

LMFFM2006B	Hand make timber joints
Unit descriptor	This unit covers the competency required to join timber by constructing joints using hand and portable power tools.
Employability skills	This unit contains employability skills.
Unit sector	Furniture Making

ELEMENT	PERFORMANCE CRITERIA
Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
1. Plan and prepare for work	1.1. Workplace health and safety requirements, including personal protection needs, 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. Product purpose, furniture style and joint type are identified from workplace documentation 1.4. Tools, adhesives and fasteners are selected to match the joint type
2. Make joint	2.1. Cutting and joining lines are marked out to suit joint type 2.2. Measurements and calculations are checked for accuracy to ensure quality outcomes 2.3. Timber is joined in accordance with workplace requirements 2.4. Fasteners and adhesives are used to make joints firm where required 2.5. Finished joint is checked against quality requirements
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

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required skills

- 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 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 unjoined carpet, including tools, equipment, calculators and measuring devices

Required knowledge

- characteristics, properties and selection criteria of adhesives used
- capabilities and limitations of tools used
- matching requirements of adhesives and fasteners to timbers/materials used
- workflow in relation to the furniture items being made or repaired

RANGE STATEMENT

The Range Statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording in the Performance Criteria is detailed below. Add any essential operating conditions that may be present with training and assessment depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts.

<p>Joints include:</p>	<ul style="list-style-type: none"> • dowel • mortise and tenon • dovetail • lap joint • biscuit joint • finger joint • housing joint • mitre and bridle joints
<p>Unit context</p>	<ul style="list-style-type: none"> • Work involves the use of tools to create hand made timber joints • Workplace health and safety requirements may include: OH&S legislation, building codes, material safety management systems, hazardous and dangerous goods codes and local safe operating procedures or equivalent • Work is carried out in accordance with legislative obligations, organisation insurance requirements, environment legislation, and manual handling procedures and relevant regulations
<p>Tools and equipment are to include:</p>	<ul style="list-style-type: none"> • chisels • mallets • mortise gauges • vernier calipers • vices • dovetail saws • tenon saws • coping saws • planes • files • hand drills

	<ul style="list-style-type: none"> • power drills • dowel jigs and power routers
Tools and equipment may also include:	<ul style="list-style-type: none"> • portable biscuit machines • power planers • power saws and power sanders
Timbers may include:	<ul style="list-style-type: none"> • indigenous and overseas timbers
Workplace requirements include:	<ul style="list-style-type: none"> • visual appearance • tolerance • gaps or play in joints and strength
Quality requirements include:	<ul style="list-style-type: none"> • alignment • neatness • firmness and acceptable tolerances
Personal protective equipment	Personal protective equipment is to include that prescribed under legislation, regulation and enterprise policies and practices
Information and procedures	<ul style="list-style-type: none"> • Workplace procedures relating to the use and operation of tools • Production planning figures • 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

EVIDENCE GUIDE

The Evidence Guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for the relevant Training Package.

Critical Aspects of Evidence	<ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> ◦ prevent damage to goods, equipment and products ◦ maintain required production output and product quality ◦ minimise the risk of injury to self and others • Select appropriate joint types for the furniture item • Utilise at least three different adhesive types • To produce a minimum of four different joint types as specified in the Range Statement in accordance with industry standards on tolerances with at least two
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	<p>produced substantially by hand operations</p> <ul style="list-style-type: none">• Work effectively with others• Modify activities to cater for variations in workplace contexts and environment
Resource Implications	Timber, chisels, mallets, mortise gauges, vernier dial calipers, vices, dovetail saws, planes, files and drills.
Method of Assessment	<p>Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts.</p> <p>Assessment should be by direct observation of tasks and questioning on underpinning knowledge.</p> <p>Assessment should be conducted over time and will generally be in conjunction with assessment of other units of competency.</p>
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.