

Title	Test finger jointed product in solid wood manufacturing		
Level	3	Credits	10

Purpose	People credited with this unit standard are able to: demonstrate knowledge of finger jointing requirements; carry out selection, labelling, physical testing, and results analysis of test samples; and carry out calibration of test equipment.
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Classification	Solid Wood Manufacturing > Finger Jointing
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Available grade	Achieved
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Guidance Information

- 1 Legislation and References
Health and Safety at Work Act 2015.
Resource Management Act 1991.
AS/NZS 1491:1996 *Finger jointed structural timber*.
Other specifications are defined for specific purposes, for example, Japanese Agricultural Standards (JAS) or American Standard Test Methods (ASTM).
- 2 Definitions
Accepted industry practice refers to approved codes of practice and standardised procedures accepted by the wider wood manufacturing industry as examples of best practice.
MOE refers to the Modulus of Elasticity that is a measure of stiffness.
MOR refers to the Modulus of Rupture that is a measure of bending strength.
Workplace procedures refer to documented policies and procedures set by the organisation carrying out the work, and to documented or other directions provided to staff, and applicable to the tasks being carried out. They may include but are not limited to – standard operating procedures, site specific procedures, site safety procedures, equipment operating procedures, quality assurance procedures, product quality specifications, references, approved codes of practice, housekeeping standards, environmental considerations, on-site briefings, supervisor’s instructions, and procedures to comply with legislative and local body requirements relevant to the wood manufacturing sector.
- 3 Assessment information
All activities and evidence must meet workplace procedures and accepted industry practice.
- 4 Recommended unit standard for entry: Unit 15055, *Demonstrate knowledge of the principles of finger jointing in solid wood manufacturing*.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of finger jointing requirements.

Performance criteria

1.1 Shook requirements are identified and justified.

Range moisture content, straight edges, square freshly cut ends, straight grain at joint.

1.2 Joint appearance is described.

1.3 Factors influencing glue bond durability are described.

Range adhesive storage, adhesive mixing, adhesive cure.

1.4 Curing requirements are identified.

1.5 Three point bending test is explained.

1.6 Storage of samples after testing is described.

Outcome 2

Carry out selection, labelling, physical testing, and results analysis of test samples.

Performance criteria

2.1 Hazards associated with selection, labelling, and physical testing of finger jointed product are identified and actions to be taken to manage the hazards are described.

Range hazards may include but are not limited to – moving equipment, flying debris, rotating saw blades.

2.2 Safe work practices associated with selection, labelling, and physical testing of finger jointed product are identified and applied.

Range practices may include but are not limited to – isolation procedures, lock outs, emergency stops, machine guarding, wearing of appropriate safety equipment.

2.3 Samples are selected, labelled, and stored in a controlled temperature environment.

2.4 Samples are prepared for test procedure.

2.5 Samples are tested.

2.6 Failed test sample joints are described.

Range may include but is not limited to – glue failure, shallow wood fibre failure, wood fibre failure, breaking load or MOE or MOR if required.

2.7 Test results are analysed, recorded, and remedial actions taken.

2.8 Action is taken with out-of-specification product.

Outcome 3

Carry out calibration of test equipment.

Performance criteria

3.1 Equipment is set up for testing.

3.2 Test equipment is calibrated.

3.3 Calibration results are recorded and stored.

Planned review date	31 December 2024
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	10 February 1999	31 December 2015
Revision	2	14 March 2000	31 December 2015
Revision	3	15 December 2000	31 December 2015
Review	4	18 December 2006	31 December 2015
Review	5	20 March 2014	N/A
Review	6	25 June 2020	N/A

Consent and Moderation Requirements (CMR) reference	0013
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Comments on this unit standard

Please contact Competenz qualifications@competenz.org.nz if you wish to suggest changes to the content of this unit standard.