

DESIGN, INSTALLATION & MAINTENANCE GUIDE

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General and product information

PURPOSE

This guide outlines design, installation and maintenance requirements for IWD Floorboard.

SKILLS REQUIRED

This guide is intended for qualified and competent tradespeople and competent DIYers.

Installers must comply with all restricted building work provisions.

FOR MORE HELP

Visit iwd.co.nz for more information and technical support. Please note that the information in this document is subject to change and should be considered a guide only.

WARRANTY

Refer to iwd.co.nz for warranty information.

PRODUCT DESCRIPTION

- **Material:** Wood-based particles, wax solution and resin
- **Sizes:**
 - 3600 x 900 x 19 - orange plastic tongue.
 - 3600 x 900 x 22 - burgundy plastic tongue.

Note: *The board thickness is stamped on the underside of the IWD Floorboard.*

DESIGN CONSIDERATIONS

IWD Floorboard is supplied for use as an internal floor, flooring substrate and structural floor diaphragm. IWD Floorboard is a particleboard manufactured in accordance with AS/NZS 1860.1 and incorporate a high concentration wax resin mix.

Floorboard can be specified as an internal floor or flooring substrate in accordance with section 7 of NZS 3604:2011 for live loads up to 2 kPa.

Floorboard can be specified as structural floor diaphragm in accordance with section 7.3 of NZS 3604:2011.

Joist spacing are a maximum 600 mm centres for 22 mm board and 450 mm centres for 19 mm board is recommended.

Floorboard may only be used where it will greater than 550 mm from direct ground.

Refer to the IWD Floorboard pass™ for scope of use, limitations, conditions, and NZ Building Code compliance.

Pre-installation

HEALTH AND SAFETY

- Ensure adequate ventilation or mechanical dust extraction when cutting or drilling.
- Support boards properly when cutting and fixing.
- Wear safety equipment, including dust masks and eye protection.
- Follow tool manuals and keep tools sharp.
- Plan and monitor safe work practices, especially when working at height.
- Clear the work area before starting.

Refer to:

- › Small Construction Sites Health and Safety Toolkit
- › Health and Safety at Work Quick Reference Guide

HANDLING AND STORAGE

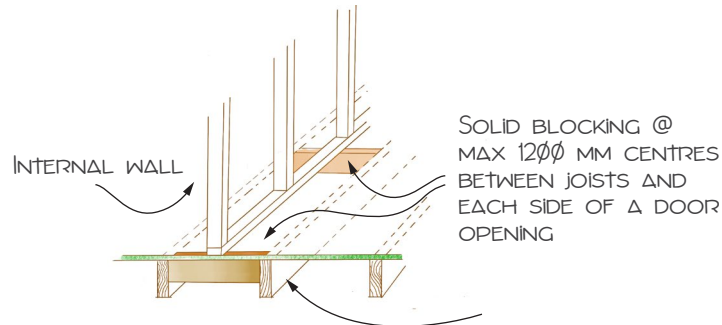
- › Handle boards carefully to avoid damage. IWD floorboards are a finished product and need to be treated with care, especially regarding the board edges. Avoid stepping on/walking over or dragging boards over each other.
- › Unload manually on edge; use supports or a pallet if unloading mechanically. When using a crane or hiab, consider a spreader bar.
- › Storage is critical. Keep in a dry, well-ventilated area, away from direct sunlight. Failure to follow requirements could result in poor product performance or appearance.
- › Stack on a flat, dry surface with supports no more than 450 mm apart, at least 150 mm off the ground, and cover with a tarpaulin to ensure the material remains dry. Store indoors if the product needs to be kept for an extended period (more than 14 days).

TOOLS AND EQUIPMENT REQUIRED

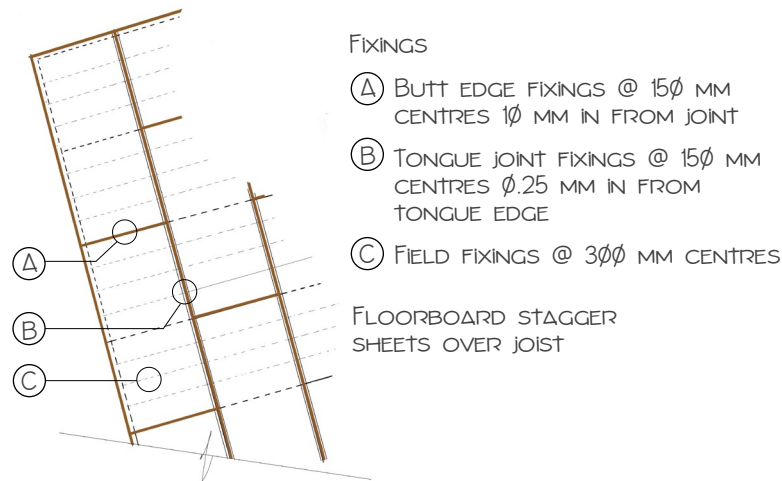
- › Drop saws, compound saws, jigsaws, bench saws, circular skill saws, drills and standard carpentry tools.
- › Follow good trade practices and the supplier's instructions.

Installation

STEP 1	CONFIRM THE SCOPE Ensure the proposed use is within the scope and limitations of the pass™.
STEP 2	CHECK FRAMING SUPPORT Confirm that the framing and substrate are straight and true and within the specified tolerances outlined in Section 2 of NZS 3604:2011 Timber-framed buildings or Nash Standard Part 2: 2009 Light Steel Framed Buildings. Sufficient subfloor ventilation with a minimum of 550 mm clearance from the ground to the underside of the particleboard must be provided. Confirm joist spacing are a maximum 600 mm centres for 22 mm board 450mm centres for 19 mm board is recommended. Board edges must be tightly fitted over a joist in accordance with Figure 79 of NZS 3604:2011. Check that there are double or single wide joists (45 mm minimum) every 10 to 15 m to support expansion joints Where a non-load bearing wall is installed between joists over the floor board a minimum 90 x 45 mm solid blocking between joists at 1.2 m maximum centres at each side of door openings in the wall must be installed in accordance with Figure 7.5 of NZS 3604:2011. Check the moisture content of the framing. IWD Floorboard must not be installed over timber supports with moisture content over 18%.
STEP 3	SELECT INSTALLATION METHOD Floorboard may be installed as a fitted floor or a platform floor. Fitted floors are those installed after internal walls are constructed. Platform floors are installed prior to the construction of internal walls. For fitted floors, an expansion gap of 10 mm must be left around all walls. This gap will later be covered by linings and skirting boards. For structural floor diaphragms ensure there is adequate wall BU's and all requirements are meet as specified in section 7.3 of NZS 3604:2011.



IWD FLOORBOARD
SUPPORT FOR NON-LOAD BEARING WALL



IWD FLOORBOARD
FIXING SHEET SET-OUT & FIXING PATTERN

STEP 4 INSTALL FLOORBOARD

Boards

- Install boards perpendicular to the floor joists in a staggered brick bond formation.
- Seal all cut edges of boards by applying a bead of adhesive.
- String lines should be used to ensure the first run of flooring is straight and true as all other boards will follow.
- Install expansion joints 10 mm to 20 mm wide every 10 m to 15 m.

Adhesive

- Select a construction-grade adhesive, suitable for use with particleboard flooring and should be confirmed by the adhesive supplier.
- A bead 5 mm to 6 mm of continuous adhesive should be applied to joists before positioning the board sheets. Only apply adhesive when each board is about to be installed. The adhesive bead must not be allowed to dry and become hard on the surface.
- Once the first board is positioned accurately on the joist with adhesive in place and fastened to prevent movement, the next board should be placed into position, glued, and fastened as before. An extra bead along the top and bottom of the tongue should be applied before sheets are pressed together which should ensure a squeak-free floor system and increased protection against weather elements once laid. Any excess glue squeezed out should be cleaned off. When sheets are cut on site, the cut edge should be sealed with adhesive.

Fixings

- › Fixings must be in accordance with the minimum requirements of section 10 of AS/NZS1860.2 or in accordance with Table 2.2 of NZS 3604:2011.
- › Mechanical fixings should be spaced at 150 mm centres along sheet edges and at 300 mm centres over the rest of the sheet. Fixings should not be placed closer than 20 mm to the long (grooved) edges and 10 mm to the short butt joined edges.
- › Fixings must not penetrate the surface by more than 1 mm.

Fasteners for timber

- › Use minimum of 65 mm x 2.8 mm hot-dipped galvanised annular grooved flooring gun nails.
- › A minimum of 60 x 2.8mm hot-dipped galvanised jolt head nails or 60 x 3.15mm hot-dipped galvanised CSK annular grooved flooring nails if hand fixing.
- › Nails may be applied by hand or with a nailing gun. Care should be taken to adjust gun nailing for softwood or hardwood joists, so that nails do not penetrate the surface by more than 1 mm. Do not allow nails to pull the board to the top of the joists. Ensure that the underside of the sheet is in firm contact with the joist before firing the nail.
- › Screws are to be 50mm x 10g Countersuck, self-drilling wood screws.
- › Angle nails towards the centre of the joists to maximise secure fastening into the timber.

Fasteners for lightweight steel

- › For fixing to metal joists, use construction adhesive and extended point self-tapping screws No. 45mm x 10g CSK.

Fasteners for I-Beams

- › For fixing to I-Beam joists, use screws only and not nails.

STEP 5

FINISHING

Once installed, fill all visible screw or nail holes with a flexible grade wood filler and then lightly sand. Boards must be sealed or overlaid with a protective floor covering (tile, carpet, etc.), or a compatible membrane system, or a high-quality polyurethane.

Where the panels are used in areas prone to water splash, a waterproof membrane or impervious floor covering must be used.

Maintenance

Under normal conditions, IWD Floorboard requires no maintenance, provided the protective covering has been maintained. If water damage occurs to an area where IWD Floorboard has been used, ensure the area is allowed to dry before replacing any covering or coating.

For more information

Visit iwd.co.nz for additional information and technical support.