James Hardie Building Products Ltd
One Fleet Place
London EC4M 7WS
Tel: (Customer Service) 0800 068 3103 (Technical Services) 0800 917 3975
Fax: 0800 917 5424
e-mail: info.europe@jameshardie.com
website: www.jameshardie.com

Agrément Certificate
04/4147
Product Sheet 1

JAMES HARDIE CLADDING SYSTEMS

HARDIEPLANK

This Agrément Certificate Product Sheet(1) relates to HardiePlank(2), a fibre-reinforced cement plank for use as an exterior non-loadbearing lap cladding over timber stud or masonry walls, or steel or aluminium framework in residential and commercial buildings.

(1) Hereinafter referred to as 'Certificate'.

(2) HardiePlank is a registered trademark of James Hardie International Finance B.V.

CERTIFICATION INCLUDES:

- factors relating to compliance with Building Regulations where applicable
- factors relating to additional non-regulatory information where applicable
- independently verified technical specification
- assessment criteria and technical investigations
- design considerations
- installation guidance
- regular surveillance of production
- formal three-yearly review.

KEY FACTORS ASSESSED

Strength and stability — the product has acceptable resistance to wind and impact loads (see section 6).

Performance in relation to fire — the product is classified as Class 0 or 'low risk' as defined in the various national Building Regulations (see section 7).

Weathertightness — the product, when installed on a non-watertight supporting wall, is not weatherproof and must be used in conjunction with a suitable vapour permeable membrane (see section 8).

Durability — the product is durable and can be expected to have a service life in excess of 30 years (see section 10).

The BBA has awarded this Certificate to the company named above for the product described herein. This product has been assessed by the BBA as being fit for its intended use provided it is installed, used and maintained as set out in this Certificate.

On behalf of the British Board of Agrément

Date of Second issue: 3 June 2015

Originally certificated on 13 September 2004

John Albon — Head of Approvals
Construction Products

Claire Curtis-Thomas
Chief Executive

The BBA is a UKAS accredited certification body — Number 113. The schedule of the current scope of accreditation for product certification is available in pdf format via the UKAS link on the BBA website at www.bbacerts.co.uk

Readers are advised to check the validity and latest issue number of this Agrément Certificate by either referring to the BBA website or contacting the BBA direct.

British Board of Agrément
Bucknalls Lane
Watford
Herts WD25 9BA
tel: 01923 665300
fax: 01923 665301
clientservices@bba.star.co.uk
www.bbacerts.co.uk

Regulations

In the opinion of the BBA, HardiePlank, if installed, used and maintained in accordance with this Certificate, can satisfy or contribute to satisfying the relevant requirements of the following Building Regulations (the presence of a UK map indicates that the subject is related to the Building Regulations in the region or regions of the UK depicted):

The Building Regulations 2010 (England and Wales) (as amended)

Requirement:	A1	Loading
Comment:		The product is acceptable for use as set out in sections 4.2 to 4.6 and 6 of this Certificate.
Requirement:	B4(1)	External fire spread
Comment:		The uncoated product is unrestricted by this Requirement. See section 7 of this Certificate.
Requirement:	C2(b)	Resistance to moisture
Comment:		The product does not provide a weatherproof cladding. To achieve a weatherproof barrier, a breather membrane must be installed. See section 8 of this Certificate.
Regulation	7	Materials and workmanship
Comment:		The product is acceptable. See section 10 and the *Installation* part of this Certificate.

The Building (Scotland) Regulations 2004 (as amended)

Regulation:	8(1)(2)	Durability, workmanship and fitness of materials
Comment:		The product can contribute to a construction satisfying this Regulation. See sections 9 and 10 and the *Installation* part of this Certificate.
Regulation:	9	Building standards applicable to construction
Standard:	1.1(a)(b)	Structure
Standard	1.2	Disproportionate Collapse
Comment:		The product is acceptable for use, with reference to clause 1.1.1[1][2]. See sections 4.2 to 4.6 and 6 of this Certificate.
Standard:	2.6	Spread to neighbouring buildings
Comment:		The uncoated product is classified as 'non-combustible' and is therefore unrestricted under clauses 2.6.5[1] and 2.6.6[2] of this Standard. See section 7 of this Certificate.
Standard:	2.7	Spread on external walls
Comment:		The uncoated product is classified as 'non-combustible' and is therefore unrestricted under clause 2.7.1[1][2]. See section 7 of this Certificate.
Standard:	3.10	Precipitation
Comment:		The product does not form a weatherproof cladding. To achieve a weatherproof barrier, a breather membrane must be provided to meet this Standard, with reference to clause 3.10.5[1][2]. See section 8 of this Certificate.
Standard:	7.1(a)	Statement of sustainability
Comment:		The product can contribute to meeting the relevant requirements of Regulation 9, Standards 1 to 6 and therefore will contribute to a construction meeting a bronze level of sustainability as defined in this Standard.
Regulation:	12	Building standards applicable to conversions
Comment:		All comments given for this product under Regulation 9, Standards 1 to 6, also apply to this Regulation, with reference to clause 0.12.1[1][2] and Schedule 6[1][2].

(1) Technical Handbook (Domestic).
(2) Technical Handbook (Non-Domestic).

The Building Regulations (Northern Ireland) 2012 (as amended)

Regulation:	23(a)(i)(iii)(b)(i)	Fitness of materials and workmanship
Comment:		The product is acceptable. See section 10 and the *Installation* part of this Certificate.
Regulation:	28(b)	Resistance to moisture and weather
Comment:		The product does not form a weatherproof cladding. To achieve a weatherproof barrier, a breather membrane must be provided. See section 8 of this Certificate.
Regulation:	30	Stability
Comment:		The product is acceptable for use as set out in sections 4.2 to 4.6 and 6 of this Certificate.
Regulation:	36(a)	External fire spread
Comment:		The uncoated product is unrestricted by this Regulation. See section 7 of this Certificate.

Construction (Design and Management) Regulations 2015

Construction (Design and Management) Regulations (Northern Ireland) 2007

Information in this Certificate may assist the client, Principal Designer/CDM co-ordinator, designer and contractors to address their obligations under these Regulations.

See sections: 1 *Description* (1.2) and 3 *Delivery and site handling* (3.1, 3.2 and 3.4) of this Certificate.

Additional Information

NHBC Standards 2014

NHBC accepts the use of HardiePlank, provided it is installed, used and maintained in accordance with this Certificate, in relation to *NHBC Standards*, Part 6 *Superstructures (excluding roofs)*, Chapters 6.1 *External masonry walls* and 6.2 *External timber framed walls*.

CE marking

The Certificate holder has taken the responsibility of CE marking the product in accordance with harmonised European Standard BS EN 12467: 2012. An asterisk (*) appearing in this Certificate indicates that data shown are given in the manufacturer's Declaration of Performance.

Technical Specification

1 Description

1.1 HardiePlank is a fibre-reinforced Portland cement cladding plank, satisfying the requirements of Category A, Class 2 in accordance with BS EN 12467 : 2012.

1.2 The product has the following characteristics:

Thickness* (mm)	8
Width* (mm)	180
Length* (mm)	3600
Weight per plank (kg)	7.4
Finish	smooth or wood textured.

1.3 The planks are supplied factory-primed and coated with ColorPlus[1]. The performance of the primer and ColorPlus, including durability, resistance to fire and UV, has not been assessed by the BBA and is outside the scope of this Certificate.

(1) ColorPlus is a registered trademark of James Hardie International Finance B.V.

1.4 Ancillary materials for use with the product include:

- HardieTrim NT3[1] — a 25 mm thick fibre-reinforced cement board, complying with the requirements of Class 1, Category A in accordance with BS EN 12467 : 2012
- breather membrane that meets the requirements of BS 5250 : 2011
- EPDM tape — 20 m roll, available in 60 mm and 100 mm widths
- galvanized or stainless-steel nail fixings, 50 mm long by 3 mm minimum diameter, with a minimum head diameter of 10 mm
- stainless steel Faynot self-drilling countersunk screw fixings for wood, aluminium and steel frames, 34 mm long by 3.5 mm in diameter and with a minimum 8.75 mm head diameter
- stainless steel Paslode nails, 51 mm long by 2.8 mm diameter and minimum 7.00 mm head diameter — used in conjunction with HardieClip
- galvanized or stainless steel wood screws, 35 mm long by 4.0 mm diameter and minimum 8.0 mm head diameter
- HardieClip — 0.5 mm gauge steel reinforcing clip for the nail fixing of HardiePlank cladding, used to ensure correct positioning of the nails and the use of 600 mm fixing centres in high wind pressure zones. HardieClip is used in conjunction with Paslode nails
- Paslode Impulse Galv-Plus 'D' head nails, 51 mm long by 2.8 mm diameter, with a minimum head diameter of 7 mm.

(1) HardieTrim is a registered trademark of James Hardie International Finance B.V.

1.5 Other items which may be used in conjunction with the product, but which are outside the scope of this Certificate, are:

- HardieClip — 0.5 mm gauge steel fixing clip secured by nails 51 mm long by 2.8 mm diameter, with a minimum head diameter of 7 mm
- zinc-plated or stainless steel screw fixings 32 mm long by 4.6 mm minimum diameter, with a minimum head diameter of 7 mm
- HardieGuillotine — a custom-designed cutting tool for the Certificate holder's HardiePlank
- HardieBlade — a diamond-tipped saw blade for cutting the Certificate holder's cementitious products
- internal and external metal corner profiles — coated aluminium corner profiles
- James Hardie combination starter and ventilation profile — to prevent ingress of insects and pests through the ventilation gap; top vent profile for ventilation under windows and at eaves.

2 Manufacture

2.1 Raw materials are batched into a slurry, formed and cut to the required size and thickness. The sheets pass through a pre-cure stage and are autoclaved.

2.2 As part of the assessment and ongoing surveillance of product quality, the BBA has:

- agreed with the manufacturer the quality control procedures and product testing to be undertaken
- assessed and agreed the quality control operated over batches of incoming materials
- monitored the production process and verified that it is in accordance with the documented process
- evaluated the process for management of nonconformities
- checked that equipment has been properly tested and calibrated
- undertaken to carry out the above measures on a regular basis through a surveillance process, to verify that the specifications and quality control operated by the manufacturer are being maintained.

3 Delivery and site handling

3.1 HardiePlank is delivered on wrapped pallets weighing up to approximately 1700 kg. The product can be unloaded using mechanical handling equipment or by manually removing individual planks.

3.2 The planks should be stored on edge or flat, under cover, and on a dry, level surface. Stacks of loose planks should not exceed 1 m in height.

3.3 At least two planks in each pallet row are marked with the product name and unique manufacturing code.

3.4 The product contains crystalline silica and reference should be made to the current version of EH40 *Occupational Exposure Limits*. In particular, when cutting, drilling or sanding in confined areas, dust levels should be controlled using suitable extraction equipment.

Assessment and Technical Investigations

The following is a summary of the assessment and technical investigations carried out on HardiePlank.

Design Considerations

4 General

4.1 HardiePlank is satisfactory for use as a decorative and protective external facing over timber stud or masonry walls, or steel or aluminium framework, with horizontal, vertical or diagonal fixings.

4.2 The designer should ensure that the strength and integrity of the intended substrate meet the requirements of the cladding system.

4.3 Brickwork or blockwork walls should be constructed in accordance with the relevant sections of BS EN 1996-1-1 : 2005, BS EN 1996-1-2 : 2005, BS EN 1996-2 : 2006 and BS EN 1996-3 : 2006 and their respective National Annexes and PD 6697 : 2010, or one of the technical specifications given in the national Building Regulations:

England and Wales — Approved Document A, A1/2, Section 2A and 2C

Scotland — Mandatory Standards 1.1 and 1.2, clauses 1.1.1 and 1.2.1 respectively

Northern Ireland — Technical Booklet D *Structure*.

4.4 Timber stud walls must be constructed in accordance with the relevant sections of BS EN 1995-1-1 : 2004 and its UK National Annex, and preservative treated in accordance with BS 8417 : 2011. Guidance on recommended wood preservation is also given in *NHBC Standards 2014*, Part 2 *Materials*, Chapter 2.3 *Timber preservation (natural solid timber)*.

4.5 Studding and timber or metal framing should be adequately supported by noggins to ensure rigidity.

4.6 When installed onto timber battens, the product must be fixed to preservative-treated, good quality timber battens aligned vertically at 400 mm or 600 mm centres. The minimum batten thickness over timber studs is 25 mm; over masonry substrates, or where aluminium or steel rails are used, thicker battens should be used to accommodate the 50 mm length of the fixings.

4.7 Care should be taken to ensure sufficient time is allowed for complete fixing or drying of the timber preservative before the planks are fixed.

4.8 Where the product is fixed to metallic supports, ie aluminium or steel frames, these must have a thickness of 2.2 to 3 mm. Care should be taken to ensure insertion of fixings is carried out using a depth stop.

4.9 Additional guidance on recommended cavity widths is given in *NHBC Standards 2014*, Part 6 *Superstructure (excluding roofs)*, Chapter 6.2 *External Timber Framed Walls*.

5 Practicability of installation

The product is designed to be installed by a competent general builder, or a contractor, experienced with this type of product.

6 Strength and stability

Wind loading

6.1 Under wind loading, the most likely mode of failure will be by pull-through of the fixings owing to wind suction.

6.2 When installed in accordance with the requirements of this Certificate, for the specified framing, the product can withstand dynamic wind pressures as shown in Table 1.

Table 1 Maximum wind pressure

Frame type	Battens centres (mm)	Fixing type/dimensions (mm)	Fixings centres (mm)	Max wind pressure (kPa)
Timber battens (min 25 mm thick)	600	3.0 x 50 mm galvanised/ stainless steel nails[1]	600	1.7
	600	2.8 x 51 mm Paslode nails[2] with 0.5 mm thick gauge steel clips[3]	600	2.07
Timber studs	400	2.8 x 51 x 7 mm Paslode D-head nails	600	1.87
	600	2.8 x 51 x 7 mm Paslode D-head nails	600	1.33
2.2 mm thick Nvelope aluminium rails fixed to timber studs	600	3.5 x 34 mm Faynot stainless steel screws[4]	600	1.53
Timber studs	600	4.0 x 35 mm wood screws[5]	600	1.40

(1) Minimum head diameter 10 mm.

(2) Minimum 6.5 mm head diameter.

(3) 56 x 28 x 8.5 mm, provided with 3 x 3 mm diameter holes at 22 mm centres and 6 mm from the edge.

(4) Countersunk head screw.

(5) Minimum 8 mm head diameter.

6.3 The permissible dynamic wind pressure may be increased by reducing batten or sub-frame spacing. This is particularly important at the corners of buildings and in exposed locations. In common with all cladding, the adequacy of a proposed installation should always be checked by a qualified engineer, who should include in the check the adequacy of the fixing of battens and metallic frames to the substrate (outside the scope of this Certificate).

6.4 The cladding should not be taken into account when designing a timber stud wall to resist racking forces.

6.5 Fixing of the metallic sub-frames to the substrate wall has adequate pull-out resistance (not covered by this Certificate).

6.6 Wind loads should be calculated in accordance with BS EN 1991-1-4 : 2005 and its UK National Annex.

Resistance to impact

6.7 When tested in accordance with BBA test methods, the product performed satisfactorily. The product is considered suitable for use in areas where there is little possibility of impact or abrasion damage, ie at low levels in areas of restricted access or at higher levels in public areas. The product is, therefore, suitable in Categories C to F as described in Table 2.

Table 2 Access categories

Category	Description	Example	
C	Accessible mainly to those with some incentive to exercise care. Some chance of accident occurring and of misuse	Walls adjacent to private open gardens. Back walls of balconies	Zone of wall up to 1.5 m above pedestrian or floor level
D	Only accessible, but not near a common route, to those with high incentive to exercise care. Small chance of accident occurring or of misuse	Walls adjacent to small fenced decorative gardens with no through paths	
E	Above zone of normal impacts from people but liable to impacts from thrown or kicked objects	1.5 m to 6 m above pedestrian or floor level in public areas	
F	Above zone of normal impacts from people but not liable to impacts from thrown or kicked objects	Wall surfaces of high positions other than those defined in E above	

7 Performance in relation to fire

7.1 The product has an A2-s1,d0* classification in accordance with BS EN 13501-1 : 2007.

7.2 The product is classified as Class 0 or low risk as defined in the various national Building Regulations.

7.3 Care must be taken when selecting a coating system to ensure that the fire performance of the installation is not compromised.

8 Weathertightness

8.1 The product is not airtight, watertight or water-vapour tight. When used on timber stud walls or aluminium or steel frames it must be backed by a breather membrane acting as a vapour-permeable water barrier, incorporated behind the cladding under the supporting battens or metallic frames. This breather membrane must meet the requirements of BS 5250 : 2011 and have a vapour resistance less than 0.6 $MN \cdot s \cdot g^{-1}$.

8.2 Where the product is used as a decorative facing attached to weathertight masonry walls, a water barrier is not necessary as the amount of water that will penetrate the cladding will be small and will not have an adverse effect on the wall.

8.3 If the product is used in the renovation of a masonry wall which is structurally sound but not fully weathertight, the use of a vapour-permeable water barrier is advisable.

8.4 Provision must always be made to allow water that has penetrated behind the cladding to drain away.

9 Maintenance

Periodic inspections should be carried out to assess the need for cleaning, maintenance painting, localised repairs and replace elements, such as joint seals and fixings. Advice regarding recoating and maintenance procedures can be obtained from the Certificate holder.

10 Durability

10.1 When installed in accordance with this Certificate and the Certificate holder's installation instructions, and subject to normal conditions of exposure and use, the product will have an estimated service life in excess of 30 years.

10.2 In common with other cementitious materials, the matrix material can become brittle over time. This can be minimised by the selection of an appropriate coating and regular maintenance painting.

Installation

11 General

11.1 HardiePlank is installed on external braced timber battens, conventional masonry or aluminium or steel framework.

11.2 The planks can be cut with the HardieGuillotine or a circular saw fitted with a HardieBlade of the appropriate size.

11.3 Large cut-outs can be made using a jigsaw with a carbide-tipped blade or a tungsten carbide or diamond-tipped saw designed for use with fibre cement. Small holes may be drilled using a carbide-tipped masonry bit.

12 Procedure

12.1 Where required, a breather membrane (see section 8.1) is laid parallel to the direction of the planks along the wall, with minimum laps of 150 mm.

12.2 Timber wall battens should be fixed over the breather membrane in accordance with section 4.6.

12.3 A strip of HardiePlank approximately 30 mm wide is cut and fixed along the front face of the battens to provide a lap spacing for the first row (see Figure 1). Alternatively the James Hardie combination starter and ventilation profile may be used (see Figure 2a).

12.4 The first course of the product is installed, using the fixings described in section 1.4 and in accordance with the manufacturer's instructions, leaving a 10 mm drip edge at the lower edge.

12.5 Subsequent courses are installed in the same way, allowing a 30 mm overlap of the lower edge over the previous row.

Figure 1 General arrangement

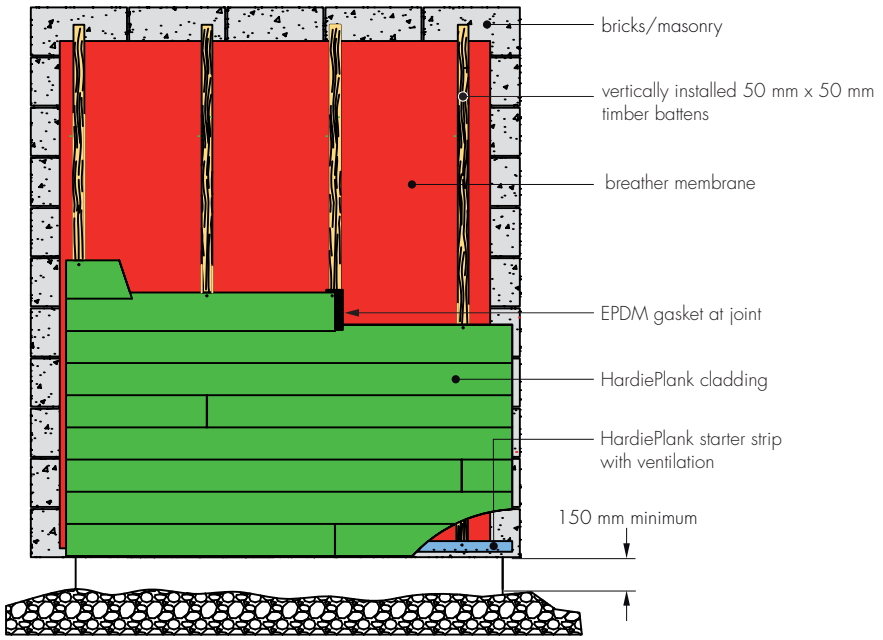


Figure 2 Top and base of cladding ventilation details

Figure 2a — ventilation at base of cladding

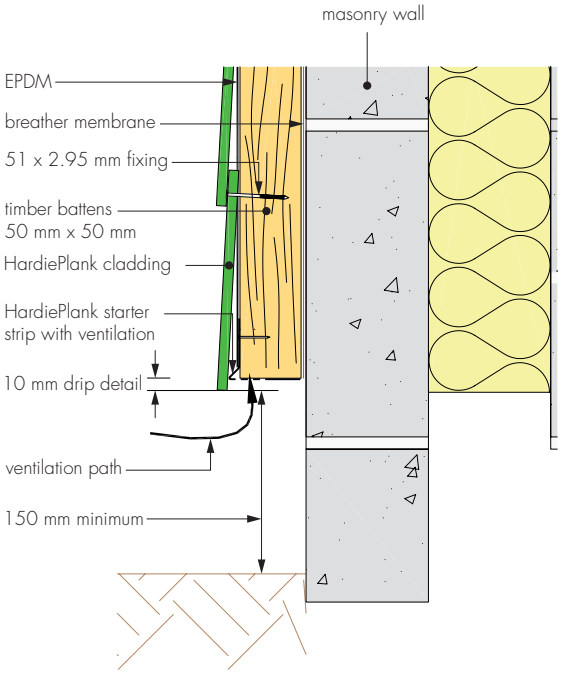


Figure 2b — provision of ventilation at top of cladding

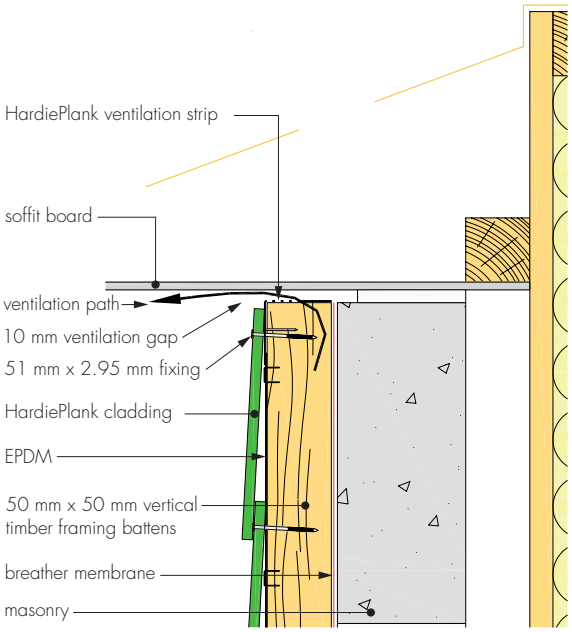
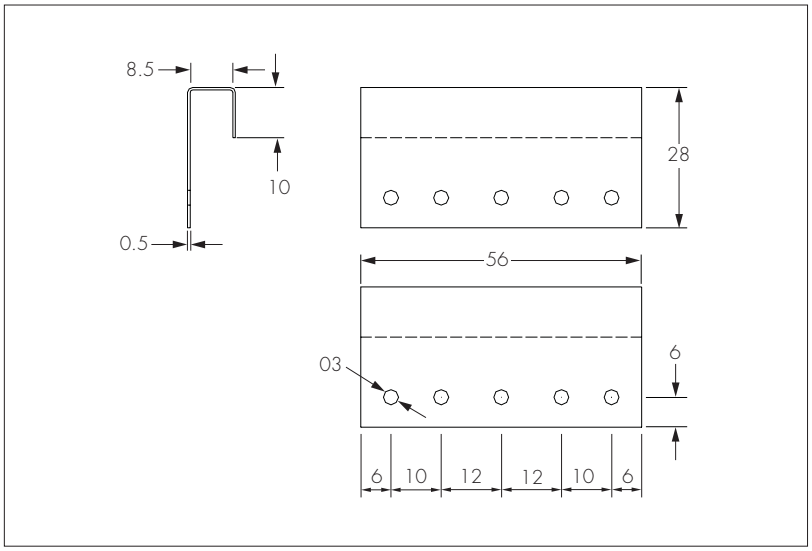


Figure 3 HardieClip



12.6 Alternatively HardiePlank can be installed with an additional HardieClip placed over the top edge of the planks on the centre of the batten with the long face containing the fixing hole facing outwards. The nail should be driven through the fixing hole provided in the clip.

12.7 At joints, the clip is placed centrally over two boards and fixed using the two outside nail holes as shown in Figure 4.

Figure 4 HardieClip section on plan of joint

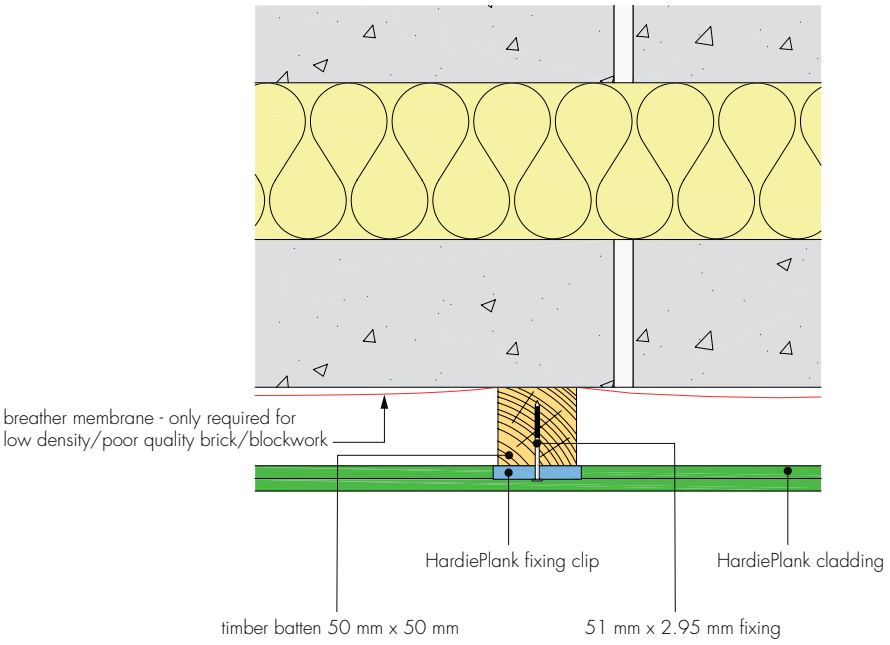
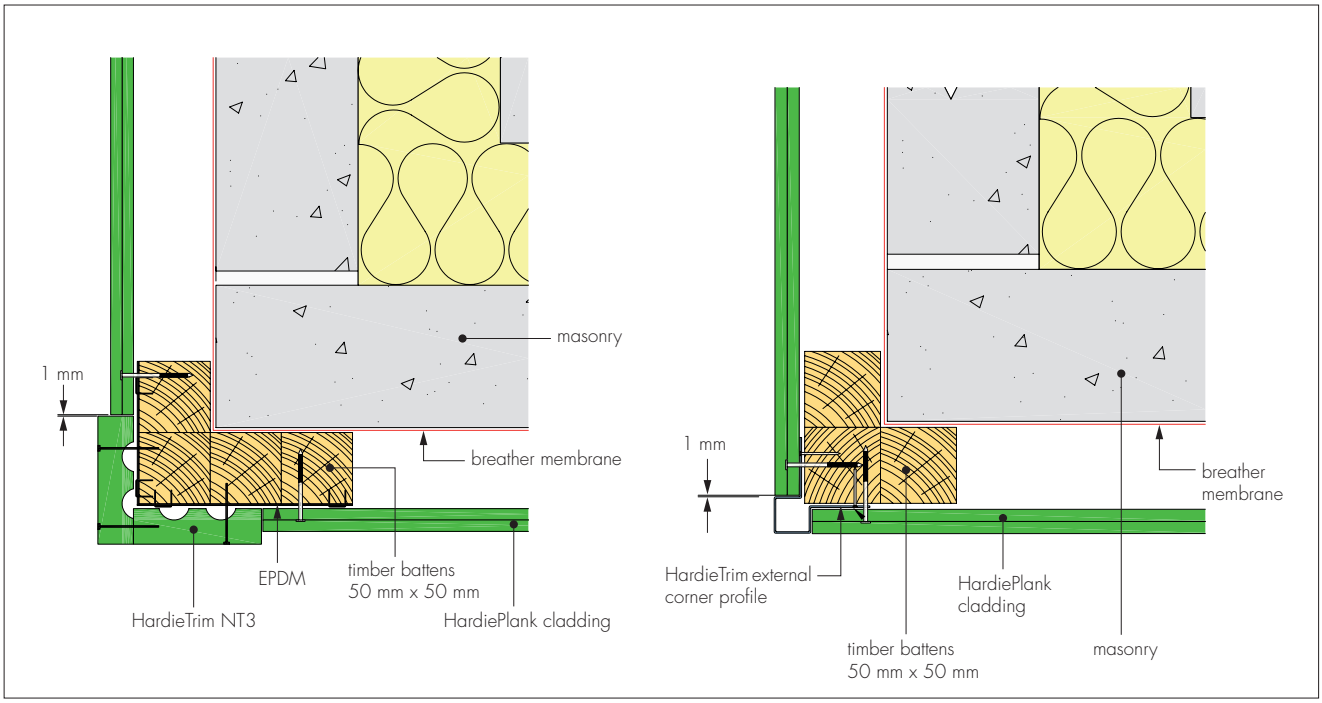


Figure 5 Corner details on timber battens



12.9 Where joints are required, the planks are butted in moderate contact to form a joint. A strip of 100 mm wide x 200 mm long EPDM should be placed behind the joint to weather the detail, as shown in Figure 5.

12.10 Corner installations can be fitted with HardieTrim NT3 (see Figure 5) or with an external metal trim butted up against the HardiePlank (see Figure 6c). When using HardieTrim, a 1 mm gap should be left between the ends of the HardiePlank and the side of the HardieTrim to allow for movement and drainage (see section 1.5). HardieTrim NT3 corner details should incorporate EPDM flashing stapled to the support battens to the full height of the corner detailing, for weatherproofing purposes.

12.11 Corner details on metal framing should be formed using MetalTrim to form the external corner profile (see Figure 6c).

Figure 6 HardiPlank detail on metal framing

Figure 6a — metal frame general arrangement

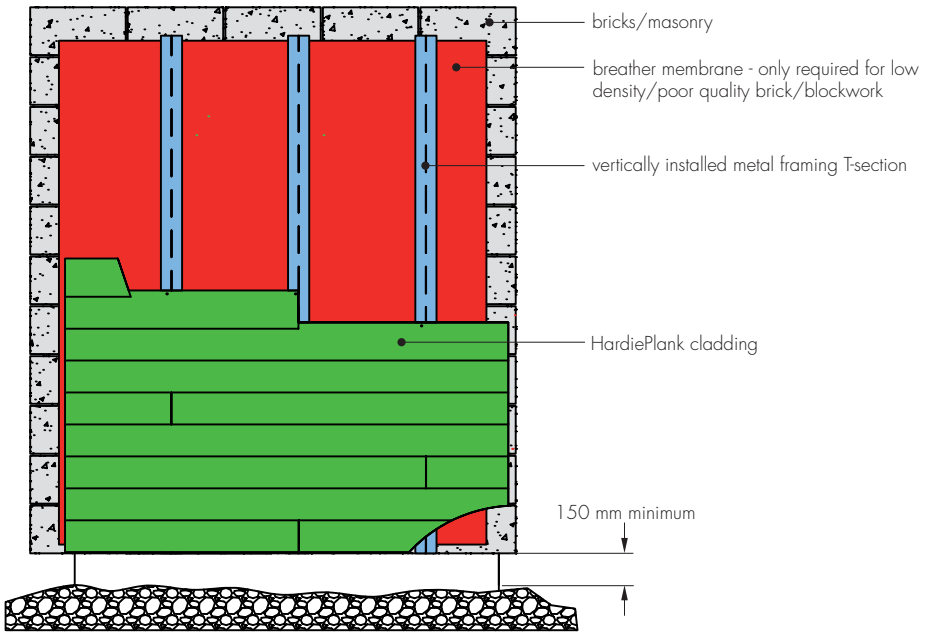


Figure 6b — joint detail

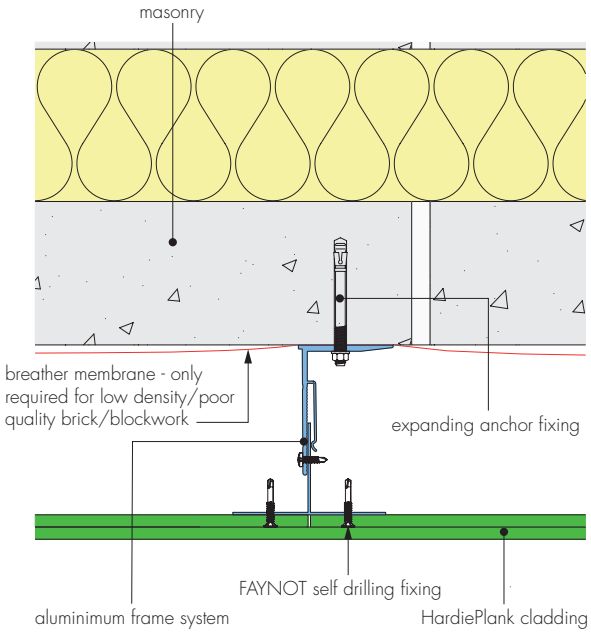
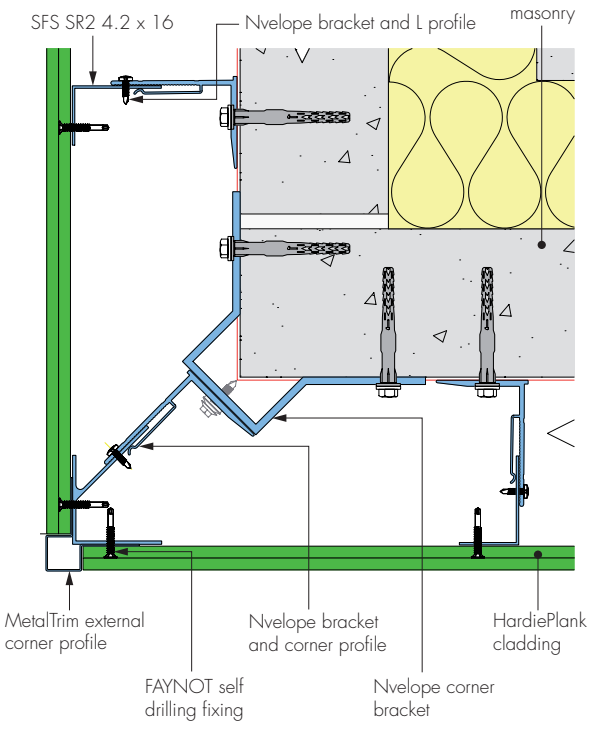


Figure 6c — corner detail on aluminium frame



13 Repair

Under normal conditions of use, the product is unlikely to suffer more than cosmetic damage, but should it occur, the planks affected should be replaced as soon as possible. This may require the temporary removal of undamaged planks above the damaged area.

14 Tests

Tests were carried out and the results assessed to determine:

- water absorption
- water vapour permeability
- resistance to hard body impact
- resistance to soft body impact
- ease of over coating
- adhesion of coatings.

15 Investigations

15.1 An assessment was made on data to BS EN 12467 : 2012, in relation to:

- dimensions*
- bending strength*
- apparent density*
- resistance to freeze/thaw*
- resistance to water soak*
- resistance to soak/dry cycling*
- resistance to heat/rain cycling*
- water impermeability*.

15.2 An assessment was made of existing data relating to:

- fire propagation
- reaction to fire
- surface spread of flame
- resistance to wind loading.

15.3 Visits were made to existing sites where the product had been in service.

15.4 The manufacturing process was evaluated, including the methods adopted for quality control, and details were obtained of the quality and composition of the materials used.

Bibliography

BS 5250 : 2011 *Code of practice for control of condensation in buildings*

BS 8417 : 2011 *Preservation of wood — Code of practice*

BS EN 1991-1-4 : 2005 *Eurocode 1 — Actions on structures — General actions — Wind actions*
NA to BS EN 1991-1-4 : 2005 UK National Annex to *Eurocode 1 — Actions on structures — General actions — Wind actions*

BS EN 1995-1-1 : 2004 *Eurocode 5 — Design of timber structures — General*
NA to BS EN 1995-1-1 : 2004 UK National Annex to *Eurocode 5 — Design of timber structures — General*

BS EN 1996-1-1 : 2005 *Eurocode 6 — Design of masonry structures — General rules for reinforced and unreinforced masonry structures*
NA to BS EN 1996-1-1 : 2005 UK National Annex to *Eurocode 6 — Design of masonry structures — General rules for reinforced and unreinforced masonry structures*
BS EN 1996-1-2 : 2005 *Eurocode 6 — Design of masonry structures — General rules — Structural fire design*
NA to BS EN 1996-1-2 : 2005 UK National Annex to *Eurocode 6 — Design of masonry structures — General rules*
BS EN 1996-2 : 2006 *Eurocode 6 — Design of masonry structures — Design considerations, selection of materials and execution of masonry*
NA to BS EN 1996-2 : 2006 UK National Annex to *Eurocode 6 — Design of masonry structures — Design considerations, selection of materials and execution of masonry*
BS EN 1996-3 : 2006 *Eurocode 6 — Design of masonry structures — Simplified calculation methods for unreinforced masonry structures*
NA to BS EN 1996-3 : 2006 UK National Annex to *Eurocode 6 — Design of masonry structures — Simplified calculation methods for unreinforced masonry structures*

BS EN 12467 : 2012 *Fibre-cement flat sheets — Product specification and test methods*

BS EN 13501-1 : 2007 *Fire classification of construction products and building elements — Classification using test data from reaction to fire tests*

PD 6697 : 2010 *Recommendations for the design of masonry structures to BS EN 1996-1-1 and BS EN 1996-2*

16 Conditions

16.1 This Certificate:

- relates only to the product/system that is named and described on the front page
- is issued only to the company, firm, organisation or person named on the front page — no other company, firm, organisation or person may hold or claim that this Certificate has been issued to them
- is valid only within the UK
- has to be read, considered and used as a whole document — it may be misleading and will be incomplete to be selective
- is copyright of the BBA
- is subject to English Law.

16.2 Publications, documents, specifications, legislation, regulations, standards and the like referenced in this Certificate are those that were current and/or deemed relevant by the BBA at the date of issue or reissue of this Certificate.

16.3 This Certificate will remain valid for an unlimited period provided that the product/system and its manufacture and/or fabrication, including all related and relevant parts and processes thereof:

- are maintained at or above the levels which have been assessed and found to be satisfactory by the BBA
- continue to be checked as and when deemed appropriate by the BBA under arrangements that it will determine
- are reviewed by the BBA as and when it considers appropriate.

16.4 The BBA has used due skill, care and diligence in preparing this Certificate, but no warranty is provided.

16.5 In issuing this Certificate, the BBA is not responsible and is excluded from any liability to any company, firm, organisation or person, for any matters arising directly or indirectly from:

- the presence or absence of any patent, intellectual property or similar rights subsisting in the product/system or any other product/system
- the right of the Certificate holder to manufacture, supply, install, maintain or market the product/system
- actual installations of the product/system, including their nature, design, methods, performance, workmanship and maintenance
- any works and constructions in which the product/system is installed, including their nature, design, methods, performance, workmanship and maintenance
- any loss or damage, including personal injury, howsoever caused by the product/system, including its manufacture, supply, installation, use, maintenance and removal
- any claims by the manufacturer relating to CE marking.

16.6 Any information relating to the manufacture, supply, installation, use, maintenance and removal of this product/system which is contained or referred to in this Certificate is the minimum required to be met when the product/system is manufactured, supplied, installed, used, maintained and removed. It does not purport in any way to restate the requirements of the Health and Safety at Work etc. Act 1974, or of any other statutory, common law or other duty which may exist at the date of issue or reissue of this Certificate; nor is conformity with such information to be taken as satisfying the requirements of the 1974 Act or of any statutory, common law or other duty of care.

British Board of Agrément
Bucknalls Lane
Watford
Herts WD25 9BA

tel: 01923 665300
fax: 01923 665301
clientservices@bba.star.co.uk
www.bbacerts.co.uk