

# Technical Supplement

Australia August 2022

## Axon™ Cladding as Internal Lining

### Introduction

This Technical Supplement outlines the requirement to install Axon™ Cladding in residential interior applications and is supplementary to the Axon™ Cladding Installation Guide.

Axon™ Cladding is a popular and attractive vertical groove panel which is typically used on the exterior of homes. It also makes for an attractive interior lining that looks more modern than old-fashioned tongue and groove timber products.

Axon™ Cladding has a U-shaped groove available in 133mm or 400mm spacing options. The long edges of panels have shiplap joints which, once fitted together, look the same as the grooves providing a seamless, continuous look. It suits indoor/outdoor areas where you want the same material to continue from the outside to the inside. It also suits hallways, feature walls and bathrooms (excluding shower recesses).

For further information, please visit [www.jameshardie.com.au](http://www.jameshardie.com.au) or Ask James Hardie™ on 13 11 03.

### IMPORTANT NOTES

1. For specification, installation and warranty terms of Hardie™ products, ensure that you have the current technical information and guides. If in doubt, or you need more information, visit [www.jameshardie.com.au](http://www.jameshardie.com.au) or Ask James Hardie on 13 11 03.
2. The specifier or other party responsible for the project must ensure that the details in this specification are appropriate for the intended application and that additional detailing is performed for specific design or any areas that fall outside the scope of this specification.
3. This Technical Supplement is only suitable for the installation of Axon™ Cladding internally in residential environments. For standard external applications refer to the Axon™ Cladding Installation Guide available at [www.jameshardie.com.au](http://www.jameshardie.com.au).

### Design Considerations

#### Framing

##### TIMBER

Use only seasoned timber. Unseasoned timber must not be used as it is prone to shrinkage and can cause Axon™ Cladding and frames to move.

The minimum stud width is 35mm. However, where butt jointing is used, the minimum stud width is 38mm at the joint.

'Timber used for house construction must have the level of durability appropriate for the relevant climate and expected service life and conditions including exposure to insect attacks or to moisture, which could cause decay.'  
Reference AS1684.2 'Residential Timber Framed Construction'.

##### STEEL

Use of steel framing must be in accordance with NASH standard for Residential and Low-Rise Steel Framing Part 1: Design Criteria and the framing manufactures specifications. Framing members must have a Base Metal Thickness (BMT) between 0.55 to 1.6mm. The steel framing must have the appropriate level of durability required to prevent corrosion. Studs must not be less than 38mm wide at butt joints, double studs may be used.

#### Bathrooms and Laundries

When installing in bathroom, laundries or similar, ensure the product is not exposed to direct moisture and must not be installed over a waterproofing membrane (e.g. not suitable to be used within the shower recess or on walls around baths).

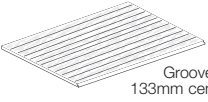

In the shower recess, bath or other areas directly exposed to moisture, James Hardie recommends installing Villaboard™ Lining. Please see the Hardie™ Wet Areas Construction Guide for further information.




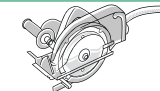

### Axon™ Cladding

Pre-primed with vertical grooves. There is a ship lap edge joint along the two long edges and square edges along the short edges. The grooves are nominally 2mm deep and 10mm wide. Sheet weighs approximately 12kg/m<sup>2</sup> in equilibrium.

Width: 1200mm Thickness: 9mm Sheets per pack: 30

Axon™ Cladding 133 Smooth & Grained	Length (mm)	Mass (kg)	Product Code
 <p>Grooves at 133mm centres</p> <p>Grained only available in 3000mm</p>	2450	36	403931
	2750	40	403932
	3000	44	403933
	3600	52	404979
	3000	44	404512
Axon™ Cladding 400 Smooth	Length (mm)	Mass (kg)	Product Code
 <p>Grooves at 400mm centres</p>	2450	36	404417
	2750	40	404418
	3000	44	404419

### Accessories and Tools

	<b>Hardie™ Joint Sealant</b> General purpose, paintable, exterior grade polyurethane joint sealant. 300ml cartridge/600ml sausage. 20 per box. Part No. 305534/305672
	<b>Dust-reducing saw with M class or higher vacuum extraction</b> Dust reducing saw with a Hardie™ Blade saw blade. Makita 5057KB Hitachi C7YA
	<b>Hardie™ Blade Saw Blade.</b> A 185mm diameter poly-diamond blade for fast and clean cutting of Hardie™ fibre cement product. 1 each. Part No. 300660

### Fasteners

	<b>Hardie™ Drive Screw 41mm Long</b> Two Hardie™ Drive Screws - Class 3 self-tapping wing-tipped screw for fastening to 0.5mm to 1.6mm BMT light gauge steel frames. 1000 per box. Product Codes: 305984 (loose) 305982 (collated).
	<b>Fibre cement nails</b> 2.8 x 40mm min. class 3 fibre cement nail. Not supplied by James Hardie
	<b>ND 50mm stainless steel brad nail</b> 14 gauge x 50mm ND 304 stainless steel nail. Not supplied by James Hardie

# Installation

TABLE 1

Maximum Fastener Spacing	
Fasteners	Max. Spacing (mm)
Fibre cement nails 2.8x40mm Hardie™ Drive Screws	300
ND 50mm stainless steel brad nail	150

Note: Max fastener spacing limited to a an Ultimate Limit State design wind pressure of 1.2kPa

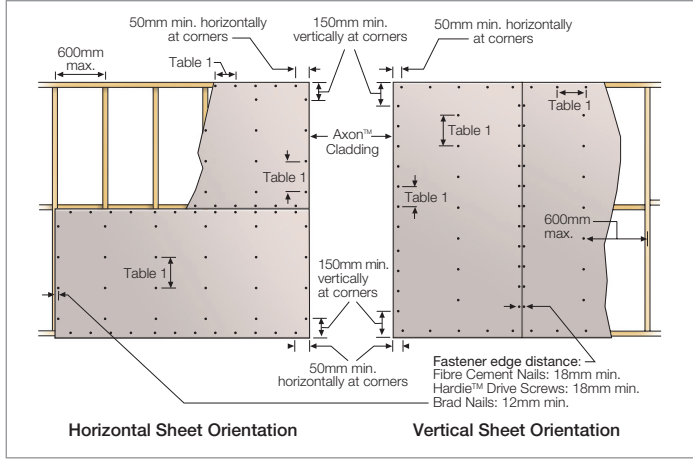


FIGURE 1 SHEET FASTENING SPACING

## Corners

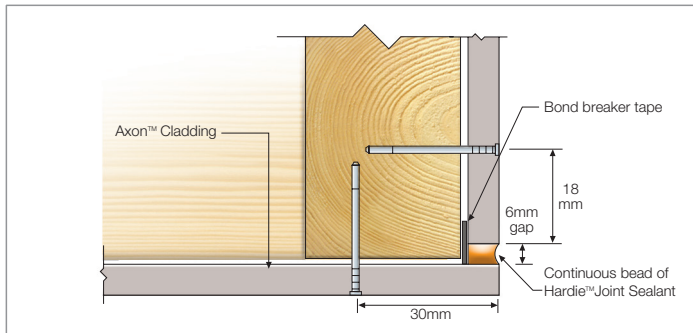


FIGURE 2 EXTERNAL CORNER - SEALANT FILL

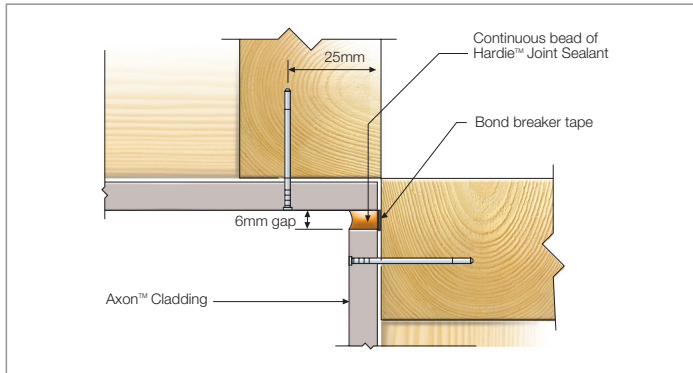


FIGURE 3 INTERNAL CORNER - SEALANT FILL

## Abutments

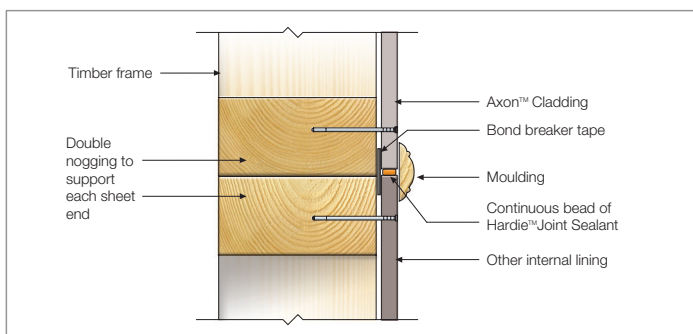


FIGURE 4 HORIZONTAL ABUTMENT TO OTHER INTERNAL LINING

# Finishes

## PATCHING

Once Axon™ Cladding has been fixed in place, any overdriven fasteners must be patched to achieve the best aesthetics:

1. Lightly sand on the surface of the nail holes with a 120 to 180 grit sandpaper.
2. Clean dust out of the nail holes to ensure correct adhesion.
3. Place a moderate quantity of heavy duty fibre cement compatible patching compound to the edge of a damp filling knife and apply firmly over the damaged area. Remove any excess with the knife and allow the compound cure as per the manufacturer's recommendations.
4. Clean off any remaining excess with a wet rag in the direction of the groove to ensure consistent finish.

## PAINTING

Axon™ cladding is primed and ready for painting. All sheets must be dry before painting. Refer to the project specification for paint requirements. Axon™ Cladding must be painted within 3 months of being fixed. James Hardie recommends the application of two coats minimum of a quality acrylic paint over the pre-primed boards in accordance with the paint manufacturer's specifications.

Refer to the paint manufacturer for paint suitability, mixing and application. If staining Axon™ Cladding, care must be taken to ensure the desired finish is achieved. It is advisable to test the stain on an off-cut, paying particular attention to fasteners and filled areas.

## Maintenance

James Hardie recommends that the cleaning and maintenance of the Axon™ Cladding be undertaken regularly as per the recommendations of the coating manufacturer. Joints must also be maintained and be free of dirt and grime.



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