Title	**Set up finger jointer for solid wood manufacturing**		
Level	**4**	**Credits**	**15**

Purpose	People credited with this unit standard are able to: demonstrate knowledge of finger jointing; set up and adjust trim saws, shaper units, transfer system and glue applicator; set up radio frequency tunnel from crowder to out-feed of the finger jointer; check dry joints, adjust shaper and trim saws; and undertake maintenance for finger jointing machinery.

Classification	Solid Wood Manufacturing > Finger Jointing

Available grade	Achieved

Guidance Information

1 Legislation and reference
Health and Safety at Work Act 2015.
Resource Management Act 1991.
AS/NZS 1491:1996 *Finger jointed structural timber*, available at https://www.standards.govt.nz.

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.
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 Range
Finger jointers – face to face, edge-to-edge;
evidence is required of one type of finger jointer.

4 Assessment information
All activities and evidence must meet workplace procedures and accepted industry practice.

5 Recommended unit standards for entry: Unit 4544, *Clean engineered wood product equipment and machinery.*

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of finger jointing.

Performance criteria

1.1 Importance of moisture content to stability and bond reliability in dry finger jointing is identified.

1.2 Finger joint defects are identified.

Range pinhole, open joint stepping, rip out, tear out, overlap or mismatch, short fingers, machine damage;
minimum of four are required.

1.3 Hazards associated with finger jointing equipment are identified and actions to be taken to manage the hazards are described.

Range hazards may include but are not limited to – moving equipment, electricity, moving lumber, adhesive spillages;
actions may include but are not limited to – isolation procedures, stop buttons, hold cards, lockout system, guards, wearing of appropriate safety equipment.

1.4 Roles and responsibilities of the finger joint operator are described.

Outcome 2

Set up and adjust trim saws, shaper units, transfer system, and glue applicator.

Performance criteria

2.1 Isolation process is followed.

2.2 Components are removed from finger jointer, without damage to the finger jointer and without damage to the components.

2.3 Cutterhead stack, trim saws (if fitted) are selected for the job requirements, visually checked for sharpness and damage, fitted and adjusted.

2.4 Glue system is re-assembled and adjusted.

2.5 Components are fitted and adjusted to suit dimensions of shook to be finger jointed.

Range bedplates (if applicable), hold down pressure, side pressure, fences, transfer (cross-over), glue applicator.

2.6 Turn down mechanism is adjusted to suit shook requirements.

Outcome 3

Set up radio frequency tunnel from crowder to out-feed of the finger jointer.

Performance criteria

3.1 Crowder and alignment section is set for the required shook dimension.

3.2 Cut-off saw is set up for required dimension and length of blanks.

3.3 Press is adjusted for the shook cross-section, pressure and length of product.

3.4 Radio frequency tunnel is set for the required shook dimension and required energy output.

Outcome 4

Check dry joints, adjust shaper, and trim saws.

Performance criteria

4.1 Finger profile, finger length, and profile matching of test pieces are checked.

Range length match, evenness of both sides, correct finger fit.

4.2 Shaper and trim saws are adjusted until test pieces' dry joint quality meets customer specifications.

4.3 Glue spread is adjusted.

Outcome 5

Undertake maintenance for finger jointing machinery.

Performance criteria

5.1 Out-of-service components are removed for maintenance and reconditioning.

5.2 Maintenance schedule for finger jointing machinery is described and carried out.

5.3 Stocks of tooling and spare parts are maintained.

Planned review date	31 December 2024

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	18 December 2006	N/A
Review	2	25 June 2020	N/A

Consent and Moderation Requirements (CMR) reference	0013

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.