Installation Guide

Hardie™ Axent™ Trim

EXTERIORS

Australia March 2024

Make sure your information is up to date.
When specifying or installing Hardie™ products, ensure you have the current technical information and guides. If in doubt, or you need more information, visit www.jameshardie.com.au or Ask James Hardie™ on 13 11 03.

JamesHardie™

Installation Guidelines

Ideal for edge treatment around windows, finishing touches to cladded internal and external corners as well as a design enhancer for butt joints.

The thickness of Hardie™ Axent™ Trim helps create the impression of solidness, and it's crisp, chamfered edges highlight frames and openings.

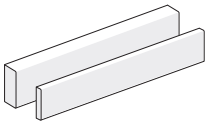
Hardie™ Axent™ Trim will maintain its integrity and general appearance significantly longer than traditional soft wood. Mostly, timber is susceptible to cracking in external applications which can lead to shrinking and warping. Hardie™ Axent™ Trim will resist shrinking, swelling and cracking and hold paint longer than wood, when installed and maintained correctly, and can also be painted in dark as well as light colours.

IMPORTANT NOTES

Due to the product enhancements, Hardie™ Axent™ Trim must be treated carefully during transit including avoiding bending and dropping of the trim and always carrying the product on edge. The trim must also be packed flat for storage.

1. Failure to install, finish or maintain this product in accordance with applicable building codes, regulations, standards and James Hardie's written application instructions may lead to personal injury, affect system performance, violate local building codes, and void the Hardie™ product warranty.
2. All warranties, conditions, liabilities (direct, indirect or consequential) and obligations whether arising in contract, tort or otherwise other than those specified in the Hardie™ product warranty are excluded to the fullest extent allowed by law. For Hardie™ product warranty information and disclaimers about the information in this guide, visit www.jameshardie.com.au.
3. The builder must ensure the product meets aesthetic requirements before installation. James Hardie will not be responsible for rectifying aesthetic surface variations following installation.

Hardie™ Axent™ Trim



Material composite trim used for box corners and as decorative trim around windows and doors. The front face of the trims are chamfered to improve their aesthetic appeal

Product Code	Length (mm)	Width (mm)	Thickness (mm)	Weight per unit (kg)
405260	3000	45	19	3
405257	3000	70	19	5
405258	3000	89	19	6
405261	3000	45	38	6
405262	3000	89	38	12

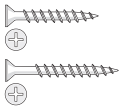
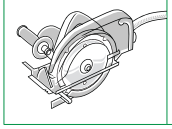
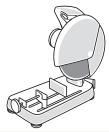
Accessories and Tools

COMPONENTS SUPPLIED BY JAMES HARDIE

PRODUCT	DESCRIPTION	PRODUCT	DESCRIPTION
	**Hardie™ Blade Saw Blade. 185mm diameter** Poly-diamond blade for Hardie™ fibre cement. Pack Size: 1 each. Part No. 300660		**Hardie™ Joint Sealant. 300mL catridge** A general purpose, paintable, exterior grade polyurethane joint sealant. 20 per box. Part No. 305534

COMPONENTS NOT SUPPLIED BY JAMES HARDIE

James Hardie recommends the following products for use in conjunction with its products.
James Hardie does not supply these products and does not provide a warranty for their use. Please contact the component manufacturer for information on their warranties and further information on their products.

ACCESSORIES	DESCRIPTION	ACCESSORIES	DESCRIPTION
	Finishing Nails Pneumatic only 50 or 62mm 16 gauge stainless steel finishing nail eg. C, ND or DA series.		**Wing tip screw** For 19mm thick trim, use a 52mm class 3 wing screw by TRI-FIXX. For 38mm thick trim, use a 75mm class 3 wing screw by Powers Fasteners Australasia Pty Ltd.
	**Bullet head nails** 50 or 65mm x 2.8mm diameter corrosion resistant bullet head nails. Nail holes must be pre drilled.		**Screws** 8-10g x 50mm corrosion resistant chipboard/wood screws. 8-10g x 65mm corrosion resistant chipboard/wood screws.
	**Dust-Reducing Saw with M class or higher vacuum extraction** Dust reducing saw used with Hardie™ Blade saw blade. Makita® 5057KB / Hitachi® C7YA		**Drop Saw*** Drop saw with aluminium blade. *not to be used for cutting Hardie™ Axent™ Trim.

WARNING - DO NOT BREATHE DUST AND CUT ONLY IN WELL VENTILATED AREA

Hardie™ fibre cement products contain sand, a source of respirable crystalline silica. **May cause cancer if dust from product is inhaled. Causes damage to lungs and respiratory system through prolonged or repeated inhalation of dust from product.**

Intact fibre cement products are not expected to result in any adverse toxic effects. The hazard associated with fibre cement arises from the respirable crystalline silica present in dust generated by activities such as cutting, rebating, drilling, routing, sawing, crushing, or otherwise abrading fibre cement, and when cleaning up, disposing of or moving dust.

When doing any of these activities in a manner that generates dust, follow Hardie™ instructions and best practices to reduce or limit the release of dust, warn others in the area and consider rotating personnel across the cutting task to further limit respirable silica exposure.

If using a dust mask or respirator, use an AS/NZS1716 P1 filter and refer to Australian/New Zealand Standard 1715:2009 Selection, Use and Maintenance of Respiratory Protective Equipment for more extensive guidance and more options for selecting respirators for workplaces. For further information, refer to our installation instructions and Safety Data Sheets available at www.jameshardie.com.au. FAILURE TO ADHERE TO OUR WARNINGS, SAFETY DATA SHEETS, AND INSTALLATION INSTRUCTIONS MAY LEAD TO SERIOUS PERSONAL INJURY OR DEATH.

James Hardie Recommended Safe Working Practices

CUTTING OUTDOORS

1. Position cutting station so wind will blow dust away from the user or others in working area.
2. Warn others in the area to avoid dust.
3. Consider rotating personnel across cutting tasks to further limit respirable silica exposures.
4. Use one of the following methods based on the required cutting rate:

Best ▪ Villaboard™ Knife ▪ Hand guillotine ▪ Fibreshear

Better ▪ Position the cutting station in a well-ventilated area. Use a dust reducing circular saw equipped with Hardie™ Blade Saw Blade or comparable fibre cement blade and well maintained M-class vacuum or higher with appropriate filter for capturing fine (respirable) dust. Wear a properly-fitted, approved dust mask or respirator (minimum P1).

CUTTING INDOORS

- Cut only using Villaboard™ Knife, hand guillotine or fibreshears (manual, electric or pneumatic).
- Position cutting station in a well-ventilated area.

DRILLING/OTHER MACHINING

When drilling or machining you should always wear a P1 dust mask and warn others in the immediate area.

IMPORTANT NOTES

1. For maximum protection (lowest respirable dust production) James Hardie recommends always using best practice cutting methods where feasible.
2. NEVER use a power saw indoors or in a poorly ventilated area.
3. ALWAYS use a dust reducing circular saw equipped with a sawblade specifically designed to minimise dust creation when cutting fibrecement - preferably a sawblade that carries the Hardie™ Blade logo or one with at least equivalent performance - connected to a M class or higher vacuum.
4. NEVER dry sweep - Use wet suppression, or an M class vacuum or higher with appropriate filter.
5. NEVER use grinders.
6. ALWAYS follow tool manufacturers' safety recommendations.
7. ALWAYS wear a properly fitted, approved dusk mask, P1 or higher

DUST MASKS AND RESPIRATORS

As a minimum, an AS/NZS1716 P1 respirator must be used when doing any activity that may create dust. For more extensive guidance and options for selecting respirators for workplaces please refer to Australian/New Zealand Standard 1715:2009 "Selection, Use and Maintenance of Respiratory Protective Equipment".
P1 respirators should be used in conjunction with the above cutting practices to minimise dust exposure. For further information, refer to Safety Data Sheet (SDS) available at www.jameshardie.com.au. If concern still exists about exposure levels or you do not comply with the above practices, you should always consult a qualified industrial hygienist or contact James Hardie for further information.

STORAGE AND HANDLING

To avoid damage, all Hardie™ building products should be stored with edges and corners of the product protected from chipping. Hardie™ building products must be installed in a dry state and protected from weather during transport and storage. The product must be laid flat under cover on a smooth level surface clear of the ground to avoid exposure to water, moisture, etc.

PREPARATION
Edges cut on site must be primed before installation. Slight chamfering of cut edges is recommended to improve edge paint adhesion.

Clearances
Install Hardie™ Axent™ Trim with a minimum 150mm clearance to the earth on the exterior of the building or in accordance with local building codes if greater than 150mm is required.

Maintain a minimum 50mm clearance between Hardie™ Axent™ Trim and roofs, decks, paths, steps and driveways. Adjacent finished grade must slope away from the building in accordance with local building codes, typically a minimum slope of 50mm minimum over the first metre.

Do not install Hardie™ Axent™ Trim such that it may remain in contact with standing water.

NOTE
Greater clearance may be required in order to comply with termite protection provisions.

TERMITE PROTECTION
The National Construction Code (NCC) specifies the requirements for termite barriers and must be complied with. Where the exposed slab edge is used as part of the termite barrier system, a minimum of 75mm of the exposed slab edge must be visible to permit ready detection of termite entry.

FRAMING
Hardie™ Axent™ Trim can be fixed to either timber or light gauge domestic type steel framing. The framing used must comply with the relevant building regulations and standards and the requirements of this guide. Use only seasoned timber.

Unseasoned timber must not be used, as it is prone to shrinkage and can cause Hardie™ Axent™ Trim and frames to move. The base metal thickness of a steel frame must be between 0.55 and 1.6mm (BMT).

Fastener durability
Various grades of fastener finishes and durability are available such as galvanised, stainless steel and fasteners with proprietary coatings.

Fasteners must have the appropriate level of durability required for the intended project. This is of particular importance in coastal areas, areas subject to salt spray and other corrosive environments.

Fasteners must be fully compatible with all other materials that they are in contact with to ensure the durability and integrity of the assembly. Contact fastener manufacturers for more information.

FIXINGS
TABLE 1

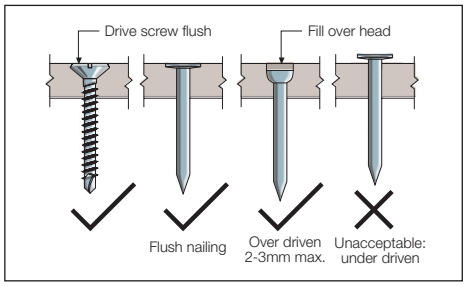
Fixing to Timber			
Pneumatically Driven Finishing Nails (Gas power not recommended)			
Trim Thickness	**Type**	**Min. Edge Fixing Distance**	**Nailing Centres**
19mm	50mm x 16 gauge brad (eg. C, ND or DA).	22mm	150mm
	Pre drill 2.8 x 50mm dia corrosion resistant bullet or flat head nails.		300mm
38mm	62mm x 16 gauge brad (eg. C, ND or DA).		150mm
	Pre drill 2.8 x 65mm dia corrosion resistant bullet or flat head nails.		300mm
Screw Fix			
19mm and 38mm	8 - 10g Corrosion resistant chipboard type screw. Predrill with a 3mm drill bit. For 19mm thick trim use 50mm long screws and for 38mm thick trim use 65mm long screws'	22mm	300mm

NOTE Gas powered nail guns are not suitable for fixing Hardie™ Axent™ Trim. Fasteners must be corrosion resistant, James Hardie recommends Stainless Steel finishing nails. Electro-galvanised nails are acceptable but may exhibit premature corrosion. James Hardie is not responsible for the corrosion resistance of fasteners.

TABLE 2

Fixing to Steel			
Wing Tip Screws			
Thickness	**Screw**	**Min. Edge Fixing Distance**	**Nailing Centres**
19mm	52mm class 3 by Tri-Fixx.	22mm	300mm
38mm	75mm class 3 by Powers Fasteners		300mm

If a smooth surface appearance on the face of the trim is required, then the heads of the nails need to be finished or punched 2-3mm below the surface and filled with a water-proof exterior filling compound as per the manufacturer's recommendations. Punch below surface only suitable for bullet head and brad nails. Flat head and screws must be finished flush with the board surface.



NOTE
Do not screw into the 38mm or 19mm edge of the Hardie™ Axent™ Trim or cut Hardie™ Axent™ Trim ends.

Flashings
Suitable weather barrier (in accordance with AS/NZS 4200.2) and flashings must be installed behind wall and corner trims in order to drain water down and out of the wall. Refer to the appropriate external cladding technical documentation, building codes and standards for requirements. Information is also available from BRANZ regarding good flashing practices.

INSTALLATION
NOTES
- When using Hardie™ Axent™ Trim with Linea™ Weatherboard, additional framing may be required, see Linea™ Weatherboard Installation Guide.
- You must ensure the product is of acceptable quality prior to installation, see Important Note 3.

Hardie™ Axent™ Trim must be fixed directly to timber framing with two fasteners at either end of the trim. Intermediate fixings are also required at 150mm maximum staggered centres for finish nails. All other nails require intermediate fixings at 300mm maximum staggered centres. Intermediate fasteners are not staggered at corners where framing is off-set, see Figure 2.

When installing Hardie™ Axent™ Trim around windows see Figure 1.

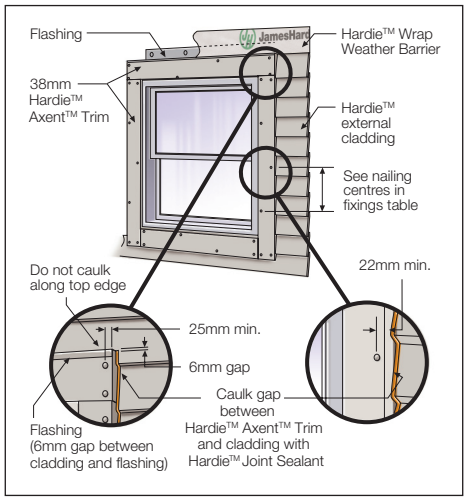


FIGURE 1 19MM AND 38MM HARDIE™ AXENT™ TRIM FIXING AROUND WINDOW

NOTE
1. **Always ensure the thickness of the trim is adequate for your selected cladding.**
2. **When the cladding around the window is a flat sheet, the cladding can either be butted to the Hardie™ Axent™ Trim as shown in Figure 1 OR installed overlapping the Hardie™ Axent™ Trim.**

Board and Batten style

Hardie™ Axent™ Trim over Hardie™ Flex Sheet.
Village House, Woodend VIC
Building Design: Glow Design Group

Hardie™ Fine Texture Cladding

Hardie™ Brushed Concrete Cladding

Hardie™ Flex Sheet

The board and batten look is a versatile and visually appealing choice for exterior design, offering a range of benefits. This design approach adds architectural interest and depth to a building, suitable for various styles from traditional to modern. It provides an opportunity for creative customisation, allowing adjustments in size and spacing for specific design goals:

TABLE 3

Board and Batten spacing options		
Batten Spacing (mm)*	Benefits	Recommended Axent™ Trim
200	Provides a detailed and intricate design with a high level of visual interest, suitable for styles that emphasize fine craftsmanship and intricate patterns.	45 x 19mm
300	Strike a balance between detail and openness, suitable for a design that combines visual interest with a slightly more streamlined appearance.	45 x 38mm
400	Provides a clean and modern look with a moderate level of detail, offering simplicity and elegance, suitable for contemporary and minimalist designs.	70 x 19mm
600	Create a spacious and simplified design with a focus on open areas, suitable for a minimalist and modern aesthetic, providing a more understated appearance.	89 x 38mm

*Based on a 1200mm wide Hardie™ Fibre Cement Panel.

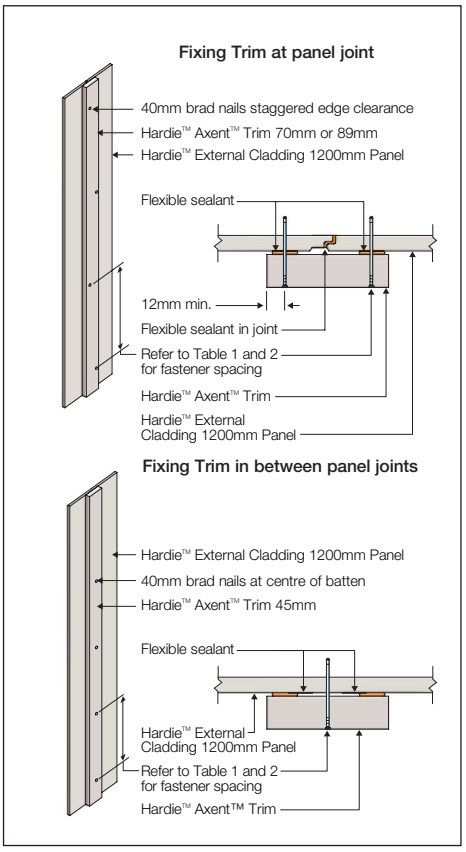


FIGURE 5 BATTEN ON PANEL JOINTING DETAIL

CORNERS AND EAVES

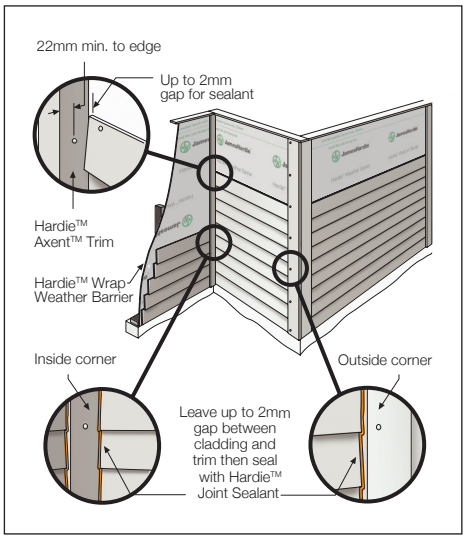


FIGURE 2 CORNER DETAIL

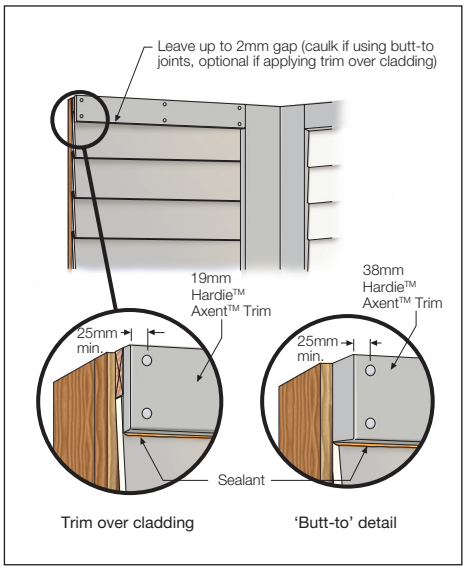


FIGURE 3 TOP OF WALL TRIM DETAILS

FINISHES

Preparation and priming

Hardie™ Axent™ Trim is pre-sealed and must be dry before painting. Where filling over fastener heads refer to page 2. Priming of filled and sanded patches may be required in accordance with paint manufacturer's specifications.

NOTE
Care must be taken not to over-sand as it can affect the finish.

Sealants

James Hardie recommends the use of Hardie™ Joint Sealant, which is a paintable polyurethane sealant. If using an alternative sealant, it must be a quality polyurethane sealant compatible with fibre cement and the specified paint system if coated. Please refer to the manufacturer's instructions for further information.

Painting

Refer to the project specification for paint requirements. Hardie™ Axent™ Trim must be painted within 3 months of being installed. James Hardie recommends the application of two coats minimum of a quality acrylic paint over the pre-sealed trim in accordance with the paint manufacturer's specifications. Some environments require special coatings. Painting selection and specifications are dependant on the paint chosen. Refer to the paint manufacturer for information and details of their warranty.

Staining

Stains containing linseed oil are specifically designed for wood and may not be suitable for Hardie™ cladding products, primed or unprimed. Semi-transparent stains can vary in uniformity of appearance depending on method of application and conditions and will require a high level of skill and craftsmanship to achieve a uniform appearance. Clear coats have not proven durable in exterior exposure and James Hardie considers them a maintenance item that may require application of a refurbishing sealer at regular intervals. James Hardie does not warrant the appearance or durability of semi-transparent stains and clear coats.

MAINTENANCE

Regular cleaning and maintenance of the paint, finished surface, joints, junctions, penetrations, etc must be carried out at regular intervals to maintain finish and weather-resistance of cladding. Maintenance must also meet the requirements of the relevant component manufacturer.

PRODUCT INFORMATION

General

The basic composition of Hardie™ building products is Portland cement, ground sand, cellulose fibre, water and proprietary additives.

Hardie™ building products are manufactured AS/NZS 2908.2 'Cellulose-Cement Products-Flat Sheet'. These are also compliant with equivalent standard ISO 8336 'Fibre-cement flat sheets - Product specification and test methods'. For product classification refer to the relevant Physical Properties Data Sheet.

DURABILITY

Resistance to moisture/rotting

Hardie™ Axent™ Trim has demonstrated resistance to permanent moisture-induced deterioration (rotting) by passing the following tests in accordance with AS/NZS 2908.2:

- Water permeability (Clause 8.2.2)
- Warm water (Clause 8.2.4)
- Heat rain (Clause 6.5)
- Soak dry (Clause 8.2.5).

Resistance to fire

Hardie™ Axent™ Trim is suitable where non-combustible materials are required in accordance with C2D10 and H3D2 of the National Construction Code (NCC) Vol 1 and 2 respectively.

Hardie™ building products have been tested by CSIRO in accordance with AS/NZS 3837 and are classified as conforming to Group 1 material (highest and best result possible), with an average specific extinction area far lower than the permissible 250m2/kg, as referenced in Specification C2D11(1) of the National Construction Code (NCC).

Resistance to termite attack

Based on testing completed by CSIRO Division of Forest Products and Ensis Australia, Hardie™ building products have demonstrated resistance to termite attack.

Alpine regions

In regions subject to freeze/thaw conditions, all Hardie™ fibre cement external cladding must be installed and painted in the warmer months of the year where the temperature does not create freeze and thaw conditions or paint issues. The cladding must be painted immediately after installation. In addition, fibre cement cladding must not be in direct contact with snow and/or ice build up for extended periods, e.g. external walls in alpine regions subject to snow drifts over winter.

Furthermore, a reputable paint manufacturer must be consulted in regards to a suitable product, specifications and warranty. The paint application must not be carried out if the air temperature or the substrate temperature is outside the paint manufacturer's recommendation including the specified drying temperature range

Hardie™ external cladding products are tested for resistance to frost in accordance with AS/NZS 2908.2 Clause 8.2.3.

Notes

For information and advice call 13 11 03 | jameshardie.com.au

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