

Title	Set up edge-to-edge finger jointer for solid wood manufacturing		
Level	4	Credits	15

Purpose	People credited with this unit standard are able to: demonstrate knowledge of edge-to-edge finger jointing; set up and adjust trim saws, shaper units, scoring saws, 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; undertake maintenance for edge-to-edge finger jointing machinery.
----------------	---

Classification	Solid Wood Manufacturing > Finger Jointing
-----------------------	--

Available grade	Achieved
------------------------	----------

Guidance Information

- 1 Definitions

Scoring saws are also known as scribing saws in some parts of the industry.

Worksite documentation refers to instructions to staff on policy and procedures (including the application of legislation to worksite situations), which are formally documented, and are available for reference at the worksite. Examples are standard operating procedures, hazard identification documentation, specifications, manuals, and manufacturer’s information.
- 2 The following apply to the performance of all outcomes of this unit standard:
 - a All work practices must meet recognised codes of practice and documented worksite health and safety and environmental procedures (where these exceed code) for personal, product and worksite health and safety, and must meet the obligations required under current legislation, including the Health and Safety in Employment Act 1992, the Resource Management Act 1991, and their subsequent amendments.
 - b All work practices must meet documented worksite operating procedures. This includes the recording (by electronic or non-electronic means) of activities, events, and decisions.
 - c All evidence of communications gathered in relation to this unit standard must be in accordance with worksite procedures for content, recipient, timing and method.
- 3 Reference

AS/NZS 1491:1996 *Finger jointed structural timber*, and subsequent amendments, replacements and additions.

Other specifications are designed for specific purposes, for example, Japanese Agricultural Standards (JAS), American Standard Test Methods (ASTM).

- 4 Recommended for entry: Unit 4544, *Clean engineered wood product equipment and machinery*; or demonstrate equivalent knowledge and skills.
-

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of edge-to-edge 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 from samples.
- | | |
|-------|--|
| Range | pinhole, open joint stepping, rip out, tear out, overlap or mismatch, short fingers, machine damage; evidence of four is required. |
|-------|--|
- 1.3 Hazards associated with finger jointing machinery are identified and actions to be taken to isolate, minimise or eliminate the hazards are described in accordance with worksite documentation.
- | | |
|-------|---|
| Range | hazards – 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 in accordance with worksite documentation.

Outcome 2

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

Performance criteria

- 2.1 Isolation process is followed in accordance with legislation and worksite documentation.
- 2.2 Components are removed from finger jointer, without damage to the finger jointer and without damage to the components.
- 2.3 Cutterheads, trim saws (if fitted) and scoring saws (if fitted) are selected for the job requirements, visually checked for sharpness and damage, fitted and adjusted in accordance with worksite documentation.
- 2.4 Glue system is re-assembled and adjusted in accordance with worksite documentation.

2.5 Components are fitted and adjusted to suit dimensions of shook to be finger jointed in accordance with worksite documentation.

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

2.6 Shaper chain lugs are squared up in accordance with worksite documentation.

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 in accordance with worksite documentation.

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 against worksite documentation.

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

4.2 Shaper, trimsaws and scoring saws are adjusted until test pieces' dry joint quality meets worksite documentation.

4.3 Glue spread is adjusted to meet worksite documentation.

Outcome 5

Undertake maintenance for edge-to-edge 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 in accordance with worksite documentation.

- 5.3 Stocks of tooling and spare parts are maintained in accordance with worksite documentation.

This unit standard is expiring. Assessment against the standard must take place by the last date for assessment set out below.

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	18 December 2006	31 December 2020
Review	2	25 June 2020	31 December 2020

Consent and Moderation Requirements (CMR) reference	0013
--	------

This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.