# ECOPLY PLYFLOOR 450

Ecoply® Plyfloor® 450 is lightweight and easy to work with. This tongue and groove plywood flooring, is perfect for residential flooring applications. Plyfloor 450 is manufactured in Australia and is carbon negative, even when manufacture and transportation are taken into account.



SUITABLE FOR 450MM JOIST SPACING



30% LIGHTER PER SHEET THAN COMPARABLE **PRODUCTS** 



MANUFACTURED FROM LOCALLY SOURCED. SUSTAINABLY GROWN PLANTATION PINE

#### **BENEFITS**

- Easy to use with no specialist tools required for installation
- Easy to handle by one person on-site; 22kg per sheet on average
- Superior spanning capability for thickness higher stiffness, strength, and span than many other wood-based substrates of similar thickness
- Durable performance Marine type "A" Bond gluelines
- Independently certified by the Engineered Wood Products Association of Australasia (EWPAA)
- Available Forest Stewardship Council® (FSC®) certified and PEFC/Responsible Wood chain
- Achieves 'Best Practise product' credit criteria for Green Star Rating of Responsible Structure, Responsible Envelope, & Responsible Finishes
- Available in H2-S and H2 Glueline treatments against termites and H3 LOSP treated against termites and fungal attack

#### PRODUCT & PURPOSE

Plyfloor 450 is a strong durable surface sanded CD structural panel available in stress grade F11 2250mm  $\times$  1200mm  $\times$  15mm thick (2.7m<sup>2</sup> coverage) specifically designed for residential construction on 450mm joist spacings. Plyfloor 450 has machine grooved long edges with a white plastic tongue to form a tongue and groove joint between sheets.

Suitable as a substrate for overlays such as carpet, tiles, resilient sheet, vinyl tiles and some membrane products (refer to flooring manufacturer).











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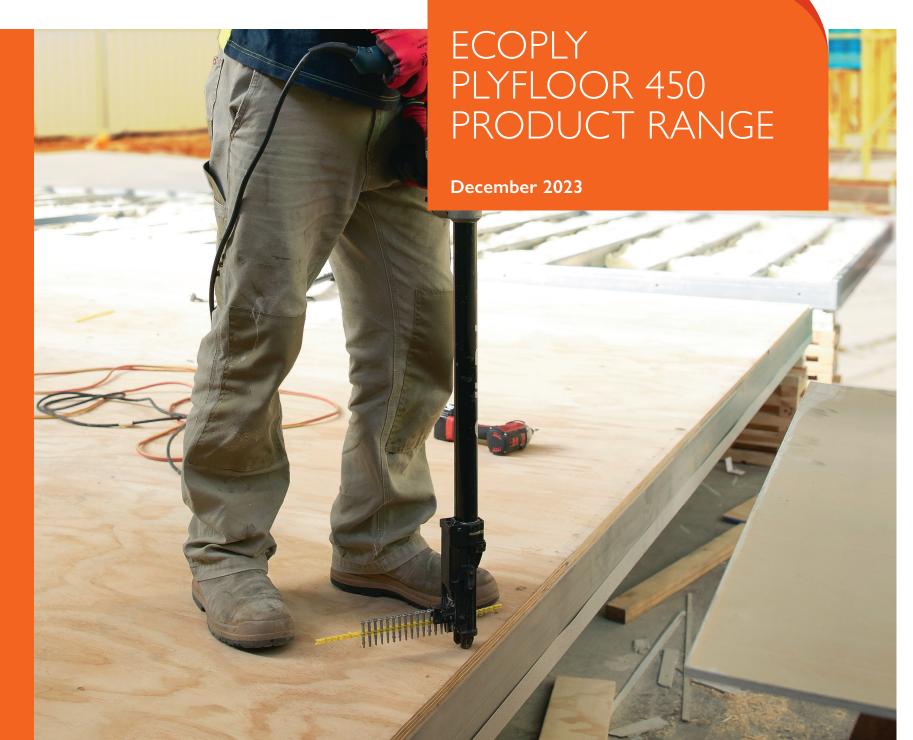
# REFERENCES & SOURCE INFORMATION

#### LIMITATIONS











any other plywood products, no matter how similar they may appear.

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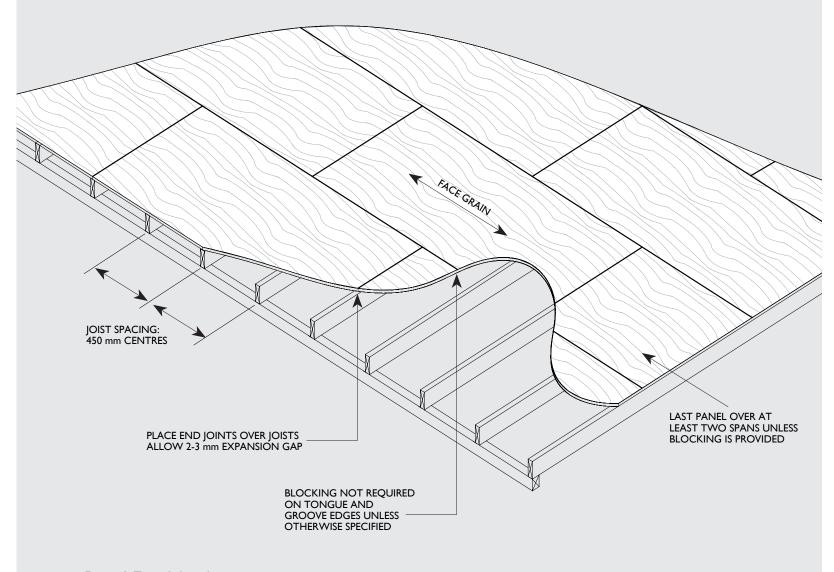


Figure 1: Typical sheet layout



#### RESPONSIBILITY

Design responsibility lies with the building owner and the professionals that they engage. The Specifier for the project must ensure that the products and details in the specification are appropriate for the

intended application and that additional detailing is provided for specific design or any areas that fall outside the scope of this literature.

#### **IDENTIFICATION**

Plyfloor 450 is manufactured and branded to comply with AS/NZS 2269:2012 Plywood – Structural, by Carter Holt Harvey Plywood Myrtleford Victoria. Plyfloor 450 carries the following branding:

- Brand Name; Ecoply Plyfloor 450
- Manufacturers name Carter Holt Harvey Plywood
- The word 'Structural'
- Australian Standard AS/NZS 2269

Face Grade 'C', Back Grade 'D'

engineering design and detailing.

NZS 2098 will be between 8-15%.

WARNING

- A Bond Durable phenolic Marine Bond
- Stress Grade 'F11'
- Panel Construction Code (ID Code) 15-30-5
- Formaldehyde Emission Class Super E0
- EWPAA Certified Mill No. 333 Myrtleford
- Date and Time of Manufacture e.g., 03 August 2023

Plyfloor 450 may be used as a floor diaphragm subject to specific

At the time of despatch from the mill, the equilibrium moisture content

anywhere within the sheet when determined in accordance with AS/

Plywood which is not certified or is manufactured to standards other

and non certified plywood around Bond durability, veneer quality and

than AS/NZS 2269, is not referenced in the National Construction

Code 2022. There can be significant differences between certified

#### **COMPLIANCE & STANDARDS**

Plyfloor 450 is manufactured under a third party audited quality control programme and is product certified by the Engineered Wood Products Association of Australasia (EWPAA) as compliant with AS/ NZS 2269 Plywood – Structural. The EWPAA is a NATA and JAS-ANZ certified body.

Plyfloor 450, has an F11 stress grade and is suitable for use as a flooring substrate subject to loading and span conditions detailed in AS 1684.2:2021, Table 5.3 – Structural flooring – Maximum spacing of joists and the requirements of Section 5.5.3 Structural plywood flooring – Laying and fixing. When installed in accordance with Section 5, AS 1684.2, Plyfloor 450 will meet the performance requirements of National Construction Code 2022 (Building Code of Australia – Volume Two) as a deemed to satisfy provision, Clause H1D6 Framing, (4)(c).

## A BETTER ENVIRONMENTAL CHOICE

Carter Holt Harvey Plywood ensures that its wood is legally sourced from managed plantation forests and offers both FSC and PEFC (Responsible Wood) Chain of custody certification upon request for Green Star Points. Plyfloor 450 also achieves 0.3mg/l formaldehyde emissions (Super E0). This is a third of the emissions compared to other engineered wood flooring products in the Australian market.

On a limited environmental life cycle analysis (LCA) basis, wood-based products have one of the lowest carbon footprints of any construction material, because it removes CO<sub>2</sub> from the atmosphere and will typically remain carbon negative even when manufacture and transportation is taken into account. As such building in wood sourced from sustainably managed plantations can therefore make a positive contribution to combating climate change.

#### **RAIN WETTING & CONSTRUCTION TIME**

Untreated Plyfloor 450 will withstand rain and exposure during normal construction periods. Some discolouration and surface checking can be expected if plywood is exposed for extended periods. For floors expected to be uncovered for extended periods (greater than 3 months) H3 LOSP treatment is recommended to reduce the risk of decay. Plywood should be returned to less than 18% moisture content

before the installation of moisture sensitive materials. In applications where the moisture content of the plywood may exceed 18% for prolonged periods, Plyfloor 450 must be treated to a minimum of H3 Hazard class to resist decay. This includes areas of high rainfall, humidity, excessive ground dampness and condensation. Appropriate building detailing and ventilation are essential.

### H3 LOSP TREATMENT

Where H3 LOSP treatment has been applied it is the designer's responsibility to ensure that any waterproofing, membranes or similar are fit for purpose and compatible with LOSP treatment. When using

LOSP treated plywood some residual solvent may be present on the sheet surface from the treatment process. Sheets feeling greasy to touch should be placed in a well ventilated area and allowed to flash off.

#### WET AREA FLOORING

Plyfloor 450 can be installed in wet areas in residential and domestic construction to meet the requirements of the National Further information for meeting these requirements in regard Construction Code 2022 (Building Code of Australia – Volume Two) as a deemed-to-satisfy provision as per AS 3740:2021 Waterproofing for domestic wet areas as a water resistant

substrate (refer Clause 3.3.2 Water Resistant Substrates). can be downloaded from the EWPAA. USING WOOD-BASED FLOORING MATERIALS IN WET AREAS – Engineered Wood Products Association Of Australasia | EWPAA

#### INSTALLATION

#### LAYING

Plyfloor 450 sheets shall be laid with the face grain of the plies at right angles to the line of the supporting joists and shall be continuous over at least two spans. Ends of sheets shall be butted over joists with a 2-3mm expansion gap. Where possible, panel ends shall be staggered. Sheets shall not be cramped during installation. Do not overdrive gun nails or screws. Refer to Figures 1 & 2.

#### **ADHESIVE**

Elastomeric (construction) adhesives should be used with nails to minimise floor squeaking. Use a bead of adhesive in accordance with the manufacturer's recommendations. Apply pressure by using the below fastener layout.

## **FIXINGS**

Plyfloor 450 shall be fixed with the following fasteners: Galvanised fasteners are the minimum recommendation.

Table 1: Fasteners

	Timber Joist	Timber Joist	Timber Joist	Steel Joist	Steel Joist
Plyfloor 450 Thickness	Hand Nail	Screws	Machine Nail	Steel 1.15mm	Steel 2.8mm +
15mm	50 × 2.8mm	No 8g x 40	50 × 2.5mm	10 – 16 45	10- 16 45

Steel – Use self-drilling, self-tapping screws.

#### FASTENER LAYOUT

Fasteners shall be spaced at 150mm centres at each panel ends and 300mm centres at intermediate joists. Fasteners shall not be less than 7mm or more than 15mm from the edge of the sheet - refer Figure 1. Deformed shank nails shall be used where a resilient floor covering is fixed directly to the sheet.

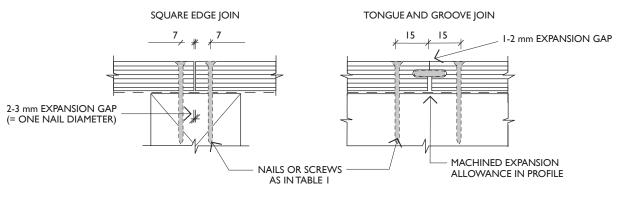


Figure 2: Plywood sheet edge joins

# FINISHING

Paints and Coatings should be applied in accordance with coating manufacturer's instructions. Avoid heavy sanding that may affect the structural face veneer.

#### STORAGE & HANDLING

Keep dry. Store undercover (avoid tight cover and potential condensation), handle and stack with care to avoid damage. Stack flat clear of ground on at least three evenly spaced bearers.

# VENTILATION

Sub-floor areas shall be ventilated in accordance with Part 6.2 of the ABCB Housing Provisions to meet the National Construction Code requirements. Designers should consider that application of treated Plyfloor 450 where moisture levels are high in subfloor regions. This should also take into account the application of floor coverings etc. Refer H3 LOSP treatments

See important notice and warning on back page