dimensions.			
		2.	3	Timber flooring inspections are completed to identify irregularities.			
		2.	4	Floor joists, bearers and stumps are checked for irregularities.			
		2.	5	Concrete floors are inspected for irregularities.			
3.	Notify findings of inspection	on 3.	1	Notification of the findings of the inspection is completed in accordance with the current and relevant standards.			
		3.	2	Copies of the notification are sent to appropriate personnel and suitably filed following workplace procedures.			

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between school shops and workplaces. It relates to the unit as a whole and facilitates holistic assessment.

Work is carried out in accordance with legislative obligations, environmental legislation, relevant health regulations, manual handling procedures and organisation insurance requirements.

Work requires individuals to demonstrate discretion, judgement and problem solving skills in inspecting and notifying suitability of sub-floors to receive floor coverings.

Floor inspection scope

This unit covers work involving the craft level inspection of timber and concrete floors and sub-floor areas to identify and notify on the suitability for floor coverings.

It does not confer authority or, of itself, satisfy formal requirements, which may be established by regulatory authorities or agencies.

The following variables may be present for this particular unit:

OH&S requirements may include:

- relevant legislation
- relevant building codes
- material safety management systems
- hazardous substance and dangerous goods codes
- safe operating procedures

Materials include:

- timber strip flooring
- construction sheet flooring
- monolithic floors
- above grade, on grade and below grade floor

Tools and equipment are to include:

- 3straight edge
- 1.5straight edge
- 150straight edge
- spirit level
- string line
- chalk line
- electrical resistance meter
- tape measure
- electric drill
- masonry drill bits
- water/laser level
- hygrometer
- thermometer probe
- acid and alkaline testing equipment

Datum line checks are used to confirm floor fall, dips and irregularities and finished floor height in relation to other floor coverings and door clearances

Timber flooring inspections are to include:

- tests for moisture content
- protruding nails
- loose metal and other objects
- cracked, loose or damaged boards
- rotting
- insect attack
- cross flow ventilation

Inspection notifications are to cover:

- the type of the inspection completed
- testing methods used
- findings of inspection
- suggested remedies to any faults identified
- recommendations for floor coverings or finishing

Information and procedures

Concrete floor inspections are to include checks:

- for any protruding obstacles
- for cracks or damage
- for moisture membrane existence

Personal protective equipment to include:

- safety goggles/glasses
- ear muffs/plugs
- safety helmet
- gloves
- footwear
- protective clothing
- workplace procedures relating to the use and operation of tools and equipment
- workplace instructions, including job sheets, plans, drawings and designs
- workplace procedures relating to notification and communications
- manufacturers' instructions for the use of equipment and materials

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

(1) Critical Aspects of Evidence

- interpret work order and locate and apply relevant information
- apply safe handling requirements for equipment, products and materials, including use of personal protective equipment
- follow work instructions, operating procedures and inspection practices to:
 - minimise the risk of injury to self and others
 - prevent damage to goods, equipment and products
 - maintain required production output and product quality
- to complete a minimum of:
 - one timber floor inspection and written notification
 - one monolithic floor inspection and written notification
- work effectively with others
- modify activities to cater for variations in workplace contexts and environment

(2) Pre-requisite Relationship of Units

Pre-requisite for this unit is:

• Nil

(3) Underpinning Knowledge and Skills

Knowledge

Knowledge of:

- the type, characteristics and defects of floor structures
- the requirements for floor condition for floor coverings
- he characteristics and requirements of sub-floor preparation
- the methods of correcting defects
- · workflow in relation to floor covering and inspection processes and procedures
- workplace safety system requirements related to floor inspection and floor covering

<u>Skills</u>

The ability to:

- collect, organise and understand information related to work orders, plans, and safety procedures
- communicate ideas and information to enable confirmation of work requirements and specifications, co-ordination of work with site supervisor, other workers and customers, and the notification of work outcomes and problems
- plan and organise activities including the preparation and layout of the worksite and the
 obtaining of equipment and materials to avoid any back tracking, workflow interruptions or
 wastage.
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise workflow and productivity
- use mathematical ideas and techniques to correctly complete measurements, complete datum checks, calculate area and estimate material requirements
- use pre-checking and inspection techniques to anticipate inspection problems, avoid reworking and avoid wastage
- use workplace technology related to the inspection of floors including tools, equipment and measuring devices

(4) **Resource Implications**

Range of floor types and conditions, test equipment, work order

(5) Method of Assessment

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts.

Assessment should be by direct observation of tasks and questioning on underpinning knowledge.

Assessment may be in conjunction with assessment of other relevant units of competency.

(6) Context of Assessment

Assessment may occur on the job or in a workplace simulated facility with relevant floor inspection materials, work instructions and deadlines.

CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency					
Level 1.	Level 2.	Level 3.			
 Carries out established processes Makes judgement of quality using given criteria 	 Manages process Selects the criteria for the evaluation process 	 Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation 			

Collect, analyse and organise information	Level 2	
Communicate ideas and information	Level 2	
Plan and organise activities	Level 2	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 1	
Use technology	Level 1	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

Mix and apply epoxy and seamless floor coverings

LMFFCF2283A:

Competency Descriptor: This unit deals with the shills and knowledge required to carry out preparation, application and finishing of epoxy and seamless floor coverings. Floor Covering and Finishing Competency Field: **ELEMENT OF COMPETENCY PERFORMANCE CRITERIA** 1. Prepare for the work 1.1 Work orders and/or plans are read and interpreted. 1.2 Workplace health and safety requirements, including ventilation and other personal protection needs, are observed throughout the work. 1.3 The condition of the sub-floor is inspected and confirmed as suitable for use. 1.4 Tools, equipment and materials are selected and checked prior to use to ensure that they are appropriate for the work, serviceable and in a safe condition. 2. Apply epoxy materials floor 2.1 Surfaces are checked for contamination, moisture content and suitable preparation. covering 2.2 Material safety data sheets, or equivalent, are read and applied during the work. 2.3 Material safety data sheets, or equivalent, are read and applied during the work. 2.4 Trial applications of surface materials are made to check equipment operation, materials consistency and specified surface finish. 2.5 Surface coatings are applied with the depth and coverage in accordance with manufacturers' specifications and job

2.6 Decorative additives are applied in accordance with job requirements.

2.7 Floor is checked and cleared for further processing.

requirements.

- Finish the flooring Sanding/grinding equipment is set up in accordance with 3. 3.1 manufacturers' instructions and operating procedures. 3.2 Emergency stops, gauges, guards and controls are identified and checked. 3.3 Equipment settings and adjustments are made and checked. 3.4 Trial runs are conducted to check machine operations and quality of finished work. 3.5 Sanding/grinding is completed to industry and manufacturers' standards. 4. Complete housekeeping 4.1 Unused materials are stored or recycled as required. 4.2 Tools and equipment are cleaned and stored appropriately. 4.3 Work area is cleaned and rubbish disposed of appropriately.
 - 4.4 Workplace documentation and/or reporting is completed.

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between school shops and workplaces. It relates to the unit as a whole and facilitates holistic assessment.

Work is carried out in accordance with legislative obligations, environmental legislation, relevant health regulations, manual handling procedures and organisation insurance requirements.

The following variables may be present for this particular unit:

Epoxy and seamless flooring includes:

- trowelled epoxy
- self levelling epoxy
- flake floors
- granule floors
- epoxy coatings (seamless)
- spray on roller coatings and waterproofing
- joint sealing

Monolithic sub-floor preparation is to include:

- sanding
- grinding
- the application of levelling compounds and primers

Sanding equipment is to include:

- sander
- edger
- belt-sander
- sander belts and paper

OH&S requirements may include:

- relevant legislation
- relevant building codes
- material safety management systems
- hazardous and dangerous goods codes
- safe operating procedures

Materials are to include but are not limited to:

- acrylics
- epoxy
- polyurethane
- separating strips
- flushing strips
- joining strips
- expansion jointing
- additives (flakes and granules)
- oil and lubricants for equipment

Information and procedures

- workplace procedures relating to use and operation of tools and equipment
- work instructions, including job sheets, plans, drawings and designs
- workplace procedures relating to reporting and communications
- manufacturers' instructions for the use of equipment and materials

Grinding equipment is to include:

- grinder
- grinding stones
- materials

Personal protective equipment to include:

- safety goggles/glasses
- ear muffs/plugs
- safety helmet
- gloves
- footwear
- protective clothing

General tools and equipment are to include:

- utility knife
- straight edge
- square
 - tape measure
 - trowels
 - rollers
 - brushes
 - buckets
 - trolley

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

(1) Critical Aspects of Evidence

- interpret work order and locate relevant information
- apply safe handling requirements for equipment, products and materials, including use of personal protective equipment
- follow work instructions, operating procedures and inspection practices to:
 - prevent damage to goods, equipment and products
 - maintain required production output and product quality
 - minimise the risk of injury to self or others
- work effectively with others
- to complete a minimum of three of the following:
 - a trowelled epoxy floor
 - a self levelling epoxy floor
 - a flake floor
 - a seamless floor
- modify activities to cater for variations in workplace context and environment

(2) **Pre-requisite Relationship of Units**

Pre-requisite required for this unit is

• LMFFCF2051A: Use flooring sector hand and power tools

(3) Underpinning Knowledge and Skills

Knowledge of:

- characteristics and requirements of monolithic sub--floor preparation
- the type, characteristics, uses and limitations of epoxy and seamless floor coverings
- techniques for preparing epoxy and seamless materials, including decorative additives
- the type, characteristics, uses and limitations of sanders/grinders
- workplace safety system requirements related to sanding and grinding
- the types and uses of relevant tools and equipment
- workplace safety system requirements related to the application of epoxy and seamless floor coverings

<u>Skills</u>

The ability to:

- collect, organise and understand information related to work orders, plans and safety procedures
- communicate ideas and information to enable confirmation of work requirements and specifications, co-ordination of work with site supervisor, other workers and customers, and the reporting of work outcomes and problems
- plan and organise activities including the preparation and layout of the worksite and the obtaining of equipment and materials to avoid any back tracking, workflow interruptions or wastage
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise workflow and productivity
- use mathematical ideas and techniques to correctly complete measurements, calculate area and estimate material requirements
- use pre--checking and inspection techniques to anticipate epoxy and seamless flooring application problems, avoid reworking and avoid wastage
- use the limited workplace technology related to the application of epoxy and seamless floor coverings including tools, equipment, applicators, measuring devices and finishers

(4) **Resource Implications**

Epoxy and seamless flooring materials, application system, sanding equipment, grinding equipment and access to floors requiring covering.

(5) Method of Assessment

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts.

Assessment should be by direct observation of tasks and questioning on underpinning knowledge.

Assessment should be conducted over time and may be in conjunction with assessment of other related units of competency, e.g. sub-floor inspection.

(6) Context of Assessment

Assessment may occur on the job or in a workplace simulated facility with relevant epoxy and seamless flooring materials, equipment, work instructions and deadlines.

CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency						
Level 1.	Level 2.	Level 3.				
 Carries out established processes Makes judgement of quality using given criteria 	 Manages process Selects the criteria for the evaluation process 	 Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation 				

Collect, analyse and organise information	Level 2	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 2	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 2	
Use technology	Level 2	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

Competency Descriptor:		Install parquetry flooring					
		This unit deals with the skills and knowledge required to cut, set out and install parquetry flooring.					
Competency Field: Floor			oor Covering and Finishing				
ELE	MENT OF COMPETEN	ICY PI	ERFORMANCE CRITERIA				
1. Plan and prepare for work		. 1.1	1 Workplace health and safety requirements, including ventilation and other personal protection needs are observed through the work.				
		1.2	2 Patterns and/or plans are read and interpreted.				
		1.3	3 Sub-floor is assessed for suitability for product consistent with industry standards and manufacturers' recommendations.				
		1.4	Tools, equipment and materials are selected in accordance with the installation plan and checked to ensure that they are appropriate for the work, serviceable and in a safe condition.				
		1.5	5 Area to be covered is measured and starting points marked.				
		1.6	Skirting boards or cover trims are removed or undercut if required and stored for refitting.				
2.	Cut and install parquetry	2.1	Parquetry is installed and fixed to produce required pattern.				
		2.2	2 Adhesives are used following workplace procedures.				
		2.3	3 Timber is cut where required to provide appropriate size and shaped blocks.				
		2.4	Appropriate field and perimeter expansion joints are allowed.				
		2.5	5 Skirting boards or cover trims are fitted/refitted and finished.				
		2.6	6 Finished job is inspected and any imperfections are rectified following workplace procedures.				
		2.7	7 Any required preparations for sanding of parquetry are made.				

- 3. Complete housekeeping
- 3.1 Off-cuts or leftover materials are collected and removed following workplace procedures.
- 3.2 Tools and equipment are cleaned, maintained and stored.
- 3.3 Work area is cleaned and waste material is removed and disposed of safely.
- 3.4 Documentation/reporting is completed following workplace procedures.

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between school shops and workplaces. It relates to the unit as a whole and facilitates holistic assessment.

Work is carried out in accordance with legislative obligations, environmental legislation, relevant health regulations, manual handling procedures and organisation insurance requirements.

Work requires individuals to demonstrate discretion, judgement and problem solving skills in the selection and application of appropriate finishing systems.

The following variables may be present for this particular unit:

OH&S requirements may include:

- relevant legislation
- relevant building codes
- material safety management systems
- hazardous and dangerous goods codes
- safe operating procedures

Sub-floor assessment is to include:

- testing for moisture content
- expansion
- rot
- structural strength
- smoothness and plane

Adhesives may include:

- PVAs
- epoxies and
- polyurethane elastamerics

Parquetry types may include:

- block
- mosaic

Tools and equipment are to include:

- drop saw
- jig saw
- hand saw
- bench saw
- band saw
- router
- string-line
- square
- serrated trowel
- moisture meter
- straight edge
- template

Tools and equipment may include: plunge saw

- circular saw
- planer, and
- laser level

Information and procedures

- workplace procedures relating to the use and operation of tools and equipment
- workplace instructions, instructions, including job sheets, plans, drawings and designs
- workplace procedures relating to reporting and communications
- manufacturers' instructions for the use of equipment and materials

Materials may include:

- adhesives
- timber fillers
- skirting boards
- cover trims

Personal protective equipment to include:

- safety goggles/glasses
- ear muffs/plugs
- safety helmet
- gloves
- footwear
- protective clothing

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

(1) Critical Aspects of Evidence

- interpret work order and locate and apply relevant information
- apply safe handling requirements for equipment, products and materials, including the use of personal protective equipment
- follow work instructions, operating procedures and inspection practices to:
 - prevent damage to goods, equipment and products
 - minimise the risk of injury to self and others
 - achieve a final finish in accordance with accepted industry practices
- to complete a minimum of two parquetry floors, which are to include at least:
 - one personally designed pattern, and
 - one block floor, herringbone pattern with a two block border
- work effectively with others
- · modify activities to cater for variations in workplace contexts and environment
- identify faults/problems and identify and carry out corrective action

(2) Pre-requisite Relationship of Units

Pre-requisite required for this unit is

• LMFFCF2051A: Use flooring sector hand and power tools

(3) Underpinning Knowledge and Skills

Knowledge of:

- the types, characteristics, uses and limitations of parquetry
- the types and uses of tools and equipment used during the installation of parguetry
- the types, uses and limitations of adhesives
- workplace safety systems relevant to the installation of parquetry
- workflow in relation to the laying of parquetry floors

Skills The ability to:

- collect, organise and understand information related to work orders, plans and safety procedures
- communicate ideas and information to enable confirmation of work requirements and specifications, co-ordination of work with site supervisor, other workers and customers, and the reporting of work outcomes and problems
- plan and organise activities including the preparation and layout of the worksite and the obtaining of equipment and materials to avoid any back tracking, workflow interruptions or wastage
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise workflow and productivity
- use mathematical ideas and techniques to correctly complete measurements, calculate area, estimate parquetry requirement and other material requirements
- use pre-checking and inspection techniques to anticipate installation problems, avoid reworking and avoid wastage
- use workplace technology related to the installation of parquetry including tools, equipment, calculators and measuring devices

(4) **Resource Implications**

 parquetry flooring materials, consumables, tools and equipment, floor area suitable for parquetry

(5) Method of Assessment

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts.

Assessment should be by direct observation of tasks and questioning on underpinning knowledge.

Assessment should be conducted over time and will generally be in conjunction with assessment of other units of competency.

(6) Context of Assessment

Assessment may occur on the job or in a workplace simulated facility with relevant process equipment, materials, work instructions and deadlines.

CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency						
Level 1.	Leve	el 2.		Level 3.		
 Carries out established processes Makes judgement of quality using given criteria 	 Manages process Selects the criteria for the evaluation process 		•	Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation		
Collect, analyse and organise information		Level 1				
Communicate ideas and info						

Collect, analyse and organise information	Level I	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 2	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 2	
Use technology	Level 1	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

LM	FFCF2303A:	Install cork tiles				
			This unit deals with the skills and knowledge required to install cork tiles including preparation, layout, cutting, laying and fixing.			
Com	petency Field:	Floor Co	overin	g and Finishing		
Ele	MENT OF COMPETEN	ICY I	Perf	ORMANCE CRITERIA		
1.	Prepare for installation	1	1.1	Patterns and/or plans are read and interpreted.		
		1		Workplace health and safety requirements, including ventilation requirements and other personal protection needs are observed throughout the work.		
		1	1.3	Tools, equipment and materials are selected and checked prior to use to ensure that they are appropriate for the work, serviceable and in a safe condition.		
		1	1.4	Suitable adhesives, trims and accessories are selected.		
		1	1.5	Floor condition is assessed for suitability for installation of cork tiles.		
		1	1.6	Sequence of work is planned to correctly identify the commencing point and to ensure lay out and fixing is in logical order.		
2.	Install tiles	2	2.1	Tiles are laid following planned laying pattern.		
		2	2.2	Tile grains and patterns are matched or contrasted as appropriate.		
		2	2.3	Tiles are marked and cut to required shape with minimum waste of materials.		
		2		Materials for fixing are organised and used in accordance with relevant safety management requirements.		
		2	2.5	Fixing methods and equipment are used following manufacturers' recommendations.		
		2	2.6	Completed installation meets required specifications.		
3.	Complete housekeeping	З	3.1	Unused materials are stored or recycled as required.		
		3	3.2	Tools and equipment are cleaned and stored appropriately.		

- 3.3 Work area is cleaned and rubbish disposed of appropriately.
- 3.4 Workplace documentation/reporting is completed.

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between school shops and workplaces. It relates to the unit as a whole and facilitates holistic assessment.

Work is carried out in accordance with legislative obligations, environmental legislation, relevant health regulations, manual handling procedures and organisation insurance requirements.

Work requires individuals to demonstrate discretion, judgement and problem solving skills in the installation of cork tiles.

The following variables may be present for this particular unit:

OH&S requirements may include:

- relevant legislation
- relevant building codes
- material safety management systems
- hazardous substance and dangerous goods codes
- safe operating procedures

Tools and equipment are to include:

- utility knife
- straight edge
- square
- chalk-line
- tape measure
- serrated or flat trowel
- bar scriber
- dividers
- hand roller
- heavy roller
- broom
- vacuum cleaner
- hammer

Cork tiles may be:

- plain or patterned and
- may range from light to dark in colour and fine to course in grain

Materials may include but are not limited to:

- cork tiles
- adhesive
- fillers
- sealers
- primers

Adhesives may include:

wet method or dry method

Information and procedures

- workplace procedures relating to the use and operation of tools and equipment
- workplace instructions, including job sheets, plans, drawings and designs
- workplace procedures relating to reporting and communications
- manufacturers instructions for the use of equipment and materials

Personal protective equipment to include:

- safety goggles/glasses
- ear muffs/plugs
- safety helmet
- gloves
- footwear
- protective clothing

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

(1) Critical Aspects of Evidence

- interpret work order and locate and apply relevant information
- apply safe handling requirements for equipment, products and materials, including use of personal protective equipment
- follow work instructions, operating procedures and inspection practices to:
 - minimise the risk of injury to self and others
 - prevent damage to goods, equipment and products
 - maintain required production output and product quality
- to complete a minimum of one installation using either a wet or dry method including basic set-out and installation
- work effectively with others
- modify activities to cater for variations in workplace contexts and environment

(2) **Pre-requisite Relationship of Units**

Pre-requisite required for this unit is

• LMFFCF2051A: Use flooring sector hand and power tools

(3) Underpinning Knowledge and Skills

Knowledge of:

- the type, characteristics, uses and limitations of cork tiles
- the types and uses of tile installation tools and equipment
- the type, characteristics, uses and limitations of cork tile installation adhesives
- workplace safety system requirements related to cork tile laying
- characteristics and requirements of sub-floor preparation
- workflow in relation to the cork tile floor covering operations

<u>Skills</u>

The ability to:

- collect, organise and understand information related to work orders, plans, and safety procedures
- communicate ideas and information to enable confirmation of work requirements and specifications, co-ordination of work with site supervisor, other workers and customers, and the reporting of work outcomes and problems
- plan and organise activities including the preparation and layout of the worksite and the obtaining of equipment and materials to avoid any back tracking, workflow interruptions or wastage
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise workflow and productivity
- use mathematical ideas and techniques to correctly complete measurements, calculate area, estimate tile requirements and estimate other material requirements
- use pre-checking and inspection techniques to anticipate installation problems, avoid reworking and avoid wastage
- use the limited workplace technology related to the installation of cork tiles including tools, equipment, calculators and measuring devices

(4) Resource Implications

Cork tiles, tools and equipment, adhesives and area requiring cork tiles.

(5) Method of Assessment

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts.

Assessment should be by direct observation of tasks and questioning on underpinning knowledge.

Assessment may be in conjunction with assessment of other relevant units of competency.

(6) Context of Assessment

Assessment may occur on the job or in a workplace simulated facility with relevant cork tile installation equipment, materials, work instructions and deadlines.

CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency						
Level 1.	Level 2.	Level 3.				
 Carries out established processes Makes judgement of quality using given criteria 	 Manages process Selects the criteria for the evaluation process 	 Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation 				

Collect, analyse and organise information	Level 1	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 2	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 1	
Use technology	Level 1	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

LM	LMFFCF2363A: Apply finishes to timber, parquetry and cork floor		nishes to timber, parquetry and cork floors		
Com	petency Descriptor:		unit deals with the skills and knowledge required to apply finishes ober, parquetry and cork floors using stains and coating systems.		
Competency Field: Floor Covering and Finishing					
ELE	CMENT OF COMPETEN	NCY PE	RFORMANCE CRITERIA		
1.	 Identify and prepare for work requirements 		Workplace health and safety requirements, including ventilation and other personal protection needs, are observed throughout the work.		
		1.2	Coating system is selected with regard to durability, aesthetics, manufacturers' recommendations and the client's expectations.		
		1.3	Stains and coating materials are assessed as being compatible with each other, with the surface to be finished and with manufacturers' recommendations.		
		1.4	Tools, equipment and materials are selected and checked prior to use to ensure that they are appropriate for the work, serviceable and in a safe condition.		
		1.5	Surface to be finished is inspected and assessed as being ready for coating.		
		1.6	Work sequence is planned to ensure efficiency and quality of application.		
		1.7	Barriers and signs are put in place as required.		
2.	Apply finishing system	2.1	Ventilation is checked before chemical fumes are released, and all OH&S requirements are met including use of personal protective equipment.		
		2.2	Environmental protection regulations are complied with.		
		2.3	Stain and/or coating system is applied in accordance with manufacturers' recommendations.		
		2.4	Recommended drying times between coats are observed.		
		2.5	Buffing or sanding between coats, where required, is carried out according to manufacturers' recommendations.		
		2.6	Final finish meets the requirements of the job.		

3. Complete housekeeping
3.1 Unused materials are resealed and stored.
3.2 Tools and equipment are cleaned, maintained and stored.
3.3 Work area is cleaned and waste material is removed and disposed of safely.
3.4 Barriers and signs are removed and stored.
3.5 Workplace documentation/reporting is completed.

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between school shops and workplaces. It relates to the unit as a whole and facilitates holistic assessment.

Work is carried out in accordance with legislative obligations, environmental legislation, relevant health regulations, manual handling procedures and organisation insurance requirements.

Work requires individuals to demonstrate discretion, judgement and problem solving skills in the selection and application of appropriate finishing systems.

Surface inspection is to ensure that surface is free from dust and debris, moisture content is acceptable and stable and any preservatives, protective coatings or other contaminants are adequately removed.

The following variables may be present for this particular unit:

Surfaces to be finished may include:

- traditional tongue and groove strip flooring
- glue-down or floating strip flooring
- engineered timber flooring
- block or mosaic parquetry flooring
- cork flooring

OH&S requirements may include:

- relevant legislation
- relevant building codes
- material safety management systems
- hazardous and dangerous goods codes
- safe operating procedures
- manufacturers' recommendations

Tools and equipment are to include:

- drum/belt sander
- edge sander
- rotary sander
- hand sander
- vacuum cleaner
- brushes

applicators

- rollers
- roller tray
- hammer
- nail punch
- spatula

Application methods may include:

- rags
- brushes
- rollers
- applicators
- spatula

Information and procedures

- workplace procedures relating to the use and operation of tools and equipment
- workplace instructions, including job sheets, plans, drawings and designs
- workplace procedures relating to reporting and communications
- manufacturers' recommendations for the use of equipment and materials

Personal protective equipment to include:

- safety goggles/glasses
- ear muffs/plugs
- safety helmet
- gloves
- footwear
- protective clothing

Coating materials may include but are not limited to:

- stains
- waxes
- oils
- oleoresins (clear varnishes)
- one-pack and two-pack solvent-based and water-based polyurethane

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

(1) Critical Aspects of Evidence

Interpret work order and locate and apply relevant information.

Apply safe handling requirements for equipment, products and materials, including the use of personal protective equipment.

Follow work instructions, operating procedures and inspection practices to:

- prevent damage to goods, equipment and products
- minimise the risk of injury to self and others
- achieve a final finish in accordance with Australian Standards and accepted industry
- practices

To complete a minimum of:

- application of one water-based product
- application of one solvent-based product

Work effectively with others.

Modify activities to cater for variations in workplace contexts and environment.

Identify faults/problems and identify and carry out corrective action.

(2) Pre-requisite Relationship of Units

Pre-requisite required for this unit is:

• LMFFCF2051A: Use flooring sector hand and power tools

(3) Underpinning Knowledge and Skills

Knowledge of:

- the methods of floor preparation from basic sanding to finishing sanding and edging
- characteristics of timber floor finishing in relation to ventilation, moisture content and reaction to change of temperature and relative humidity
- the type, characteristics, uses and limitation of coating materials including manufacturers' recommendations
- the types and uses of floor finishing tools and equipment
- workplace safety systems related to floor finishing processes
- workflow in relation to the application of finishes to timber and cork floors

<u>Skills</u>

The ability to:

- collect, organise and understand information related to work orders, plans and safety procedures
- communicate ideas and information to enable confirmation of work requirements and specifications, co-ordination of work with site supervisor, other workers and customers, and the reporting of work outcomes and problems
- plan and organise activities including the preparation and layout of the worksite and the obtaining of equipment and materials to avoid any back tracking, workflow interruptions or wastage
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise workflow and productivity
- use mathematical ideas and techniques to correctly complete measurements, calculate area and estimate material requirements
- use pre-checking and inspection techniques to anticipate finishing problems, avoid reworking and avoid wastage
- use the limited workplace technology related to the finishing including tools, equipment, calculators and measuring devices

(4) **Resource Implications**

• stains, coatings, tools, equipment and timber or cork floor requiring staining or coating

(5) Method of Assessment

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts.

Assessment should be by direct observation of tasks and questioning on underpinning knowledge.

Assessment should be conducted over time and will generally be in conjunction with assessment of other units of competency.

(6) Context of Assessment

Assessment may occur on the job or in a workplace simulated facility with relevant process equipment, materials, work instructions and deadlines.

CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

	Levels of Competency					
Level 1.	Level 2.	Level 3.				
 Carries out established processes Makes judgement of quality using given criteria 	 Manages process Selects the criteria for the evaluation process 	 Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation 				

Collect, analyse and organise information	Level 1	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 2	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 1	
Use technology	Level 1	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

LMFIND0083A: Adjust and install shower screens

Competency Descriptor: This unit deals with the skills and knowledge required to plan, adjust and install shower screens.

Competency Field: Light Manufacturing Furnishing – Interior Decoration

EL	EMENT OF COMPETENCY	PER	FORMANCE CRITERIA
1.	Prepare self for work	1.1	Requirements for the form of type of shower screen to be fabricated and installed are identified from work instructions.
		1.2	Workplace health and safety requirements, including personal protection needs, are observed.
			Tools and equipment appropriate to the fixing method are identified and procured.
2.	Plan work operation	2.1	Quantities of materials required are calculated from plans or work instructions or by measuring the fixture opening.
		2.2	Costs are correctly calculated taking in account all relevant issues
		2.3	Glass fixing method and joining devices or materials are identified in line with specifications or type of materials to be used.
		2.4	Work sequence is determined in a logical order to suit the job.
3.	Adjust and install shower screen	3.1	The pattern or plan for shower screen to be installed is correctly interpreted.
		3.2	The process for adjusting and installing shower screens is identified.
		3.3	Tools, equipment and materials selected are checked prior to use to ensure that they are appropriate for the work, serviceable and in a safe condition.
		3.4	Requirement for adjustment to shower frame is correctly determined.

	3.5	Adjusted shower frame depicts accurate measurements and the ability to carryout the adjustment activity safely and correctly.
	3.6	Shower screen is installed correctly and in accordance with given instructions/plan
	3.7	Fittings are attached to screen in accordance with workplace procedures or industry practice.
	3.8	Components of the shower screen are checked against specifications or job order for: size, quantity, finish and profile.
	3.9	Shower screen is waterproof sealed in accordance with workplace procedures or industry practice.
Complete work	4.1	Shower screen is inspected for quality of work and faults identified and appropriate corrective action taken.
	4.2	Material, which can be reused is collected and stored.
	4.3	Waste and scrap material is removed for disposal or recycling as required.
	4.4	Work area is cleaned and rubbish appropriately disposed.
	4.5	Tools and equipment are cleaned and stored appropriately.

4.6 Relevant documentation is completed in accordance with workplace requirements.

RANGE STATEMENT

4.

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between school shops and workplaces. It relates to the unit as a whole and facilitates holistic assessment.

Work requires individuals to demonstrate discretion, judgement and problem solving skills in the adjustment and installation process.

Work is generally performed individually, with general supervision and may be part of a production process.

The following variables may be present for this particular unit.

Shower screens are glass panels and may include:

- framed
- semi-frameless and frameless screens
- sliding screens
- pivot screens and returns

Fittings may include:

- wheels
- hinges
- handles
- pivot blocks
- corner blocks
- fasteners

Tools and equipment may include:

- power saws
- pneumatic
- hydraulic and manual presses
- tooling
- drills
- screwdrivers
- rubber mallets
- general glazing tools
- spirit and laser levels

Information and procedures:

- Workplace procedures relating to the adjustment and installation of shower screens
- Work instructions including job sheets, plans, drawings and designs.
- Safety standards include personal protective equipment, OH&S regulations and enterprise requirements.

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

OH&S requirements may include:

- standard building codes
- material safety management systems
- safe operating procedures

Materials are to include but are not limited to:

- aluminium shower screen extrusions
- laminated, toughened and organic coated glass
- glazing and bump rubbers
- shower screen and sealants

Personal protective equipment is to include:

- gauntlets
- gloves
- safety glasses
- hard hats
- safety footwear
- aprons
- overalls

(1) Critical Aspects of Evidence

Plan the adjustment and installation of shower screens

Interpret work order/job instruction and locate and apply relevant information to adjust/assemble and install shower screens and wardrobe doors.

Apply safe handling requirements for equipment, products and materials, including use of personal protective equipment

Follow work instructions, operating procedures and inspection practices to:

- minimise the risk of injury to self and others
- prevent damage to glass, equipment and products
- maintain required production output and product quality

To complete a minimum of:

- measure for installation each of sliding
- pivot
- bi-fold
- semi-frameless and frameless shower screens
- work from product specification data sheets
- identify and select product materials
- select glass in accordance with work requirements
- adjust/assemble frame and sash components including cutting, tooling and drilling
- identify, select and install component hardware including weather seals, wheels, hinges, guides and handles
- assemble frames including glass and gaskets
- install shower screens
- calculate the cost of shower screens
- Work effectively with others.
- Modify activities to cater for variations in workplace contexts and environment.

(2) **Pre-requisite Relationship of Units**

Nil

(3) Underpinning Knowledge and Skills

Knowledge

Knowledge of:

- characteristics of materials used and
 uses of products produced
- workplace safety system requirements related to the adjustment, assemble and installation of shower screens
- identification of equipment, processes and procedures
- workflow in relation to the fabrication and installation of shower screens

Skills The ability to:

- collect, organise and understand information related to work orders, basic plans, and safety procedures
- communicate ideas and information to enable confirmation of work requirements and specifications, coordination of work with work supervisor, other workers and customers, and the reporting of work outcomes and problems
- plan and organise activities including the preparation and layout of the work area and the obtaining of equipment and materials to avoid any back tracking, workflow interruptions or wastage
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise workflow and productivity
- use mathematical ideas and techniques to correctly complete measurements, calculate work requirements, optimise material sizes for economical cutting and assemble requirements
- use pre-checking and inspection techniques to plan work, avoiding reworking and wastage

(4) Resource Implications

• Shower screen glass, aluminium framing material, fixtures, waterproof sealant, workplace operating procedures, personal protective equipment and an appropriate work area.

(5) Method of Assessment

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts.

Assessment should be by direct observation of tasks and questioning on underpinning knowledge.

(6) Context of Assessment

Assessment may occur on the job or in a workplace simulated facility with relevant process equipment, materials, work instructions and deadlines.

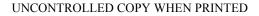
CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency							
Level 1.	Level 2.	Level 3.					
 Carries out established processes Makes judgement of quality using given criteria 	 Manages process Selects the criteria for the evaluation process 	 Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation 					

Collect, analyse and organise information	Level 1
Communicate ideas and information	Level 1
Plan and organise activities	Level 1
Work with others and in team	Level 1
Use mathematical ideas and techniques	Level 1
Solve problems	Level 1
Use technology	Level 1

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.



LM	IFIND00073A: Mix and match paint colours		match paint colours			
match			is units deals with the skills and knowledge required to mix and tch paint colours. It applies to individuals engage in painting I decorative work.			
Com	petency Field:	Light I	Manu	facturing Furnishing – Interior Decoration		
ELE	MENT OF COMPETE	NCY I	Perf	FORMANCE CRITERIA		
1	Prepare materials and equipment	1	1.1	Quality Assurance requirements of company's painting and decorating operations recognised and adhered to.		
		1	1.2	OH&S requirements for workplace environment and handling and mixing of paint recognised and adhered to.		
		1	1.3	Materials checked for conformity against specifications.		
		1	1.4	Appropriate personal protective equipment selected, correctly fitted and used in accordance with safe working practices.		
		1	1.5	Tools and equipment selected to carry out processes consistent with job requirements and checked for serviceability.		
		1	1.6	Safety hazards identified and correct procedures used to reduce risk to self and others.		
2	Match paint colour to specified sample	2	2.1	Base colour identified from analysis of sample.		
		2	2.2	Paint type, tint base and sheen level of sample established.		
		2	2.3	Colorants suitable for colour match selected.		
		2	2.4	Colour mixed and matched against sample and allowed to dry to establish accuracy of colour match.		
		2	2.5	Full quantity of paint mixed and colour match tested again prior to application.		
3	Clean up	З	3.1	Area cleaned.		
		З	3.2	Waste and unwanted material disposed of safely.		
		3	3.3	Unused materials sealed and stored.		
		3	3.4	Tools and equipment cleaned, maintained and stored.		

LMF03

RANGE OF VARIABLES

This unit applies to the mixing and matching of colour to sample in the area of commercial painting and decorating.

Mixing colour in surface coatings includes

- solvent-borne (alkyd, urethane, urethane/alkyd, urethane oil or modified alkyd resins)
- latex (PVA, PVA/acrylic, acrylic and styrene acrylic)
- roofing paints (latex and solvent-borne)
- some timber stains
- decorative "single-pack" materials

OH&S requirements may include:

- protective clothing and equipment
- handling of hazardous materials
- working environment
- emergency procedures
- operating equipment

Tools and equipment may include:

- stirring implements
- colorant dispenser
- mechanical paint mixer (shaker)

The term sample refers to:

- in-situ previously painted unit or area
- paint manufacturer's colour card
- fan deck

Personal protective equipment may include:

- safety goggles/glasses
- respirators
- gloves
- overalls
- boots

EVIDENCE GUIDE

Competence is to be demonstrated by the successful eye matching of a colour to a given sample using single-pack proprietary surface coatings and universal colorants.

(1) Critical Aspects of Evidence

It is essential that competence be demonstrated in the following aspects:

- demonstrate compliance with Occupational Health and Safety regulations applicable to workplace operations
- indicate compliance with organisational policies and procedures
- select and use appropriate processes, tools and equipment
- apply to organisational quality procedures and process within context of matching specified paint colour
- identify base colour by analysis of sample
- mix paint thoroughly after colorant is added
- · add tints gradually to achieve colour match to ensure minimal waste
- record formula for future reference (if applicable)
- check properties of the paint are not affected by addition of colorant (especially drying process)
- observe standards related to colour where applicable

Standards and Assessment Development Unit, NCTVET

LMF03

Page 2 of 5



Copyright © 2003 National Council on Technical & Vocational Education & Training (NCTVET) All rights reserved. No part of this document may be reproduced in any form or by any means without the prior permission of the publishers.



(2) Pre-requisite Relationship of Units

Pre-requisite for this unit are:

Nil

(3) Underpinning Knowledge and Skills

Knowledge A knowledge of:

- workplace and equipment safety requirements
- specifications
- paint types and uses
- hazards associated with surface coatings
- tools and equipment related to mixing paint
- basic colour theory
- colour harmony and colour schemes
- colour measurement systems
- national standards applicable to the use of colour in painting and decorating,
- colour standards for general purposes
- the use of colour for marking physical hazards and the identification of certain
- equipment in industry
- identification of the contents of piping
- conduits and ducts
- guide to the specification of colours
- factors that effect the apparent colour of paint including
 - the gloss level and paint type
 - colour and opacity of the paint
 - age and deterioration of painted sample
 - lighting conditions
 - colour of surface covered by paint
 - colour of drapes and other furnishings
- colours used in heritage painting or restoration

Skills The ability to:

- work safely
- organise work
- interpret specifications
- use tools and equipment
- identify the base paint and colorants required to match a colour
- mix and match by "eye" a range of colours in a range of surface coatings and sheen levels to specification
- estimate quantities of material
- use a colorant dispenser

Copyright © 2003 National Council on Technical & Vocational Education & Training (NCTVET) All rights reserved. No part of this document may be reproduced in any form or by any means without the prior permission of the publishers.

(4) **Resource Implications**

The following resources should be provided:

- workplace location or simulated workplace location
- tools and equipment appropriate to application tasks
- materials appropriate to tasks
- specifications and samples

(5) Method of Assessment

Competency should be assessed through direct observation and questions related to underpinning knowledge.

Competency should be assessed under general guidance checking at various stages of the process and at completion of the activity against performance criteria and specifications.

(6) Context of Assessment

Competency may be assessed in the workplace or simulated workplace setting.

Assessment shall be while tasks are undertaken under limited supervision.

Standards and Assessment Development Unit, NCTVET

LMF03



CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

	Levels of Competer	ncy
Level 1.	Level 2.	Level 3.
 Carries out established processes Makes judgement of quality using given criteria 	 Manage process Select the criteria for the evaluation process 	 Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation

Collect, analyse and organise information	Level 1	
Communicate ideas and information	Level 2	
Plan and organise activities	Level 2	
Work with others and in team	Level 2	
Use mathematical ideas and techniques	Level 2	
Solve problems	Level 2	
Use technology	Level	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

LMF03

LMFIND0093A: Decorate glass surfaces

Competency Descriptor: This unit deals with the skills and knowledge required to apply patterns and/or designs to glass surfaces.

Competency Field: Light Manufacturing Furnishing – Interior Decoration

EL	EMENT OF COMPETENCY	PER	FORMANCE CRITERIA
1.	Identify work requirements	1.1	Work instructions are correctly interpreted and accurately carried out
		1.2	Workplace health and safety requirements for application of patterns and designs to glass surfaces, including personal protection needs, are observed throughout the work.
		1.3	Tools and equipment suitable to the work method are identified.
		1.4	The process for applying patterns and designs to glass surfaces is identified.
2.	Prepare for work	2.1	Work sequence is planned in a logical order to suit the job.
		2.2	Tools, equipment and materials are selected and checked prior to use to ensure that they are appropriate for the work, serviceable and in a safe condition.
		2.3	Pattern or design template (if required) is produced from plan or design or drafted from existing design or pattern.
		2.4	Work procedures are identified and clarification sought and obtained where required
3.	Apply pattern or design to glass surface	3.1	Pattern or design template is applied or glass surface is masked as necessary with appropriate materials.
		3.2	Pattern or design is applied to glass surface in accordance with workplace procedures or industry practice.
		3.3	Problems occurring during operation are identified and appropriate corrective action taken.

- 3.4 Any authorised changes in working procedures are followed.
- 4. Complete work 4.1 Product is inspected for quality of work and repaired or
 - discarded as required in accordance with workplace procedures.
 - 4.2 Waste and scrap material is removed for disposal or recycling as required.
 - 4.3 Work area is cleaned and rubbish disposed of as appropriate.
 - 4.4 Workplace documentation is completed as required.
 - 4.5 Tools and equipment are cleaned and stored following workplace procedures.

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between school shops and workplaces. It relates to the unit as a whole and facilitates holistic assessment.

Work requires individuals to demonstrate discretion, judgement and problem solving skills in the application of designs and/or patterns to glass surfaces.

Work is generally performed individually, with general supervision and may be part of a production process.

Work may be performed in workplaces, which are involved in the manufacture of decorative glass products.

The following variables may be present for this particular unit.

Patterns or designs may be applied to glass surfaces by:

OH&S requirements may include:

- chemical etching
- screen printing

- building codes
- material safety management systems, and
- local safe operating procedure

Tools and equipment are to include:

- masking materials
- templates
- etching chemicals
- screen printing equipment

Personal protective equipment is to include:

- gauntlets
- gloves
- safety glasses
- hard hats
- safety footwear
- aprons
- overalls

Information and work procedures include:

- Equipment manufacturers' specifications and operational procedures.
- Safety standards include: personal protective equipment, OH&S regulations and enterprise requirements.
- Materials safety data sheets.
- Workplace procedures relating to the application of patterns or designs to glass.
- Work instructions, including job sheets, plans, drawings and designs.
- quality of materials and items produced
- quality requirements for each stage of the application process

Materials are to include but are not limited to:

- annealed
- laminated
- toughened glass
- mirrors

Work instructions relate to:

- material to be used for application of design or pattern
- pattern or plan to be followed
- process required to complete work tasks
- items to which pattern or design is to be applied
- holding area for completed items
- the material curing time (if required) for the type of material used and type of glass

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

(1) Critical Aspects of Evidence

Interpret work order/job instruction and locate and apply relevant information to apply patterns and/or designs to glass surfaces.

Prepare to apply patterns and designs to glass surfaces.

Follow work instructions, operating procedures and inspection practices to:

- minimise the risk of injury to self and others
- prevent damage to glass, equipment and products
- maintain required production output and product quality

To complete a minimum of:

- draw and cut freehand designs
- set up, process, upload and cut designs from computerised software programs
- clear and white chemical etching on glass
- stage screen printing on glass

Work effectively with others.

Modify activities to cater for variations in workplace contexts and environment.

(2) Pre-requisite Relationship of Units

Nil

(3) Underpinning Knowledge and Skills

Knowledge Knowledge of:

- the qualities and characteristics of glass and materials, including the hazards and handling requirements
- procedures, techniques and means of applying patterns and designs to glass surfaces
- workplace safety system requirements related to the application of patterns and designs to glass surfaces
- workflow in relation to other stages of the work process

<u>Skills</u>

The ability to

- collect, organise and understand information related to work orders, basic plans, and safety procedures
- communicate ideas and information to enable confirmation of work requirements and specifications, co-ordination of work with work supervisor, other workers and customers, and the reporting of work outcomes and problems
- plan and organise activities including the preparation and layout of the work area and the obtaining of equipment and materials to avoid any back tracking, workflow interruptions or wastage
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise workflow and productivity
- use mathematical ideas and techniques to correctly complete measurements, calculate work requirements and assemble required materials
- use pre-checking and inspection techniques to plan work, avoiding reworking and wastage
- use the limited workplace technology related to the application of designs and/or patterns to glass surfaces

(4) **Resource Implications**

Template materials/patterns, masking materials, application equipment, workplace operating procedures, unprocessed glass, personal protective equipment and an appropriate work area.

(5) Method of Assessment

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts.

Assessment should be by direct observation of tasks and questioning on underpinning knowledge.

Assessment may be in conjunction with assessment of other relevant units of competency.

(6) Context of Assessment

Assessment may occur on the job or in a workplace simulated facility with relevant pattern/design process equipment, materials, work instructions and deadlines.

CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency							
Level 1.	Level 2.	Level 3.					
 Carries out established processes Makes judgement of quality using given criteria 	 Manages process Selects the criteria for the evaluation process 	 Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation 					

Collect, analyse and organise information	Level 2	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 2	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 2	
Solve problems	Level 2	
Use technology	Level 1	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.

LMFIND0102A:		Laminate glass					
			This unit deals with the skills and knowledge required to plan, cost and carryout glass-laminating operation.				
Competency Field: Ligh		Light	Light Manufacturing Furnishing – Interior Decoration				
ELEMENT OF COMPETENCY		NCY	PERF	FORMANCE CRITERIA			
1.	Prepare for work		1.1	Work requirements from work instructions to ascertain:			
				 material to be used process required to complete work tasks the type, thickness and colour of the interlayer number of sheets to be laminated and holding area for completed items the correct machine heat and pressure settings for the materials that are being used 			
			1.2	Workplace health and safety requirements relevant to operating glass-laminating equipment including personal protection needs, are observed throughout the work.			
			1.3	Work sequence is planned in a logical order to suit the job.			
			1.4	Tools, equipment and materials are selected and checked prior to use to ensure that they are appropriate for the work, of the required quality, serviceable and in a safe condition.			
			1.5	Machines, cutting tools and jigs are identified and checked for safe and effective operation, including emergency stops, gauges, guards and controls.			
			1.6	Procedures are identified for checking:			
				 quality of materials and items produced working condition of equipment quality requirements for each stage of the laminating process 			
			1.7	Communication with others involved with the work is established and maintained to ensure efficient workflow coordination, personnel co-operation and safety throughout the application of this competency.			

2.	Set up equipment	2.1	Machine settings and adjustments are made in accordance with job requirements and machine and tool manufacturers' instructions.
		2.2	Trial runs are conducted to check machine operation, accuracy and quality of finished work.
		2.3	Necessary adjustments are made to machine settings.
3.	Conduct glass laminating operations	3.1	Glass to be laminated is prepared for the process in accordance with workplace procedures or industry practice.
		3.2	Start-up and shutdown procedures for equipment used in the laminating process are completed in accordance with manufacturers' instructions or workplace procedures.
		3.3	Glass flopping and washing procedures are conducted in accordance with manufacturers' instructions or workplace procedures.
		3.4	White room procedures are conducted in accordance with manufacturers' instructions or workplace procedures.
		3.5	White room hoist is operated in accordance with manufacturers' instructions or workplace procedures.
		3.6	Pre-press oven and glass stacker are operated in accordance with manufacturers' instructions or workplace procedures to recognised industry standards.
		3.7	Air lifter is operated in accordance with manufacturers' instructions or workplace procedures.
		3.8	Autoclave is loaded, operated and unloaded in accordance with manufacturers' instructions or workplace procedures.
		3.9	Cutting table is operated to cut glass to required size (if applicable) in accordance with manufacturers' instructions or workplace procedures.
		3.10	FMF is operated in accordance with manufacturers' instructions or workplace procedures.

Complete work and maintain

4.

Product is inspected for quality of work and items, which do

equipment		reprocessing in accordance with workplace procedures.
	4.2	Completed work is placed in holding area in accordance with workplace procedures.
	4.3	Work area is cleaned and rubbish disposed of as appropriate.
	4.4	Equipment is cleaned and inspected for serviceability in accordance with workplace procedures.
	4.5	Unserviceable equipment is tagged and faults identified in accordance with workplace procedures.
	4.6	Equipment and tooling is maintained in accordance with workplace procedures.
	4.7	Workplace documentation is completed in accordance with workplace requirements.
	4.8	Tools, equipment and unused materials are removed and stored appropriately.

4.1

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency, allowing for differences between school shops and workplaces. It relates to the unit as a whole and facilitates holistic assessment.

Glass laminating equipment includes that equipment and machines involved in the process of laminating glass. This involves the insertion of an intermediary layer between two layers of glass.

This unit covers work involving the set up, operation and monitoring of glass laminating equipment.

Work requires individuals to demonstrate discretion, judgement and problem solving skills in the set up and operation of glass laminating machines.

Work is carried out in accordance with statutory requirements, environment legislation, manual handling procedures and relevant regulations and organisation insurance requirements.

The following variables may be present for this particular unit.

Laminated glass includes:

- safety
- automotive
- bullet and bandit resistant
- patterned laminated glass

OH&S requirements may include:

- legislation
- standards
- building codes
- material safety management systems
- safe operating procedures

Tools and equipment are to include:

- glass flopping and washing machines
- white room
- hoist
- pre-press oven
- glass stacker
- air lifter

autoclave

- packing equipment
- cutting machine
- FMF machine
- standards stamping equipment (including stamp)

Work is generally performed individually, with general supervision and may be part of a production process.

Materials are to include but are not limited to:

- annealed float
- sheet, and
- patterned glass

Personal protective equipment is to include:

- gauntlets
- gloves
- safety glasses
- hard hats
- safety footwear
- aprons
- overalls

Information and procedures:

- Workplace procedures relating to the setting up and operation of glass laminating machinery.
- Machine manufacturers' specifications and operational procedures.
- Workplace procedures relating to the handling and movement of glass.
- Work instructions including job sheets, cutting lists, plans, drawings and designs.
- Safety standards include personal protective equipment, OH&S regulations and enterprise requirements.

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Range Statement.

(1) Critical Aspects of Evidence

Interpret work order/job instruction and locate and apply relevant information to operate glass laminating equipment.

Plan the conduct of glass laminating operations.

Set up, operate, monitor and perform operator maintenance of glass laminating equipment.

Apply safe handling requirements for equipment, products and materials, including use of personal protective equipment.

Follow work instructions, operating procedures and inspection practices to:

- minimise the risk of injury to self and others
- prevent damage to glass, equipment and products
- maintain required production output and product quality

To complete a minimum of:

- identify and demonstrate glass flopping and washing operation and procedures
- identify and demonstrate the white room operation and procedures
- safely load glass into the pre-press oven and stacker
- operate the pre-press oven and stacker during the glass laminating process
- operate an air lifter
- operate an autoclave
- safely complete the requirements of the packing area
- operate a laminating cutting table

Carry out post laminating procedures.

Perform testing, classification and marking of toughened glass.

Work effectively with others.

Modify activities to cater for variations in workplace contexts and environment.

(2) **Pre-requisite Relationship of Units**

Pre-requisite for this unit are:

- LMFCOR0011A Follow safe working policies and practices
- LMFCOR0031A Carry out measurement and calculations
- LMFGGL1652A Use glass and glazing sector hand and power tools

(3) Underpinning Knowledge and Skills

Knowledge Knowledge of:

- procedures for the set up, operation and operator maintenance of glass laminating equipment
- workflow relating to the operation of glass laminating equipment
- characteristics of materials used and uses of products produced in the glass laminating process
- workplace procedures for the reporting of material, product or equipment faults
- workplace safety system requirements related to the operation of glass laminating equipment

<u>Skills</u> The ability to:

- collect, organise and understand information related to work orders, basic plans, and safety procedures
- communicate ideas and information to enable confirmation of work requirements and specifications, coordination of work with work supervisor, other workers and customers, and the reporting of work outcomes and problems
- plan and organise activities including the preparation and layout of the work area and the obtaining of equipment and materials to avoid any back tracking, workflow interruptions or wastage.
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise workflow and productivity
- use mathematical ideas and techniques to correctly complete measurements, calculate work requirements, optimise glass sizes for handling and processing and assemble required materials
- use pre-checking and inspection techniques to plan work, avoiding reworking and wastage
- use the workplace technology related to the operation of glass laminating equipment

(4) **Resource Implications**

• Glass laminating equipment, workplace-operating procedures, unprocessed materials, personal protective equipment and an appropriate work area.

(5) Method of Assessment

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts.

Assessment should be by direct observation of tasks and questioning on underpinning knowledge.

Assessment may be in conjunction with assessment of other relevant units of competency.

(6) Context of Assessment

Assessment may occur on the job or in a workplace simulated facility with relevant glass laminating equipment, materials, work instructions and deadlines.

CRITICAL EMPLOYABILITY SKILLS

Three levels of performance denote level of competency required to perform a task. These levels do not relate to the NCTVET Qualifications Framework. They relate to the seven areas of generic competency that underpin effective workplace practices.

Levels of Competency		
Level 1.	Level 2.	Level 3.
 Carries out established processes Makes judgement of quality using given criteria 	 Manages process Selects the criteria for the evaluation process 	 Establishes principles and procedures Evaluates and reshapes process Establishes criteria for evaluation

Collect, analyse and organise information	Level 2	
Communicate ideas and information	Level 1	
Plan and organise activities	Level 2	
Work with others and in team	Level 1	
Use mathematical ideas and techniques	Level 1	
Solve problems	Level 2	
Use technology	Level 2	

Please refer to the Assessment Guidelines for advice on how to use the Critical Employability Skills.