

# Installation Instructions

## IMPORTANT NOTES

- As a result of product enhancements effective on products from August 2010, the following installation instructions have changed from the pre August 2010 version. The changes reflect new:
  - product sizes
  - recommended fasteners for seasoned timber frames
  - fastener spacing's
  - fastener end and edge clearances

Due to the product enhancements, Scyon™ 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. Refer to the manual for additional information and details.

- 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 James Hardie's product warranty.
- All warranties, conditions, liabilities (direct, indirect or consequential) and obligations whether arising in contract, tort or otherwise other than those specified in James Hardie's product warranty are excluded to the fullest extent allowed by law. For James Hardie's product warranty information and disclaimers about the information in this manual, see the section at the end of this manual.
- The builder must ensure the product meets aesthetic requirements before installation. James Hardie will not be responsible for rectifying aesthetic surface variations following installation.
- Make sure your information is up to date. When specifying or installing James Hardie® products, ensure you have the current manual. 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.

## WARNING

### DO NOT BREATHE DUST AND CUT ONLY IN WELL VENTILATED AREA

James Hardie products contain sand, a source of respirable crystalline silica which is considered by some international authorities to be a cause of cancer from some occupational sources. Breathing excessive amounts of respirable silica dust can also cause a disabling and potentially fatal lung disease called silicosis, and has been linked with other diseases. Some studies suggest smoking may increase these risks. During installation or handling:

- work in outdoor areas with ample ventilation;
- minimise dust when cutting by using either 'score and snap' knife, fibre cement shears or, where not feasible, use a HardieBlade™ saw blade and dust-reducing circular saw attached to a HEPA vacuum;
- warn others in the immediate area to avoid breathing dust;
- wear a properly-fitted, approved dust mask or respirator (e.g. P1 or P2) in accordance with applicable government regulations and manufacturer instructions to further limit respirable silica exposures. During clean-up, use HEPA vacuums or wet cleanup methods - never dry sweep. For further information, refer to our installation instructions and Material Safety Data Sheets available at [www.jameshardie.com.au](http://www.jameshardie.com.au). FAILURE TO ADHERE TO OUR WARNINGS, MATERIAL SAFETY DATA SHEETS, AND INSTALLATION INSTRUCTIONS MAY LEAD TO SERIOUS PERSONAL INJURY OR DEATH.

## JAMES HARDIE RECOMMENDED SAFE WORKING PRACTICES

### CUTTING OUTDOORS

- Position cutting station so wind will blow dust away from the user or others in working area.
- Use a dust reducing circular saw equipped with HardieBlade™ saw blade and HEPA vacuum extraction.

### DRILLING/OTHER MACHINING

When drilling or machining you should always wear a P1 or P2 dust mask and warn others in the immediate area.

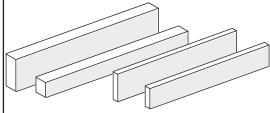
### IMPORTANT NOTES

- NEVER use a power saw indoors.
- NEVER use a circular saw blade that does not carry the HardieBlade™ logo.
- NEVER dry sweep - Use wet suppression or HEPA vacuum.
- NEVER use grinders.
- ALWAYS follow tool manufacturers' safety recommendations.






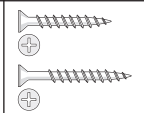
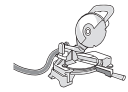

P1 or P2 respirators should be used in conjunction with above cutting practices to further reduce dust exposures. Additional exposure information is available at [www.jameshardie.com.au](http://www.jameshardie.com.au) to help you determine the most appropriate cutting method for your job requirements. 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 James Hardie building products should be stored with edges and corners of the product protected from chipping. James 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.

SCYON™ AXENT™ TRIM		
PRODUCT	DESCRIPTION	QUANTITY/SIZE
	<b>Scyon™ Axent™ Trim</b> Material composite trim used for box corners and for trim around the windows and doors.	<b>38mm thick Axent trim</b> Finish: Sanded/Grooved Width: 89mm Length: 3640mm Approx. mass: 13kg Part No: 404402
		<b>19mm thick Axent trim</b> Finish: Sanded/Grooved Width: 89mm Length: 3640mm Approx. mass: 8kg Part No: 404400
		- 45mm 4200mm 9kg 403626 Smooth 45mm 3040mm 3.2kg 404250

Please call James Hardie on 13 11 03 to check availability.

PRODUCT / ACCESSORIES / TOOLS			
COMPONENTS SUPPLIED BY JAMES HARDIE			
ACCESSORIES	DESCRIPTION	ACCESSORIES	DESCRIPTION
	<b>HardieBlade™ Saw Blade. 185mm diameter</b> A 185mm diameter poly-diamond blade for fast and clean cutting of James Hardie fibre cement. 1 each. Part No. 300660		<b>James Hardie™ Joint Sealant. 300ml cartridge</b> 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 Scyon™ Axent™ Trim 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
	<b>Finishing nails</b> Pneumatic only 50 or 62mm 16 gauge stainless steel finishing nail eg. C, ND or DA series.		<b>Wing Tip Screw</b> 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.
	<b>Bullet head nails</b> 50 or 65mm x 2.8mm diameter corrosion resistant bullet head nails. Nail holes must be pre drilled.		<b>Screws</b> 8-10g x 50mm corrosion resistant chipboard/wood screws 8-10g x 65mm corrosion resistant chipboard/wood screws
	<b>Compound mitre saw</b> Dust reducing compound mitre saw used with HardieBlade™ saw blade. Makita: LS0714 / LS1013 / LS1212 Hitachi: C10FSB / C12FSB		<b>Dust extraction vacuum with HEPA filter</b> Used with HEPA filter and paper bag for reduced dust exposure.

## PREPARATION

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

### Clearances

Install Scyon™ 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 Scyon™ 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 Scyon™ 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 BCA 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

Scyon™ 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 manual. Use only seasoned timber.

Unseasoned timber must not be used, as it is prone to shrinkage and can cause Scyon™ 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

### FIXING TO TIMBER

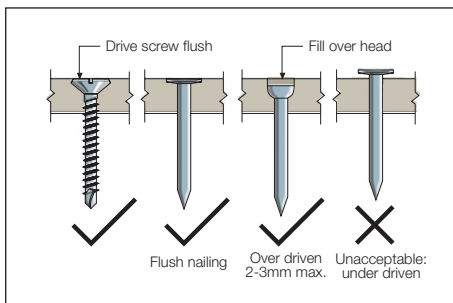
Pneumatically Driven Finishing Nails (Gas power not recommended)			
TRIM THICKNESS	TYPE	MIN. EDGE FIXING DISTANCE	NAILING CENTRES
19mm	50mm x 16 gauge brad (eg. C, ND or DA)	22mm	150mm
	Pre drill 2.8 x 50mm dia corrosion resistant bullet or flat head nails.		300mm
38mm	62mm x 16 gauge brad (eg. C, ND 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. Pre-drill 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 Scyon™ 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.

### FIXING TO STEEL

Wing Tip Screws			
THICKNESS	SCREW	MINIMUM 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 Scyon™ Axent™ Trim or cut Scyon™ Axent™ Trim ends.

### Flashings

Vapour permeable membranes (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 Scyon™ Axent™ Trim with Scyon™ Linea™ weatherboard, additional framing may be required, see Scyon™ Linea™ weatherboard installation instructions.
- You must ensure the product is of acceptable quality prior to installation, see Important Note 3.

Scyon™ 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 Scyon™ Axent™ Trim around windows see Figure 1.

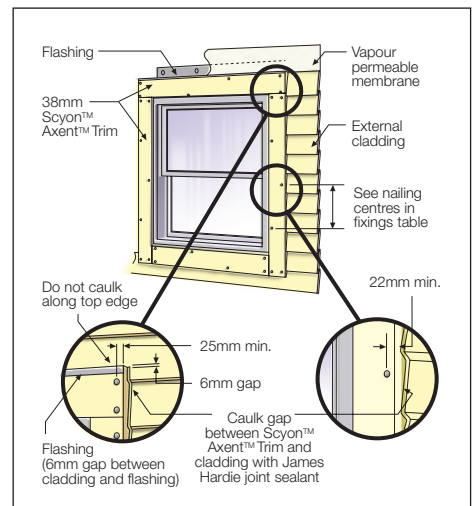


FIGURE 1 19MM AND 38MM SCYON™ AXENT™ TRIM FIXING AROUND WINDOW

### NOTE

Always ensure the thickness of the trim is adequate for your selected cladding.

## CORNERS AND EAVES

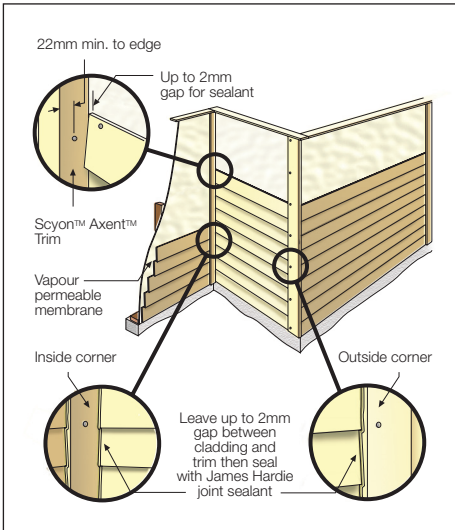


FIGURE 2 CORNER DETAIL

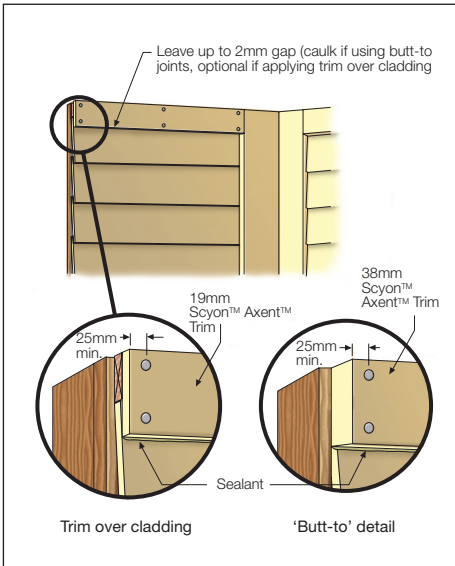


FIGURE 3 TOP OF WALL TRIM DETAILS

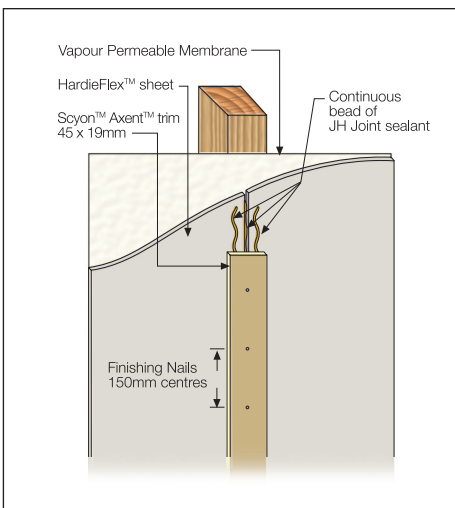


FIGURE 4 ABUTMENT HARDIEFLEX SHEET VERTICAL DETAIL

## FINISHES

### Preparation and priming

Scyon™ Axent™ Trim is pre-primed 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

Application and use of sealants must comply with manufacturer's instructions. Sealants, if coated, must be compatible with the paint system.

### Painting

Refer to the project specification for paint requirements. Scyon™ Axent™ Trim 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. 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 James 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

Scyon™ Axent™ Trim is a reengineered concrete formulation utilising patented technology. The basic composition is Portland cement, ground sand, cellulose fibre, water and proprietary products.

Scyon™ Axent™ Trim is manufactured to AS/NZS 2908.2 'Cellulose-Cement Products Part 2: Flat Sheets'.

For Material Safety Data Sheets (MSDS) visit [www.jameshardie.com.au](http://www.jameshardie.com.au) or Ask James Hardie™ on 13 1103.

## DURABILITY

### Resistance to moisture/rotting

Scyon™ 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

The Scyon™ Axent™ Trim is suitable where non-combustible materials are required in accordance with C1.12 of the Building Code of Australia.

James 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 250m<sup>2</sup>/kg, as referenced in Specification C1.10a of the BCA.

### Resistance to termite attack

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

### Alpine regions

In regions subject to freeze/thaw conditions, all James 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

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

## Scyon™ Axent™ Trim 10 YEAR WARRANTY

### January 2012

James Hardie Australia Pty Limited ("James Hardie") warrants to the first purchaser of Scyon™ Axent™ Trim (**Product**) from James Hardie and the last purchaser of the Product prior to installation that, subject to compliance with the Conditions of Warranty below:

- for a period of 10 years from the date of purchase, the Product will be free from defects due to defective factory workmanship or materials; and
- for a period of 10 years from the date of purchase, the Product will be resistant to damage from cracking, moisture, rotting, fire and termites to the extent set out in James Hardie's relevant published literature current at the time of installation; and
- for a period of 12 months from the date of purchase that the accessories supplied by James Hardie will be free from defects due to defective factory workmanship or materials.

For the purposes of this warranty, a "defect" in respect of the Product means a non-compliance with AS/NZS 2908.2:2000 Cellulose-cement products - Flat sheet.

### CONDITIONS OF WARRANTY

This warranty is strictly subject to the following conditions:

- (a) James Hardie will not be liable for breach of this warranty unless the claimant provides proof of purchase of the Product and makes a written claim to James Hardie at the address set out below, either within 30 days after the defect would have become reasonably apparent or, if the defect was reasonably apparent prior to installation, then the claim must be made prior to installation.
- (b) the Product is subject to natural variation in finish as part of the manufacturing process. The builder/installer must ensure the Product meets aesthetic requirements before installation. Subject to the terms of this warranty, after installation of the Product, James Hardie is not liable for claims arising from aesthetic surface variations if such variations were, or would upon reasonable inspection have been, apparent prior to installation;
- (c) this warranty cannot be relied upon by any other person and is not transferable;
- (d) the Product must be installed and maintained strictly in accordance with the relevant James Hardie literature current at the time of installation and must be installed in conjunction with the components or products specified in the literature. To obtain copies of such literature go to or contact Ask James Hardie™ on 13 11 03. Further, all other products, including coating and jointing systems, applied to or used in conjunction with the Product must be applied or installed and maintained strictly in accordance with the relevant manufacturer's instructions and good trade practice;
- (e) the project must be designed and constructed in strict compliance with all relevant provisions of the current Building Code of Australia, regulations and standards;

- (f) if the claimant chooses to rely upon this warranty then the claimant's sole remedy under this warranty for breach of this warranty is (at James Hardie's option) that James Hardie will either supply replacement Product, rectify the affected Product or pay for the cost of the replacement or rectification of the affected Product;
- (g) In the circumstances where the Australian Consumer Law does not apply in respect of the purchase of the Product, James Hardie will not be liable for any losses or damages (whether direct or indirect) including property damage or personal injury, consequential loss, economic loss or loss of profits, arising in contract or negligence or howsoever arising. Without limiting the foregoing, James Hardie will not be liable for any claims, damages or defects arising from or in any way attributable to poor workmanship, poor design or detailing, settlement or structural movement and/or movement of materials to which the Product is attached, incorrect design of the structure, acts of God including but not limited to earthquakes, cyclones, floods or other severe weather conditions or unusual climatic conditions, efflorescence or performance of paint/coatings applied to the Product, normal wear and tear, growth of mould, mildew, fungi, bacteria, or any organism on any Product surface or Product (whether on the exposed or unexposed surfaces);
- (h) In the circumstances where the Australian Consumer Law does not apply in respect of the purchase of the Product, all warranties, conditions, liabilities and obligations other than those specified in this warranty are excluded to the fullest extent allowed by law;
- (i) If meeting a claim under this warranty involves re-coating of Product, there may be slight colour differences between the original and replacement Product due to the effects of weathering and variations in materials over time and James Hardie is not liable for any such colour differences;
- (j) In the circumstances where the Australian Consumer Law does not apply in respect of the purchase of the Product and therefore to this warranty, all expenses incurred as a result of claiming under this warranty are to be borne by the claimant.
- (k) In the circumstances where the Australian Consumer Law does apply in respect of the purchase of the Product and therefore to this warranty, if James Hardie accepts or it is determined by James Hardie that the claimant has a valid claim under this warranty, James Hardie will bear the claimant's reasonable costs of claiming under this warranty. The claimant is responsible for all other costs of claiming under this warranty. All claims for such costs are to be notified to James Hardie at the address outlined below within 21 days from when the claimant first makes a claim under this warranty.

### DISCLAIMER

The recommendations in James Hardie's literature are based on good building practice but are not an exhaustive statement of all relevant information and are subject to conditions (d), (e), (g) and (h) above. Further, as the successful performance of the relevant

system depends on numerous factors outside the control of James Hardie (e.g. quality of workmanship and design), James Hardie shall not be liable for the recommendations in that literature and the performance of the relevant system, including its suitability for any purpose or ability to satisfy the relevant provisions of the Building Code of Australia, regulations and standards.

### IMPORTANT NOTE

If you acquire goods manufactured by James Hardie as a consumer according to the Australian Consumer Law, our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

Any rights a consumer may have under this warranty are in addition to other rights and remedies of a consumer under a law in relation to the goods to which this warranty relates. Nothing in this document shall exclude or modify any legal rights a customer may have under the Australian Consumer Law or otherwise which cannot be excluded or modified at law.

Contact details if you wish to make a claim under this warranty: For more information or to make a claim under this warranty please Ask James Hardie™ on 13 11 03, visit [www.jameshardie.com.au](http://www.jameshardie.com.au) or [www.accel.com.au](http://www.accel.com.au), email James Hardie via our website or write to James Hardie at:

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**Call 13 11 03**  
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**Australian  
Standard**