

scyon™

SECURA™

EXTERIOR  
FLOORING



PEACE OF MIND THE EASY WAY

# SECURA™ EXTERIOR FLOORING

## What is it?

An external structural flooring substrate for ceramic tile finishes over timber or lightweight steel floor joists. Simple and fast to install, Scyon™ Secura™ exterior flooring helps give you peace of mind against moisture damage to balconies.

## Where do you use it?

As an external substrate for tiled residential balconies and as an alternative to particleboard, plywood or compressed fibre cement.

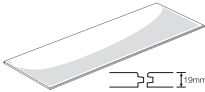
## WHAT ARE THE KEY BENEFITS?

**SECURITY.** Secura exterior flooring is sealed on all sides with an advanced polymer coating that helps protect the board from moisture-related problems. A topcoat on the surface of the board provides good adhesion. The mesh reinforcement on the underside enhances the heavy-duty performance of the Scyon™ material, adding extra strength and impact resistance to deliver a suitable external residential flooring substrate.

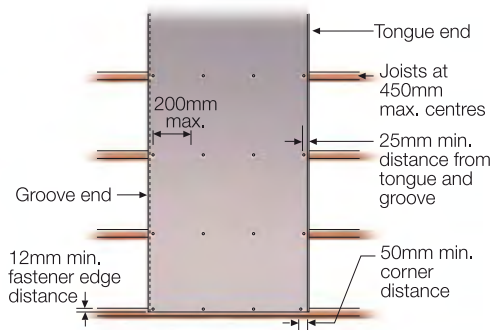
**EASY TO INSTALL.** At about 40kg and 2,700mm long by 600mm wide, Secura exterior flooring is about 20% lighter than compressed sheet (per square metre) and can be carried by two people, tucked under the arm and carried like a large surfboard. It's also tongue and grooved, which delivers engineered joints and eliminates the need for timber trimmers under these joints.

**SPEED.** For balconies that aren't over habitable rooms – verandas for example – no additional waterproofing membrane is needed once Secura exterior flooring is installed. For balconies over habitable rooms, a waterproofing system needs to be applied.


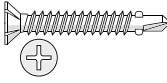
## Secura exterior flooring

Product	Description
	Size: 19 x 600 x 2,700mm Approx. mass: 40kg


## Secura exterior flooring fastener layout



## Accessories

Accessories	Description
	<b>James Hardie Joint Sealant</b> Polyurethane joint sealant for sealing of all sheet joints. PC: 300753
	<b>HardiBlade® Saw Blade</b> Ø185 poly diamond blade, for fast, clean cutting of Secura exterior flooring. PC: 300660
	<b>HardieDrive® Screw</b> For fastening to 0.75mm–1.6mm BMT steel frames. Class 3 finish. Length 40mm. PC: 300635

## COMPONENTS NOT SUPPLIED BY JAMES HARDIE

Accessories	Description
	<b>Nails</b> 50 x 2.8mm corrosion-resistant fibre cement nails. 50mm corrosion-resistant D Head gun nails.

**For more information about performance, installation, warranties and warnings: [www.scyon.com.au](http://www.scyon.com.au)**

Ask James Hardie™  
Call 13 11 03  
[www.jameshardie.com.au](http://www.jameshardie.com.au)

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# Installation instructions

**IMPORTANT NOTES**

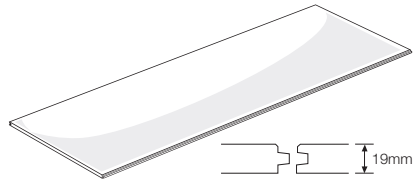
1. Scyon™ Secura™ Exterior Flooring is suitable for internal and external residential flooring applications. The maximum loading capacities are outlined in the loading section of this manual.
2. Failure to install, finish or maintain this product in accordance with applicable building codes, regulations, 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.
3. All warranties, conditions, liabilities (direct, indirect or consequential) and obligations whether arising in contract, tort, industry negligence 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 information and disclaimers about the information in this manual, see the section at the end of this manual.
4. The builder must ensure that the product meets aesthetic requirements before installation. James Hardie will not be responsible for rectifying aesthetic surface variations following installation.
5. Make sure your information is up to date. When specifying or installing James Hardie® products, ensure that 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:

- (1) work in outdoor areas with ample ventilation;
- (2) minimise dust when cutting by using either 'score and snap' knife, fibre cement shears or, where not feasible, use a HardiBlade® saw blade and dust-reducing circular saw attached to a HEPA vacuum;
- (3) warn others in the immediate area to avoid breathing dust;
- (4) 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.**



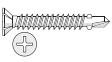
**SCYON™ SECURA™ EXTERIOR FLOORING**

PRODUCT	DESCRIPTION
	<b>Scyon™ Secura™ Exterior Flooring</b> Structural flooring product for internal and external residential flooring applications. Long edges have a tongue and groove feature for easy jointing. Size: 19 x 600 x 2700mm Approx. mass: 40kg per sheet Part No. 404050

**NOTES**



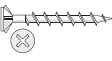



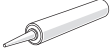





1. All dimensions and masses provided are approximate only and subject to manufacturing tolerances. Masses are based on equilibrium moisture content of product.

**PRODUCT / ACCESSORIES / TOOLS**
**COMPONENTS SUPPLIED BY JAMES HARDIE**

ACCESSORIES	DESCRIPTION	ACCESSORIES	DESCRIPTION
	<b>HardiBlade® saw blade</b> Ø 185mm poly diamond blade, for fast, clean cutting of Scyon™ Secura™ Exterior Flooring. Part No. 300660		<b>James Hardie joint sealant</b> Polyurethane joint sealant for sealing of all sheet joints and can be used to adhere sheets to framing. Part No. 300753
	<b>HardiDrive® screw</b> For fastening to 0.8mm to 1.6mm BMT steel frames. Class 3 finish. Length 40mm Part No. 300635		

**COMPONENTS NOT SUPPLIED BY JAMES HARDIE**

James Hardie recommends the following products for use in conjunction with its Scyon™ Secura™ Exterior Flooring. 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>Nails</b> ■ 2.8 x 50mm corrosion resistant fibre cement nails ■ 50mm corrosion resistant D Head gun nails		<b>Gun Nailer</b> Suitable pneumatic or coil gun nailer.
	<b>Screws</b> ■ № 8 x 40mm Corrosion resistant self embedding head for screwing to timber.		<b>Cordless Drill</b> Recommended tool for screw fixing the sheets to steel and timber framing.
	<b>QuikDrive Collated Screw</b> 42mm long Class 3 screw for fixing to 0.8 - 1.6mm BMT steel framing. Part No. CBSDG158SA		<b>Spatula</b> For spreading adhesive over all sheet joints and fasteners.
	<b>Construction Adhesive</b> Suitable construction adhesive for gluing sheets to floor frame.		<b>Vacuum Extraction with HEPA filter</b> Used with HEPA filter and paper bag for reduced dust exposure.
	<b>Dust-reducing Saw</b> Dust reducing saw with a HardiBlade® saw blade.		<b>Epoxy Primer</b> Use a suitable epoxy primer to seal all cut sheet edges and small damaged sheet areas that may have been damaged. eg Watty® Kill Rust Heavy Duty Primer or equivalent.
	<b>Foam Backing Rod</b> A 10mm diameter backing rod is to be fixed into all 5mm butt/movement joints.		<b>Site Applied Primer</b> A single coat of Ardex WPM 300, Parchem Emer-Proof WB Primer or equivalent is recommended over installed Secura exterior sheets in a water resistant deck. This is not considered a waterproof deck.

**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. Use a dust reducing circular saw equipped with HardiBlade® saw blade and HEPA vacuum extraction.

**SANDING/DRILLING/OTHER MACHINING**

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

**IMPORTANT NOTES**

1. NEVER use a power saw indoors.
2. NEVER use a circular saw blade that does not carry the HardiBlade® logo.
3. NEVER dry sweep - Use wet suppression or HEPA vacuum.
4. NEVER use grinders.
5. 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 sheets protected from damage.

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

Protective gloves must be worn while handling sheets.

## SCOPE

These Installation Instructions cover the use of Scyon™ Secura™ Exterior Flooring sheets in a tiled residential deck application. It does not contain all information relevant for constructing a deck and as indicated below appropriate experts must be consulted or additional information sought. For internal floor applications Ask James Hardie™ on 13 11 03.

Constructing a deck involves the installation of two components:

### COMPONENT 1: Installation of Sheets

Component 1 is the Scyon™ Secura™ Exterior Flooring sheet. This sheet is installed over timber or light gauge steel frames in a squared or staggered pattern.

### COMPONENT 2: Waterproofing and Tiling (Supplied by third party)

Component 2 is a third party supplied and warranted waterproofing and tiling system which is installed over the installed Scyon™ Secura™ Exterior Flooring.

To obtain the third party warranty, the entire waterproofing system must be installed from the same manufacturer. Refer to a reputable waterproofing manufacturer for system requirements and warranty conditions.

Note: Waterproofing information provided in this manual is only to be used as a guide. James Hardie are not waterproofing experts and therefore the specifier is responsible for carrying out the necessary design and detailing to ensure the correct waterproofing and finish are in accordance with waterproofing manufacturers standard recommendations and relevant codes and regulations.

All components must be fully compatible with one another. For information on suitable waterproofing and tiles including installation instructions and warranty, refer to a reputable waterproof, tile adhesive and tile manufacturer.

The two types of decks discussed in this manual are:

1. Water resistant decks, and
2. Waterproof decks:
  - a) Liquid applied membrane
  - b) Flexible sheet membrane and mortar bed

The following table outlines the main differences between a water resistant and waterproofed deck.

REQUIREMENT	WATERPROOF DECK	WATER RESISTANT DECK
Floor Waterproofing to meet AS4858*	✓	
External Floor over outdoor area	✓	✓
External Floor over habitable area	✓	

\* and Installed to manufacturer's specifications.

NOTE: Even if you do not require a waterproof deck, it is recommended that the deck be made as water resistant as possible (ie that water penetration be minimised) as it can lead to damage to the frame such as timber dry rot.

## DESIGN Compliance

All design and construction must comply with the appropriate requirements of the current Building Code of Australia (BCA) and other applicable regulations and standards current at the time of construction.

## Responsibility

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.

## Loading

Scyon™ Secura™ Exterior Flooring Sheets have been designed to satisfy and exceed the load requirements for domestic and residential activities (Category A) of Table 3.1 of AS/NZS 1170.1 - 'Structural design actions - Permanent, imposed and other actions.'

NOTE: The code specifies higher load requirements in areas subject to crowd loading, storage of materials and heavy wheel loads. For more information on these applications, Ask James Hardie™ on 13 11 03

## Fastener Durability

Fasteners must have the appropriate level of durability required for the intended project. This is of particular importance in coastal areas and 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.

James Hardie recommends a minimum Class 3 fastener for all decks. Do not use zinc plated fasteners. Contact fastener manufacturers for more information.

## FRAMING General

Scyon™ Secura™ Exterior Flooring may be fixed to timber or steel joists installed at 450mm max. centres.

Floor joists must be 45mm wide as a minimum to enable adequate jointing of sheets.

All sheet square edges which includes movement joints, must be continuously supported by framing.

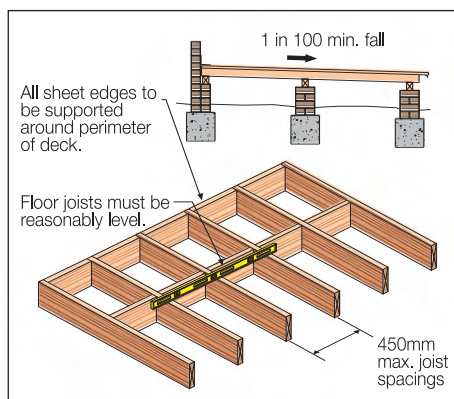


FIGURE 1 FRAME PREPARATION

## Step Down

There must be a step down (at least 50mm but preferably 150mm) from the door sill level to the finished surface of the deck to adequately weatherproof the entry door, particularly if it is subject to rain and wind. Refer to relevant building regulations and codes which may specify a larger step down.

## Fall

Decks must have a fall to facilitate drainage. Decks must have a fall of at least 1 in 100 away from the building. Floor joists must run in the direction of the fall.

Do not provide fall by packing sheets. The fall can be created by trimming or sloping the joints.

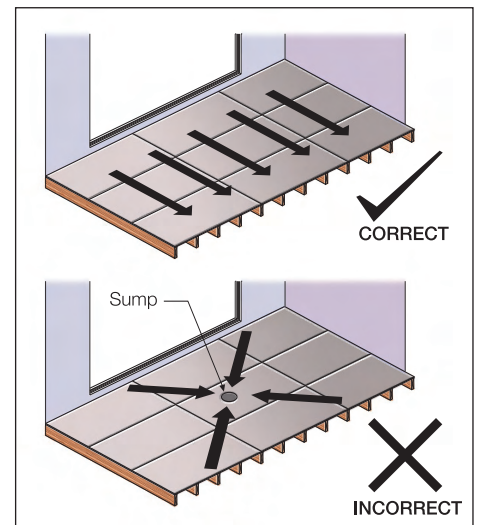


FIGURE 2 DRAINAGE

## Balustrade

The balustrade upright supports must be fixed to the structural frame and not the Scyon™ Secura™ Exterior Flooring.

The balustrade must not compromise the waterproofing and durability of the deck. Furthermore, the specifier is responsible for any water issues that could occur due to the penetration of the balustrade uprights including fixings, flashing, waterproofing and sheet support.

## Timber Framing

Use of timber framing must be in accordance with AS 1684 - 'Residential timber-framed construction', the building code of Australia and the framing manufacturer's specifications.

Use only seasoned timber. Unseasoned timber must not be used because it is prone to shrinkage and can cause sheets and frames to move.

'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 AS 1684.2.

To help reduce the potential for dry rot in timber framework, one of the following is recommended:

- a) Seasoned treated timber framing
- b) Suitable seasoned exterior durable hardwood.

NOTE: To help protect against moisture ingress and rot, always prime the end grain of timber members, together with surfaces which are permanently concealed and may be in contact with other building materials. Furthermore, adequate ventilation in the floorspace is recommended.

## Steel Framing

Use of steel framing must be in accordance with AS 3623 - 'Domestic metal framing' and the framing manufacturer's specifications. Framing members must be in the range 0.75mm to 1.9mm BMT (base metal thickness).

The steel framing must have the appropriate level of durability required to prevent corrosion.

## Tolerances

In order to achieve an acceptable finish, it is imperative that framing is straight and true. Framing tolerances must comply with the relevant codes and the manufacturer's specifications.

# COMPONENT 1: Installation of Secura exterior flooring sheets

## SHEET LAYOUT

Planning the layout of the sheets is essential before installing the sheets. The sheets must be laid squared or in a staggered pattern across the floor joists. All square sheet edges including movement joints, must be fully supported by framing.

Using the sheet layout selection table below, the specifier can select the recommended sheet layout based on the deck type and finished system:

SHEET LAYOUT SELECTION TABLE			
DECK TYPE	SHEET LAYOUT	FINISH	SHEET CONTROL JOINTS
Water Resistant	Squared	Tile Direct, see page 5	2.7m In direction of sheet only, see Figure 3.
Waterproofed	Squared	Method 1, see Figure 16	
Waterproofed	Staggered	Method 2, see Figure 20	4.1m In direction of sheet only, see Figure 5.

## Squared Sheet Layout

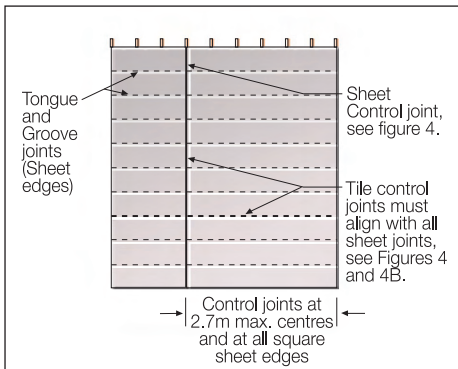


FIGURE 3 SQUARED SHEET LAYOUT

### NOTES ON FIGURE 3

- A floating mortar bed is not recommended with the squared sheet option.
- Tiled surface is broken up, by sheet control joints. All sheet control joints must carry up through the tiles, see Figure 4.
- Tile control joints must align with all sheet joints and sheet control joints to avoid tile cracking, see Figures 4 and 4B.

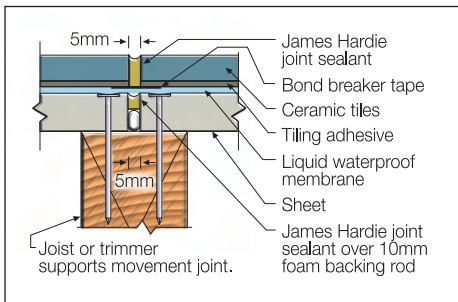


FIGURE 4 DIRECT TILE - TILE MOVEMENT JOINT OVER SHEET MOVEMENT JOINT

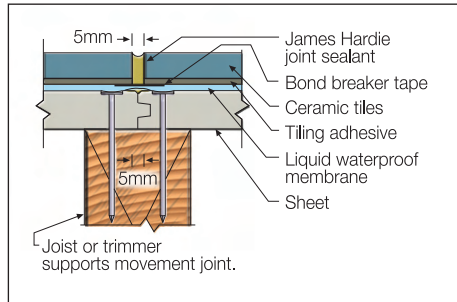


FIGURE 4B DIRECT TILE - TILE MOVEMENT JOINTS OVER TONGUE AND GROOVE JOINT

## Staggered Sheet Layout

All butt joints are installed in accordance with Figure 13.

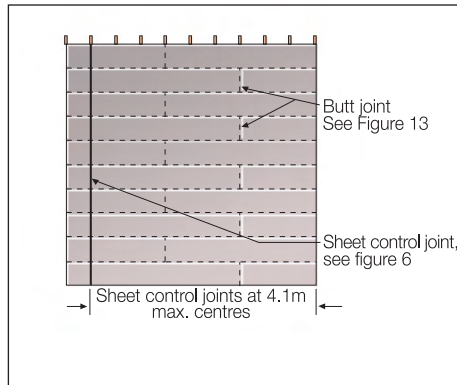


FIGURE 5 STAGGERED SHEET LAYOUT

### NOTES ON FIGURE 5

- Only suitable with the flexible sheet membrane and mortar bed deck option, Figure 20.
- Control joints in floating mortar bed and tiling at maximum 4.5 x 4.5m. Sheet edges and movement joints do not need to coincide with mortar bed control joints.

NOTE: Tiling direct to a staggered sheet layout without a floating mortar bed is not recommended. Not following this advice will lead to an increased risk of tile cracking and system performance issues.

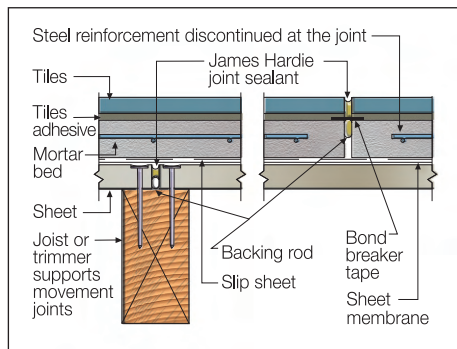


FIGURE 6 MORTAR BED - MOVEMENT DETAIL

## INSTALLATION STEPS

### NOTES:

1. The sheets are installed with the mesh facing down.
2. You must ensure that the product is of acceptable quality prior to installation.
3. The edges of all cut sheets must be sealed with two coats of Watty! Kill Rust Heavy Duty Primer or equivalent.

The following illustrations show how to install the Scyon™ Secura™ Exterior Flooring Sheets in a squared pattern. When installing the sheets in a staggered pattern the sheet offset must be taken into consideration.

- STEP 1:** Determine sheet layout and expansion joint placement, see sheet layout section.  
**STEP 2:** Cut desired sheets and seal cut and exposed sheet edges.

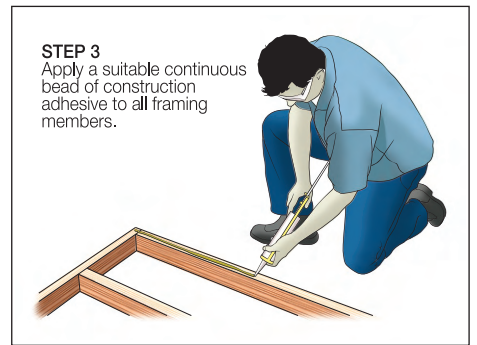


FIGURE 7 CONSTRUCTION ADHESIVE

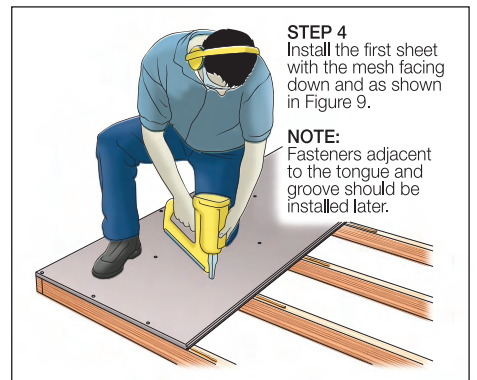


FIGURE 8 FIXING 1ST SHEET

## FASTENER SELECTION

PRODUCT	TIMBER JOISTS	STEEL JOISTS 0.75 - 1.6MM BMT	STEEL JOISTS 1.7 TO 1.9MM BMT
2.8 x 50mm FC nails	✓		
50mm D Head gun nails	✓		
No.8 x 40mm CSK self drilling screw	✓		
40mm HardiDrive screw		✓	
40mm QuikDrive screw		✓	
40mm CSK self drilling screw			✓*

NOTE: All fasteners must have a minimum Class 3 finish. \* Refer to manufacturer's specifications for suitability and correct installation including minimum and maximum steel joist thickness.

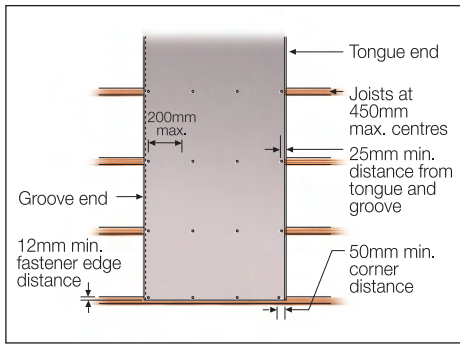


FIGURE 9 FASTENER LAYOUT

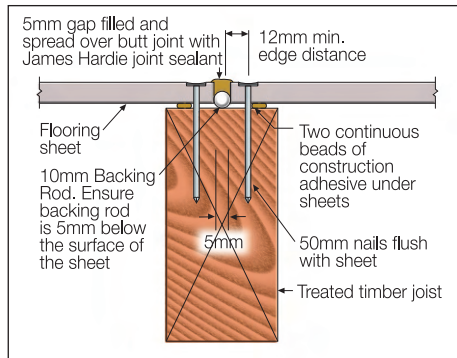


FIGURE 13 BUTT JOINT



**STEP 5**  
 Install second sheet, nail second sheet in place and fix fasteners into previous sheet adjacent to tongue and groove.

FIGURE 10 NAILING 2ND SHEET

**NOTES ON FIGURE 13**

1. All square edge joints must be fully supported.
2. When tiling direct to sheets, do not tile over butt joints, see Figure 4.

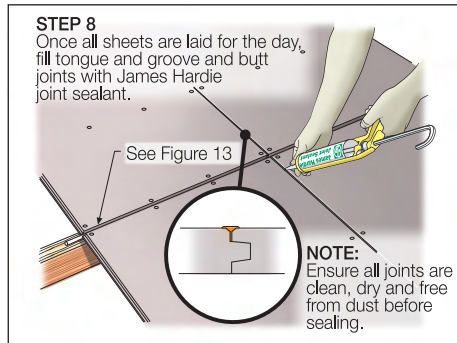


FIGURE 14 SEALING ALL JOINTS

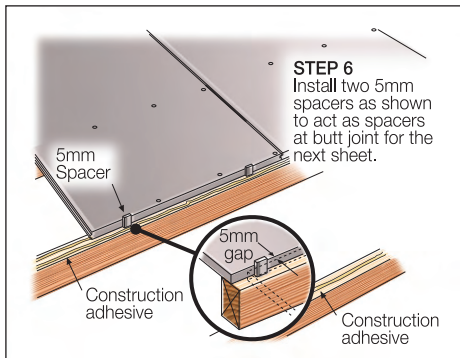


FIGURE 11 CREATING 5MM SHEET JOINT

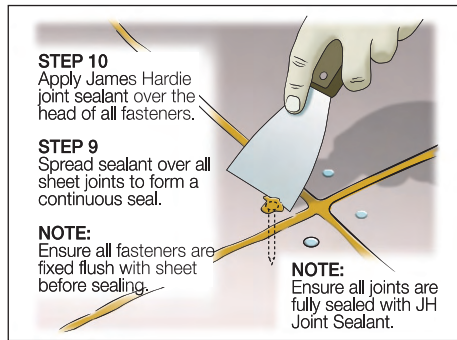


FIGURE 15 SEAL OVER FASTENERS AND JOINTS

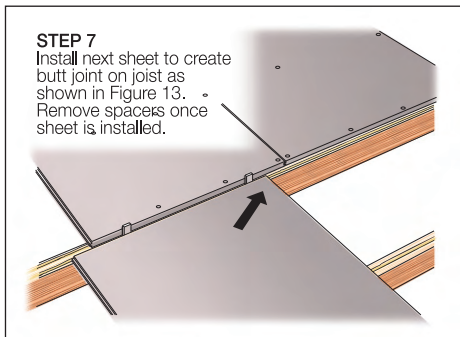


FIGURE 12 INSTALLING 3RD SHEET

NOTE: Avoid excessive foot traffic on the deck for at least 24 hours to allow sealant to set and dry out. Adverse weather conditions may increase this period to 48-72 hours. Protect the surface of the sheets from damage until final finish is applied.

# COMPONENT 2: Waterproofing and tiling (Supplied by third party)

Component 2 is a third party supplied and warranted waterproofing and tiling system which is installed over the installed Scyon™ Secura™ Exterior Flooring.

The two types of decks discussed in this section include:

1. A water resistant deck
2. Waterproofing decks:
  - a) **METHOD 1:** Liquid membrane method
  - b) **METHOD 2:** Flexible sheet membrane method

NOTE: This section DOES NOT contain all information relevant for waterproofing and is to be used as a guide only. It is the responsibility of the specifier to carry out the necessary design and detailing to ensure the waterproofing and finish satisfy all relevant codes, regulations and system waterproofing manufacturer recommendations.

## WATER RESISTANT DECKS

Even if you do not require a waterproof deck, it is recommended that the deck be made as water resistant as possible (i.e that water penetration be minimised) as it can lead to damage such as timber dry rot or building damage. This includes all sheet joints, junctions and fasteners. Refer to page 7 for information on suitable finishes.

During the installation of the Secura exterior flooring sheets, the factory applied sealer is subject to damage from tools, material and traffic. It is therefore recommended, that a single priming coat of Ardex WPM 300, Parchem Emer-Proof WB Primer or equivalent is applied with a roller over water resistant decks before tiles are installed.

The information contained in method 1 may be used as a guide for constructing water resistant decks.

## WATERPROOF DECKS System selection

To achieve a fully waterproof deck, sheets require a compatible and correctly installed waterproofing system on top of the deck. Refer to waterproofing membrane manufacturer and applicator for system performance and warranty information.

### METHOD 1:

This method relies on a liquid applied membrane installed on top of the sheets. Installation of the selected membrane system must be by a licensed/accredited applicator able to offer a waterproofing guarantee, see Figure 16.

## WATERPROOF DECK METHOD 1: LIQUID MEMBRANE (SUITABLE FOR SQUARED SHEET LAYOUT ONLY)

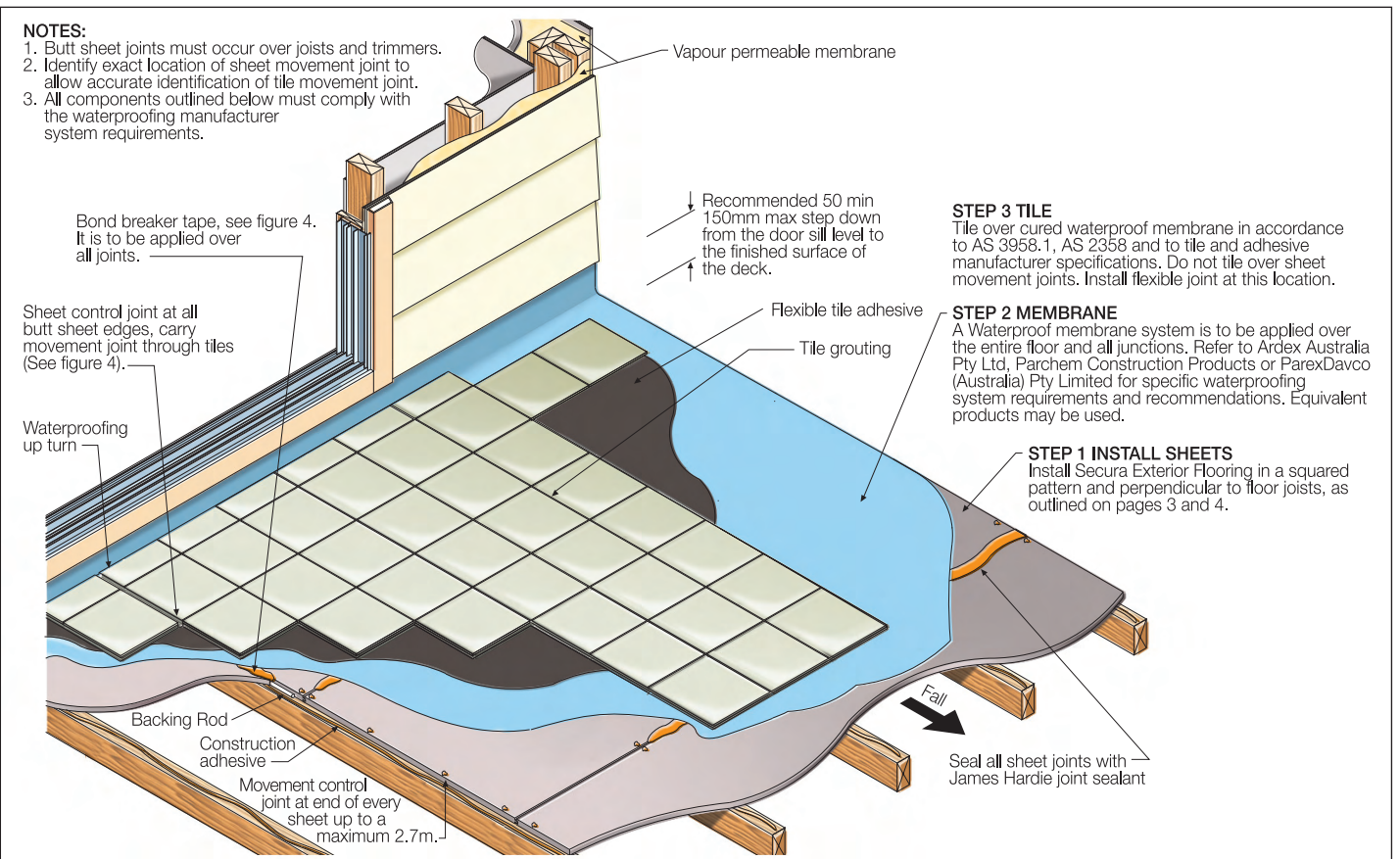


FIGURE 16 METHOD 1 - SYSTEM INSTALLATION

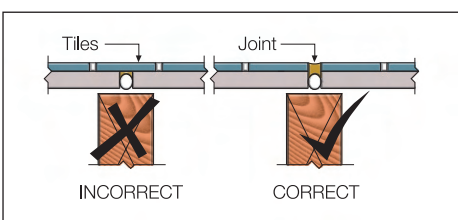


FIGURE 17 METHOD 1: MOVEMENT JOINTS DETAIL

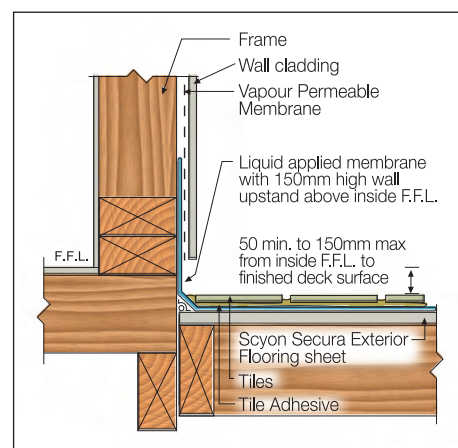


FIGURE 18 METHOD 1: WALL TO DECK FLASHING

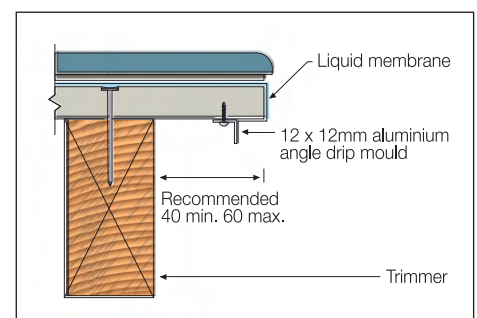
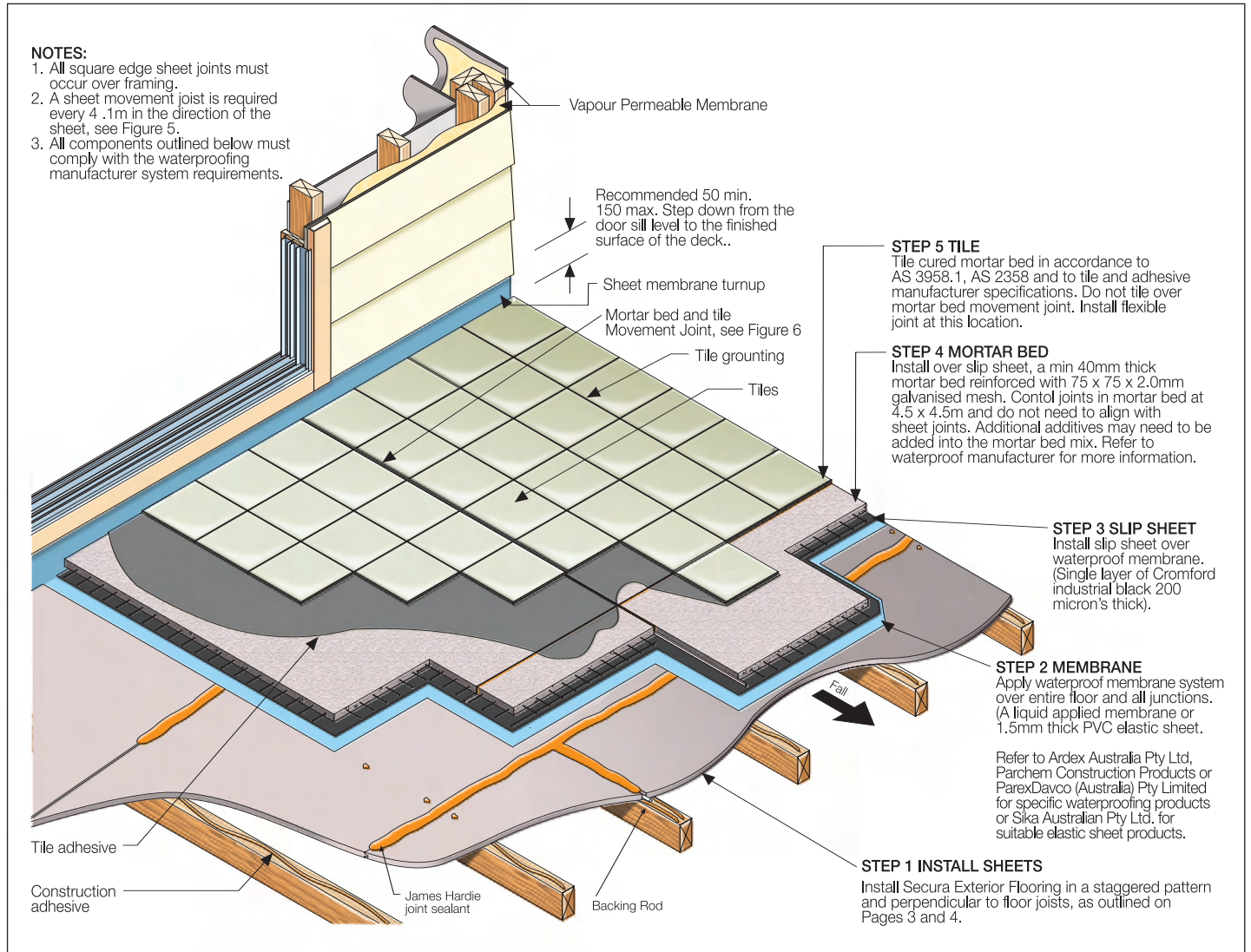


FIGURE 19 METHOD 1 DECK EDGE DETAIL USING DRIP ANGLE

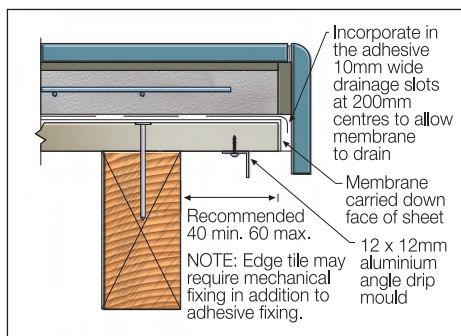
**METHOD 2:**

This waterproofed deck includes installing a membrane and slip sheet under a tiled mortar bed, see Figure 20.

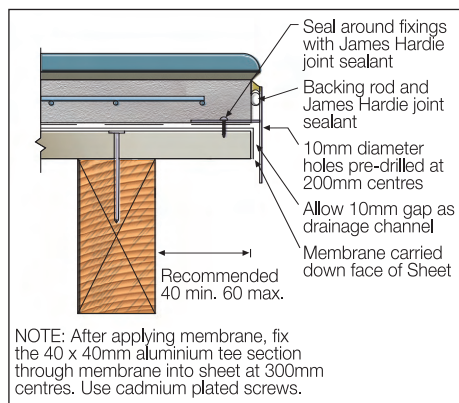
**WATERPROOF DECK METHOD 2: FLEXIBLE SHEET MEMBRANE AND FLOATING MORTAR BED (STAGGERED SHEET LAYOUT)**



**FIGURE 20 METHOD 2 - SYSTEM INSTALLATION**



**FIGURE 21 METHOD 2 - DECK EDGE DETAIL USING TILE**



**FIGURE 22 METHOD 2 - DECK EDGE DETAIL USING ALUMINIUM TEE SECTION**



## FINISHES

NOTE: Protect the surface of the external flooring sheets from damage until final finish is applied. Any damage to the surface coating must be repaired immediately to ensure that the deck maintains its integrity.

A drip edge must be installed on all Cantilevered sheet edges.

All cut and exposed sheet edges must be sealed with two coats of Wattyll Kill Rust.

A recommended finish must be applied to the sheets within 3 months of installing the sheets.

Any waterproof membrane must be appropriately treated at both the joints, the deck to wall junction and deck edge to maintain the integrity of the waterproofing system.

For water resistant decks, it is recommended that a single priming coat of Ardex WPM 300, Parchem Emer-Proof WB Primer or equivalent is applied with a roller over the installed sheets before tiles are installed. This priming coat is recommended because during the installation of the Secura exterior flooring sheets, the factory applied sealer is subject to damage from tools, material and traffic.

All waterproofing systems must be sufficiently flexible across sheet joints to accommodate differential thermal and moisture movement of all the covering materials. The waterproofing system must be installed by a licensed/accredited applicator who will provide a waterproofing guarantee.

At wall junctions and all doorway set downs, it is important to turn the membrane up the vertical face for the full height beyond the step down onto the deck.

All components of the deck must be fully compatible with one another.

For information on suitable waterproofing, tile adhesive and tiles including installation instructions and warranty, refer to a reputable waterproof, tile adhesive and tile manufacturer.

## Tiling

Tiles should be applied with proprietary adhesives that conform to Australian Standard AS 2358 and installed in accordance to AS3958.1 and to tile and adhesive manufacturer recommendations. Use a flexible tile adhesive recommended for exposed exterior applications and compatible with all other materials.

When tiling direct to sheets with no mortar bed, the 5mm butt joints between all adjacent sheets act as control joints. These control joints must be carried up through the tiled finish, see Figure 4.

When tiling to a mortar bed, the sheet control joints do not need to align with mortar bed and tile control joints, see Figure 6.

It is recommended that tiles are laid from the control joint out. This will ensure that the cut tiles are located around the perimeter of the decking.

Ensure the tile adhesive used is suitable and compatible with adjoining surfaces for the intended application.

Refer to the waterproofing and tile manufacture and relevant tiling codes for maximum tile control joint spacing, product suitability and compatibility including grout, tile adhesive, tile and waterproofing warranty and maintenance requirement.

## Maintenance

Regular cleaning and maintenance of the finished surface, joints, junctions, seats, penetrations etc must be carried out at regular intervals. The finished surface must be kept free of organic matter.

Remove any solvent spills immediately with absorbent material.

Ensure adequate protection is provided to all exposed waterproofed areas.

NOTE: Any damage to the surface or waterproofing must be repaired immediately to ensure that the system maintains its integrity.

## ADDITIONAL INFORMATION

The above brief notes do not cover all aspects of deck construction and tiling. Further advice should be sought from specialists in that area. The following publications are also recommended:

- CSIRO Notes of Science of Building NSB124.
- Australian Standard AS 3958.1 'Part 1 Guide to the Installation of Ceramic Tiles'.
- Australian Standard AS 2358 'Adhesives - For Fixing Ceramic Tiles'.
- AS 4992.1-2006 Ceramic tiles -Grouts and adhesive.
- BRANZ - 'Good Tiling Practice.'
- BRANZ - 'Waterproofing Decks' - Bulletin 472

## PRODUCT INFORMATION

### General

Scyon™ Secura™ Exterior Flooring is an advanced cement composite. The basic composition is Portland cement, ground sand, cellulose fibre, water and proprietary additives. Scyon™ Secura™ Exterior Flooring is manufactured to ISO 8336 "Fibre cement flat sheets" and is classified Type A, Category 2 in accordance with this standard.

For Material Safety Data Sheets (MSDS) visit [www.jameshardie.com.au](http://www.jameshardie.com.au) or Ask James Hardie™ on 13 11 03.

### Product mass

Based on equilibrium moisture content the approximate mass of Scyon™ Secura™ Exterior Flooring is 24.5kg/m<sup>2</sup>.

### Durability

#### Resistance to moisture/rotting

Scyon™ Secura™ Exterior Flooring has demonstrated resistance to permanent moisture induced deterioration (rotting) by passing the following tests in accordance with AS/NZS2908.2:

- 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 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.

#### Resistance to fire

The uncoated and bare Scyon™ Secura™ Exterior Flooring is suitable where non-combustible materials are required in accordance with C1.12 and part 3.7.1.2 of the Building Code of Australia.

Uncoated and bare Scyon™ Secura™ Exterior Flooring has the following early fire hazard indices (tested to AS 1530 Part 3).

EARLY FIRE HAZARD INDICES	
Ignition index	0
Flame spread index	0
Heat evolved index	0
Smoke developed index	0 - 1

NOTES: Zero is the best possible result. The range is 0 - 10, except Ignition Index which is 0 - 20.

## WARRANTY

James Hardie Australia Pty Limited ("James Hardie") warrants to the first purchaser of the Product and the last purchaser prior to the installation of the Product for a period of 10 years from the date of purchase that Scyon™ Secura™ Exterior Flooring (the "Product") will be free from defects due to defective factory workmanship or materials and, subject to compliance with the conditions below, will be resistant to cracking, rotting, fire and damage from termite attacks to the extent set out in James Hardie's relevant published literature current at the time of installation. James Hardie warrants 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.

Nothing in this document shall exclude or modify any legal rights a customer may have under the Trade Practices Act or otherwise which cannot be excluded or modified at law.

### Conditions of Warranty

The warranty is strictly subject to the following conditions:

- (a) James Hardie will not be liable for breach of warranty unless the claimant provides proof of purchase and makes a written claim 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) this warranty is not transferable;
- (c) 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 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;

- (d) the project must be designed and constructed in strict compliance with all relevant provisions of the current Building Code of Australia, regulations and standards;
- (e) the claimant's sole remedy for breach of 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;
- (f) 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);
- (g) all warranties, conditions, liabilities and obligations other than those specified in this warranty are excluded to the fullest extent allowed by law;
- (h) if meeting a claim under this warranty involves re-coating of Products, there may be slight colour differences between the original and replacement Products due to the effects of weathering and variations in materials over time.

## 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 (c), (d), (f) and (g) above. Further, as the successful performance of the relevant system depends on numerous factors outside the control of James Hardie (eg 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.

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

**Ask James Hardie™**  
**Call 13 11 03**  
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