



HardiePlank® Cladding

Installation manual

1. Overview	2
2. Storage & Handling	2
3. Materials	3
4. Ancillary products	4
5. Construction	5
6. Installation HardiePlank® cladding	6
7. Clearances	8
8. Fabrication	8
9. Wall penetrations	9
10. Load bearing	9
11. Cleaning of facades	9
Silica warning	9

1. OVERVIEW

HardiePlank® Cladding is a nominally 8 mm thick plank intended as external or internal cladding for residential and commercial buildings both new build and renovation. **HardieTrim®** NT3™ cladding profiles are 25 mm thick and available in 2 widths and are used to finish corners, door frames and window frames. These profiles are used in connection with façades clad with **HardiePlank®** cladding.

2. STORAGE AND HANDLING

Store flat and keep dry prior to installation. Keep away from weather influences. Products stored outside should be covered with a waterproof covering in addition to the product wrapper to avoid contact with water and dust.

Wet products must not be installed. Installing wet cladding will result in shrinkage at butt joints. James Hardie is not responsible for damage caused by improper storage and handling of the product. Carry planks on edge.



3. MATERIALS

3.1 COMPOSITION

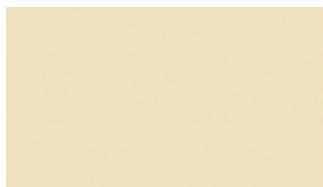
HardiePlank® cladding and HardieTrim® cladding profiles are made of Portland cement, milled sand, cellulose fibres, water and selected additives.

3.1.1 Textures

HardiePlank® cladding is available in 2 different textures:



Cedar



Smooth

3.2 CHARACTERISTICS

	HardiePlank® Siding	HardieTrim® Siding
Thickness	8 mm	25 mm
Length	3600 mm	3655 mm
Width	180 mm	90 mm, 140 mm
Weight	11.2 kg/m ²	21.9 kg/m ²

3.3. QUALITY AND CERTIFICATIONS

HardiePlank® and HardieTrim® cladding have been assessed by the British board of Agrément and have been awarded BBA certificate number: No 04/4147. HardiePlank® cladding conforms to Type A category 2 of the EN 12467. James Hardie® HardieTrim® cladding profiles conform to Type A category 1 of the EN 12467. Both HardiePlank® and HardieTrim® cladding are classified noncombustible : A2, s1-d0 according to EN13501-1.

3.3.1. Laminate film

HardiePlank® cladding and HardieTrim® cladding profiles are equipped with a PE film for protection of the surface during transportation, cutting and installation. PE is an environmentally friendly polymer, which can be recycled or disposed of by deposition or burning.

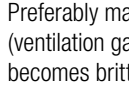
Finishing : If cut to size the edges must be sealed with the ColorPlus® touch-up paint.

3.4. FRAMING

HardiePlank® Cladding can be installed on a variety of timber and metal sub-frames, sometimes referred to as rainscreen cladding.

Note: Cladding with HardiePlank® cladding must always be carried out as a ventilated façade with min 20 mm distance between the cladding and the rear lining (insulation material). However, in special situations (e.g. high rise buildings) local regulations may demand a larger ventilation gap. Inlet and outlet openings must have a cross section of at least 100 cm²/m.

4. ANCILLARY PRODUCTS

Accessories / tools supplied by James Hardie		Accessories/ tools not supplied by James Hardie	
	EPDM tape To cover the vertical joints between planks and between planks and trims/windows/doors. Lengths of 20 m, in 60, 80, 100 and 120mm wide.		Waterproof membrane The installation of a breather membrane acting as vapour-permeable water-barrier will be necessary for timber frame buildings or block walls where the wall is not considered waterproof. This barrier must meet the requirements of BS EN 13859:2005.
	HardieTrim® NT3™ cladding profiles In fibre cement (ECC). For corners, windows, doors, etc. Length 3655 mm. Width 90 or 140 mm. Cut to size with HardieBlade® saw blade.		Battens General : 50 x 25 mm (to allow for a ventilation gap of min. 20 mm) Blockwork : 50 x 50 mm (to accommodate for the siding fixing nail) Counterbatten: Dimension ≥ 50 mm x 25 mm (for vertical installation of HardiePlank® siding)
	MetalTrim profiles For internal and external corners. Length 3000 mm.		Ventilation grille Preferably made of stainless steel or aluminium mesh of 25 mm deep (ventilation gap). Note : hard plastic mesh is not recommended, as it becomes brittle over time and may fail.
	Starting profile (with ventilation) For easier and faster installation of HardiePlank® . It ensures the correct level of inlet ventilation. Available in 2 sizes to suit 25mm and 50mm battens	Fixings HardiePlank® cladding The siding does not require pre-drilling and can simply be nailed or screwed to the battens. Fixings must have suitable corrosion protection for the intended application. Where additional consideration must be made, check with your engineer. Nails : ring shank nails of at least 50 mm x 2.8 mm and diameter head of 6.5 mm. These nails should be manufactured according to EN10230-12000. Where 50 x 25 mm battens are installed on blockwork, ring shank nails of 2.65 x 30 mm, ø 8 mm can be used with hand nailing.	
	ColorPlus® Touch-up paint To touch-up cut edges and small damages. Cans of 1 litre.		
	HardieGuillotine™ cutting tool	Screws : Screws must be a minimum of 35mm long, 4mm diameter shank, with 8mm diameter self-embedding head.	
	HardieBlade® diamond tipped saw blade Diametres 160 mm, 190, 254 or 310 mm.	Fixings HardieTrim® NT3™ cladding profiles Second fix brad nail 50mm x 16g. The nails need to penetrate the battens by at least 20 mm.	
		Jig saw For façade details. Tungsten Carbide tipped for producing curves or cut-outs.	
		Saw equipped with HardieBlade® saw blade and HEPA extraction. To cut HardiePlank® and HardieTrim® cladding to size.	

5. CONSTRUCTION

James Hardie does not specify the fastening requirements for the framing to the building and will not take the liability of such structural elements. The attachment of the framing should be incorporated into the overall building design and should be approved by the responsible parties.

5.1 STRUCTURE

The structural wall to which **HardiePlank®** cladding is to be fixed must be of sufficient strength and stiffness to satisfy the requirements of the local building regulations in its own right under the designed dead and live loads. The wall may be of masonry or framed construction.

5.2 WATERPROOF MEMBRANE

Fix a waterproof membrane, if needed, to the outer face of the structural wall, laid along the wall, with an overlap between the layers of membrane of at least 150 mm. Ensure the waterproof membrane is lapped to drain any water to the outside of the building. James Hardie will assume no responsibility for water infiltration.

5.3 FRAMING

Batten centres are typically 600mm reducing to 500mm or 400mm at the boundary areas of the building up to building height of 4 storeys. Seek advice from a professional engineer regarding batten centres as these correspond to the wind load calculated for the contract.

The timber thickness should not be less than 25 mm thick. When fixing over a masonry wall a thicker batten is required to accommodate the 50 mm minimum length of the siding fixing nail.

The wall battens should be level! Irregularities in framing and sheathing can mirror through the finished application. Counterbattens: When there is a requirement for external insulation the main batten must be installed on a counterbatten to maintain the air flow/ventilation behind **HardiePlank®** cladding. The counterbatten dimension should be $\geq 50 \text{ mm} \times 25 \text{ mm}$, fixed at $\leq 600 \text{ mm}$ to the main batten. The fixing centres of the counter batten to the wall are dependent on the wall unevenness. Distance between primary anchors $\leq 800 \text{ mm}$.

5.4. EPDM GASKET

The EPDM gasket replaces the mastic seals in all areas where the planks abut each other or **HardieTrim® NT3™**. It provides additional weather protection to the battens to prevent them rotting prematurely. Install by stapling to the top of the batten, then allow the gasket roll to drop, take out any slack and place staples at regular intervals down its length. Trim to size.

Note: Do not stretch the EPDM gasket as this could lead to it pulling over the staple fixings.

5.5. HARDIECLIP™ FOR HARDIEPLANK®

This is a reinforcing clip for nail fixing of **HardiePlank®**. Ensures correct positioning of nail & the use of 600mm fixing centres in high wind pressure zones. Place the clip over the top of the **HardiePlank®** with the short leg facing outward on the centre of the batten and apply a nail through though the centre pre punched hole. At joints place the clip centrally over two boards and fix using the two outside nail holes. (see fixing details: framing onto masonry wall)

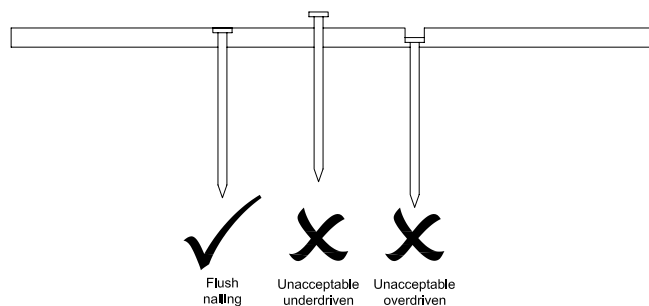
6. INSTALLATION HARDIEPLANK® CLADDING

Do not install James Hardie® products, such that they may remain in contact with standing water.

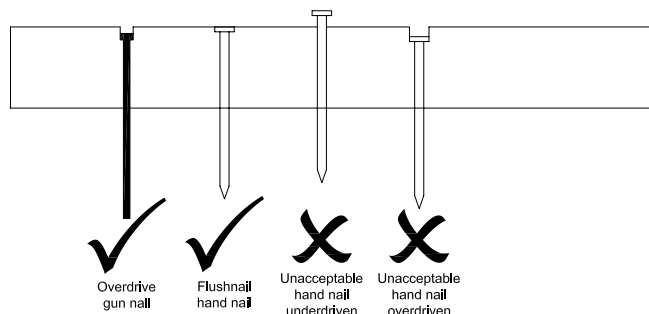
6.1 GUN NAILING

Predrilling is not necessary; **HardiePlank®** and **HardieTrim®** cladding can easily be gun nailed. In this case we advise to check the pressure of the gun. If it is incorrect, the product can be damaged.

For gun nailing **HardiePlank®** cladding needs to be flush installed.



HardieTrim® NT3™ cladding profiles need to be flush nailed or overdriven (by 1 mm) so the nail heads can be touched-up.



6.2 INSTALLATION PRINCIPLES

A ventilation gap of a minimum of 20 mm should be provided between the cladding layer and substrate. Suitable care should be taken to prevent insects and pests entering through the ventilation gap – install the James Hardie combined starter and ventilation profile at the base of the cladding or other suitable ventilation grille, corrosion resistant wire mesh or similar, at the base, the top and above and below window frames.

6.3 HORIZONTAL INSTALLATION

6.3.1 Starter strip

The easiest way to ensure the correct detailing for the first plank is by installing the James Hardie combined starter and ventilation profile. Select the size most suitable for your batten depth. Sizes available to suit 25mm and 50mm battens. An alternative could be to cut a 30 mm wide starter strip from a sheet of **HardiePlank®** siding to kick out the first **HardiePlank®** siding to match the lap of the wall. Nail this along the front face of the battens so the lower edge of the starter strip lies along the line made by the bottom of the vertical battens. This provides the lap spacing for the first row of plank. The omission of this strip will result the “kick-out” on the wall appearing inconsistent in the second, third and fourth courses.

6.3.2. Fitting the first layer of **HardiePlank®** siding

Mark a line 170 mm up from the lower edge of the starter strip. Ensure that this line is level. This will be the top of the first row of **HardiePlank®** siding. This spacing gives a 10 mm drip edge at the lower edge of the siding. Fix the siding to the vertical timber battens with one nail or screw on every batten. The centre line of the nail or screw should be 20-25mm below the top edge of the siding. When fixing the ends of the siding ensure the fixing is placed at 15 mm from the end.

6.3.3. Second and subsequent rows of plank

The second row of **HardiePlank®** siding is placed so that the lower edge of the second plank overlaps the top of the first plank by 30 mm. It is important to carefully maintain this dimension throughout the construction of the wall. Each end of **HardiePlank®** siding should coincide with a batten centre. Measure 150mm up from the top edge of the plank and draw a line on the battens, this gives the position for the top edge of the next plank. Repeat once each row of planks is installed. It is advisable to check with a spirit level every 4 or 5 rows to ensure the planks level is maintained. A siding gauge set to 150mm will help speed up the installation.

6.3.4. Plank joints

Cut the siding plank neatly so that it finishes at the centre line of the timber batten. Stagger the butt joints in an area of wall over two or more batten lines, i.e. **avoid joints located directly in the same vertical line**. The siding planks are butted in moderate contact to form the joint. Put an EPDM gasket underneath each joint. James Hardie believes it is good building practice to have 1 mm joints around windows, doors and trim edges to allow for a degree of building movement and product tolerance. It also provides a natural vertical drain for rainwater.

6.4 VERTICAL INSTALLATION

HardiePlank® cladding can also be installed vertically. To facilitate vertical installation, counterbattens should be installed horizontally over the vertical frame to support the vertical **HardiePlank®** cladding. **HardiePlank®** cladding is installed at 120 mm centres, such that these planks can be covered by a

second layer of **HardiePlank®** cladding which covers the first layer by 30 mm at both sides. Use ring shank nails for the first layer of planks, starting at 15 mm from the top of the batten. Use the same nails, but stainless steel, for the second layer, and start at 35 mm from the top of the batten so nails will not coincide. Nails should be 15mm in from each vertical edge as this position places the fixing in the middle of the overlapped area.

6.5 CORNER DETAILS

The wall battens should be fitted so that they overlap at the corner forming a solid corner to which to fix **HardiePlank®** cladding and the corner profiles: **HardieTrim® NT3™** fibre cement profiles or **MetalTrim** profiles.

6.5.1. Installation of **HardieTrim® NT3™** cladding profiles

The corners can be formed in two ways depending on the style desired:

HardiePlank® cladding can be run right to the corner and have **HardieTrim®** cladding placed over **HardiePlank®** cladding, or **HardieTrim®** cladding can be fixed to the corner battens directly and **HardiePlank®** cladding butted up to the edge of **HardieTrim®** cladding. Allow approx. 1 mm between the end of **HardiePlank®** cladding and **HardieTrim® NT3™** siding profiles for movement and water drainage.

HardieTrim® NT3™ cladding profiles can be butt joined or mitre cut at the corner.

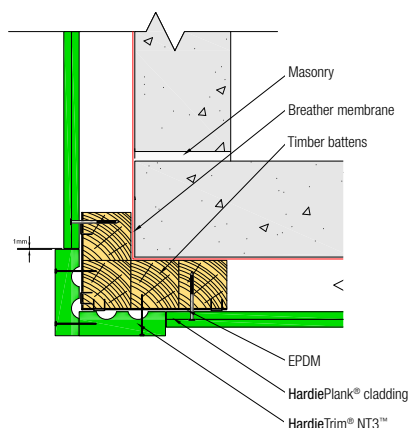
Make sure to leave the protective film on the profiles during installation. This will allow you to apply touch-up paint to the nail head. The protective film can be removed immediately after application or left on until other trades have completed their work. It may be prudent to leave the film on as long as is practical as it affords a degree of protection to the **HardieTrim® NT3™** profiles.

Fix the profiles each 400 mm down the length 25mm in at the ends and 12mm in down the long edges

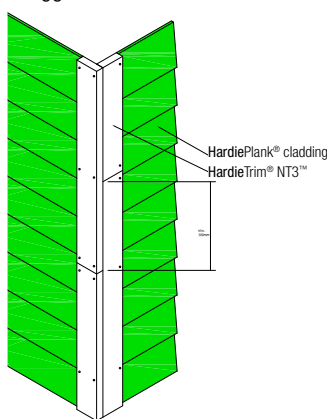
6.5.1.1. Pre assembling **HardieTrim®** corner profiles

HardieTrim® corners should be preassembled on the ground and fitted as a preassembled corner to the wall. This will allow an easier and more level installation than piece by piece installation. Find a flat, dry, clean area. Support **HardieTrim®** cladding pieces as a leveled corner. Fix through corners at 400 centre nail spacing and 12 mm from the edge. Fix with second fix brad nail 50mm x 16g. Where the cladding height is greater than the length of **HardieTrim® NT3™** (3.65m) it will be necessary to butt joint corner trims. This should be done by offsetting the ends of **HardieTrim® NT3™** by 300mm to provide a staggered horizontal interlock and not a straight butt joint. Not only is the detail stronger, but it also is aesthetically more pleasing. See also figure below.

Preformed Corner Installation



Staggered Installation



6.5.2. Installation of **MetalTrim** corner profiles

*Note: **MetalTrim** corner profiles are to be installed vertically only.*

Cutting **MetalTrim**

1. Cut the metal trim with a suitable saw or shears.
2. Ensure that the cuts are clean and straight.
3. Ensure that the trim is not damaged during the cutting operation.

Installation

Fix the trim with stainless steel nails. Ensure that you do not overdrive or underdrive nails.

When joining pieces of trim together ensure that the trim is correctly aligned prior to fixing. Where exposure of the metal trim to sun is extreme pay attention to thermal expansion. When fixing the trim, fix the trim at the top first, then the base then fix at remaining locations. Maximum spacing of fixings is 1.5 m. It is imperative that the plastic protection is removed immediately after installation otherwise it will be come trapped behind the **HardiePlank®** and be difficult to remove

7 CLEARANCES

Install HardiePlank® cladding in compliance with local building regulations requirements for clearance between the bottom edge of the cladding and the adjacent finished grade. This is typically 150mm. Maintain a minimum 50mm clearance between HardiePlank® cladding and roofs, paths, steps and driveways.

8 FABRICATION

8.1 SECURITY

As for all other building materials safety precautions must be taken into account. Cutting and drilling are subject to dust development, and proper precautions must be taken. Dust from fibre cement boards is characterized as mineral dust and EU-approved respirators can be used in conjunction with following cutting practices to further reduce dust exposures.

① Cutting instructions

Cutting should always be done outdoors

1. Position cutting station so that wind will blow dust away from user and others in working area
2. Use one of the following methods based on the required cutting rate:

Preferred Cutting Method

- Dust reducing circular saw equipped with a HardieBlade® saw blade and HEPA vacuum extraction

Acceptable Cutting Method

- Dust reducing circular saw with a HardieBlade® saw blade (only use for low to moderate cutting)

Minimum Cutting Method (for low to moderate cutting only)

- Hand Saw with hardened teeth
- NEVER use a power saw indoors
- NEVER use a circular saw blade that does not carry the HardieBlade® saw blade trademark
- ALWAYS follow tool manufacturer's safety recommendations
- NEVER use a grinder or continuous rim diamond blade for cutting as they produce too much dust.

When cleaning up dust and debris, NEVER dry sweep as it may excite silica dust particles into the user's breathing area. Instead, damp debris down with a fine mist to suppress dust during sweeping, or use a HEPA vacuum to collect particles.

Sanding/Rebating/Drilling/Other Machining

If sanding, rebating, drilling, or other machining is necessary, you should always wear a dust respirator in compliance with local requirements (e.g. EN 149, FFP2/3) and warn others in the immediate area.

Important Note: For maximum protection (lowest respirable dust production), James Hardie recommends always using "Preferred"- level cutting methods where feasible.

Important Note: HSE approved respirators can be used in conjunction with above cutting practices to further reduce dust exposures. 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.

For further information, refer to our Material Safety Data Sheet available at www.jameshardie.co.uk.

8.2. CUT TO SIZE

Trimming the products on site: use normal slow or fast running hand tools or stationary equipment equipped with a diamond tipped HardieBlade® saw blade. For HardiePlank® cladding we advice to use a HardieGuillotine™ hand tool.

8.3. FINISHES

HardiePlank® cladding and HardieTrim® cladding profiles come in a variety of colours. Handle the product with care during installation and make sure it is not damaged. After trimming the edges must be sealed with Touch-up paint prior to installation with a small artist brush. Wipe off any excess from the front face immediately.

The ColorPlus® touch up paint may also be used to deal with small scratches and marks less than 6mm. The paint should be used sparingly and restricted to the area of damage otherwise it may become visible. If the damage is still visible the plank should be replaced. (see 11.3)

9 WALL PENETRATIONS

When a penetration in the wall is required for a pipe or tap for example, form a hole in the plank using a carbide tipped hole saw. Make the hole approx. 6 mm larger than the diameter of the pipe. Seal between the fitting and the edge of the hole with an exterior quality sealant (like Ceresit Flextec FT101). If the space between the fitting and the hole is too wide, use a polyethylene foam-backing rod to fill the major part of the gap. The remaining gap should be filled with sealant.

10 LOAD BEARING

HardiePlank® cladding and HardieTrim® cladding profiles are not intended as a load bearing or shear element in the wall construction. Items required to be attached to the wall should be supported directly by connections to the structural sheathing and/or framing members, not attached to the siding or trim as the primary load-bearing elements.

11 CLEANING OF FACADES

11.1 ANNUAL INSPECTION

Under normal atmospheric conditions HardiePlank® cladding does not require much maintenance to maintain its strength, properties and function. Environmental impacts may, however, influence the visual appearance of the façade cladding.

Therefore, an annual inspection of the ventilation gaps, joints and fixings is a good idea. Detection and repair of possible damages ensure a longer life for the façade cladding.

11.2 IMPACT FROM NATURE

The weather and nearby green plants may affect the appearance of the façade cladding. Pollution, dirt, leaves from trees, bushes and flowers will have an impact on the façades appearance. HardiePlank® cladding is manufactured from weather resistant raw materials and will not be attacked by algae, rot and dry rot.

11.3 REPAIRING HARDIEPLANK® SIDING

HardiePlank® cladding should be replaced by removing the damaged board, gently lifting the board immediately above and inserting the new board. The board is then fixed by face nailing through the top board.

11.4 CLEANING

HardiePlank® cladding can be cleaned with cold or lukewarm water, if necessary with the addition of a mild household-cleaning agent not containing solvents. Always start from the top with well-defined areas. Rinse with plenty of clean water until the façade is perfectly clean.

Before cleaning full scale, it is recommended to test the chosen cleaning method on a smaller area to make sure it is likely to be successful.

11.5 HIGH PRESSURE CLEANING

NOTE: High Pressure Cleaning is a rough treatment of fibre cement cladding. Exaggerated or wrong use of a high pressure cleaner may damage the surface. Therefore, do not use High Pressure Cleaning.

WARNING-AVOID BREATHING SILICA DUST

James Hardie® products contain crystalline silica. This mineral is found everywhere in the world – often in the form of sand - and, therefore, commonly used in many construction products (for example brick, concrete, glass wool and abrasives). The mineral itself is inert, but certain building practices such as drilling, high speed cutting and abrading can release fine particulate dust which may constitute a health hazard.

Excessive or protracted inhalation of fine particle silica dust can lead to a lung disease called silicosis.

There is also some evidence that it may increase the risk of lung cancer if inhaled for prolonged periods. Smoking may also exacerbate this risk. Like smoking, the risk from fine particle silica dust is time and concentration dependent.

CONTROL:

To suppress or to reduce excessive inhalation of fine particle silica dust the following steps should be taken to protect operatives who work with products containing silica dust:

- During fabrication operate outdoors or in well ventilated space in a separate area if available or away and down-wind from other operatives;
- Use low speed, low dust cutting tools – Score-and snap-knife, HardieGuillotine, HardieBlade fitted to a circular saw connected to a dust extraction HEPA filter vacuum cleaner (see James Hardie tools).
- When cutting, drilling or abrading always wear a FFP2/3 dust control or full face mask adjusted and fitted in conformity with regulatory recommendations and affixed with CE marking and/or fully certified to the relevant EN standards if applicable;
- Keep the working environment clean and remove debris as soon as possible; and
- At the end of the operation remove dust from clothes, tools and work area with a HEPA filter vacuum cleaner or damp with water to suppress the dust before sweeping.

Remember, James Hardie products are no more dangerous than many other building materials containing crystalline silica sand. We hope through this information to engage in effective education of the construction industry and build upon the requirements of national health and safety regulations.

For more information, see our installation instructions and MSDS available on www.jameshardieeu.com or call James Hardie.

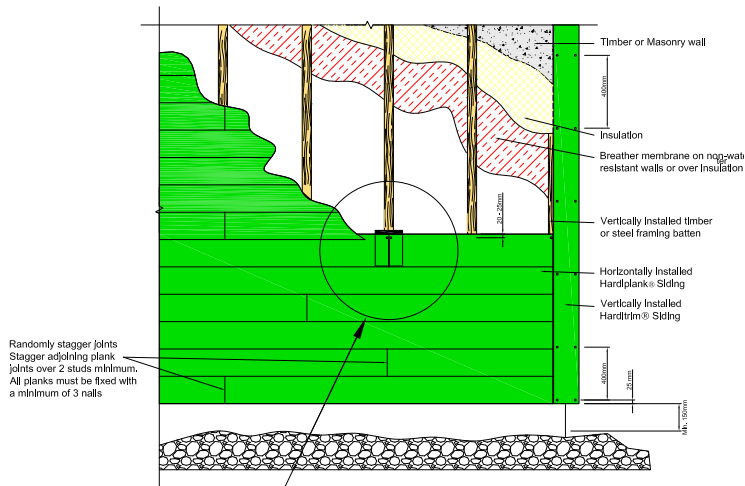
ANNEX 1

FIXING DETAILS

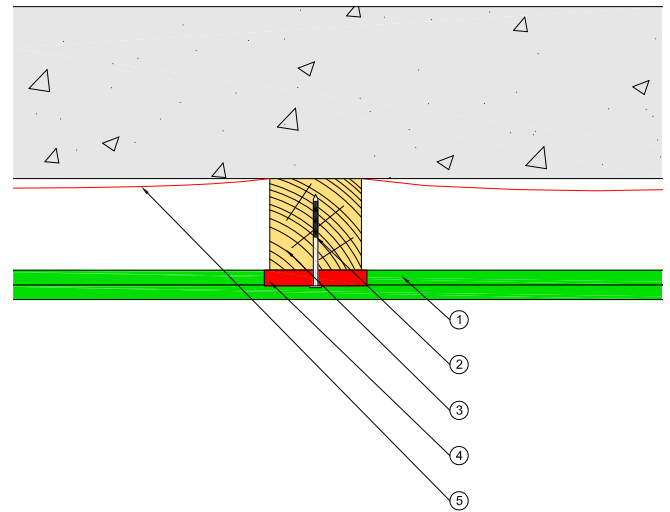
Installation	Fixing	Nailing	Windload	Max. support distance
Horizontal	Ring shank nails 2.95 x 50mm, D-head ø 6.5 mm	Top fixing	1920 Pa	400 mm
			1120 Pa	600 mm
Horizontal	HardieClip™		2200 Pa	600 mm
Vertical	Ring shank nails 2.95 x 50mm, D-head ø 6.5 mm	On both sides of the top plank	2250 Pa	600 mm

Disclaimer

The information contained in this publication and otherwise supplied to users of **HardiePlank®** cladding is based on James Hardie's general experience, best knowledge and belief. However because of factors that fall beyond James Hardie's knowledge and control, which can affect the use of the products, no warranty is given or implied with respect to such information. James Hardie's policy is one of continuous improvement. James Hardie therefore reserves the right to alter specifications at any time and without notice.

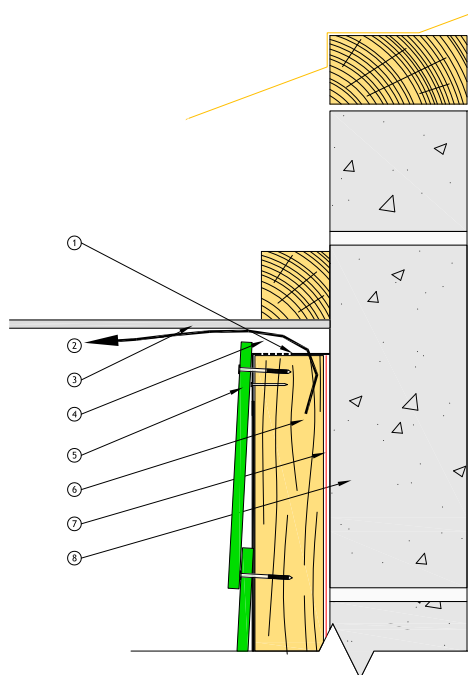


Joint detail



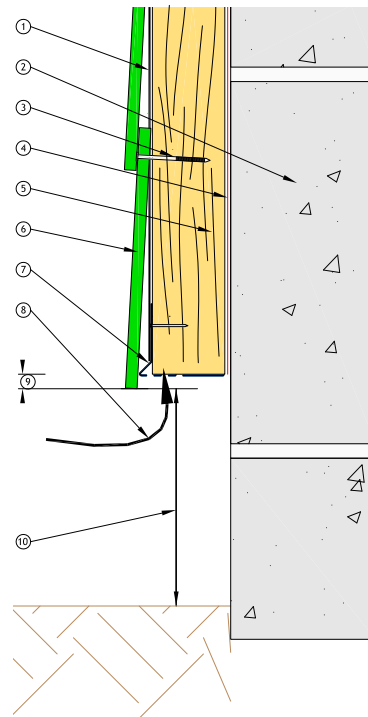
1. HardiePlank® cladding
2. 51x2.95mm fixing
3. Timber batten 50mm x 50mm
4. HardieClip™
5. Breather membrane
- only required for low density / poor quality brick/blockwork

TOP OF SIDING - VENTILATION DETAIL

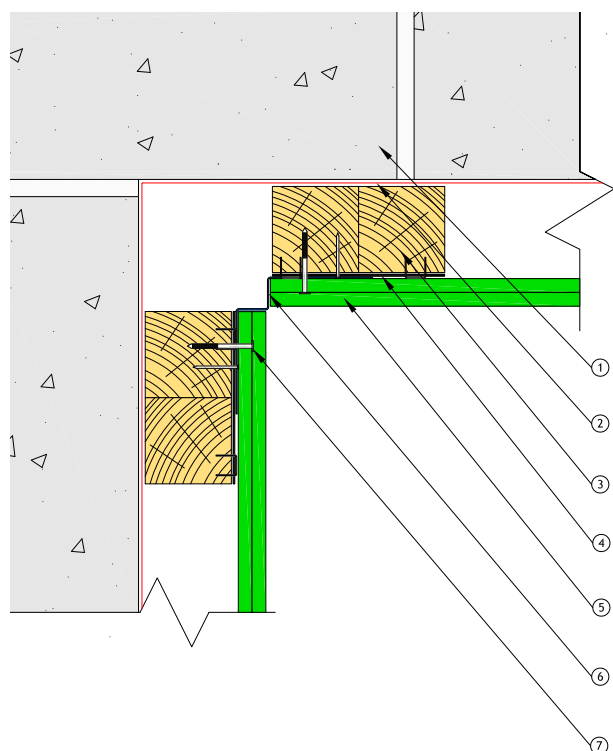


1. Ventilation grill
2. Ventilation path
3. Soffit board
4. 10mm Ventilation gap
5. HardiePlank® cladding
6. 50mm x 50mm vertical timber framing battens
7. Breather membrane
8. Masonry

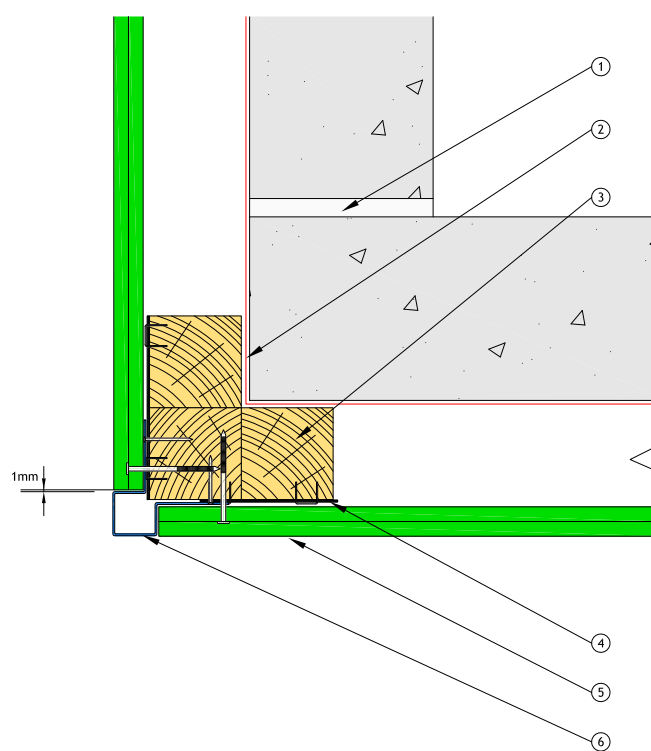
GROUND LEVEL DETAIL



1. EPDM
2. Masonry wall
3. 51x2.95mm fixing
4. Breather membrane
5. Timber battens 50mm x 50mm
6. HardiePlank® cladding
7. Starter strip
8. Ventilation path
9. 10mm drip detail
10. 150mm Min.



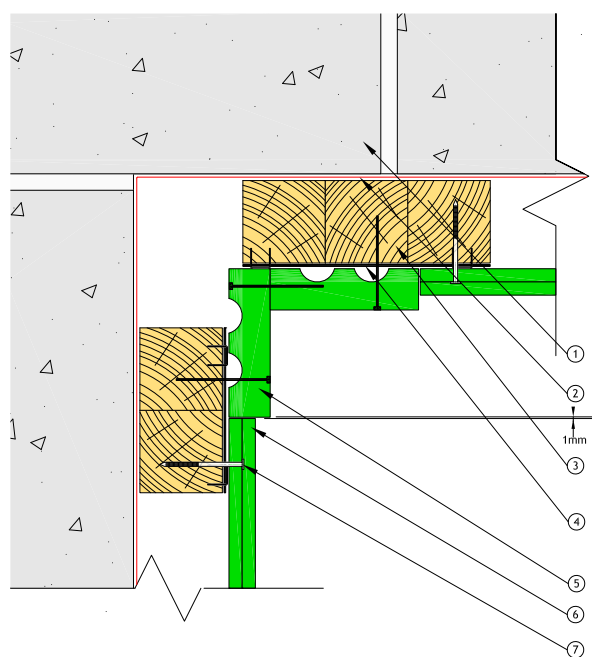
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|------------------------------|------------------------|
| 1. Masonry | 6. Internal angle trim |
| 2. Breather membrane | 7. 51x2.95mm fixing |
| 3. Timber battens 50mm x50mm | |
| 4. EPDM | |
| 5. HardiePlank® cladding | |



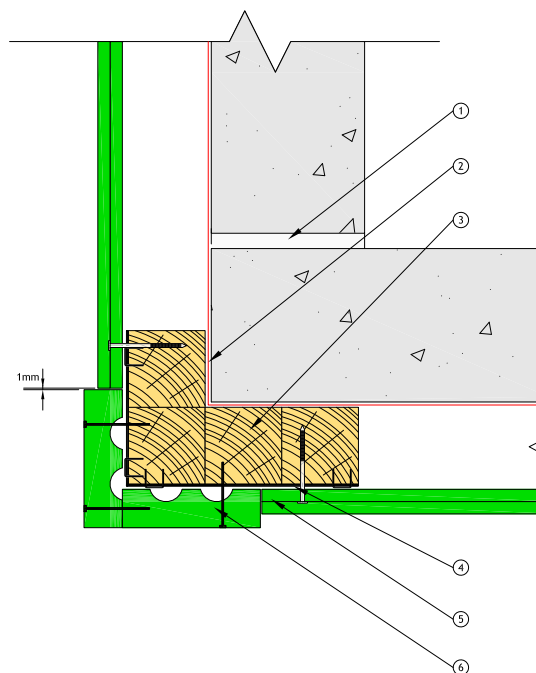
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|------------------------------|--------------------------|
| 1. Masonry | 5. HardiePlank® cladding |
| 2. Breather membrane | 6. External angle trim |
| 3. Timber battens 50mm x50mm | |
| 4. EPDM | |

90° INTERNAL CORNER - HARDIETRIM® NT3™

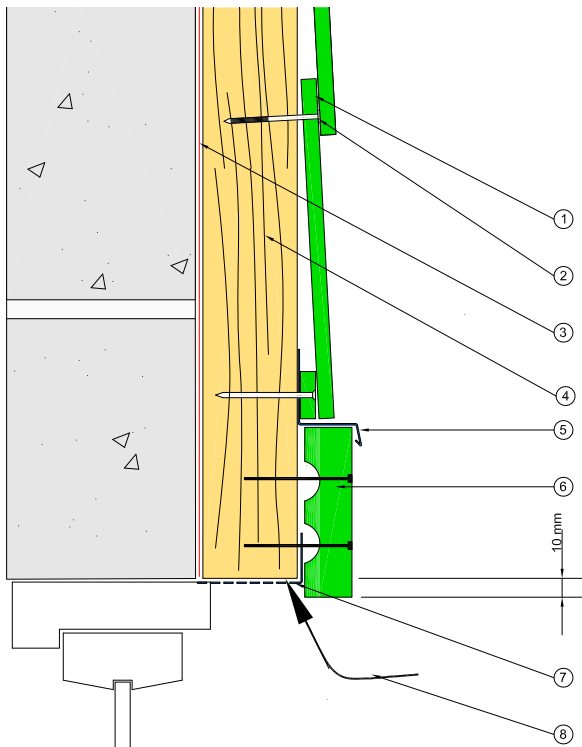
90° EXTERNAL CORNER WITH HARDIETRIM® NT3™



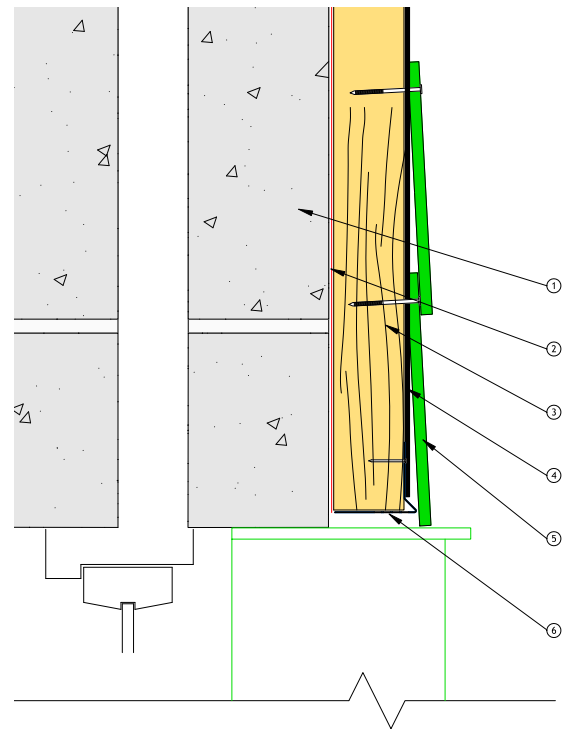
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|------------------------------|--------------------------|
| 1. Masonry | 6. HardiePlank® cladding |
| 2. Breather membrane | 7. 51x2.95mm fixing |
| 3. Timber battens 50mm x50mm | |
| 4. EPDM | |
| 5. HardieTrim® NT3™ | |



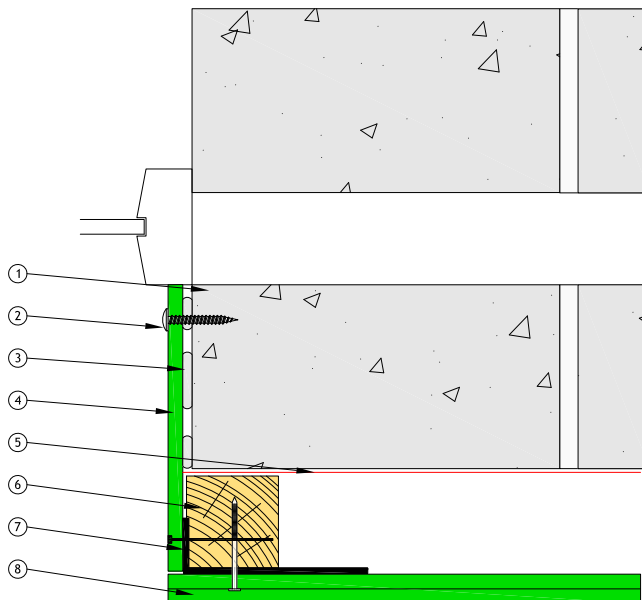
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| 1. Masonry | 5. HardiePlank® cladding |
| 2. Breather membrane | 6. HardieTrim® NT3™ |
| 3. Timber battens 50mm x50mm | |
| 4. EPDM | |



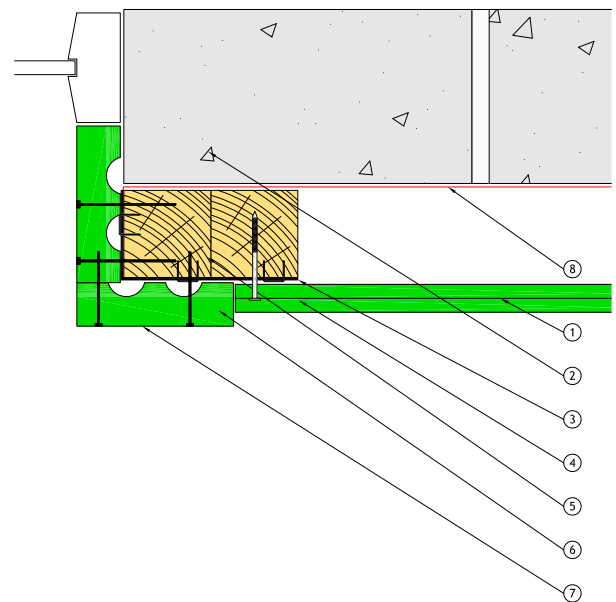
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|------------------------------|-----------------------------|
| 1. HardiePlank® cladding | 5. Drip flashing |
| 2. Breather membrane | 6. 90x25mm HardieTrim® NT3™ |
| 3. 51x2.95mm fixing | 7. Ventilation grill |
| 4. Timber battens 50mm x50mm | 8. Ventilation path |



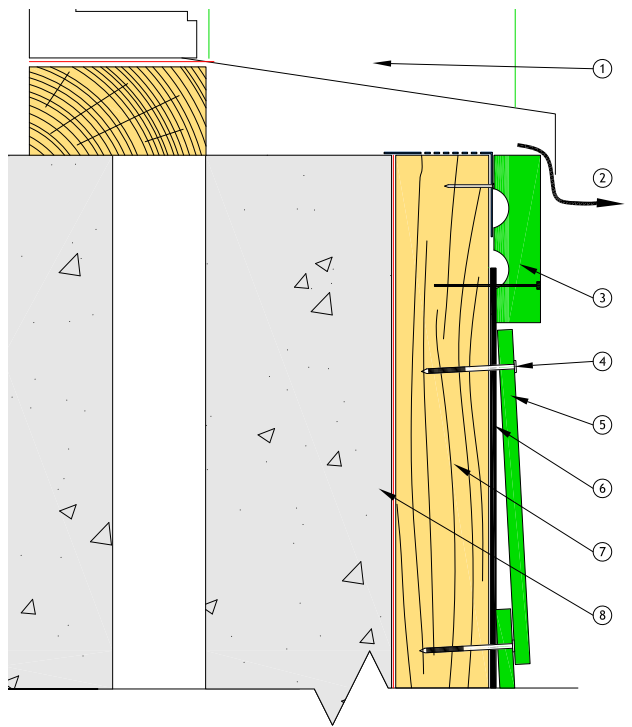
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|------------------------------|--------------------------|
| 1. Masonry | 5. HardiePlank® cladding |
| 2. Breather membrane | 6. Starter strip |
| 3. Timber battens 50mm x50mm | |
| 4. EPDM | |



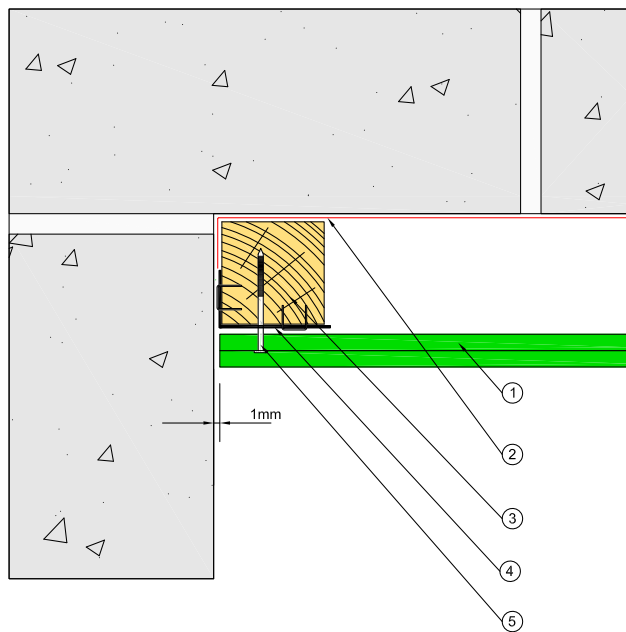
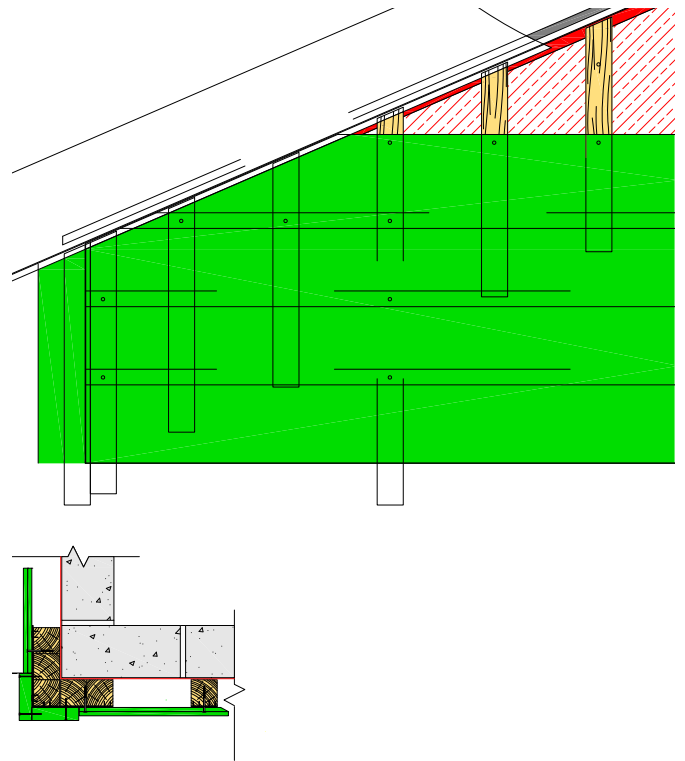
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|--|------------------------------|
| 1. Masonry | 5. Breather membrane |
| 2. Torx T20 screw | 6. Timber battens 50mm x50mm |
| 3. Cartridge based adhesive | 7. EPDM |
| 4. HardiePanel - rear face painted prior to fixing | 8. HardiePlank® cladding |



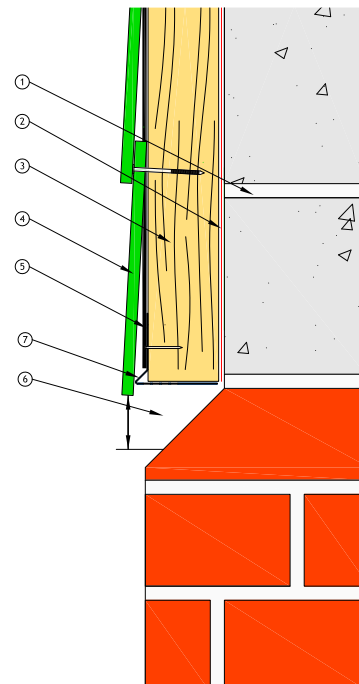
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|----------------------------------|-----------------------------|
| 1. HardiePlank® cladding | 6. 90x25mm HardieTrim® NT3™ |
| 2. Masonry | 7. 51mm 16g fixing |
| 3. EPDM Gasket stapled to batten | 8. Breather membrane |
| 4. 51x2.95mm fixing | |
| 5. Timber battens 50mm x50mm | |



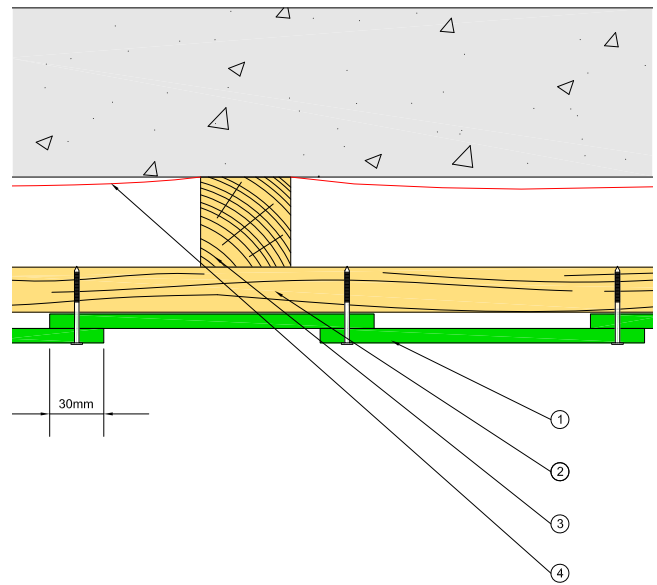
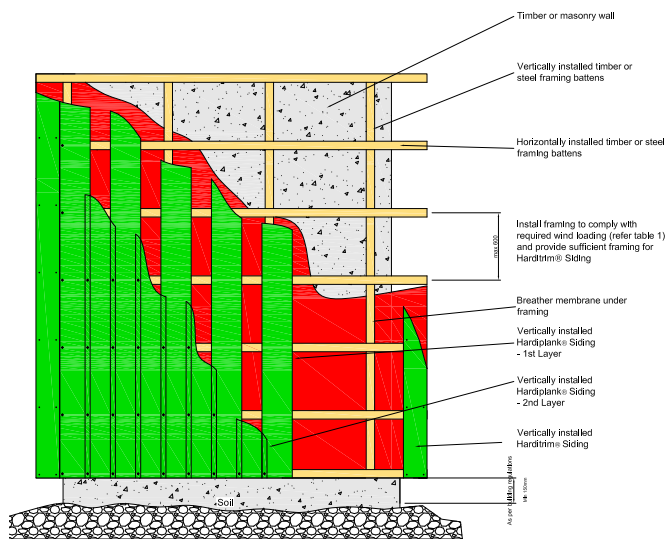
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|---------------------------|------------------------------|
| 1. HardieFlex™ | 5. HardiePlank® cladding |
| 2. Ventilation (min 10mm) | 6. EPDM |
| 3. HardieTrim® NT3™ | 7. Timber battens 50mm x50mm |
| 4. 51x2.95mm fixing | |



- | |
|-------------------------------|
| 1. HardiePlank® cladding |
| 2. Breather membrane |
| 3. Timber battens 50mm x 50mm |
| 4. EPDM |
| 5. 51x2.95mm fixing |



- | | |
|------------------------------|---------------------------|
| 1. Masonry wall | 5. EPDM |
| 2. Breather membrane | 6. 10 mm Min. drip detail |
| 3. Timber battens 50mm x50mm | 7. Starter profile |
| 4. HardiePlank® cladding | |



1. HardiePlank® cladding - Vertically installed
2. Horizontal Timber batten 50mm x 50mm
3. Vertical Timber batten 50mm x 50mm
4. Breather membrane

GENERAL INFORMATION

SERVICE

If you have any questions regarding HardiePlank® siding, our staff are ready to assist you with advice and guidance. Please, ensure that you have the latest version of this publication, by checking that the publication date corresponds with the downloadable version from our website www.jameshardie.co.uk. In case of doubt, please contact your local James Hardie® representative.

WARRANTY

Warranty conditions can be commissioned at James Hardie Europe BV.

ADDITIONAL INFORMATION

Additional information including CAD details and test reports are available at www.jameshardie.co.uk

SPECIFIC INSTALLATION

For any installation which is not covered in this manual, please contact our technical service at the number below.



CONTACT US AT

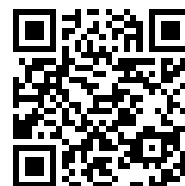
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