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Agrément Certificate
12/4939
Product Sheet 1

SPSENVIRWALL CLADDING SYSTEMS

RENDACLAD ENVIROSIL SYSTEM AND RENDACLAD ENVIROBRICK SYSTEM

This Agrément Certificate Product Sheet⁽¹⁾ relates to RendaClad EnviroSil System and RendaClad Envirobrick System consisting of a render carrier board and associated ancillary items with either a render or simulated brick slip finish. Both systems are for use as external cladding over insulated timber-frame constructions up to three storeys high.

(1) Hereinafter referred to as 'Certificate'.

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 systems can resist the loadings likely to be met in the UK (see sections 4 and 6).

Performance in relation to fire — the board has a reaction-to-fire classification of A2-s1, d0 and has a spread-of-fire rating equivalent to Class 0 as defined in the national Building Regulations (see section 7).

Weathertightness — the systems resist the passage of moisture from the ground and from weather (see section 9).

Durability — the systems have acceptable durability and can be expected to have a service life in excess of 30 years (see section 12).



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

On behalf of the British Board of Agrément

Brian Chamberlain
Head of Approvals — Engineering

Greg Cooper
Chief Executive

Date of First issue: 25 September 2012

Certificate amended on 5 October 2012 to revise specification of EnviroSil top coat.

The BBA is a UKAS accredited certification body — Number 1113. 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.

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Regulations

In the opinion of the BBA, RendaClad Envirosil System and RendaClad Envirobrick System, if installed, used and maintained in accordance with this Certificate, will meet or contribute to meeting 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)

Requirement: A1	Loading
Comment:	The system is acceptable for use as set out in sections 6.1 to 6.10 of this Certificate.
Requirement: B4(1)	External fire spread
Comment:	The system meets Class 0 requirement. See sections 7.1 to 7.3 of this Certificate.
Requirement: C2(b)(c)	Resistance to moisture
Comment:	The system will meet this requirement. See sections 9.1, 9.2, 10.1 to 10.3 of this Certificate.
Requirement: Regulation 7	Materials and workmanship
Comment:	The system is acceptable. See sections 12.1 and 12.2 and the <i>Installation</i> part of this Certificate.



The Building (Scotland) Regulations 2004 (as amended)

Regulation: 8(1)(2)	Fitness and durability of materials and workmanship
Comment:	The system can contribute to a construction satisfying this Regulation. See sections 11.1, 11.2, 12.1 and 12.2 and the <i>Installation</i> part of this Certificate.
Regulation: 9	Building standards – construction
Standard: 1.1(a)(b)	Structure
Comment:	The system is acceptable, with reference to clause 1.1.1 ⁽¹⁾⁽²⁾ . See sections 6.1 to 6.10 of this Certificate.
Standard: 2.6	Spread to neighbouring buildings
Comment:	The system can contribute to satisfying this Standard, with reference to clause 2.6.4 ⁽¹⁾⁽²⁾ . See sections 7.1 to 7.3 of this Certificate.
Standard: 2.7	Spread on external walls
Comment:	The system can contribute to satisfying this Standard, with reference to clause 2.7.1 ⁽¹⁾⁽²⁾ . See sections 7.1 to 7.3 of this Certificate.
Standard: 3.10	Precipitation
Comment:	The system will contribute to meeting this Standard, with reference to clauses 3.10.1 ⁽¹⁾⁽²⁾ to 3.10.3 ⁽¹⁾⁽²⁾ , and 3.10.5 ⁽¹⁾⁽²⁾ to 3.10.6 ⁽¹⁾⁽²⁾ . See sections 9.1 and 9.2 of this Certificate.
Standard: 3.15	Condensation
Comment:	The system can satisfy or contribute to satisfying this Standard, with reference to clauses 3.15.1 ⁽¹⁾ , 3.15.2 ⁽¹⁾ , 3.15.4 ⁽¹⁾ and 3.15.5 ⁽¹⁾ . See sections 10.1 to 10.3 of this Certificate.
Standard: 7.1(a)(b)	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 – conversions
Comment:	All comments given for these systems under Regulation 9, 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) 2000 (as amended)

Regulation: B2	Fitness of materials and workmanship
Comment:	This system is acceptable. See sections 12.1 to 12.2 and the <i>Installation</i> part of this Certificate.
Regulation: B3(2)	Suitability of certain materials
Comment:	The system is acceptable. See sections 11.1 and 11.2 of this Certificate.
Regulation: C4(b)	Resistance to ground moisture and weather
Comment:	The system will contribute to meeting this Regulation. See sections 9.1 and 9.2 of this Certificate.
Regulation: C5	Condensation
Comment:	The system is acceptable. See sections 10.1 to 10.3 of this Certificate.
Regulation: D1	Stability
Comment:	The system is acceptable as set out in section 6.1 to 6.10 of this Certificate.
Regulation: E5(a)	External fire spread
Comment:	The system meets the Class 0 requirements. See sections 7.1 to 7.3 of this Certificate.

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

See sections: 2 *Delivery and site handling* (3.2 and 3.4) and 16 *Installation – Procedure* (16.5).

Additional Information

NHBC Standards 2011

NHBC accepts the use of RendaClad EnviroSil System and RendaClad Envirobrick System when installed and used in accordance with this Certificate, in relation to *NHBC Standards*, Chapter 6.2 *External timber framed walls and Chapter 6.9 Curtain walling and cladding*.

Technical Specification

1 Description

1.1 The RendaClad EnviroSil System and RendaClad Envirobrick System are external wall façade systems comprising RendaClad board finished with EnviroSil render or EnviroBrick simulated brick slips.

1.2 Details of the component build-up of the systems are:

RendaClad EnviroSil System and RendaClad Envirobrick System

Metal rails – 0.9 mm thick, 5009 grade galvanised perforated steel top hat profiles manufactured to BS EN 10143. Profiles are 25 mm deep by 60 mm wide, or

Timber battens – 25 mm by 50 mm.

RendaClad board — manufactured from calcium silicate and fixed to the timber frame substrate (outside the scope of the Certificate) constructed in accordance with BS EN 1995 : 2004 by use of either the timber battens or metal rails. The characteristics and dimensions of the boards are:

Length (mm)	2400
Width (mm)	1200
Thickness (mm)	9
Nominal density (kgm ⁻³)	1200
weight (kgm ⁻²)	10.8
thermal conductivity (W·m ⁻¹ ·K ⁻¹)	0.17
bending strength (MPa)	8.8
modulus of elasticity (MPa)	4.0
moisture content (%)	≤10.

RendaClad board to metal rail fixings — 32 mm long self-driving screws with 10.4 mm diameter head, 4.2 mm diameter shaft.

RendaClad board to timber batten fixings — 41 mm long self-driving screws with 10.4 mm diameter head, 4.2 mm diameter shaft.

EnviroRend basecoat — a 4 mm to 5 mm thick polymer modified cementitious basecoat render comprising mineral bonders, granulated aggregates and additives supplied in powder form to which clean water is added.

EnviroMesh — a 4 mm by 4 mm glass-fibre reinforcing mesh with a nominal weight per unit area of 165 gm⁻² and used in conjunction with the EnviroRend basecoat with extra mesh reinforcement used across corners of opening (see section 15.8).

1.3 The finish of each system comprises:

RendaClad EnviroSil System

EnviroSil Primer — a silicone resin emulsion primer used over the EnviroRend basecoat.

EnviroSil top coat — a 1.5 mm silicone render used as a topcoat finish supplied premixed and available in a range of colours.

RendaClad Envirobrick System

Envirobrick — 65 mm by 215 mm by 4 mm to 6 mm thick Meldorfer Flachverblender simulated brick slips comprising inorganic fillers and aggregates with an organic binder. Also available in corner profile 65 mm by 215 mm by 115 mm and used in conjunction with EnviroRend basecoat, EnviroMesh reinforcement and adhesive, as an alternative to EnviroSil render finish.

Adhesive — an adhesive mortar used to bond EnviroBrick to the render.

1.4 Ancillary items used with the system but outside the scope of this Certificate include:

Fixings to structural timber frame

Breather membrane

Insect mesh

Aluminium flashings — for use in details such as oversills and copings

Sealants — mastic applied around details.

1.5 A ventilated cavity is created by the timber battens or metal rails supporting the RendaClad board.

2 Manufacture

2.1 RendaClad board is manufactured from Portland cement, lime, quartz and cellulose fibre.

2.2 To ensure product quality is consistently maintained to the required specification, the BBA has:

- 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
- 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 The RendaClad boards are stacked on timber pallets. Each pack contains a label incorporating the manufacturer's name, product name, thickness, width, length, batch number, number of boards per pallet, pallet weight, recommended storage and handling method. Each board is marked with standard product information.

3.2 The boards must be stored in a ventilated and dry environment on a flat, level surface protected from contamination. To avoid excessive flexing of the boards, long edges must be supported when lifting and handling the boards. The Certificate holder's instructions on site handling and storage must be followed.

3.3 The render materials should be stored in a cool dry place and protected from moisture, frost and direct sunlight. The components packaging details are given in Table 1 with each pack containing a label incorporating, where relevant; the manufacturer's name, product name, weight, batch reference, date of manufacture and application instructions.

Component	Quantity	Weight (kg)	Packaging
EnviroRend basecoat	40	25 each	paper sacks with polythene liner on pallets
EnviroMesh	30 (1 m x 50 m rolls)	165 g·m ⁻²	pallet
Envirosil Primer	1	25	plastic bucket
Envirosil top coat	1	25	plastic bucket
Envirobrick	174		cardboard boxes
Adhesive mortar	1	25	Plastic bucket

3.4 Metal components and render beads must be stored flat in dry conditions.

Assessment and Technical Investigations

The following is a summary of the assessment and technical investigations carried out on RendaClad Envirosil System and RendaClad Envirobrick System.

Design Considerations

4 General

4.1 The systems are satisfactory for use as non-loadbearing exterior wall cladding in insulated timber-frame buildings up to three storeys high. The systems are designed to transmit self-weight and wind load into the structural frame.

4.2 The design should include:

- a ventilated and drained cavity system incorporating an insect guard to all ventilation openings
- effective detailing around window openings to ensure that wind-driven rain is excluded from hidden members in the surround and from the cavity
- an effective breather membrane on the inside, to ensure the frame structure is protected.

4.3 The system should be kept above damp-proof course level and a minimum of 150 mm above ground level.

5 Practicability of installation

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

6 Strength and stability



6.1 The frame to which the panels are fixed must be structurally sound and constructed in accordance with the requirements of the relevant national Building Regulations and Standards.

6.2 Timber stud walls and sheathing must be structurally sound, designed and constructed in accordance with BS EN 1995-1-1 : 2004 + A1 : 2008, and preservative treated in accordance with BS EN 351-1 : 2007. The timber frame studs should be designed to limit mid-span deflections to $L/250$, and cantilever deflections to $L/180$ or 10 mm, whichever is less.

6.3 The contribution of the board and finishes on the stability of the structure is assumed to be negligible. The timber frame structure, with or without the RendaClad systems, must be able to take the full wind actions and racking loads and capable of sustaining the weight of the system. The adequacy of the structural frame is outside the scope of this Certificate and must be verified by a suitably qualified engineer.

6.4 Wind actions should be calculated in accordance with BS EN 1991-1-4 : 2005. The higher pressure coefficients applicable to corners of the building must be used.

6.5 A suitably qualified chartered engineer must check the design and method of installation of the boards.

6.6 The design pull-through value of RendaClad Board, calculated by applying a safety factor of 3.0 to the mean failure pull-through values determined by tests in accordance with BS EN 1383 : 1999, for the 4.2 mm diameter shaft, 10.4 mm diameter head self-driving screws⁽¹⁾ is given in Table 2.

Table 2 Pull-through values⁽¹⁾

Mean failure value (N)	Design value (N)
976	325

(1) For fasteners other than those specified, the Certificate holder's advice must be sought.

6.7 Design negative wind pressures for metal rail and specified screws based on dynamic wind load testing and a factor of safety of 2.5 are given in Table 3.

Table 3 Wind load resistance

Metal rail spacing (mm)	Screw spacing (mm)	Design wind pressure ($N \cdot m^{-2}$)
600	300	1400

6.8 The systems should be designed to adequately resist wind pressures likely to be experienced in the UK and should be checked by a suitably qualified engineer.

6.9 The designer must ensure that the fixings of the metal rail or timber battens to the structural timber frame have adequate pull-out strength (not covered by this Certificate).

6.10 The bond strengths between the RendaClad board to EnviroRend basecoat, and adhesive mortar to EnviroBrick have adequate capacity to resist wind loads likely to be experienced in the UK.

Impact resistance

6.11 When tested for soft and hard body impacts, the RendaClad EnviroSil System and RendaClad EnviroBrick System have adequate resistance to impact, and therefore, may be considered suitable for use in location categories E_2 to E_5 as defined in Table 3.1 of MOAT 43 : 1987 and reproduced in Table 4.

Table 4 Exposure classification areas (as reproduced from MOAT 43 : 1987)

Category	Description	Examples of components(*)
E ₂	Readily accessible to public and others with little incentive to exercise care. Chance of accident occurring and of misuse.	Walls adjacent to pedestrian thoroughfares or playing fields, up to 1.5 m above pedestrian level, but not in vandal prone locations.
E' ₂	Above zone of normal impacts from people but liable to impacts from thrown or kicked objects.	1.5 m to 6 m above pedestrian level at location category E ₂ .
E ₃	Accessible primarily to those with some incentive to exercise care. Some chance of accident occurring or of misuse.	Walls adjacent to private open gardens. Back walls of access galleries or balconies, up to 1.5 m above pedestrian level.
E ₄	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 ₅	Above zone of normal impacts from people and not exposed to impact from thrown or kicked objects.	Locations similar to E ₂ , but over 6 m above pedestrian level. Locations similar to E ₃ and E ₄ but over 1.5 m above pedestrian level.

* The height of 1.5 m corresponds to the region where human impacts with the energies established in Table 2.1 are likely to occur in normal buildings. However, for some types of building, such as gymnasia, warehouses, etc, greater heights may have been considered.

7 Performance in relation to fire



7.1 The RendaClad Board is classified as non-combustible in accordance with BS 476-4 : 1970.

7.2 The systems may be regarded as having a Class 0 surface ('low risk' in Scotland) in accordance with the following national Building Regulations:

England and Wales — Approved Document B

Scotland — Technical Handbooks⁽¹⁾⁽²⁾, Section 2

(1) Technical Handbook (Domestic).

(2) Technical Handbook (Non-Domestic).

Northern Ireland — Technical Booklet E.

7.3 Cavity barriers should be incorporated as required under the national Building Regulations, but should not block essential ventilation and drainage pathways. Guidance on fire barriers can be found in BRE report (BRE135 : 2003) *Fire Performance of External Insulation For Walls of Multi-Storey Buildings*.

8 Proximity of flues

When installing the systems in close proximity to certain flue pipes or heat-producing appliances, the following provisions of the national Building Regulations should be met:

England and Wales — Approved Document J

Scotland — Mandatory Standard 3.19, clauses 3.19.1⁽¹⁾⁽²⁾ to 3.19.4⁽¹⁾⁽²⁾ and 3.19.8⁽¹⁾⁽²⁾

(1) Technical Handbook (Domestic).

(2) Technical Handbook (Non-Domestic).

Northern Ireland — Technical Booklet L.

9 Weathertightness



9.1 The systems resist the passage of moisture from the ground and from weather. Any water collecting in the cavity due to rain or condensation will be removed by drainage and ventilation.

9.2 The air space between the back of the RendaClad board and the supporting wall is 25 mm wide.

10 Condensation risk



10.1 When using the RendaClad systems, consideration must be given to the overall design using the recommendations contained in BS 5250 : 2002 to minimise the risk of condensation,

10.2 The risk of interstitial condensation will be minimal when the RendaClad systems are used in conjunction with a timber-frame construction incorporating a suitable breather membrane.

10.3 If the systems are to be used on the external walls of rooms expected to have continuous high humidity, care must be taken in the design of the rooms to avoid possible problems from the formation of interstitial condensation in the wall.

11 Maintenance and repair



11.1 Periodic inspections are recommended to assess the need for cleaning, localised repairs and element replacements, such as joints seals and fixings, to ensure that ingress of water does not occur. Necessary repairs should be carried out immediately (see section 11.2).

11.2 Damaged areas must be repaired using appropriate materials and advice should be sought from the Certificate holder.

12 Durability



12.1 The durability and service life of the systems will depend on the building location, immediate environment and intended use of the building, and proper maintenance and repairs.

12.2 Provided regular maintenance is carried out, as described in section 11 and in accordance with the Certificate holder's instructions, the systems can be expected to have a service life in excess of 30 years when used in the normal climatic conditions found in the UK.

13 Re-use and recyclability

The board and renders comprise of materials that cannot easily be reused. The steel support rails and timber battens can be recycled.

Installation

14 General

14.1 Installation of the systems should be carried out strictly in accordance with the provisions of this Certificate and the Certificate holder's instructions. Full system details for each application are available from the Certificate holder. Typical installation details are shown in Figure 1.

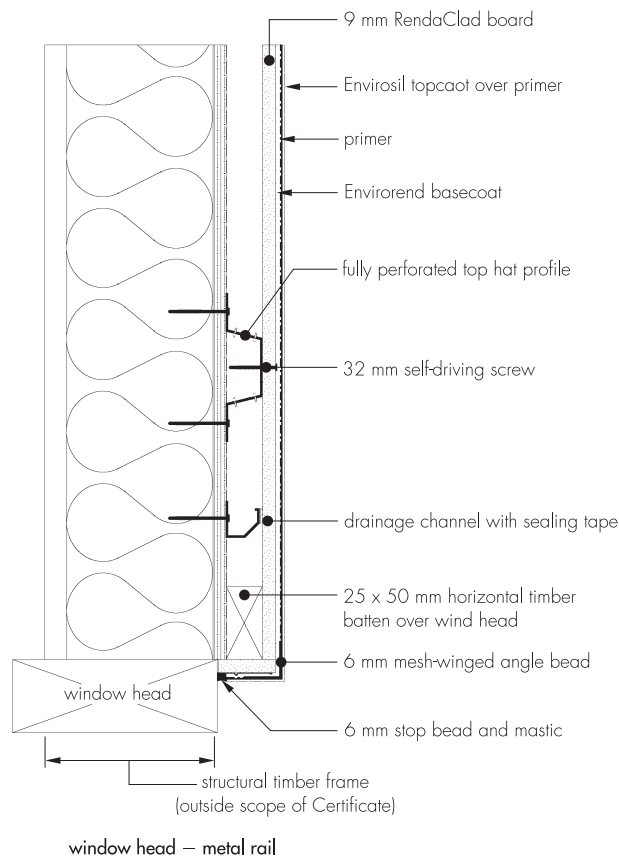
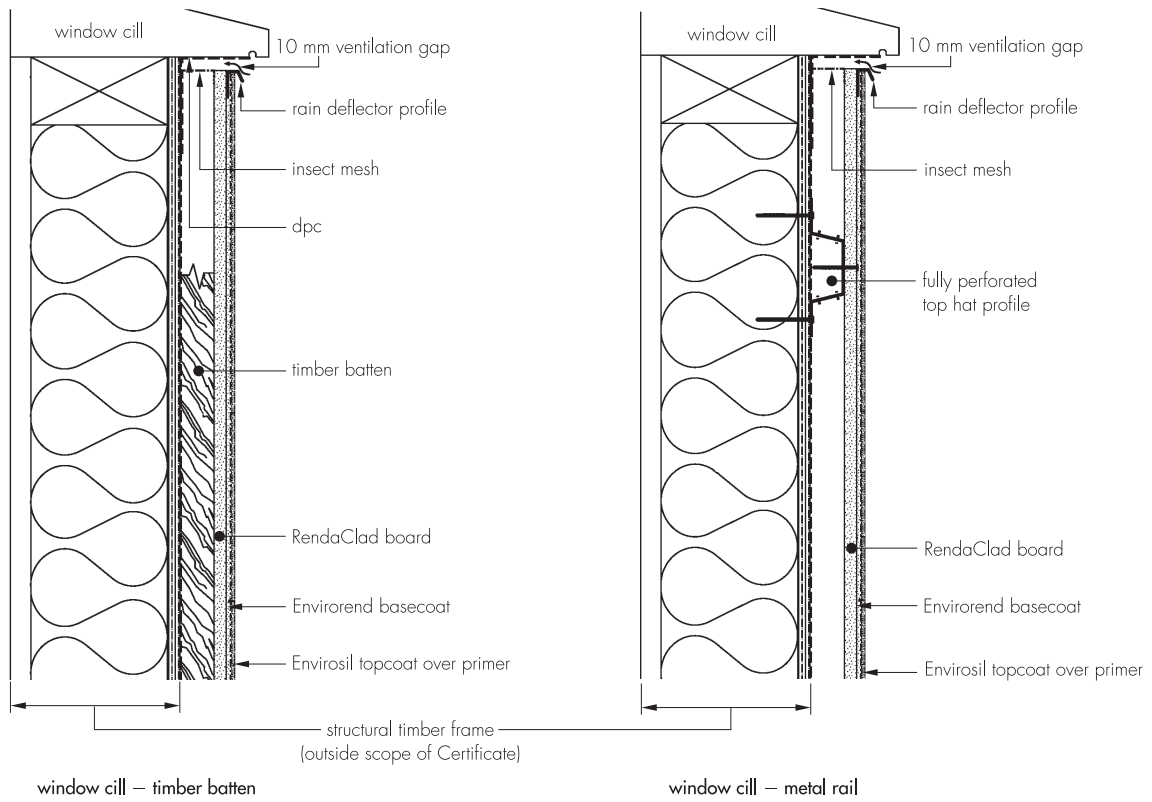
14.2 The level of supervision during installation of the systems and the associated structure must be sufficient to ensure the quality of workmanship.

14.3 Horizontal movement joints in accordance with BS EN 13914-1 : 2005 must be provided at every floor to accommodate vertical shrinkage of up to 6 mm in the timber frame and to follow movement joints in the substructure.

14.4 Vertical movement joints in accordance with BS EN 13914-1 : 2005 should be provided at a maximum of 15 m intervals. The actual spacing and position of the joints will be determined by the shape of the area to be rendered and should coincide with movement joints in the structure and allow for the same degree of movement.

14.5 The system renders must not be installed at temperatures less than 5°C. When applying the renders, measures must be taken (such as the provisions of cover) to protect against the effects of inclement weather eg driving rain, or direct sunlight, to prevent the coatings drying too fast, or runs developing. The Certificate holder's advice should be sought regarding the preparation and application of the render system.

Figure 1 Window opening detail



15 Preparation

All doors, windows, frames, fascias and other areas of existing structure not forming part of the system must be fully protected, for example with masking tape and polythene sheet.

16 Procedure

Support steel rail/timber batten

16.1 The RendaClad board support timber battens or metal rails must be at a maximum of 600 mm centres.

RendaClad board

16.2 The RendaClad board can be cut with a fine tooth hand saw or power saw ensuring suitable dust control measures are taken (eg protective safety glasses, gloves and respiratory masks) and observing all necessary health and safety regulations. Damaged boards must not be used.

16.3 Screws should be a minimum of 15 mm from board edges and spaced at a maximum of 300 mm. The screws must not be over-tightened.

EnviroRend Basecoat

16.4 Prior to the basecoat, a bead of silicone must be applied around all window and door frames or where the render abuts any other building or surface in accordance with the Certificate holder's installation instructions to ensure that they are weathertight.

16.5 EnviroRend Basecoat is prepared by thoroughly mixing the contents of a 25 kg bag with between 4 litres and 5 litres of clean water until the correct workability is achieved.

16.6 The basecoat is trowelled onto the surface of the RendaClad board to a thickness of between 4 mm and 5 mm, ensuring it is butted against details (eg under window sills), and trowelled smooth. The surface is roughened with a notched trowel or comb.

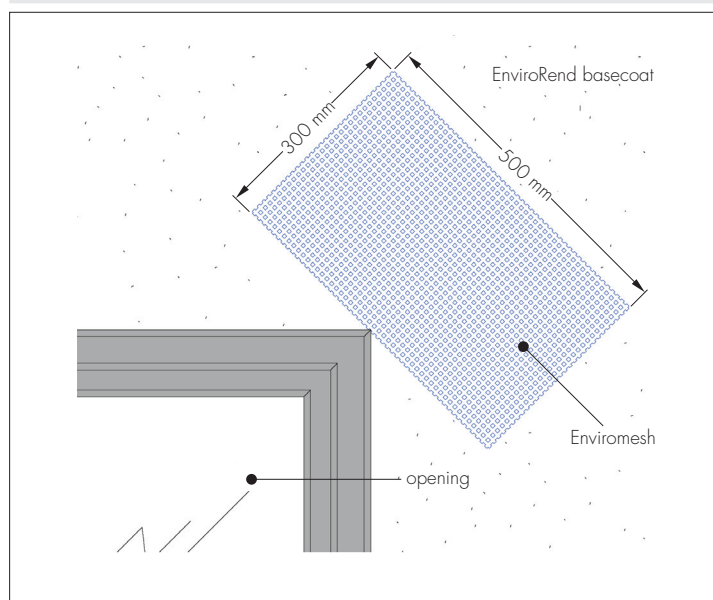
16.7 The drying period of any render will depend on weather conditions; however, the basecoat must be left to harden for at least two days before applying the relevant finish.

EnviroMesh

16.8 EnviroMesh reinforcement is placed onto the roughened surface of the basecoat, which is then trowelled over to completely cover the mesh. All the rendered surfaces must be reinforced and joints in the mesh must overlap by at least 100 mm.

16.9 Additional reinforcement is required around openings and at corners (see Figure 2). Angle beads and stop beads are positioned in accordance with the Certificate holder's installation instructions.

Figure 2 Additional reinforcement at openings



Finishing

RendaClad EnviroSil System

16.10 The EnviroSil primer is applied by roller onto the basecoat.

16.11 The render is applied to a thickness of 1.5 mm. A straight edge can be used to help ensure a flat surface, and wet sponges, wooden mortar boards or similar tools can be used to create the desired finish.

RendaClad Envirobrick System

16.12 The adhesive is trowelled onto the surface of the base coat and the surface is roughened with a notched trowel or comb. The direction of the notched lines of the adhesive mortar must be perpendicular to the brick slip length.

16.13 The simulated brick slips are laid by pressing onto the surface of the adhesive ensuring a firm bond is achieved. Pointing between the brick slip is carried out using a wet soft brush.

Technical Investigations

17 Tests

17.1 Tests were carried out to determine:

- resistance to hard body impact in accordance with ETAG 004 : March 2000
- resistance to soft body impact in accordance with BBA Moat 43 : 1987
- bond strength test in accordance with ETAG 004 : March 2000
- pull-through strength of fixings in accordance with BS EN 1383 : 1999
- pull-out strength of fixings in accordance with BS EN 1382 : 1999
- resistance to freeze/thaw cycling in accordance with BBA MOAT No 22 : 1988
- thermal cycling in accordance with BBA MOAT 22 : 1988
- resistance to heat/sun cycling to MOAT No 22 : 1988
- dynamic wind loading in accordance with ETAG 004 : 2000
- weathertightness test in accordance with BS EN 12865 : 2001 and BS 5368-2 : 1980.

18 Investigations

An assessment was made relating to the following:

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

18.2 The system's resistance to wind loading and mechanical resistance.

Bibliography

- BS 476-4 : 1970 *Fire tests on building materials and structures — Non-combustibility test for materials*
- BS 5250 : 2002 *Code of practice for control of condensation in buildings*
- BS 5368-2 : 1980 *Methods of testing windows — Watertightness test under static pressure*
- BS EN 351-1 : 2007 *Durability of wood and wood-based products — Preservative-treated solid wood — Classification of preservative penetration and retention*
- BS EN 1382:1999 *Timber structures. Test methods. Withdrawal capacity of timber fasteners*
- BS EN 1383:1999 *Timber structures. Test methods. Pull-through resistance of timber fasteners*
- BS EN 1991-1-4 : 2005 *Eurocode 1 : Actions on structures — General actions — Wind actions*
- BS EN 1995-1-1 : 2004 *Eurocode 5 : Design of timber structures — General — Common rules and rules for buildings*
- BS EN 10143 : 2006 *Continuously hot-dip coated steel sheet and strip. Tolerances on dimensions and shape*
- BS EN 12865 : 2001 *Hygrothermal performance of building components and building elements. Determination of the resistance of external wall systems to driving rain under pulsating air pressure*
- BS EN 13914-1 : 2005 *Design, preparation and application of external rendering and internal plastering — External rendering*
- MOAT No 22 ; 1988 *UEATc Directives for the Assessment of External Insulation Systems for Walls (Expanded Polystyrene Insulation Faced with a Thin Rendering)*
- MOAT No 43 : 1987 *UEATc Directives for Impact Testing Opaque Vertical Building Components*
- BRE Report (BR 135 : 2003) *Fire Performance of External Insulation For Walls of Multi-Storey Buildings*
- ETAG 004 : 2000 *Guideline for European Technical Approval of External Thermal Insulation Composite Systems with Rendering*

19 Conditions

19.1 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.

19.2 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.

19.3 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.

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

19.5 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.

19.6 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.