

Pyneboard White

Main Features

Range: Carter Holt Harvey Pyneboard™ White particleboard is available in many sizes and thicknesses from 12mm to 33mm.

Economy: The comprehensive range allows economic cutting of boards. Pyneboard™ White particleboard has no grain direction so there is the same strength and appearance in all directions. This reduces waste.

Ease of working: Pyneboard™ White particleboard is easy to work with normal woodworking tools. For long production runs, tungsten-carbide tipped tools are recommended.

Ease of fixing: Most normal nail-free woodworking joints can be used.

Uniform product: The regular properties of Pyneboard™ White particleboard provide more consistent results from machining etc.

Edge-lipped shelving: Pyneboard™ White particleboard is available as shelving with timber lipping on one long edge, ready for installation.

Main Features of MR board

Moisture resistant: Pyneboard™ White MR successfully resists moisture uptake. Edge swell and surface fibre raise are kept to a minimum.

Resilience: Even after immersion in water, there is minimal swelling (even though wood products will naturally swell). On drying out, Pyneboard™ White MR returns towards its original thickness. Pyneboard™ White MR special bonding resins resist moisture, and the adverse effects of occasional wetting and high relative humidity.

Machinability: The core of Pyneboard™ White MR is suitable for fine routing, rebating and profiling.

Strong bonding: Chip out and loose flakes are minimised by the tight bonding of the moisture resistant resins in Pyneboard™ White MR. This promotes detailed working of the board.

Humidity endurance: Where applications may be subjected to conditions of high relative humidity or occasional wetting, Pyneboard™ White MR should be used. Pyneboard™ White MR should not be used in areas subject to continual wetting or continuous relative high humidity.

Identification: To help identify Carter Holt Harvey Pyneboard™ White MR in the workshop, look for the blue-green core. This identification is your guarantee of having the moisture resistant product.

Key Applications

Pyneboard™ White particleboard is a versatile panel for interior use in furniture and joinery applications, particularly in cupboards, wardrobes and storage applications.

Where applications may be subjected to conditions of high relative humidity or occasional wetting, Pyneboard™ White MR substrate should be used. Pyneboard™ White MR is ideal for applications such as bathroom vanities, kitchen cabinets and dishwasher surrounds. It should not be used in shower recesses or areas subject to regular wetting or continuous high relative humidity.

Surface Properties

Resistance to Staining: surfaces are resistant to staining from most commonly used household cleaners, chemicals and cooking substances. They are unaffected by the reagents 1-18 inclusive, as listed in AS 2925.9.

Colourfastness: Surfaces are stable and colourfast under normal indoor lighting conditions. Some deterioration may occur, in the long term, with regular exposure to sunlight.

Precautions: Avoid direct contact with heated articles, such as lighted cigarettes or hot household utensils, or close proximity to heaters.

Cutting & Machining

How To Use:

As with all Carter Holt Harvey Panel products, Pyneboard™ White particleboard is easy to work with normal woodworking tools. Some recommendations are given here.

Cutting: Use a fine-toothed, crosscut handsaw or dimensional saw. With portable saws, use a blade designed to give a clean edge when crosscutting natural timber. Alternatively, use tungsten-carbide tipped blades with alternative top-bevel-edge teeth. Care must be taken to minimise surface shipping or breakout. A sharp hand plane may be used to trim sawn edges.

Rebating or routing: Use hand or power routers, with tungsten-carbide tipped cutters for long runs. Adjust feed and cutter speeds to obtain desired balance of cut and cutter wear. Depth of cut should not be more than one-third the thickness of the board.

Production Machining: Pyneboard™ White particleboard may be cut on circular saw benches or precision sizing machines with traversing saw carriages. The equipment should be fitted with an ancillary tungsten-carbide tipped scribing saw. Main saws with tungsten-carbide special concave or alternating flat top and bevel-tooth profiles are recommended. Preferred peripheral speeds are 50-60m/sec. Double-ended tenoners and spindle moulding machines with fixed or exchangeable tungsten-carbide tipped cutters are suitable for edge machining.

Boring or drilling: Use common timber or metal working bits. For long runs use tungsten tipped cutters or high-speed drills.

Fixing Requirements

Fixing Procedures and Installation

Jointing: Most normal nail-free woodworking joints are satisfactory for jointing. Dowel fixing or knockdown construction is best suited to particleboard. A large range of fittings to suit knockdown construction methods are available to the trade through hardware outlets. For specific advice contact your hardware supplier.

Where substrate is exposed at housed or rebated joints, woodworking adhesives such as PVA may be used to achieve a satisfactory bond. The housing or rebate depth should not exceed one third the board depth. If bonding to the melamine surface, rubber-based contact adhesives may be used. Ensure excess adhesive is removed from the surface before it has cured.

Hinges: Face-mounted hinges, available from most hardware suppliers, are recommended.

Screw Fixing: Use screws especially designed for use with particleboard, such as wood screws threaded the entire length, and observe the following instructions:

- Use longer and thinner screws than would normally be used for timber.
- Drill a pilot hole for the full length of the screws as shown in the table below.
- Do not over tighten screws.
- A drop of adhesive will help to consolidate screws.
- Do not force heavy-gauge screws into the edge of Pyneboard™ White.

	Screwing and pilot hole diameters			
Screw size	4	6	8	10
Pilot hole diameter (mm)	2.0	2.5	3.0	3.2

Load bearing: Maximum loads the boards will support in shelving applications depend on board span, width and thickness, and on the fixing or support system used.

Maintenance

The melamine resin surface of Pyneboard™ White is highly resistant to staining by normal household reagents. It is always best, however, to remove splashes and spillages quickly by wiping the surface clean with a damp cloth. Soap or detergent and water will generally clean the surface and no other maintenance should be necessary. Do not use harsh abrasives.

Product Range & Physical Properties

Product Details

Thickness: 9mm, 12mm, 16mm and 18mm

Dimensions of standard sheets:

	Pyneboard™ White Standard substrate	Pyneboard™ White MR substrate
12mm	2400mm x 1200mm	2400mm x 1200mm
16mm	3600mm x 1800mm 3600mm x 1200mm 3600mm x 600mm 2400mm x 1800mm 2400mm x 1200mm	3600mm x 1800mm 3600mm x 1200mm 3600mm x 600mm 2400mm x 1800mm 2400mm x 1200mm
18mm	3600mm x 1800mm 2400mm x 1800mm 2400mm x 1200mm	3600mm x 1800mm 2400mm x 1800mm 2400mm x 1200mm

Tolerances:

Length and width nominal sizes: + 50mm, - 0mm

Cut to size: +/- 1.5mm

Thickness: +/- 0.3mm

Squareness: 1.5mm per metre length of diagonal (difference between diagonals)

Edge Straightness: 1.5mm per metre length (deviation from a straight line)

Flatness: 1.5mm per metre length

Board cut to specified tolerances is available on quotation.

Properties

Carter Holt Harvey Pyneboard particleboard is manufactured to comply with the requirements for particleboard in AS/NZS 1859.1.

Typical values for 16mm thick board are given below.

Property	Unit	Typical Value	Typical Value
Bending strength (modulus of rupture)	MPa	17	18
Stiffness (modulus of elasticity)	MPa	2500	2700
Internal bond strength	kPa	600	750
Moisture content (ex factory)	%	7	8
Thickness Swell (24 Hour)	%	10	4
Thickness Swell after wet cycling	%	-	8
Screw holding: Surface	N	900	1000
Edge	N	600	650

Hygro-expansivity:

The linear hygro-expansivity of Pyneboard™ White MR particleboard is approximately 0.035% per % change in moisture content.

Storage

Carter Holt Harvey Pyneboard™ White sheets should be stored under cover and kept clear of the ground on timber bearers spaced at 450mm centres, with end bearers located 75mm from each end of the stack.