

RendeX®

EXTERNAL CLADDING SYSTEM

PWS
Prestige Wall Systems

TECHNICAL MANUAL

NCC-BCA 2013 Compliant



VERSION 1.2018





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RendeX® EXTERNAL CLADDING SYSTEM

The RendeX® External Cladding System, manufactured and supplied by Prestige Wall Systems Pty Ltd (PWS) is a multi-layered, BCA Compliant and fully BRAC Accredited exterior wall cladding system. The benefits are superior energy efficiency, weather resistance, design flexibility, lightweight construction, quick and easy installation, strong and durable structure, yet with the appearance of a rendered brick wall. The RendeX® External Cladding System is an insulating, decorative and protective finish system for exterior walls that can be used in many different types of construction. The RendeX® External Cladding System is a cost effective solution for Domestic, Commercial and Industrial applications.

The key element of the RendeX® External Cladding System is the RendeX® Panel manufactured from Grade M Expanded Polystyrene (EPS) boards, factory-coated on one or two sides with polymer modified cementitious base-coat and alkaline resistant fibreglass mesh, ready for application of render, texture and finish coatings on site. The RendeX® Panel must be mechanically secured to a structurally adequate, exterior wall frame (by others).

Few, if any competitive products offer such a wide range of desirable benefits. Chief among these are superior energy efficiency and virtually unlimited design flexibility. Furthermore, the RendeX® External Cladding System has been awarded CodeMark Accreditation and is also suitable for use in Bushfire areas, with requirements up to BAL-29.

TECHNICAL MANUAL TO BE USED BY ARCHITECTS/DESIGNERS, ENGINEERS AND BUILDERS

This Manual is intended for use by qualified and experienced Architects/Designers, Engineers and Builders. The authors, publishers and distributors of this Manual and the associated drawings do not accept any responsibility for incorrect, inappropriate or incomplete use of this information.

This Manual, including the design recommendations and associated drawings, are available in electronic format, with the express intention that Architects/Designers will edit them to suit the particular requirements of specific construction projects.

BASIS OF SPECIFICATION AND DRAWINGS

This Manual has been prepared in the context of the National Construction Code (NCC). Architects/Designers, Engineers and Builders must make themselves aware of any recent changes to these documents, to any Standards referred to therein or to local variations or requirements. The authors, publishers and distributors of the referenced specifications and associated drawings do not accept any responsibility for failure to do so.

In the preparation of this Manual, the following conventions have been adopted. Architects/Designers can choose to either:

- Ensure that all building design and construction complies with the NCC and any relevant referenced documents referred to therein, including Deemed-to-Satisfy provisions, or
- Where the construction is not covered by the Deemed-to-Satisfy provisions of the NCC, the design and construction is presented as an Alternative Solution and must comply with a balanced combination of Australian Standards, current practice, engineering principles and Supplier's information (refer Certification of Alternative Solution at the back of this Manual).

1. PRODUCT ACCREDITATION



CODEMARK ACCREDITATION



CERTIFICATE OF CONFORMITY

This is to certify that

Rendex® External Cladding System



Product Description
Rendex® External Cladding System provides a rendered weatherproof building cladding system of high thermal resistance.

Product Purpose or Use
It consists of Grade M expanded polystyrene, factory-coated on one or two sides with polymer modified render and alkaline resistant fibreglass mesh, mechanically secured to battens fixed to the exterior wall frame. Lightweight and ready for application of render, texture and finish coatings on site.

Certificate Holder

Prestige Wall Systems
24 Humphries Terrace, Kilkenny SA 5009
www.prestigewallsystems.com.au
1300 865 118

Codemark Certification Body
CertMark Australasia Pty Ltd
ABN: 98 154 306 804
JAS-ANZ Accreditation No. Z4450210AK
PO Box 7144, Sippy Downs Qld 4556
www.certmark.com.au

Complies with the Building Code of Australia:

1. BCA Volume One 2013 BP1.1 (a) and BP1.2 Structural Provisions
2. BCA Volume One 2013 FP1.4 Damp and Weatherproofing
3. BCA Volume One 2013 J1.2 (a) Thermal Constructions
4. BCA Volume Two 2013 P2.1 (a), (b) & (c) Structural Performance to wind ratings N1, N2, N3, N4 & C1
5. BCA Volume Two 2013 P2.1 Wall Cladding
6. BCA Volume Two 2013 P2.2.2 Weatherproofing

Subject to the following conditions and limitations:

1. Product installation shall be carried out in accordance with the Rendex® External Cladding System Technical Manual (July 2013)
2. Installation of windows, doors and other penetration through the EPS must be performed as per common industry practice including installation of a continuous moisture barrier between the cladding and timber frame
3. The Prestige EIF System is for use up to and including C1 Cyclonic Regions

Note: BCA Volume Two 2013 P2.2.2 (a) does not apply to Class 10 building except where its construction contributes to the weatherproofing of Class 4 building.
BCA Volume One 2013 FP 1.4 does not apply to (Class 7-B building where in the particular case there is no necessity for compliance or a garage, tool shed, sanitary compartment, or the like, forming part of the building used for other purposes or an open spectator stand or open deck car park.

Signatures:
John Thorpe, CertMark Australasia Pty Ltd
Don Egan, Unrestricted Building Certifier

Dates:
14/3/2014 Date of issue
14/3/2017 Date of expiry

CMA-CM40080 Certificate Number


Logos:
ABCB
JAS-ANZ
www.abcb.gov.au

• This Certificate of Conformity is issued by an accredited certification body under arrangement with JAS-ANZ. The ABCB does not in any way warrant, guarantee or represent that the product the subject of this Certificate of Conformity conforms with the BCA, nor accepts any liability arising out of the use of the Product. The ABCB disclaims to the extent permitted by law, all liability (including negligence) for claims of losses, expenses, damages and costs arising as a result of the use of the product(s) referred to in this Certificate.
• It is advised to check that this Certificate of Conformity is currently valid and not withdrawn, suspended or superseded by a later issue by referring to the ABCB website, www.abcb.gov.au.

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BAL-29 CERTIFICATION



Exova
Warrington

Testing, Advising, Assuring.

EWFA CERTIFICATE OF TEST	CERTIFICATE No : SFC 27882000.1	Page 1 of 1
Report Sponsor	Certificate Issue Date	
Prestige Wall Systems 11A Salvator Drive Camdenfield, VIC, 3081	26/03/14	

Introduction
The element of construction described below was tested by this laboratory on behalf of the test sponsor in accordance with the stated test standard and delivered the results stated below. Refer to the referenced test report for more information.

Reference Report	Test Date	Test Standard
EWFA 27882000.1	05/03/2014	AS1500 8.1-2007

Description of Product		
Product name	Test Specimen Arrangement	Rating
Rendex® Panel Wall System with ICad Render	The wall system consisted of two 30x45 timber stud frames, the central frame offset 310mm back incorporating an 800mm x 800mm aluminium framed window and heavy detail. The unexposed side was fixed with 10mm Gyprock plasterboard while the exposed side had a nominally 18.0mm ICad Render system applied over 70mm back Rendex® Panel System. Further details are provided in test report.	BAL A-29

Notes
THIS CERTIFICATE IS PROVIDED FOR GENERAL INFORMATION ONLY AND DOES NOT COMPLY WITH THE REGULATORY REQUIREMENTS FOR EVIDENCE OF COMPLIANCE.
Reference should be made to the relevant test report to determine the applicability of the test result to a proposed installation and for a full description of the tested construction.
The results of these fire tests may be used to assess fire hazard, but it should be recognised that a single test method will not provide a full assessment of fire hazard under all conditions.

TESTING AUTHORITY	Exova Warrington Pty Ltd
Address	PO Box 485 WARRINGTON SOUTH VIC 3106
Phone / Fax	Unit 2, 485A - 11th Street West WARRINGTON VIC 3175
ABN	18 003 150 1099 (M) 03 9326 7881
Legal Notice Page	11 (02) 241 534
Authorisation	Reviewed By
S. J. Hickey	C. M. Mullen

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Exova
Warrington



BRAC ACCREDITATION

BUILDING REGULATIONS ADVISORY COMMITTEE

Certificate of Accreditation

RENDEX EXTERNAL CLADDING SYSTEM

Prestige Wall Systems
24 Humphries Terrace
KILKENNY SA 5009

has applied to the Building Regulations Advisory Committee for the accreditation of the Rendex External Cladding System, as suitable for use as an external rendered polystyrene cladding system for Class 1 or 10 buildings.

The Building Regulations Advisory Committee appointed under Division 4 of Part 12 of the Building Act 1993 has examined the application and accredited the Rendex External Cladding System as complying with Performance Requirements:

P2.1(a), (b) and (c), P2.2.2 and P2.2.3
of Volume Two of the National Construction Code Series
Building Code of Australia Class 1 and Class 10 Buildings,

as adopted by the Building Regulations 2006, as those clauses apply within the State of Victoria to the structural performance (wind loads), weatherproofing, and damp-proofing, in relation to a cladding system for external walls of Class 1 and 10 buildings, subject to the following conditions:

1. The system must be installed in accordance with the Rendex Cladding System Data Technical Manual, published by Prestige Wall Systems, November 2013.
2. All fixtures and features attached to the wall must be secured into the wall framing.
3. This certificate must be incorporated in the Rendex Cladding System Data Technical Manual, published by Prestige Wall Systems, November 2013.

Date issued: 25 November 2013
Certificate Number: V13/01
Chairperson:

Commissioner David Bennett

C/- The Goods Shed North
733 Bourke Street, DOCKLANDS VIC 3008


2. ABOUT THE RendeX® PANEL

USE AND APPLICATIONS

The RendeX® Panel is lightweight and therefore easy to install to either timber or steel framing. It has great thermal and acoustic insulation properties and therefore the RendeX® Panel has many uses in residential, commercial and industrial buildings, such as external walls, bulkheads, columns and extensions. The RendeX® Panels provide an appearance of a rendered brick wall with depth of reveal at windows that enhances its architectural appearance.

SIZES

RendeX® Panels are available as 1.2m*2.4m sheets in the following thicknesses:

	COATED ON ONE SIDE	50mm	75mm	100mm
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	COATED ON TWO SIDES	-	75mm	100mm
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75mm and 100mm RendeX® Panels are also available in 2.7m and 3.0m lengths, coated on either one or two sides.

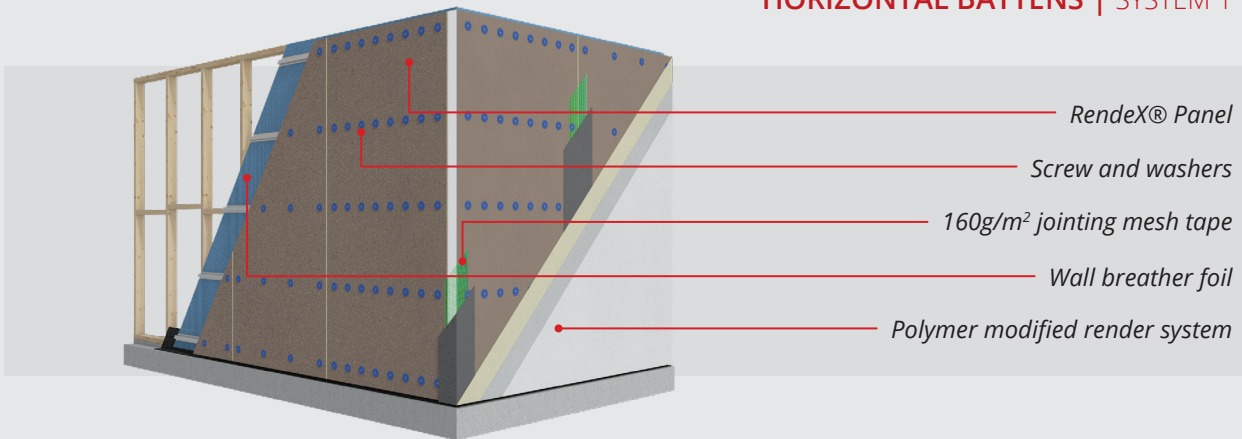
RendeX® EXTERNAL CLADDING SYSTEM

INSTALLATION OPTIONS

The RendeX® Panel is the key component of the RendeX® External Cladding System and can be installed in three alternate configurations:

SYSTEM 1	Vertical RendeX® Panels fixed to horizontal metal battens, on steel or timber studs
SYSTEM 2	Horizontal RendeX® Panels fixed to vertical timber battens, on steel or timber studs
SYSTEM 3	Horizontal RendeX® Panels fixed directly to steel or timber studs

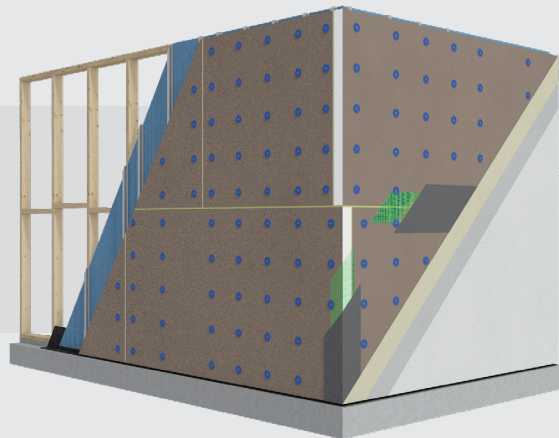
VERTICAL RendeX® PANELS ON HORIZONTAL BATTENS | SYSTEM 1



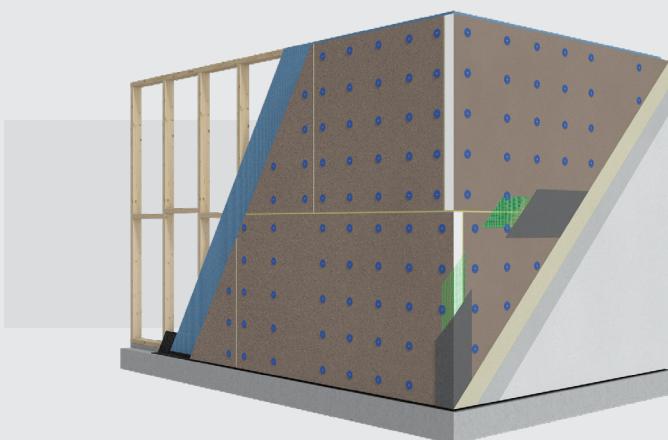
HORIZONTAL RendeX® PANELS ON VERTICAL BATTENS | SYSTEM 2

Apart from battens and panel direction, all components are similar to System 1.

The advantage of this system is that moisture cannot accumulate on horizontal battens.



HORIZONTAL RendeX® PANELS DIRECT FIXED TO TIMBER OR STEEL STUDS | SYSTEM 3



All components similar to System 2 except vertical battens are not installed.

*Polymer modified.
Render as per manufacturers specs.*

NOTE: where there is high risk of condensation within the wall cavity, the use of System 2 is preferable to Systems 1 and 3.

3. STRUCTURAL PERFORMANCE

NATIONAL CONSTRUCTION CODE AND AUSTRALIAN STANDARDS

RendeX® External Cladding System applications must be designed to withstand the loads set out in the NCC and Australian Standards, as applicable. As a minimum the following Australian Standards should be considered:

AS/NZS1170.0	Structural design actions	Part 0: General principles
AS/NZS1170.1	Structural design actions	Part 1: Permanent, imposed and other actions
AS/NZS1170.2	Structural design actions	Part 2: Wind actions
AS/NZS1170.3	Structural design actions	Part 3: Snow and ice actions
AS1170.4	Structural design actions	Part 4: Earthquake actions in Australia
AS4055	Wind loads for housing	

WIND LOADS

Alternative Solution Requirements

The wind loading capacity as specified in Section 12 'Certification of Alternative Solution' has been determined in accordance with:

- AS/NZS1170.2 – Structural Design Actions Part 2: Wind Actions
- AS4055 – Wind Loads for Housing.

The design wind loads for a particular building may only be determined by site classification and height of the building in accordance with one of these Australian Standards.

As the RendeX® External Cladding System is not load bearing, and control joints are specified at regular intervals, there is no specific wall height limitation for the application of the system for buildings with wind loads determined in accordance with AS/NZS1170.2.

Deemed-to-Satisfy Requirements

Where the wind loads of a Class 1 or 10 building are designed in accordance with AS4055, the building shall comply with the limitations of that standard including;

- distance from ground level to the underside of eaves shall not exceed 6.0m,
- distance from ground level to the highest point of the roof, not including chimneys, shall not exceed 8.5m,
- width including roofed verandas, excluding eaves, shall not exceed 16.0m, and the length shall not exceed five times the width, and
- roof pitch shall not exceed 35 degrees.

RendeX® Panels applied to the walls of a building designed for wind loads in accordance with AS4055, are capable of sustaining the design ultimate limit state wind loadings for Wind Classifications N1, N2, N3, N4 and C1.

Racking Loads

The cladding system is not intended to resist racking loads. These must be resisted by appropriate bracing of the wall structure to provide both strength and a high degree of stiffness against these loads.

4. FIRE AND THERMAL PERFORMANCE

FIRE PERFORMANCE

The RendeX® Panel is made of flame-retardant modified expanded polystyrene (EPS), with a factory applied fibreglass mesh reinforced, polymer modified cementitious base-coat. The RendeX® Panel is not fire rated, however the EPS will self-extinguish when the flame source is removed. Note also that the RendeX® External Cladding System has NOT been tested for fire rated construction, therefore the FRL performance is not stated and cannot be assumed.

Separation distances from flues to the external faces of the RendeX® External Cladding System should be observed for the protection of the material. Care must also be taken to protect heat sensitive lining/framing and finishing materials where they are used. Where penetrations are made in the RendeX® Panels for flues and the like, reference must be made to Building Code of Australia (BCA) Part 3.7.3.

THERMAL RESISTANCE OF RendeX® EXTERNAL CLADDING SYSTEM

The RendeX® External Cladding System is commonly applied to stud framing (either timber or metal frame) with a breather membrane, battens, RendeX® Panels, render and acrylic coating. The RendeX® External Cladding System has excellent thermal resistance as set out TABLE 1.

A 75mm thick RendeX® Panel, together with 10mm plasterboard on a stud frame and battens can provide thermal resistance up to R2.4, without additional insulation. With a 100mm thick RendeX® Panel, the system can provide thermal resistance up to R4.5, when additional R1.5 wall insulation is installed.

Table 1 | Thermal Resistance of RendeX® External Cladding System

THERMAL RESISTANCE OF RendeX® EXTERNAL CLADDING SYSTEM (CALCULATED)			
Thickness of EPS (mm)	Thermal Resistance of EPS – R (m ² K/W)	Total Thermal Resistance of walls made from RendeX® External Cladding System fixed to a Timber Stud Wall, with 10mm Plasterboard – R _{total} (m ² K/W)	Total Thermal Resistance of walls made from RendeX® External Cladding System fixed to Steel Battens (thermal break) on a Timber Stud Wall, with 10mm Plasterboard – R _{total} (m ² K/W)
50	1.20	1.60	1.77
75	1.80	2.20	2.37
100	2.40	2.80	2.97

The thermal resistance values of the EPS board are the minimum values required for compliance with AS1366.3 for Class M EPS. The Total Thermal Resistance of a completed wall is calculated using:

- 0.04m²K/W for the external air film
- 0.01m²K/W for 5-8mm external render
- 1.20, 1.80 or 2.40m²K/W for 50mm, 75mm or 100mm EPS board respectively
- 0.17m²K/W for a 20mm ventilated thermal break i.e. the RendeX® panels are fixed on battens.
- 0.00m²K/W for the breather membrane (sarking)
- 0.17m²K/W for a non-ventilated cavity not less than 70mm between the breather membrane and plasterboard, bridged only by stud frames
- 0.06m²K/W for 10mm plasterboard
- 0.12m²K/W for the internal air film

The thermal resistance of these systems may be increased by adding bulk insulation between the studs and/or reflective foil between the studs and the plasterboard, or other proprietary insulation system.

The building design and construction process involves three principle functions:

- Design, including product selection;
- Manufacture and supply of all components; and
- Construction, including the attendant supervision, inspections and certification.

DESIGN PROCESS

The design process must encompass the selection of the appropriate product for the particular design application. The Architect/Designer and Engineer for any building project share responsibility (and authority) to determine and communicate the design (within the constraints of NCC) to the Builders. They are required to consider all relevant matters affecting the building and its components, and determine their designs drawing on professional training, experience, peer practices, ethics, client requirements, published standards, research and the like. This information must be communicated to the Builders and Installers by drawings and specifications.

All materials and construction must comply with the most recent version of:

- the relevant parts of the Building Regulations;
- the Standards referred to therein;
- other Standards nominated in this specification; and
- other relevant Regulations.

Relevant Standards

AS1684.2	Residential Timber Framed Construction <i>Non-cyclonic areas</i>
AS1684.3	Residential Timber Framed Construction <i>Cyclonic areas</i>
NASH Standard	Residential and low-rise steel framing

All buildings are required to be built such that:

- The RendeX® External Cladding System is properly supported to resist horizontal wind and earthquake loads, together with vertical gravity loads;
- The building is weatherproof and durable; and
- The required thermal resistance can be achieved.

Structural Support

The specification, supply and construction of the building frames and/or structure is outside the scope of this Manual and the supply of the RendeX® External Cladding System. The Architect/Designer, Engineer and Builder must ensure the correct specification, supply and construction of appropriate frames to AS1684 (timber frames designed in accordance with AS1720.1 that provide the same degree of support e.g. support spacing, will be equally applicable), AS4600 or other appropriate standard, such that the supporting structure has sufficient combined capacity to transmit the horizontal in-plane and out-of-plane loads from the wall to the supports.

Weather-Proofing

Buildings must be correctly detailed to account for weatherproofing requirements, foundation movement, shrinkage and the efficient removal of rain water:

- Gutters and rainwater downpipes must be free draining, and connected to a functioning stormwater system.
- Flashing must be secured and joints sealed with flexible sealant e.g. silicone or similar, which must be renewed over time as they deteriorate.
- Damp-proof courses shall exclude rising ground water and the accompanying salts from contaminating the structure. The RendeX® External Cladding System does not require a proprietary damp-proof course provided the bottom of the RendeX® Starter Panel or Starter Trim is fixed at least 100mm above the finished ground level.
- The specification, supply and construction of appropriate windows and doors are outside the scope of the RendeX® External Cladding System and this Manual. The Architect/Designer, Engineer and Builder must ensure the correct specification, supply and construction of appropriate windows and doors, such that drainage holes and integral flashings drain rain water to the outside of the building and prevent the ingress of water behind the RendeX® External Cladding System.

MANUFACTURE AND SUPPLY

The RendeX® Panels are manufactured according to controlled work instructions and under the guidance of an approved Product Quality Plan. All raw material suppliers are expected to maintain a Quality Control process which enables full traceability.

All materials are checked on receipt, records are kept of production runs and the finished RendeX® Panels are checked on dispatch.

CONSTRUCTION

Correct installation of the RendeX® External Cladding System is critical for achieving a structurally sound and weatherproof finished product. Sections 6 to 11 of this Manual detail typical installation requirements, to assist Designers, Architects and Builders at all stages of the project.

6. INSTALLATION OF RendeX® EXTERNAL CLADDING SYSTEM

COMMENCEMENT

Work must commence as soon as practical after, but not before:

- The Builder has issued:
 - a written order advising of completion of support framing
 - the relevant contract drawings, specifications and schedule of work
 - written approval of any details provided by the Contractor
- The structural framework has reached a stage to permit the work to proceed.

QUALIFICATIONS AND EXPERIENCE OF INSTALLERS

The RendeX® External Cladding System should only be installed by qualified and experienced carpenters or other tradesmen, who are conversant with the installation techniques set out in this Manual.

METHODOLOGY

Refer to Sections 8 to 11 of this Manual for specific installation details.

Before fixing the RendeX® Panels ensure that the wall framing (or superstructure) is both aligned and plumb. Check that the stud and/or batten spacing does not exceed 600mm. Ensure that all RendeX® Panel edges are supported, so that fixings can be applied between 50mm to 150mm from the edge. Additional horizontal battens may be required to support vertical RendeX® Panels on both sides of a horizontal join. Additional vertical studs and/or battens may also be required to support horizontal RendeX® Panels on both sides of a vertical join.

When fixing RendeX® Panels within 1.2m of an external corner, provide additional studs or battens for the additional fastener requirements (see detailing in Sections 8, 9 and 10, where additional studs or battens are indicated with a 'red star').

1. **DPC or Flashing** – DPC and flashings must be fixed (by others) as per the manufacturer's recommendation and approved drawings/specifications.
2. **Sarking** – Fix the permeable (breathable) sarking over the studs, before fixing battens (when required) or the RendeX® Panels.
3. **Battens (when required) shall be fixed as per one of the following options:**

- *System 1* – Vertical RendeX® Panels fixed to horizontal steel top-hat battens

Steel top-hat sections must not be lapped, but the end of each batten must be securely fixed to the supporting structure. A 10mm gap must be provided between battens in the same horizontal line to allow for the escape of trapped moisture. The top-hat battens must be fixed according to the manufacturer's recommendation and be spaced at 600mm maximum centres.

- *System 2* – Horizontal RendeX® Panels fixed to vertical timber battens

Battens must be securely fixed to the supporting structure (studs). The vertical battens must be spaced at 600mm maximum centres.

4. **RendeX® Starter Panel or Starter Trim** – Install RendeX® Starter Panel or Starter Trim.
5. **Cutting** – Measure the required lengths and cut the RendeX® Panel using a straight-edge and diamond-masonry blade in a circular saw, to a tolerance of $\pm 1\text{mm}$.
6. **Fixing** – The RendeX® Panels should be butted together, with a maximum gap of 5mm. A clearance of not less than 100mm must be maintained between the bottom edge of any RendeX® Panel and the finished ground level. Erect each RendeX® Panel, ensuring it is square to the frame. Apply expanding foam between each RendeX® Panel (except at control joints) and fix to the studs or battens using PVC washers and screws (see specification for details). Screws must be driven only until the washer just sinks into the surface of the RendeX® Panel, without damaging the fibreglass mesh.
7. **RendeX® Panel Joints (other than Control Joints)** – After trimming back any excess expanding foam, install a 200mm wide strip of fibreglass mesh (160g/m²) to all RendeX® Panel joints. Ensure that the mesh overlaps the RendeX® Panel by 100mm and apply with polymer modified patching compound.
8. **Openings** – At window and door openings provide a 3mm gap between the RendeX® Panel and the window/door frames. Provide a minimum of 1 in 6 fall at window sills. Install mesh reinforced corner trim around all reveals and install butterfly meshing on corners. Install RendeX® Weatherseal Tape for rain/moisture and wind protection around windows and doors frames. Apply sealant between the frames and finished RendeX® Panels.
9. **Horizontal Control Joints** – Provide horizontal movement joints at vertical centres corresponding to a storey height or not exceeding 3.6m. The control joint consists of a 10mm gap filled with a closed-cell polyethylene joint filler strip (75mm*10mm) and polyurethane flexible sealant (refer to manufacturer for recommended installation details). The joint filler strip is placed under the RendeX® Panel at the time of installation. Horizontal joints to dissimilar materials, other than those detailed in this Manual should be referred to the respective manufacturer for guidance.
10. **Vertical Control Joints** – Install vertical movement joints at horizontal centres not exceeding 4.8m. The control joint consists of a 10mm gap, closed-cell 13mm diam. backing rod and polyurethane flexible sealant (refer to manufacturer for installation details). The backing rod is pressed into position after the adjoining RendeX® Panels have been rendered. Vertical joints to dissimilar materials, other than those referenced in this Manual, should be referred to the respective manufacturer for guidance.
11. **External Corners** – Install mesh reinforced corner trim (meshed external beading) with an additional strip of 200mm wide fibreglass mesh to the side where raw polystyrene is visible. Apply with polymer modified patching compound.
12. **Internal Corners** – Install an additional strip of 200mm wide strip of fibreglass mesh into the corner. Apply with polymer modified patching compound. Alternatively, internal corners may be detailed as a vertical control joint.
13. **Finish** – Apply polymer modified render in accordance with manufacturer's specifications. The RendeX® Panels must be rendered within two weeks of installation and must not be rendered when wet e.g. from dew, rain or frost.

FIXING REQUIREMENTS

The minimum number of standard fixings for RendeX® Panels is summarised in TABLE 2.

Fixings must not be placed less than 50mm or more than 150mm from the edge or end of a RendeX® Panel.

Table 2 | Minimum Number of Standard Fixings for RendeX® Panels

MINIMUM NUMBER OF STANDARD FIXINGS FOR RENDEX® PANELS			
Wind Class (to AS4055)	RendeX® Panel Thickness (mm)	Minimum number of standard fixings per m ²	
		Further than 1.2m from corners	Within 1.2m of the corners
N1	50, 75, 100	6	12
N2	50, 75, 100	6	12
N3	75, 100	6	12
N4	75, 100	7	14
C1	75, 100	7	14

Pressures are determined in accordance with AS4055:2012.

Each Standard Fixing consists of a 48mm diameter flexible PVC washer, fixed to the supports through the RendeX® Panel by one screw complying with the following specification.

Screws shall be:

- Coarse thread, at least 10 gauge (4.8mm);
- Of length at least 25mm longer than the thickness of the RendeX® Panel plus any vertical timber batten;
- At least Class 3 when the site is further than 1.0km from breaking surf;
- At least Class 4 when the site is further than 100m (but less than 1.0km) from breaking surf and fully embedded;
- Grade 304 or 316 stainless steel for applications within 100m of breaking surf;
- In accordance with the specified number of standard fixings per m² of RendeX® Panel, as per the above table.

Screws installed adjacent to the edge or end of a RendeX® Panel shall be no closer than 50mm or further than 150mm.

Washers shall be 48mm diameter flexible PVC, capable of being pulled flush with the surface of the RendeX® Panel without rupturing the reinforced base-coat.

Specific fixing requirements for the alternate systems are defined below:

FIXING LOCATIONS FOR **SYSTEM 1**

(Vertical RendeX® Panels fixed to Horizontal Steel Battens)

Within 1.2m of external corners:

WIND CLASSES N1, N2 & N3: AT LEAST 12 FIXINGS PER M ²			
RendeX® Panel Size	Batten Spacing	No. of Battens	Fixings/Panel
1.2m*2.4m	550mm	5	35 @ 170c/c
	275mm	9	36 @ 350c/c
1.2m*3.0m	550mm	6	42 @ 170c/c
	275mm	11	44 @ 350c/c

WIND CLASSES N4 & C1: AT LEAST 14 FIXINGS PER M ²			
RendeX® Panel Size	Batten Spacing	No. of Battens	Fixings/Panel
1.2m*2.4m	550mm	5	40 @ 125c/c
	275mm	9	45 @ 250c/c
1.2m*3.0m	550mm	6	48 @ 125c/c

	275mm	11	55 @ 250c/c
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Further than 1.2m from external corners:

WIND CLASSES N1, N2 & N3: AT LEAST 6 FIXINGS PER M ²			
RendeX® Panel Size	Batten Spacing	No. of Battens	Fixings/Panel
1.2m*2.4m	550mm	5	20 @ 350c/c
1.2m*3.0m	550mm	6	24 @ 350c/c

WIND CLASSES N4 & C1: AT LEAST 7 FIXINGS PER M ²			
RendeX® Panel Size	Batten Spacing	No. of Battens	Fixings/Panel
1.2m*2.4m	550mm	5	20 @ 350c/c
1.2m*3.0m	550mm	6	24 @ 350c/c

FIXING LOCATIONS FOR SYSTEMS 2 AND 3

(Horizontal RendeX® Panels fixed to Vertical Timber Battens or Direct to Studs)

Within 1.2m of external corners:

WIND CLASSES N1, N2 & N3: AT LEAST 12 FIXINGS PER M ²			
RendeX® Panel Width	Stud Spacing	Fixings/Stud	Fixings/m2
1.2m (full Panel)	300mm	5 @ 250c/c	14
	450mm	6 @ 200c/c	12
0.6m (half Panel)	300mm	3 @ 250c/c	17
	450mm	4 @ 150c/c	17
0.3m (Starter Panel)	300mm	2 @ 150c/c	22
	450mm	2 @ 150c/c	17

WIND CLASSES N4 & C1: AT LEAST 14 FIXINGS PER M ²			
RendeX® Panel Width	Stud Spacing	Fixings/Stud	Fixings/m2
1.2m (full Panel)	300mm	5 @ 250c/c	14
	450mm	7 @ 170c/c	15
0.6m (half Panel)	300mm	3 @ 250c/c	17
	450mm	4 @ 150c/c	17
0.3m (Starter Panel)	300mm	2 @ 150c/c	22
	450mm	2 @ 150c/c	17

Further than 1.2m from external corners:

WIND CLASSES N1, N2 & N3: AT LEAST 6 FIXINGS PER M ²			
RendeX® Panel Width	Stud Spacing	Fixings/Stud	Fixings/m2
1.2m (full Panel)	600mm	4 @ 350c/c	7
	450mm	3 @ 500c/c	6
0.6m (half Panel)	600mm	3 @ 250c/c	10
	450mm	2 @ 500c/c	8

0.3m (Starter Panel)	600mm	2 @ 150c/c	13
	450mm	2 @ 150c/c	17

WIND CLASSES N4 & C1: AT LEAST 7 FIXINGS PER M²

RendeX® Panel Width	Stud Spacing	Fixings/Stud	Fixings/m2
1.2m (full Panel)	600mm	4 @ 350c/c	7
	450mm	4 @ 350c/c	8
0.6m (half Panel)	600mm	3 @ 250c/c	10
	450mm	2 @ 500c/c	8
0.3m Starter Panel	600mm	2 @ 150c/c	13
	450mm	2 @ 150c/c	17

INSPECTION AND TESTING REQUIREMENTS

Inspections and tests must be performed as defined in TABLE 3.

Table 3 | *Inspection and Testing Requirements*

INSPECTION AND TESTING REQUIREMENTS			
Item or Product	Inspection Required	Accept Criteria	Hold / Witness
Drawings & Specifications	Inspect controlled documents	Controlled copy of latest issue on site	Hold
Frame			
Position	Spot check	±5mm	Hold
Squareness	Spot check	±5mm	Hold
Plumbness	Spot check	±1mm	Hold
Samples	Visual	As per spec	Hold
Finished cladding etc	Visual + Open and close all doors and windows	As per drawing and specification. Must function correctly.	Witness

DAMP-PROOF COURSE

Damp-proof course shall be installed around the perimeter of the ground floor walls frames, where a concrete rebate is provided (as per detail).

RendeX® STARTER PANEL / STARTER TRIM

RendeX® Starter Panels function as a cavity closer but must permit drainage to the exterior of the wall. Starter Trims function in the same way.

RendeX® Starter Panels and Starter Trims must be installed such that there is a minimum drip edge to the wall cladding of:

- 15mm above window and door head flashings; and
- 10mm at the base of walls.

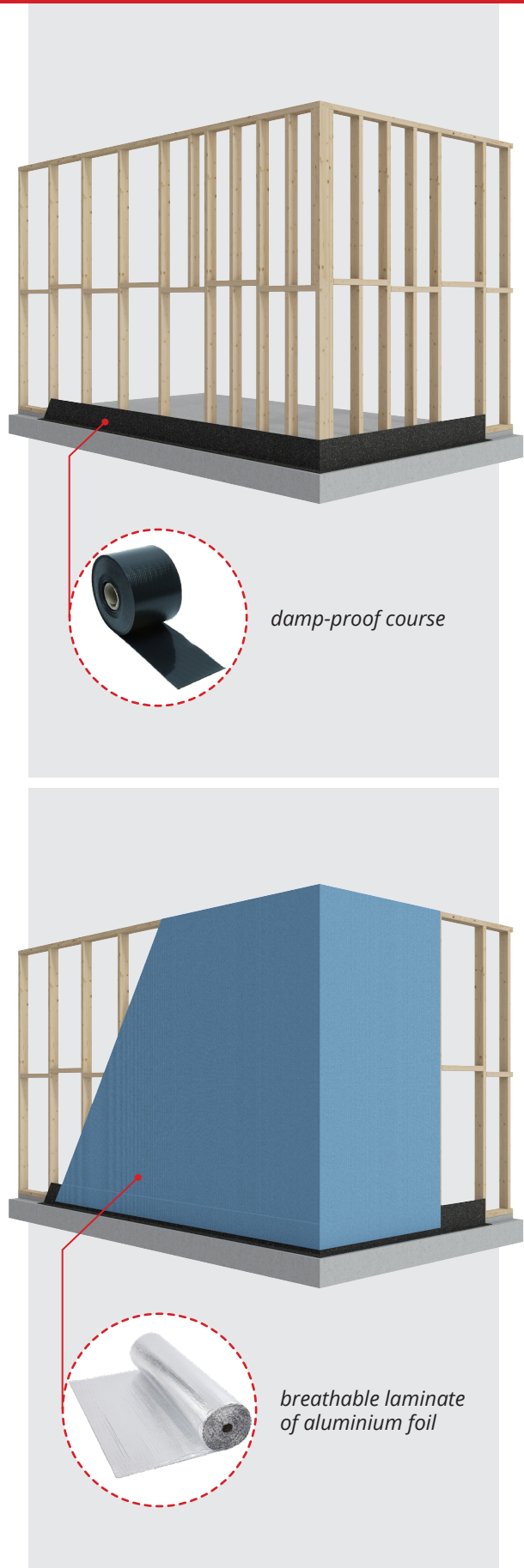
Where Starter Trims are installed to provide intermittent support for fixings or pipe penetrations through a drained cavity, the Starter Trim must be set to a 1 in 12 fall to allow drainage of any moisture from the top.

Starter Trims must be manufactured from aluminium, stainless steel or uPVC, with holes or slots having min and max dimension of 3 and 5mm, providing an opening area of at least 1,000mm²/m.

SARKING

Sarking must be a breathable (permeable) laminate of aluminium foil and poly-woven fabric with the following properties: Heavy duty, Water Vapour Transmission Rate not less than 140Ng/Ns, Emittance of reflective face not more than 0.05, Flammability Index under 5, Tensile Strength in the machine direction not less than 12.5kN/m, Tensile Strength in the lateral direction not less than 7.5kN/m, Edge Tear Resistance in the machine direction not less than 80N, Edge Tear Resistance in the lateral direction not less than 80N.

Complying product: Rhino Heavy Duty Wall Wrap RP51 THOR BUILDING PRODUCT (or equivalent)



BATTENS FOR CAVITY SYSTEMS

System 1 – Vertical RendeX® Panels fixed to horizontal steel battens on steel or timber studs

- Battens must be Grade G550 steel, 0.42mm BMT (base metal thickness), AZ150 (150g/m² Zinalume) aluminium/zinc coating, top-hat section, 65mm total width*30mm flange width*24mm depth.
- Battens to be fixed using 2*10g screws at each stud-frame.

Complying product: Rondo 24mm Cyclonic Ceiling Batten 303 (or equivalent)

System 2 – Horizontal RendeX® Panels fixed to vertical timber battens on steel or timber studs

- Timber battens – Nominally 20mm*45mm MGP10 complying with AS1684 (minimum 45mm wide, and between 18mm and 25mm thick).

EXPANDED POLYSTYRENE (EPS) BOARD

EPS board must be M-Grade, flame retardant modified in accordance with AS1366.3, with the following properties:

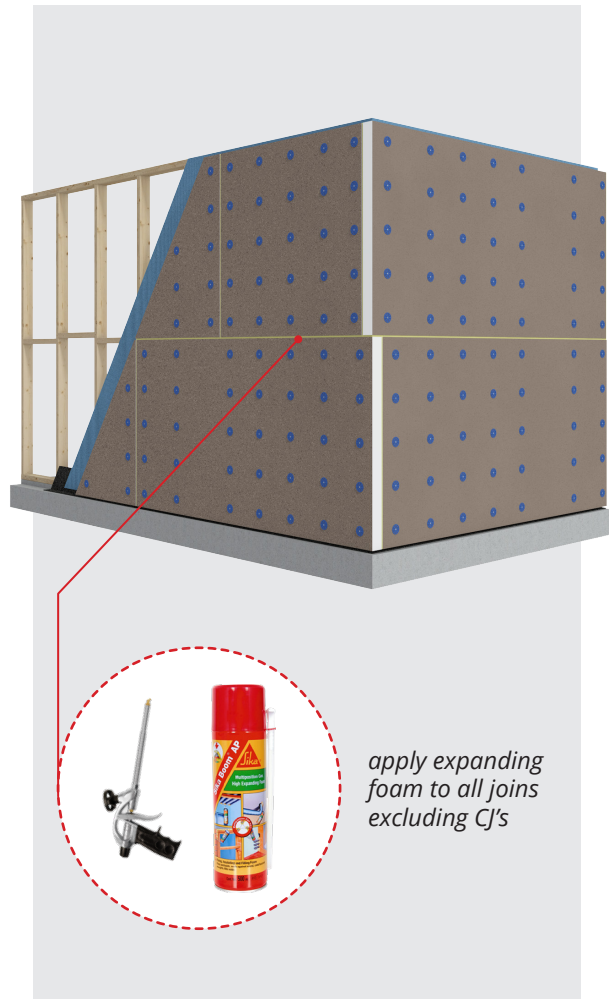
- Thermal resistance at a mean temperature of 23°C of a 50mm sample in accordance with AS/NZS4859.1 – not less than R1.2 (m²K/W)
- Compressive strength in accordance with AS2498.3 Method 3 – not less than 105kPa
- Cross breaking strength in accordance with AS2498.4 Method 4 – not less than 200kPa
- Water Vapour Transmission in accordance with AS2498.5 Method 5 – not more than 520mg/m²
- Dimensional stability in accordance with AS2498.6 Method 6 – not more than 1%
- Flame Propagation Surface Ignition of Vertically Oriented Specimens in accordance with AS2122.1 Method 6
 - Residue for 2sec Ignition Median Percent not less than 30%, Standard Deviation not less than 27%

- Flame duration 5sec: Median Percent not more than 2sec, Standard Deviation not more than 3sec

EXPANDING FOAM FOR JOINS

Expanding foam for joins must be a single-component polyurethane foam, which is applied by pistol, hardens via chemical reaction with atmospheric humidity, with long shelf life, resistant to rotting and resistant to aging, resistance to temperature of hardened foam (-30°C to +80°C), non-tacky after approximately 10mins, can be cut after approximately 25mins, load-bearing after approximately 3hrs, completely hardened after approximately 5 to 8hrs (all details based on temperature of +20°C).

Complying product: Fischer PU 1 (or equivalent)



SCREW FIXINGS

Schedule of screw fixings is detailed in Table 4:

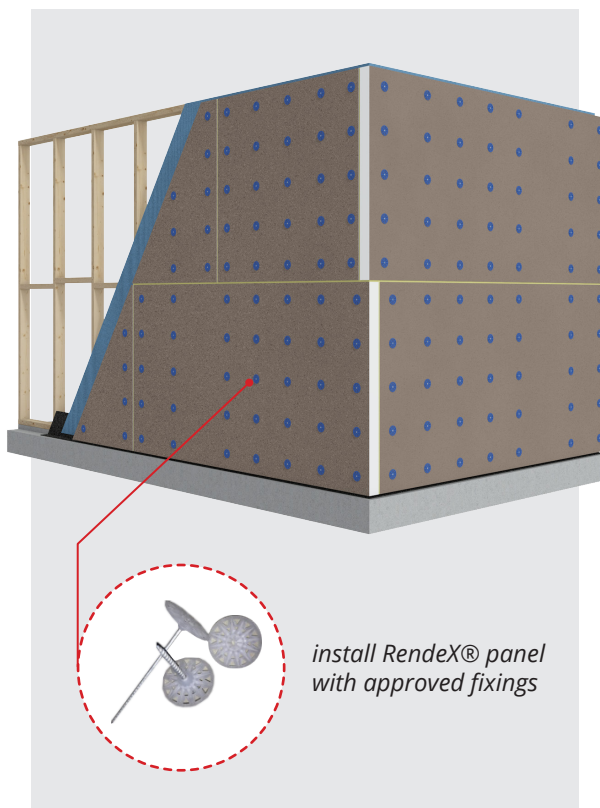
Table 4 | Schedule

SCHEDULE OF SCREW FIXINGS								
Application	Substrate	Thickness secured mm	Outside Diameter	Screw Gauge	Length mm	Corrosion Resistance	Thread	Washer
More than 1km from breaking surf	10mm MGP 10 timber	50mm	4.8mm	10g	100	Class 3	Coarse	48mm dia PVC
		75mm	4.8mm	10g	125	Class 3	Coarse	
		100mm	4.8mm	10g	150	Class 3	Coarse	
	Steel battens	50mm	4.8mm	10g	75	Class 3	Coarse	
		75mm	4.8mm	10g	100	Class 3	Coarse	
		100mm	4.8mm	10g	125	Class 3	Coarse	

Screws shall be:

- Coarse threaded (Coarse);
- At least 10 gauge (4.8mm) for Wind Classifications N1, N2, N3, N4 and C1;
- Of length at least 25mm longer than the thickness of the EPS board plus the batten (for System 2);
- At least Class 3 further than 1km from breaking surf;
- At least Class 4 further than 100m (and less than 1km) from breaking surf and fully embedded;
- Grade 304 or 316 stainless steel for applications within 100m of breaking surf.

Complying product: RendeX® Screws (Product code: MA-Screw 75/100/125/150) Galvanised Class 3 (Class 4 or 304 or 316 stainless for corrosive environments as specified above)



WASHERS

Washers must be a minimum of 48mm diameter flexible PVC.

Complying product: RendeX® Washers (Product code: MA-48mmPW)

MESHED EXTERNAL BEADING

Meshed External Beading shall be either Aluminium or uPVC. uPVC beading must be polyvinyl chloride virgin material, mesh reinforced, UV stabilised, marine grade. Both shall be extruded to the specified shapes.

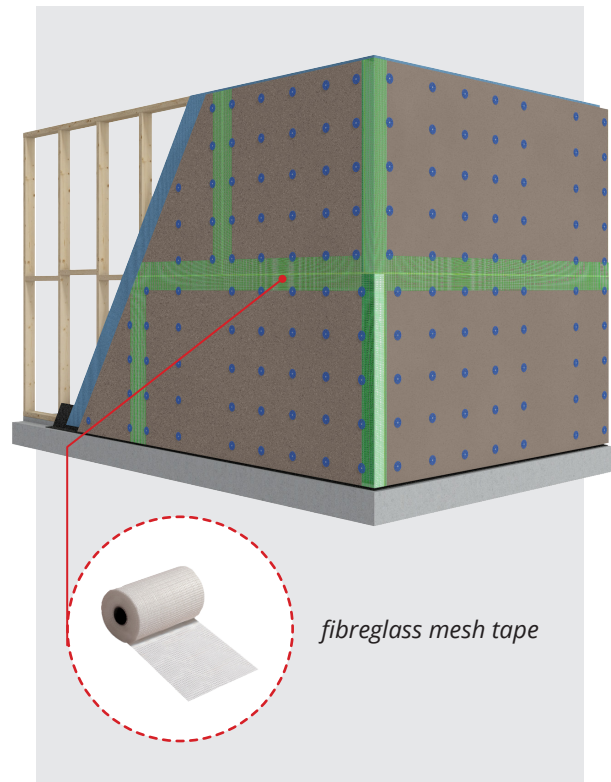
FIBREGLASS MESH TAPE

Meshing is required to all joints (excluding control joints), and external corners where raw polystyrene is visible, i.e. internal and external corners and openings as detailed, it must be 200mm wide, 160g/m² self-adhesive alkali resistant fibreglass mesh (as pictured and shown green in diagram).

Complying product:

Site-installed - Fibreglass 5mm*5mm mesh, 160g/m² mesh, alkali resistant.

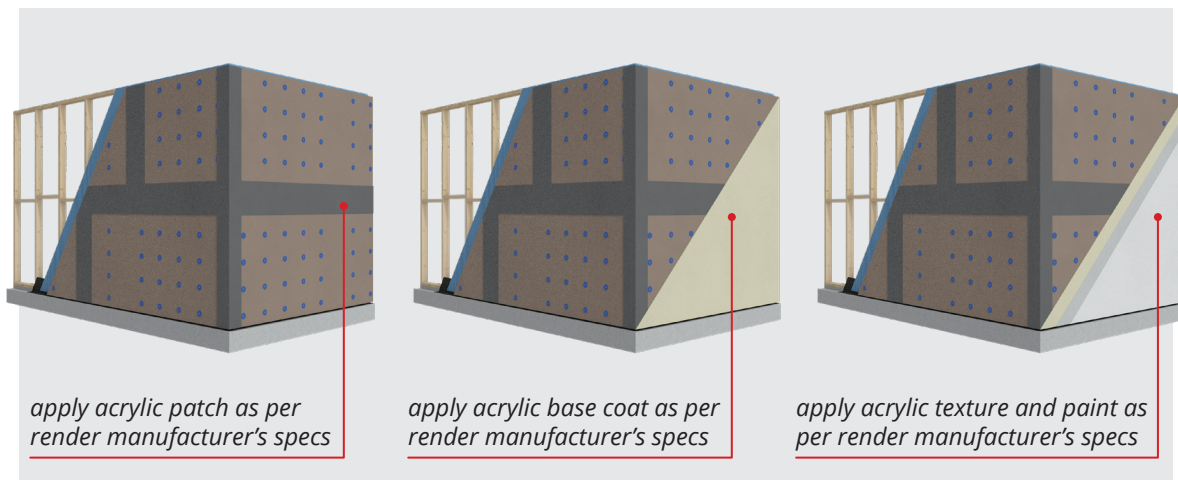
Product code: MESH200A



RENDERING

Render must be pre-blended polymer modified cement render, suitable for mixing with water immediately before use to provide a smooth, trowel-able paste.

Base Coat: Two coats of base coat render 3 to 5mm thick shall be applied to the entire wall area.



Sealant must be an acrylic based texture coating suitable for external application over cement rendered surfaces. Coating must consist of an acrylic external coating system, applied according to the manufacturer's instructions.

Complying product: Proprietary systems compliant with the above specification above are deemed suitable.

Finish Coat: Applied on top of the base coat giving a durable, weatherproof, crack-resistant finish.



8

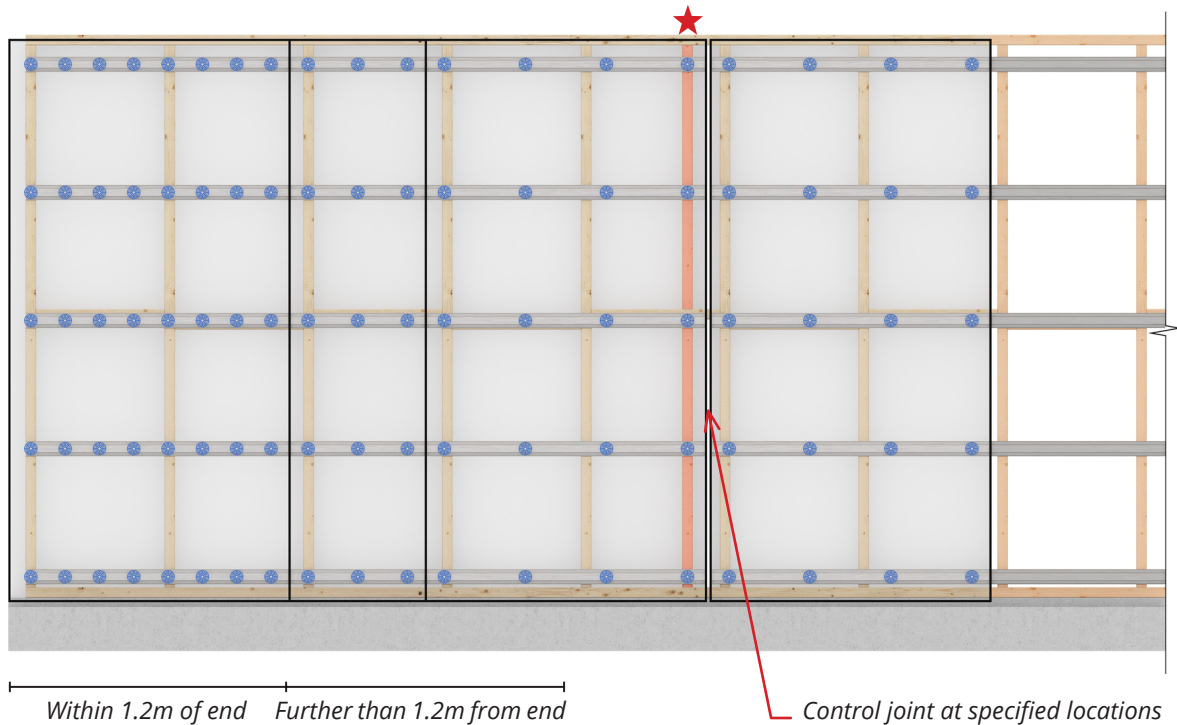
INSTALLATION DETAILS | **SYSTEM 1**

Vertical RendeX® panel fixed to horizontal steel battens on steel/timber studs

FIXING LOCATIONS

Fixing and stud locations: Vertical panels fixed to horizontal battens on steel or timber studs.

★ Indicates additional studs and noggings to provide required support.



Fixings must not be placed less than 50mm or more than 150mm from the edge or end of a panel.

Within 1.2m from end:

WIND CLASSES N1, N2 & N3: AT LEAST 12 FIXINGS PER M²

Typically 35 fixings per panel 1.2x2.4m (5 battens)

Typically 42 fixings per panel 1.2x3.0m (6 battens)

WIND CLASSES N4 & C1: AT LEAST 14 FIXINGS PER M²

Typically 40 fixings per panel 1.2x2.4m (5 battens)

Typically 48 fixings per panel 1.2x3.0m (6 battens)

Further than 1.2m of end:

WIND CLASSES N1, N2 & N3: AT LEAST 6 FIXINGS PER M²

Typically 20 fixings per panel 1.2x2.4m (5 battens)

Typically 24 fixings per panel 1.2x3.0m (6 battens)

WIND CLASSES N4 & C1: AT LEAST 7 FIXINGS PER M²

Typically 20 fixings per panel 1.2x2.4m (5 battens)

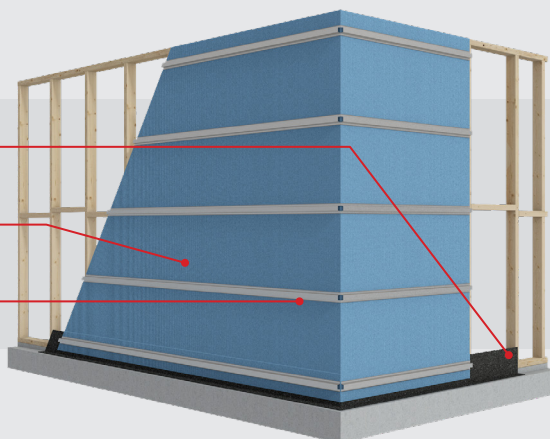
Typically 24 fixings per panel 1.2x3.0m (6 battens)

STEP BY STEP

STEP 1 | Install DPC

STEP 2 | Install Sasalation

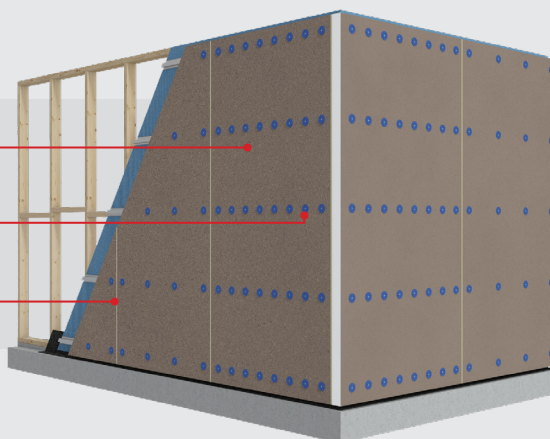
STEP 3 | Install horizontal battens



STEP 4 | Cut panel to size

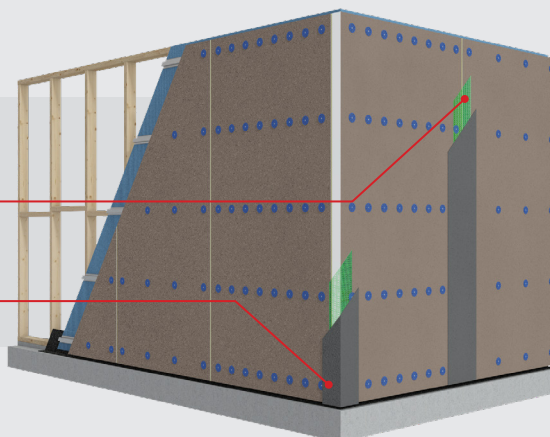
STEP 5 | Fix panel with screws and washers

STEP 6 | Fill gaps between the panels with expanding foam



STEP 7 | Install fiberglass mesh to joints and corners
Apply extra mesh to external corner

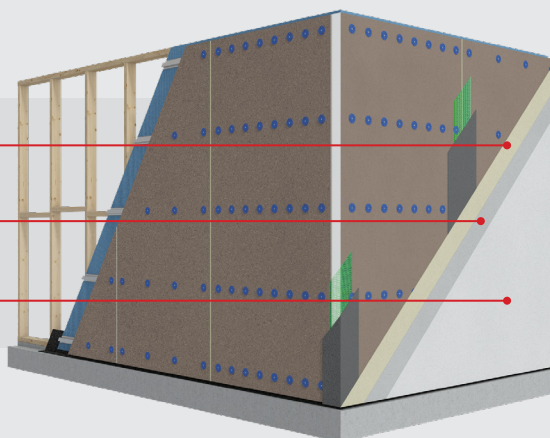
STEP 8 | Patch with patching compound

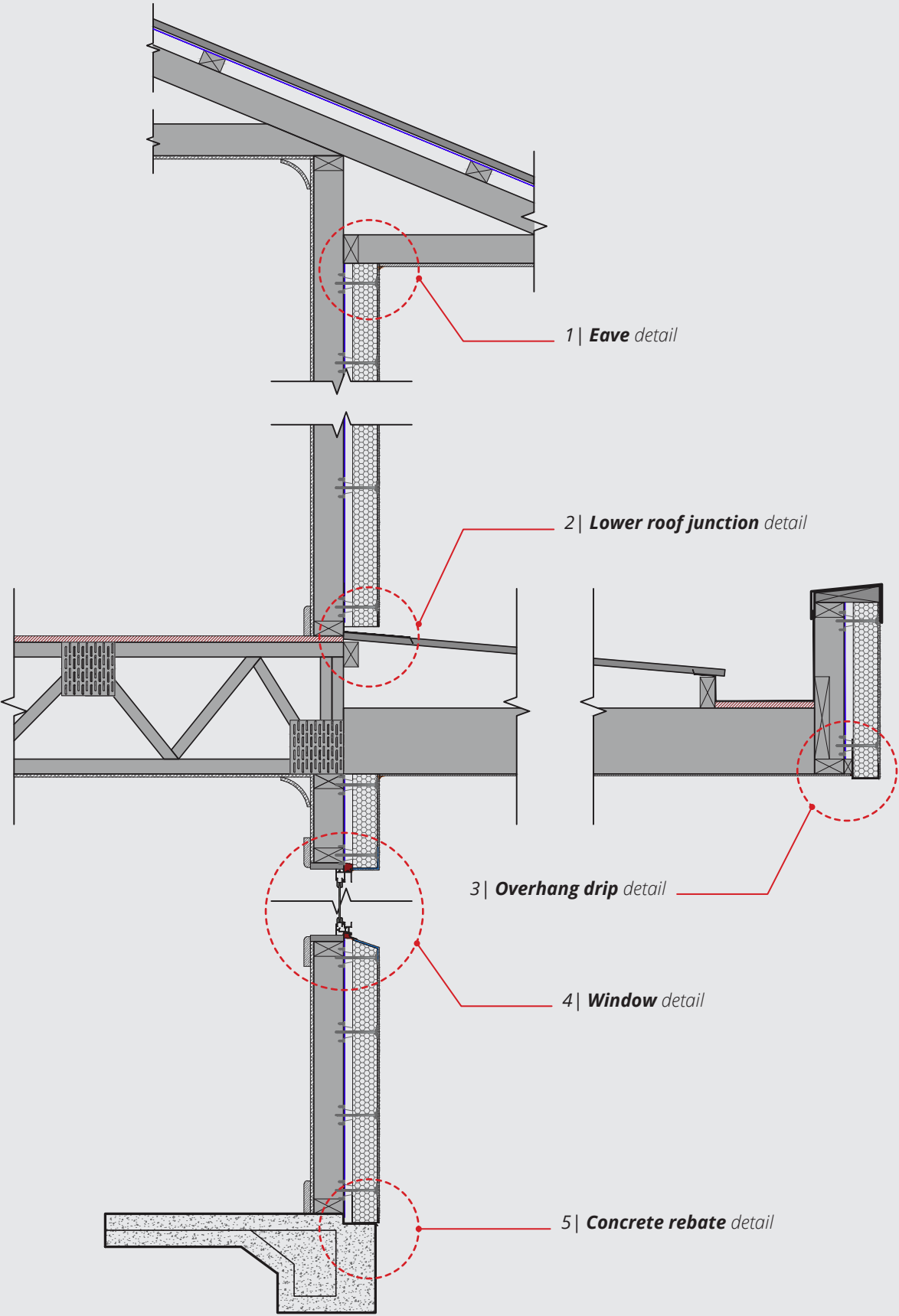


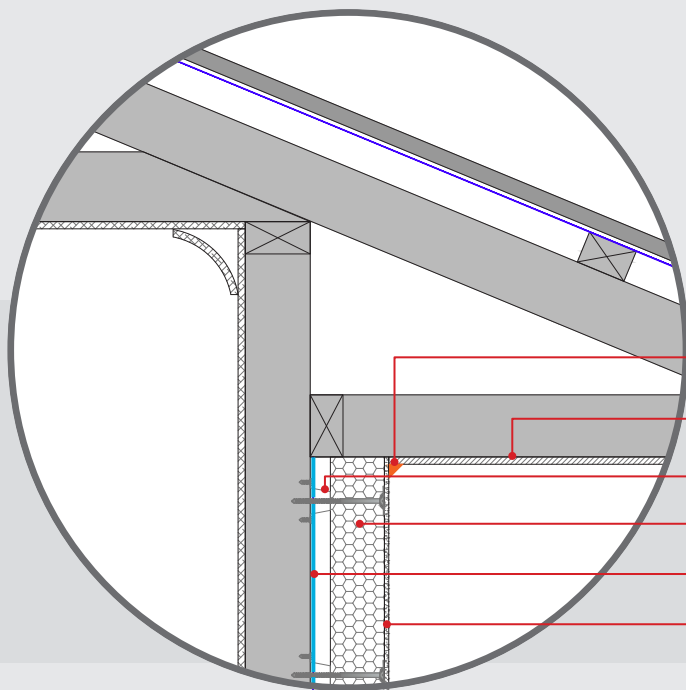
STEP 9 | Basecoat acrylic render to manuf. specs

STEP 10 | Texture

STEP 11 | Acrylic membrane







EAVE DETAIL | OPTION A
SYSTEM 1

Sealant

Eave lining

Rondo tophat

RendeX® panel

Sarking

Acrylic render

1A

EAVE DETAIL | OPTION B
SYSTEM 1

Sealant

Eave lining

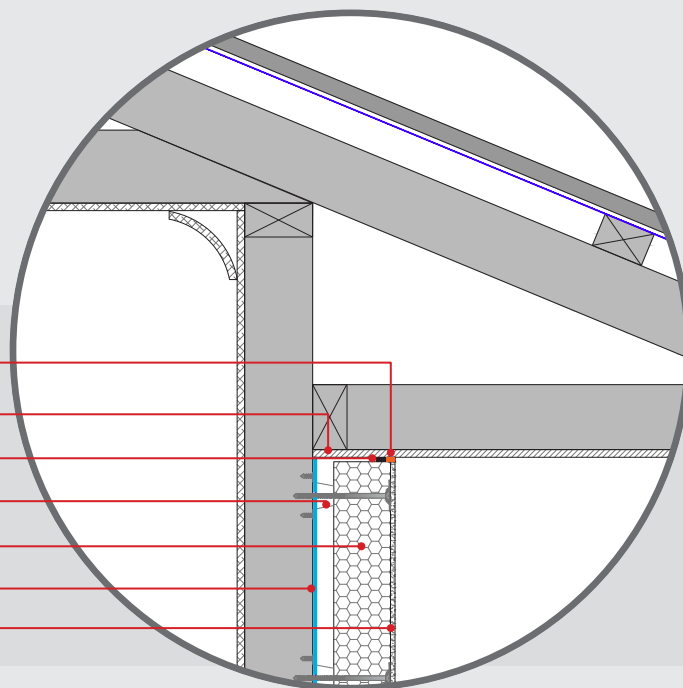
Backing rod

Rondo tophat

RendeX® panel

Sarking

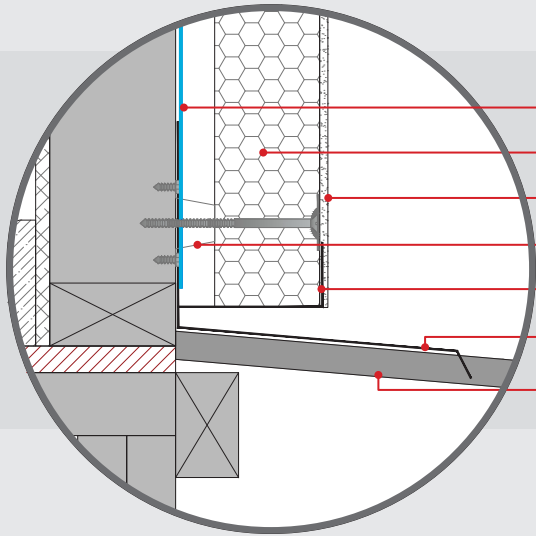
Acrylic render



1B

LOWER ROOF JUNCTION DETAIL | SYSTEM 1

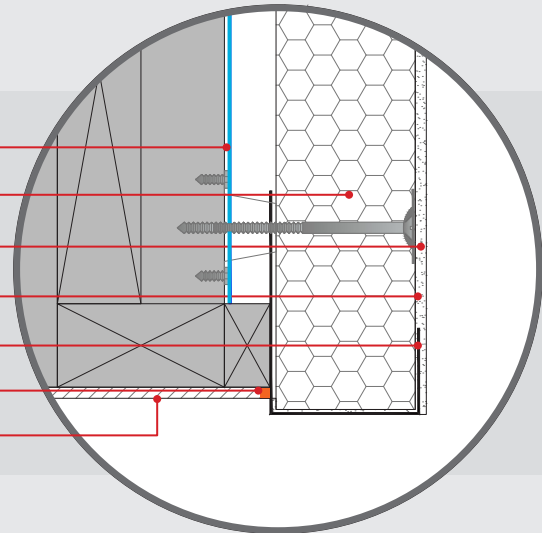
2



Sarking
RendeX® panel
Acrylic render
Rondo tophat
Starter trim
Metal flashing
Metal roof

OVERHANG DRIP DETAIL | SYSTEM 1

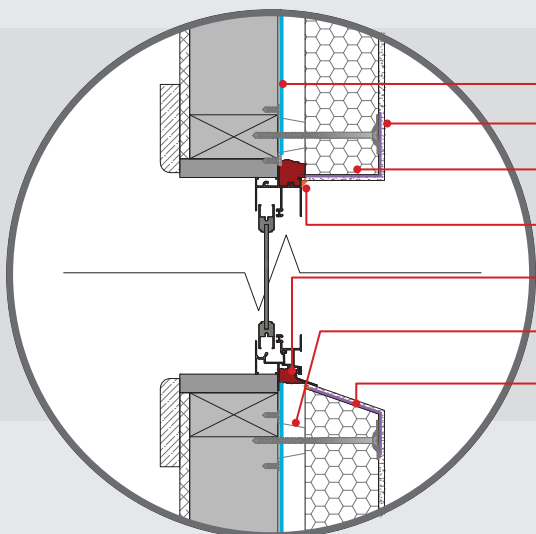
Sarking
RendeX® panel
Acrylic render
Rondo tophat
Starter trim
Sealant
Soffit lining



3

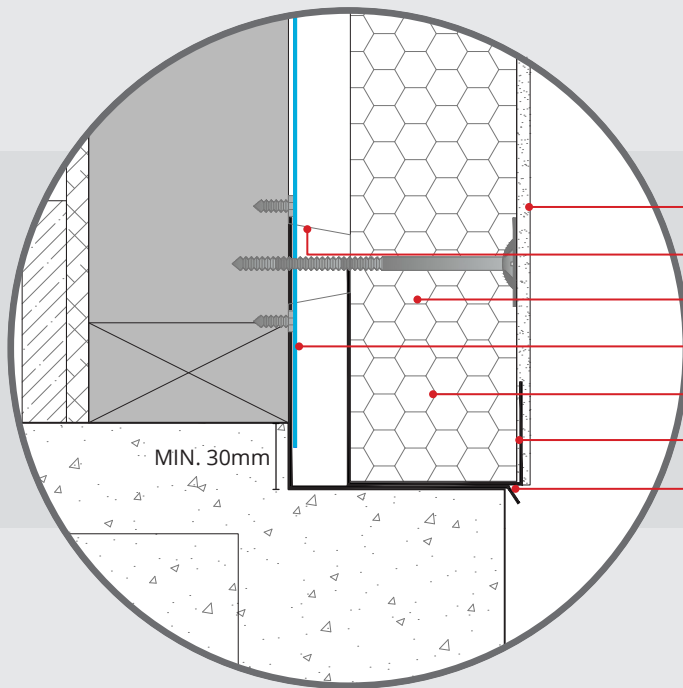
WINDOW DETAIL | SYSTEM 1

4



Sarking
Acrylic render
RendeX® panel
Sealant
Expanding foam
Rondo tophat
Meshed corner bead

CONCRETE REBATE DETAIL SYSTEM 1

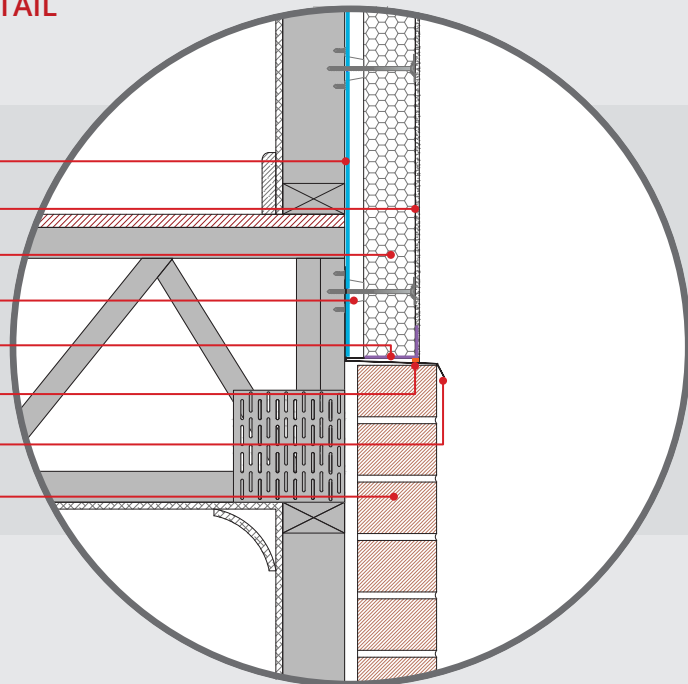


Acrylic render
Rondo tophat
Approved fixing
Sarking
RendeX® panel
Starter trim
DPC

5

RendeX® AND BRICK VENEER DETAIL SYSTEM 1

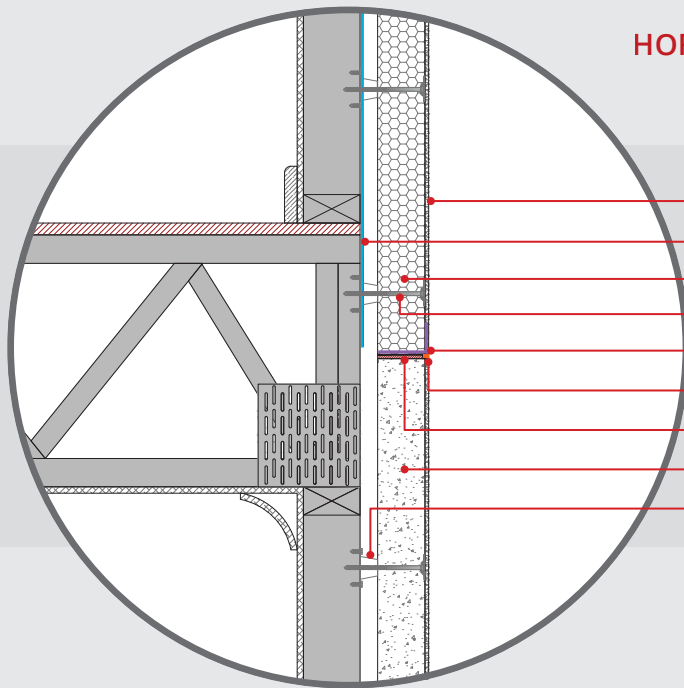
Sarking
Acrylic render
RendeX® panel
Rondo tophat
Meshed corner bead
Sealant
Metal flashing
Brick



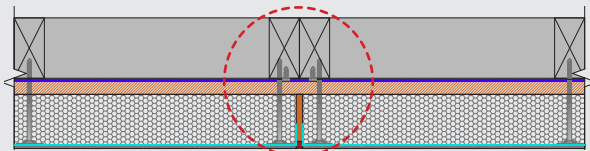
6

DISSIMILAR SUBSTRATES HORIZONTAL CONTROL JOINT DETAIL SYSTEM 1

7

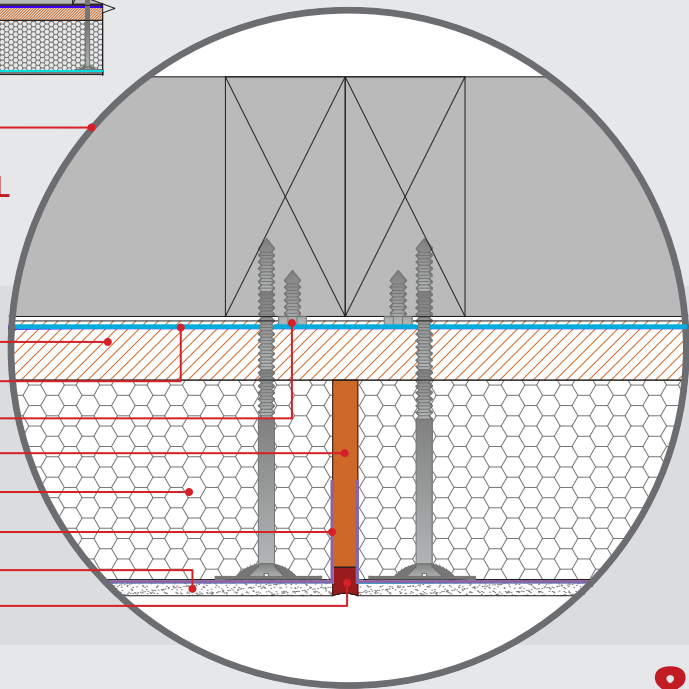


Acrylic render
Sarking
RendeX® panel
Approved fixing
Meshed corner bead
Sealant
Backer rod
AAC panel
Rondo tophat

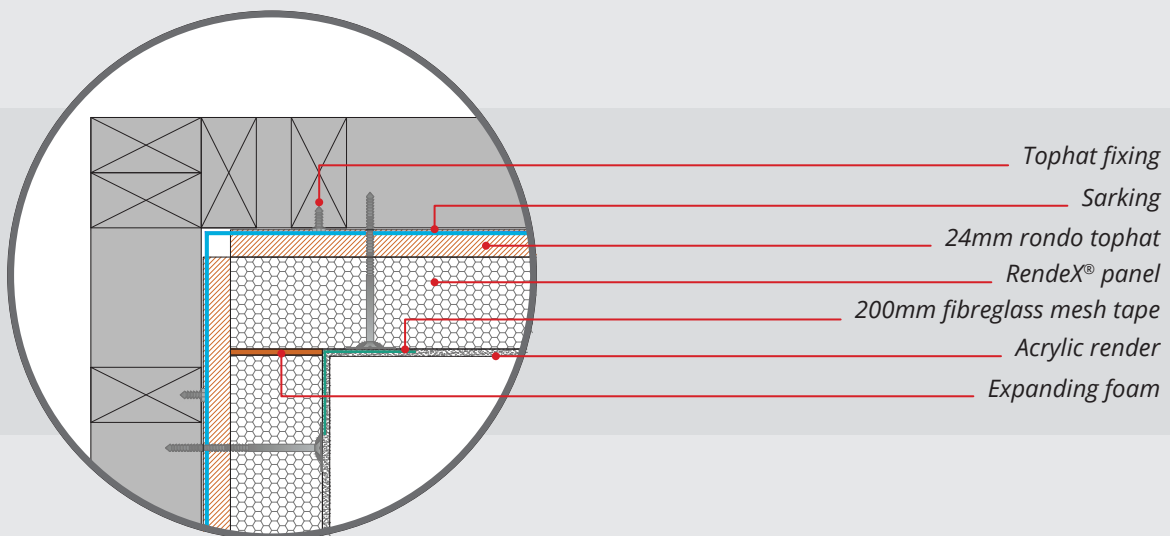


VERTICAL CONTROL JOINT DETAIL SYSTEM 1

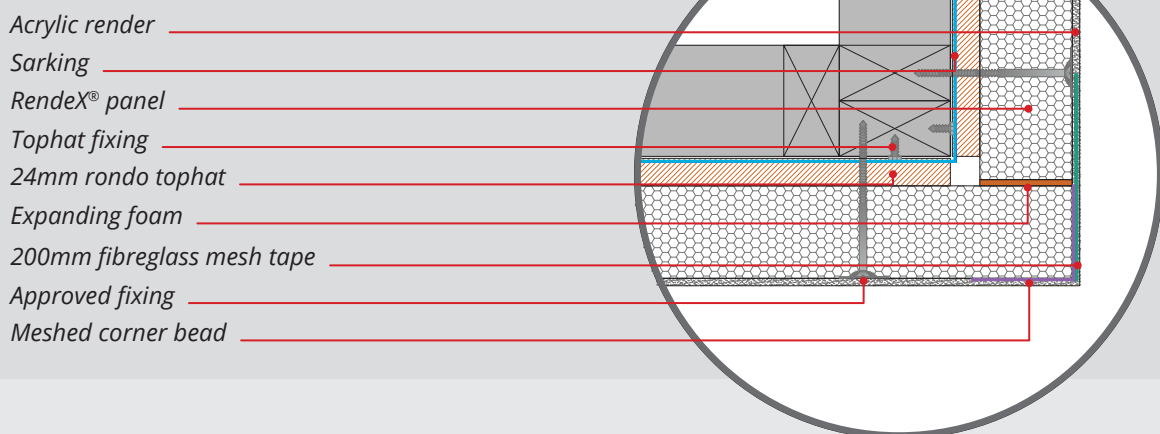
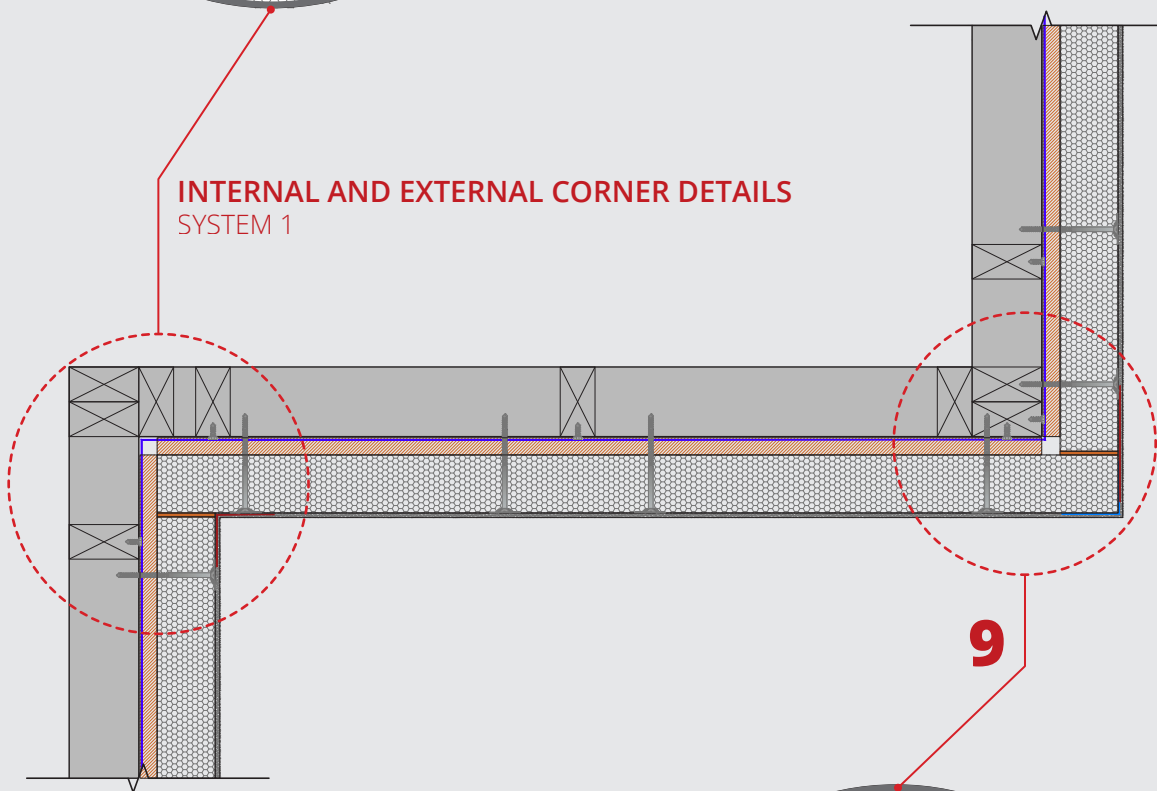
Rondo tophat to be discontinued at cj
Sarking
Tophat fixing
Backer rod
RendeX® panel
Meshed corner bead
Acrylic render
Sealant



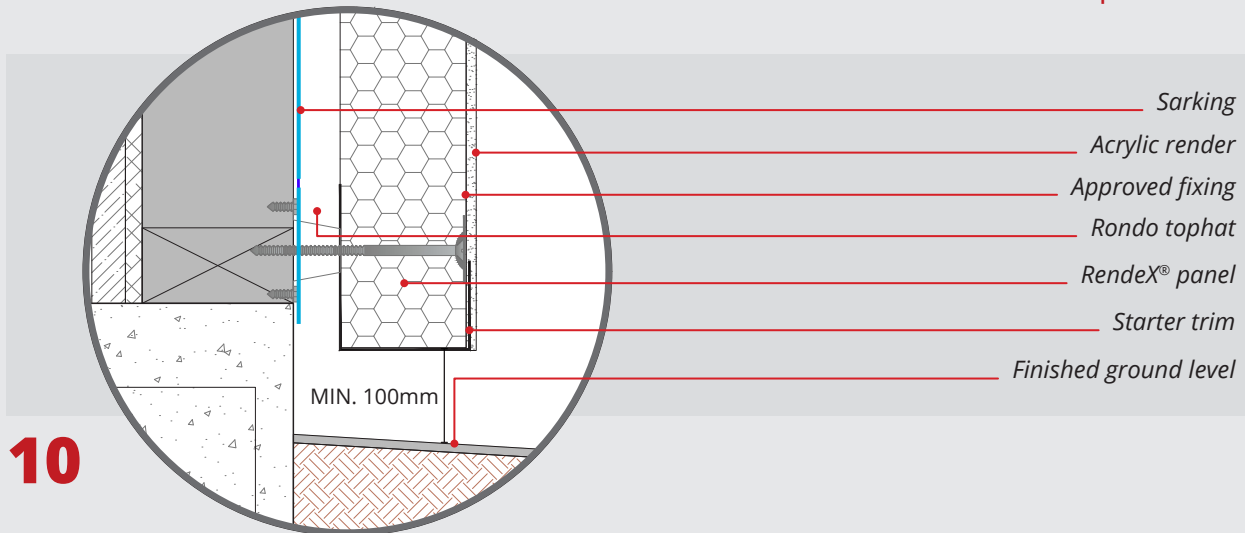
8



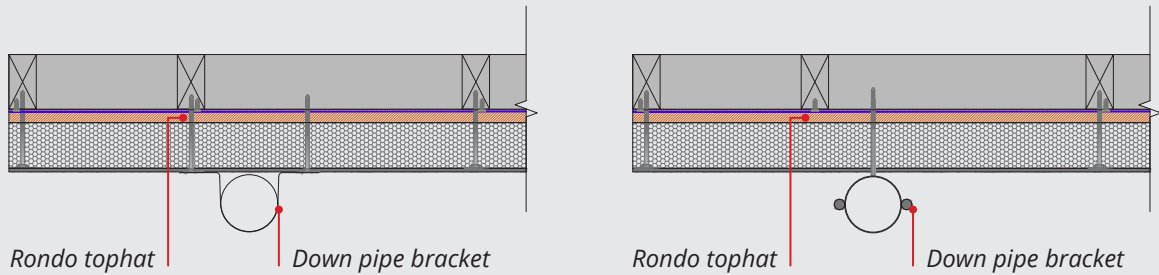
INTERNAL AND EXTERNAL CORNER DETAILS SYSTEM 1



GROUND SLAB DETAIL | SYSTEM 1

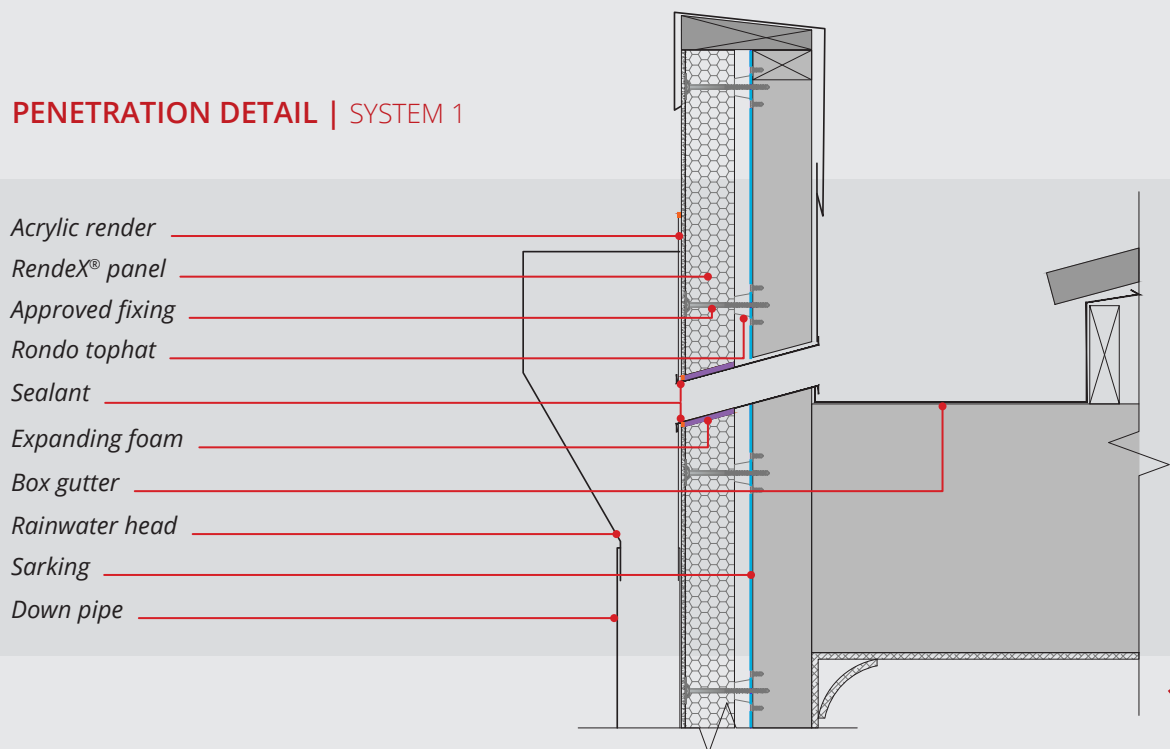


DOWNPIPE FIXING DETAIL | SYSTEM 1



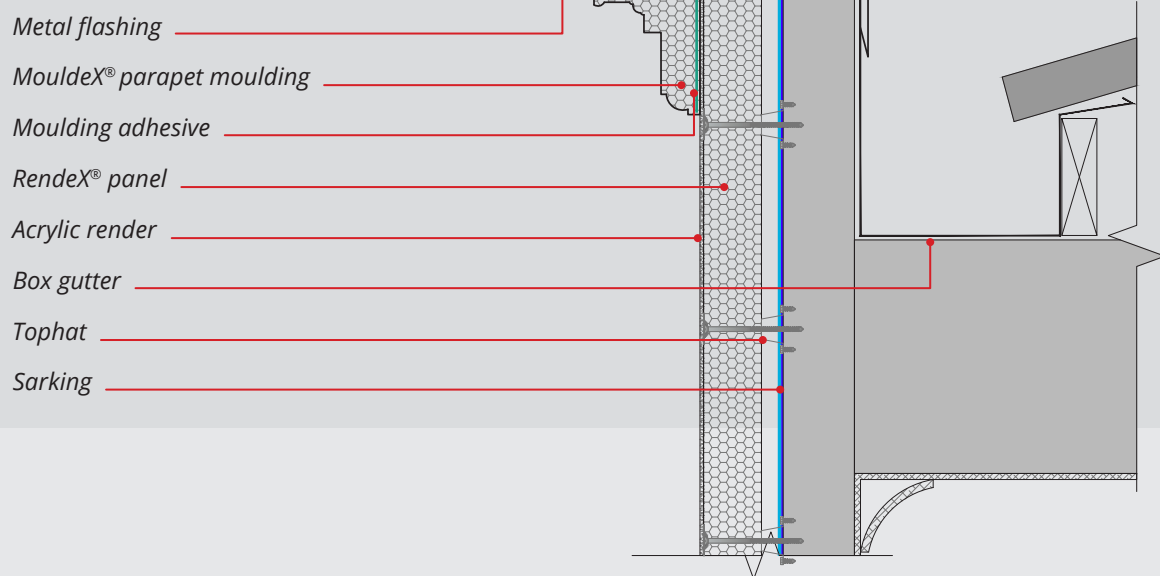
11

PENETRATION DETAIL | SYSTEM 1



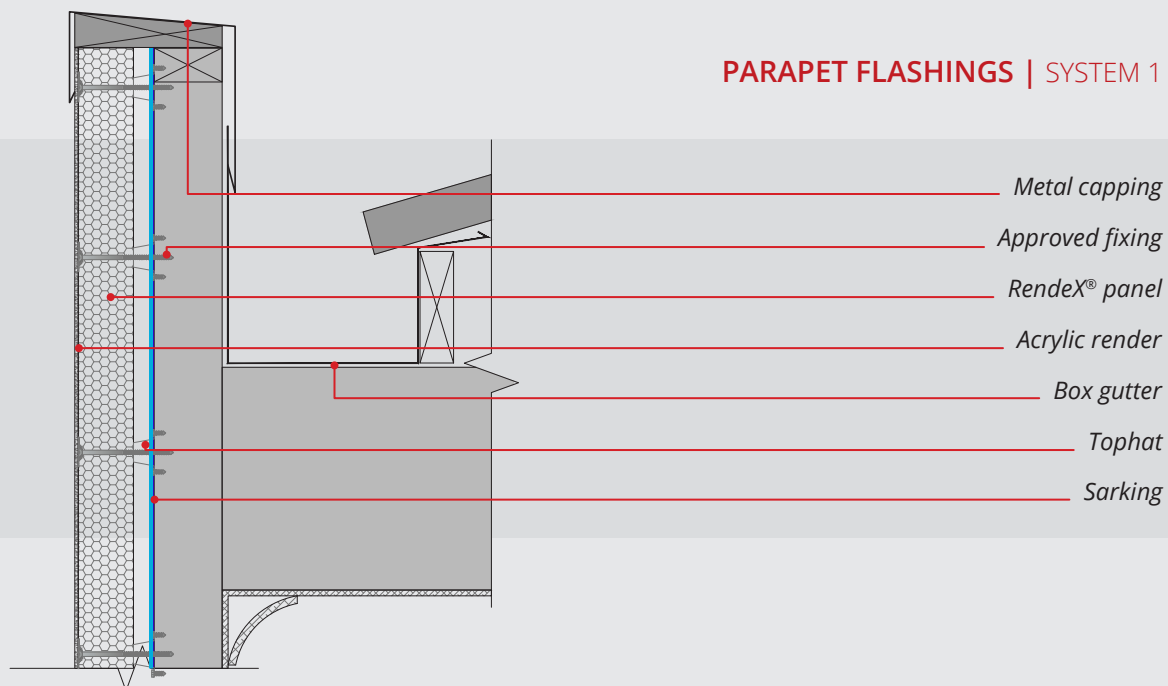
12

PARAPET FLASHINGS | SYSTEM 1



13

PARAPET FLASHINGS | SYSTEM 1





9

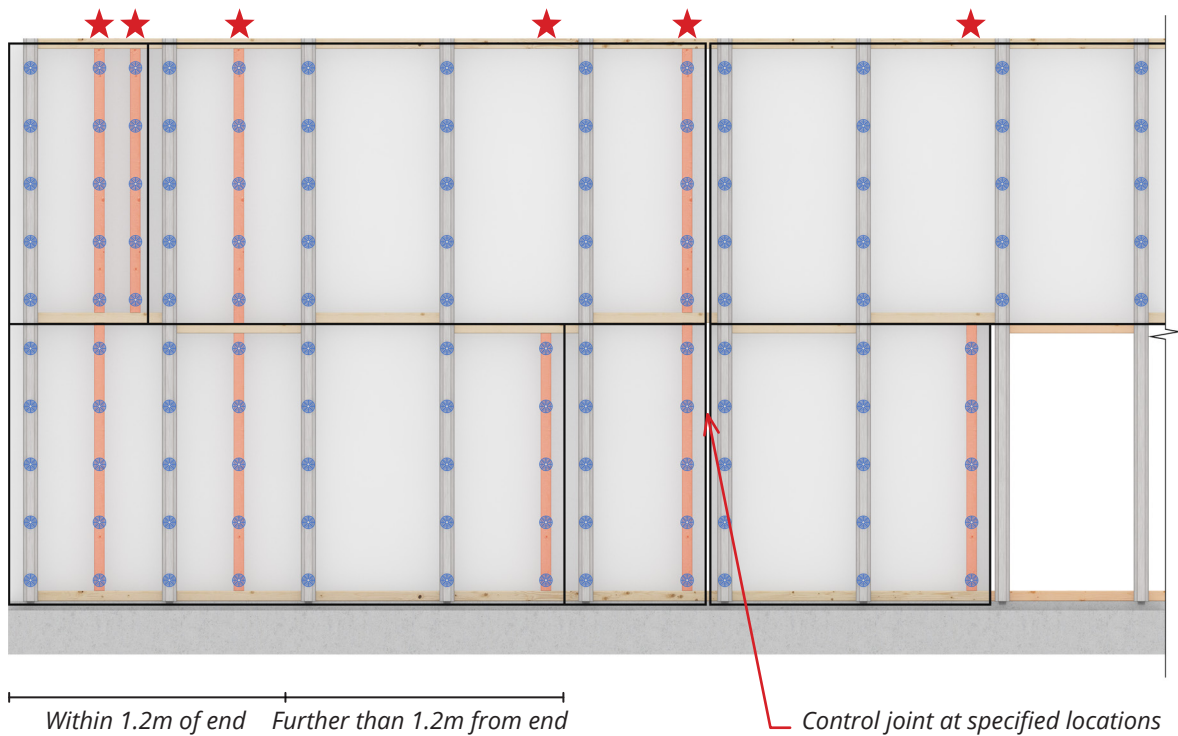
INSTALLATION DETAILS | **SYSTEM 2**

Horizontal RendeX[®] panel fixed to vertical timber battens on steel/timber studs

FIXING LOCATIONS

Fixing and stud locations: horizontal panels fixed to vertical battens on steel/timber studs.

★ Indicates additional studs to provide required support.



Fixings must not be placed less than 50mm or more than 150mm from the edge or end of a panel.

Within 1.2m of end:

WIND CLASSES N1, N2 & N3: AT LEAST 12 FIXINGS PER M²

Typically 20 fixings per half panel 1.2x1.2m

WIND CLASSES N4 & C1: AT LEAST 14 FIXINGS PER M²

Typically 20 fixings per half panel 1.2x1.2m

Further than 1.2m from end:

WIND CLASSES N1, N2 & N3: AT LEAST 6 FIXINGS PER M²

Typically 25 fixings per full panel 1.2x2.4m or 30 fixings per full panel 1.2x3.0m

WIND CLASSES N4 & C1: AT LEAST 7 FIXINGS PER M²

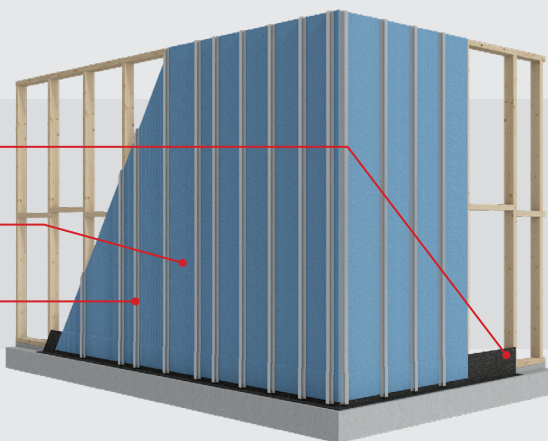
Typically 25 fixings per full panel 1.2x2.4m or 30 fixings per full panel 1.2x3.0m

STEP BY STEP

STEP 1 | *Install DPC*

STEP 2 | *Install Sasalation*

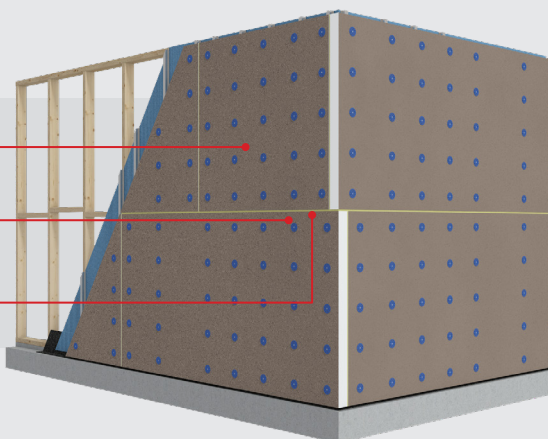
STEP 3 | *Install vertical battens*



STEP 4 | *Cut panel to size*

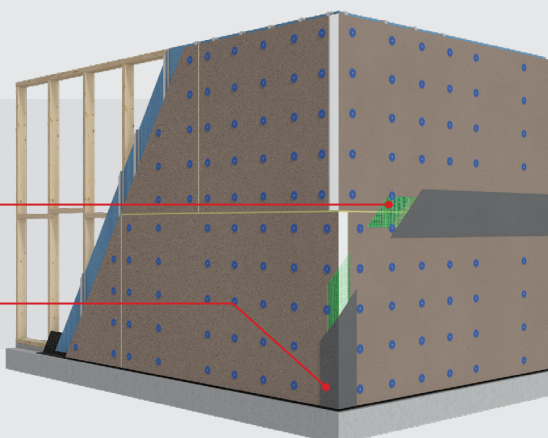
STEP 5 | *Fix panel with screws and washers*

STEP 6 | *Fill gaps between the panels with expanding foam*



STEP 7 | *Install fiberglass mesh to joints and corners*
Apply extra mesh to external corner

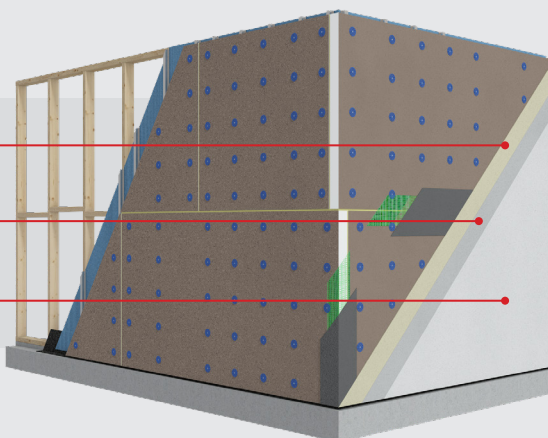
STEP 8 | *Patch with patching compound*



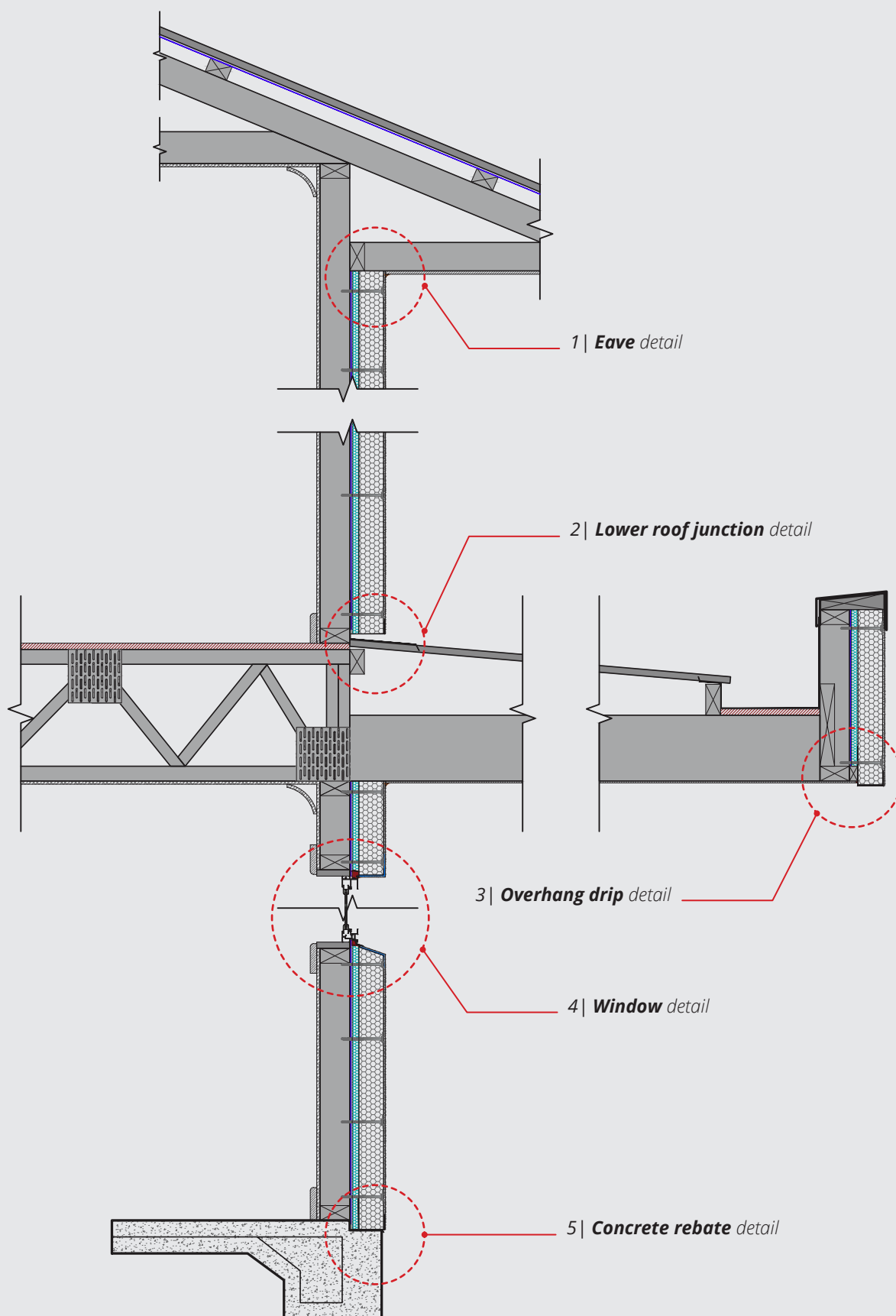
STEP 9 | *Basecoat acrylic render to manuf. specs*

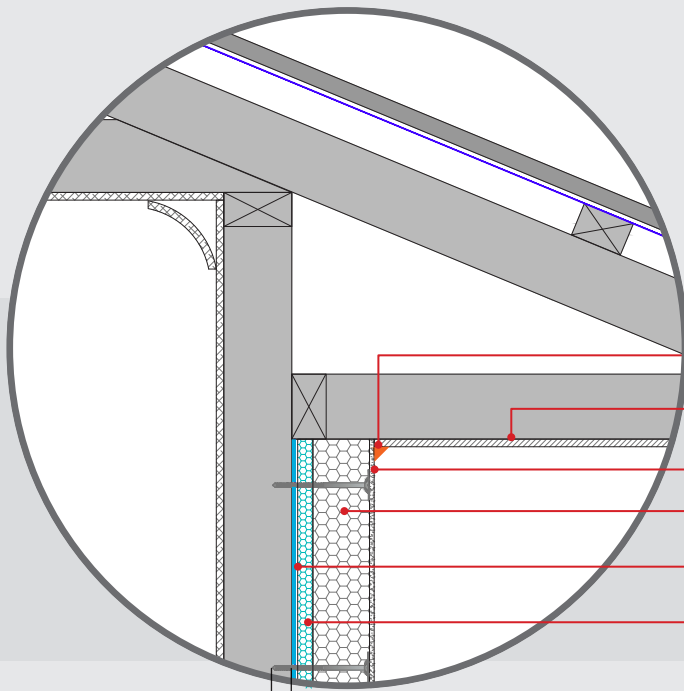
STEP 10 | *Texture*

STEP 11 | *Acrylic membrane*



GENERAL ARRANGEMENT | SYSTEM 2





EAVES DETAIL | OPTION A
SYSTEM 2

Sealant

Eave lining

Acrylic render

RendeX® panel

Sarking

Batten

1A

MIN. 25mm

EAVE DETAIL | OPTION B
SYSTEM 2

Sealant

Eave lining

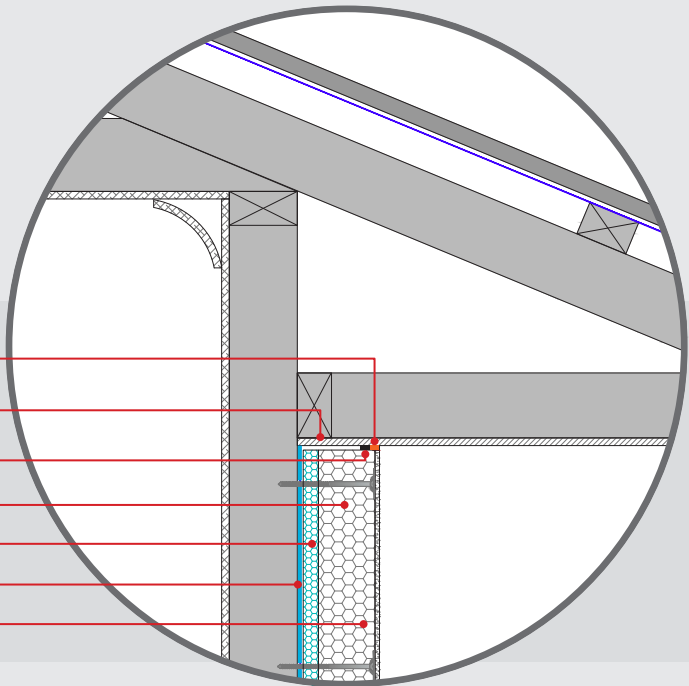
Backing rod

RendeX® panel

Batten

Sarking

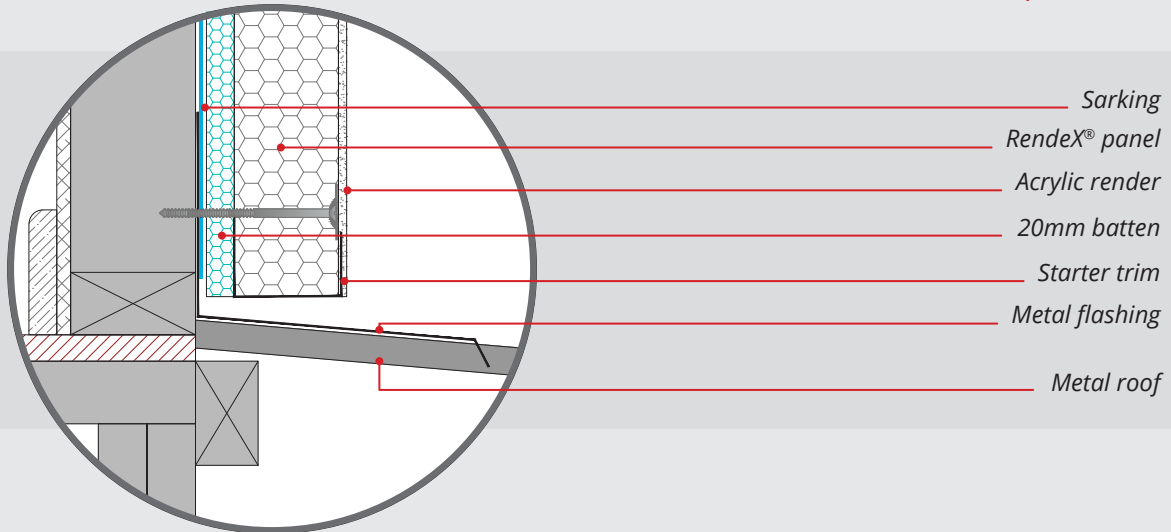
Acrylic render



1B

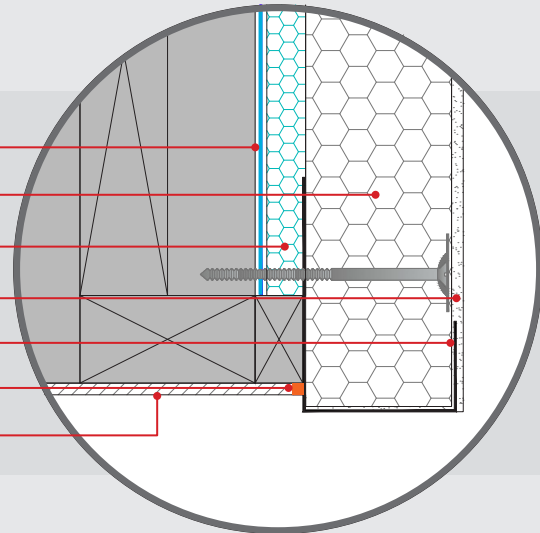
LOWER ROOF JUNCTION DETAIL | SYSTEM 2

2



OVERHANG DRIP DETAIL | SYSTEM 2

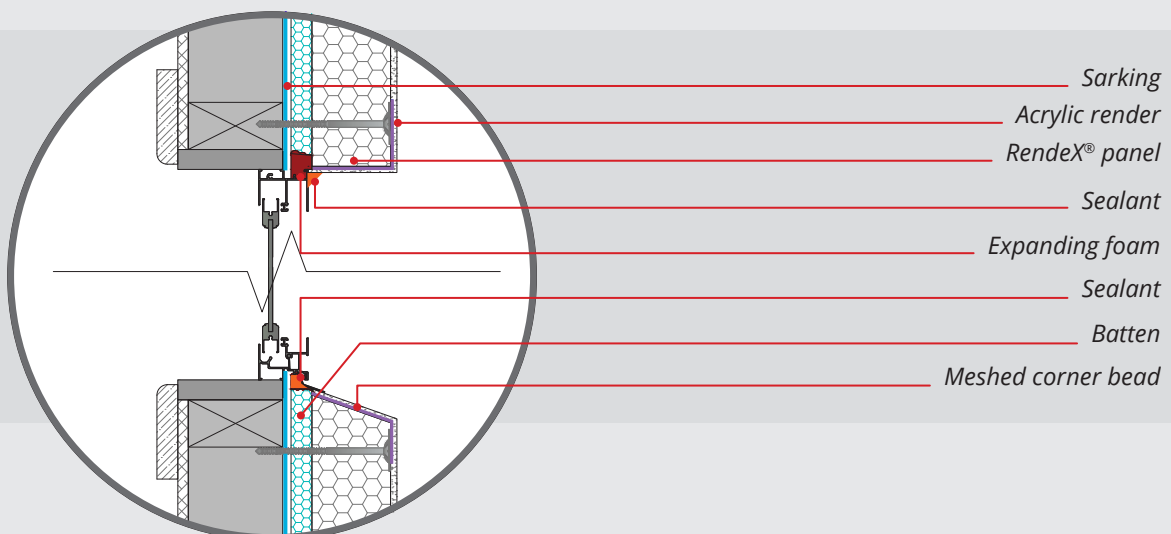
Sarking
Rendex® panel
Batten
Acrylic render
Starter trim
Sealant
Soffit lining



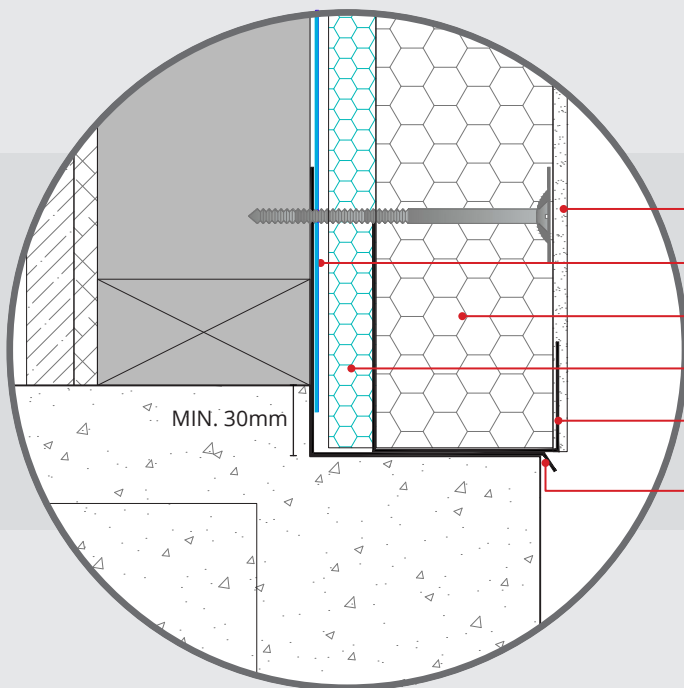
3

WINDOW DETAIL | SYSTEM 2

4



5



CONCRETE REBATE DETAIL SYSTEM 2

Acrylic render

Sarking

RendeX® panel

Batten

Starter trim

DPC

RendeX® AND BRICK VENEER DETAIL SYSTEM 2

Sarking

Acrylic render

RendeX® panel

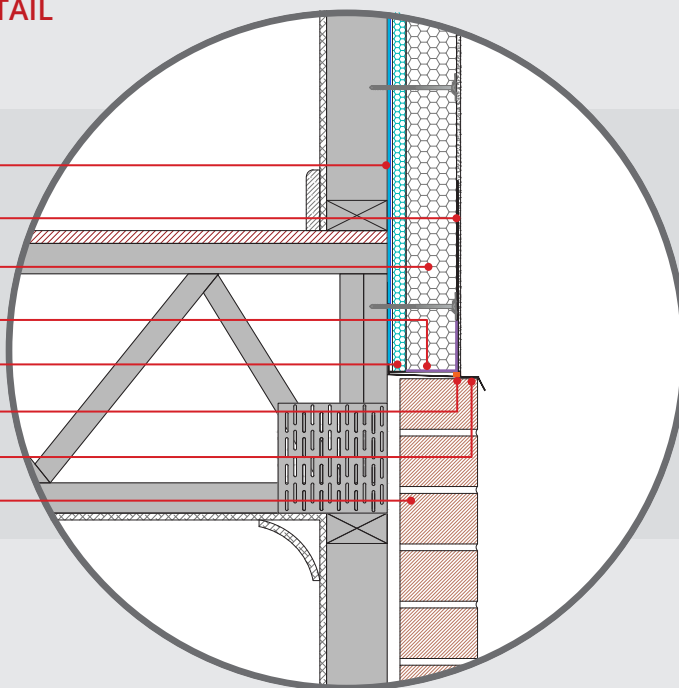
Meshed corner bead

Batten

Sealant

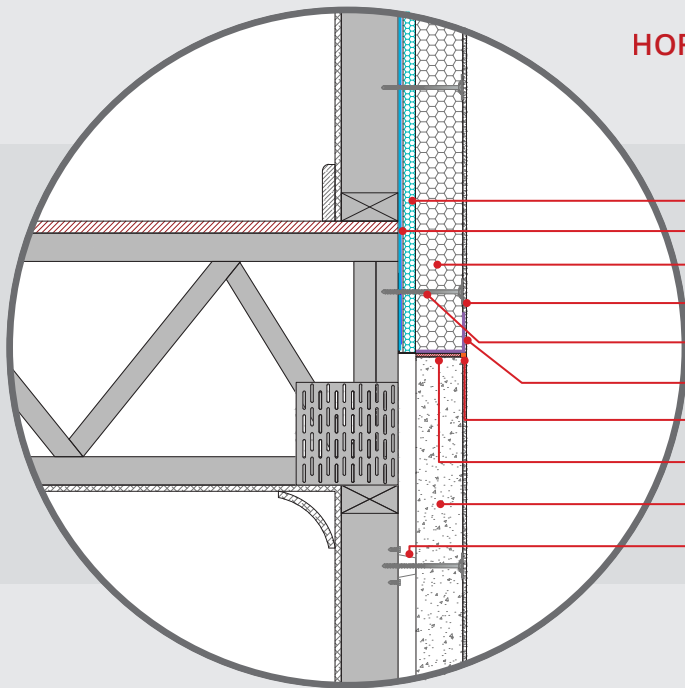
Metal flashing

Brick



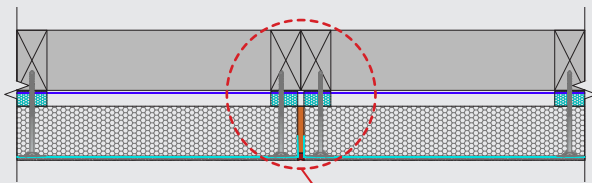
6

DISSIMILAR SUBSTRATES HORIZONTAL CONTROL JOINT DETAIL SYSTEM 2



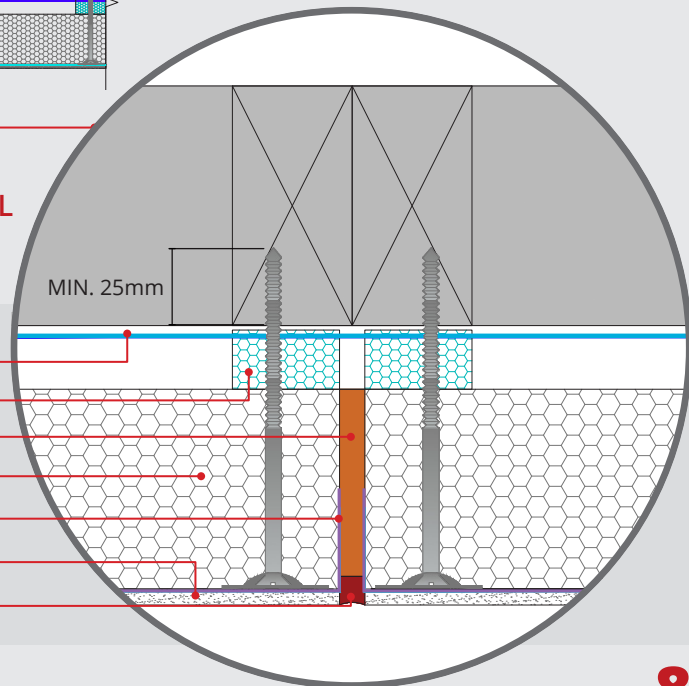
Batten
Sarking
Rendex® panel
Acrylic render
Approved fixing
Meshed corner bead
Sealant
Backer rod
AAC panel
24mm rondo tophat

7

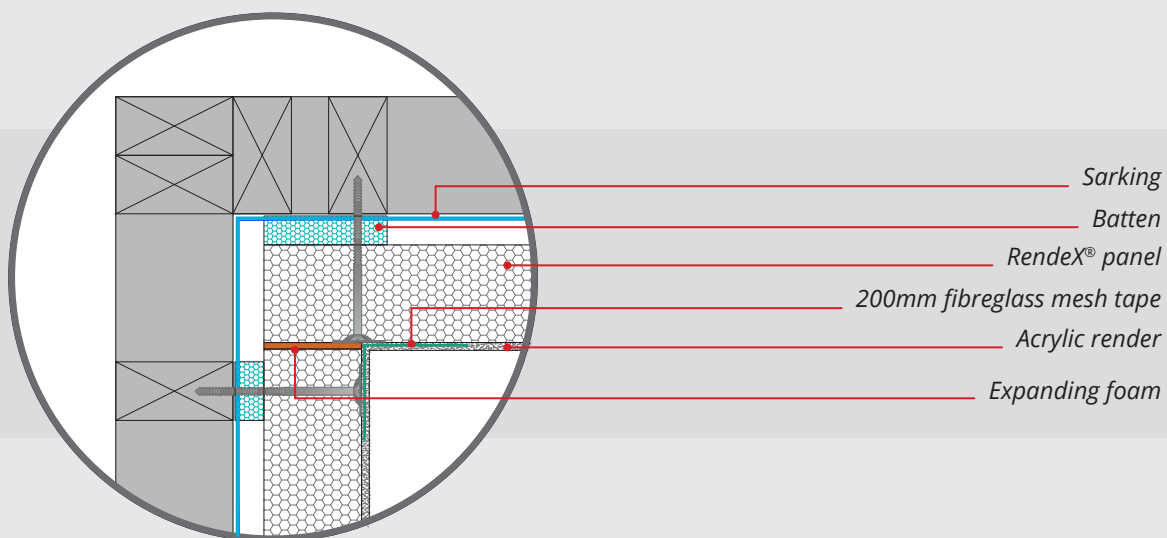


VERTICAL CONTROL JOINT DETAIL SYSTEM 2

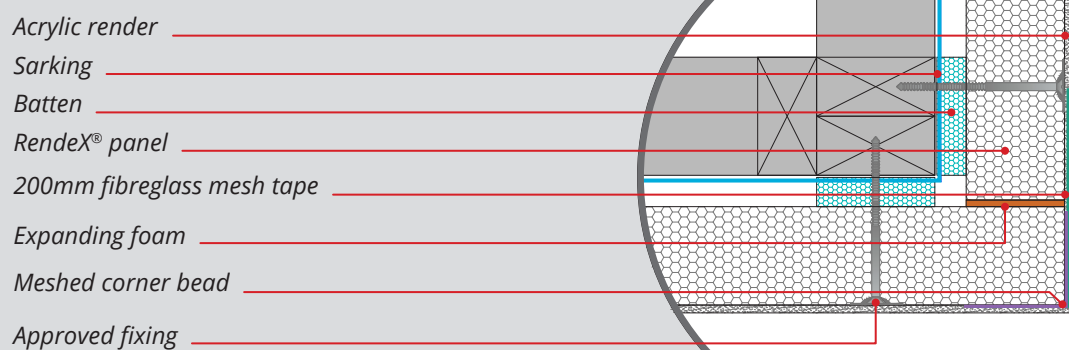
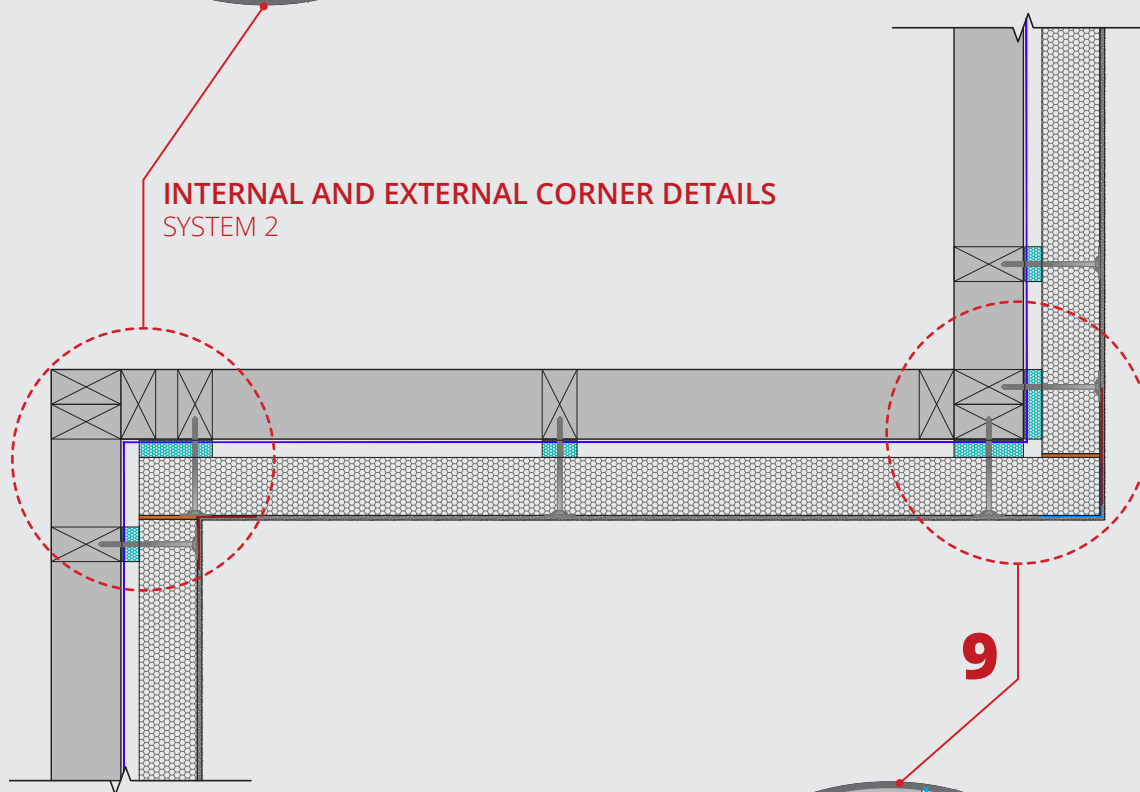
Sarking
Batten
Backer rod
Rendex® panel
Meshed corner bead
Acrylic render
Sealant



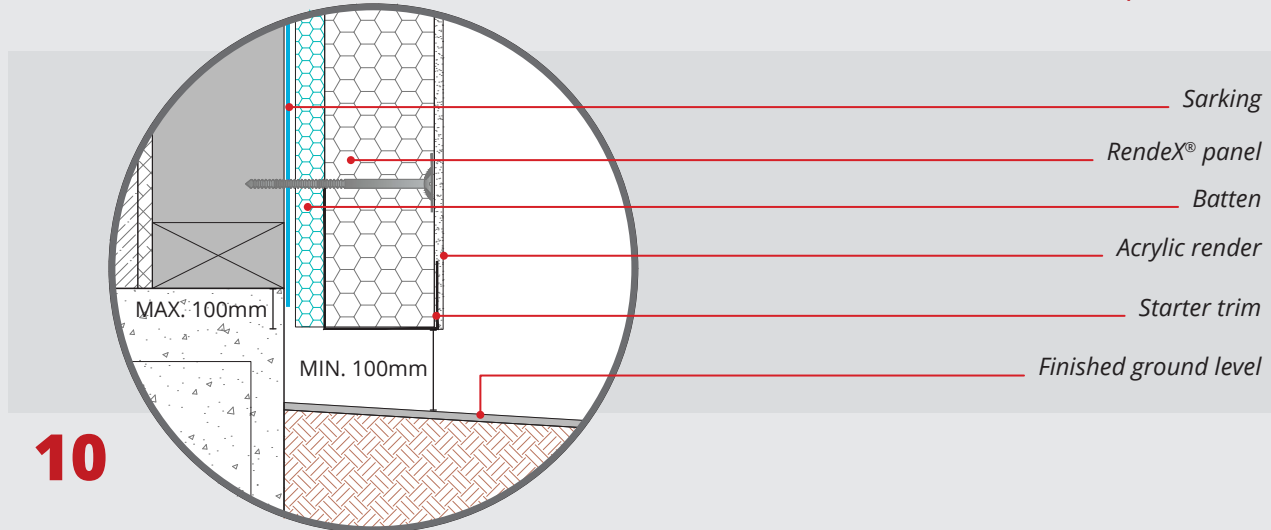
8



INTERNAL AND EXTERNAL CORNER DETAILS SYSTEM 2

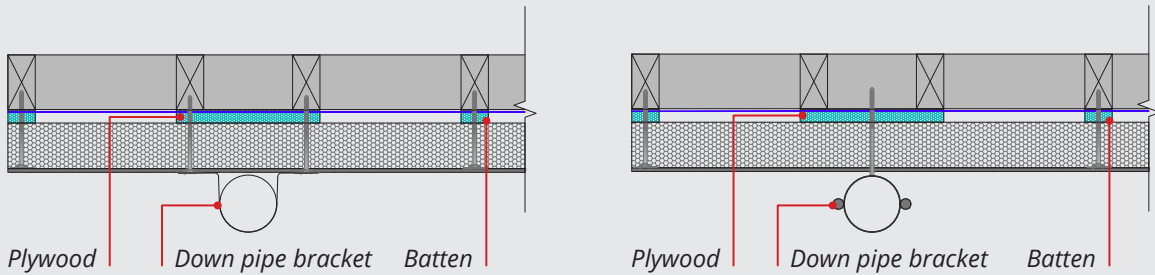


GROUND SLAB DETAIL | SYSTEM 2



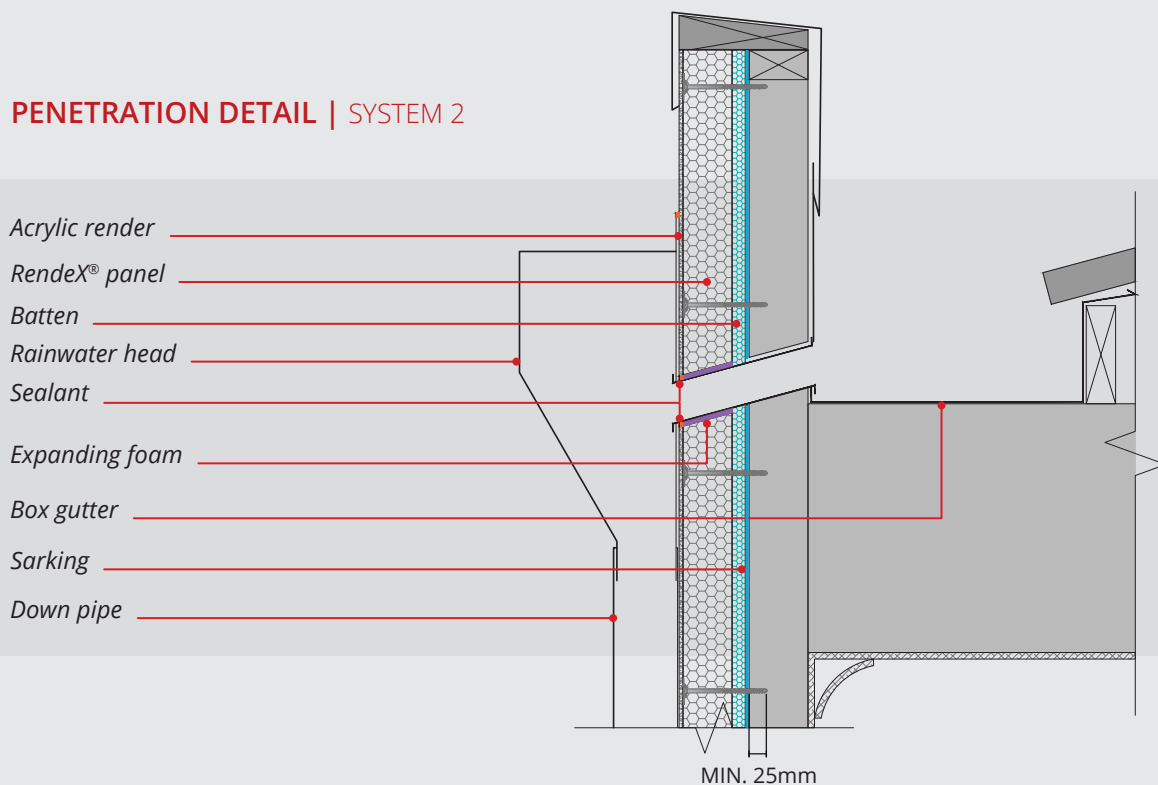
10

DOWNPIPE FIXING DETAIL | SYSTEM 2



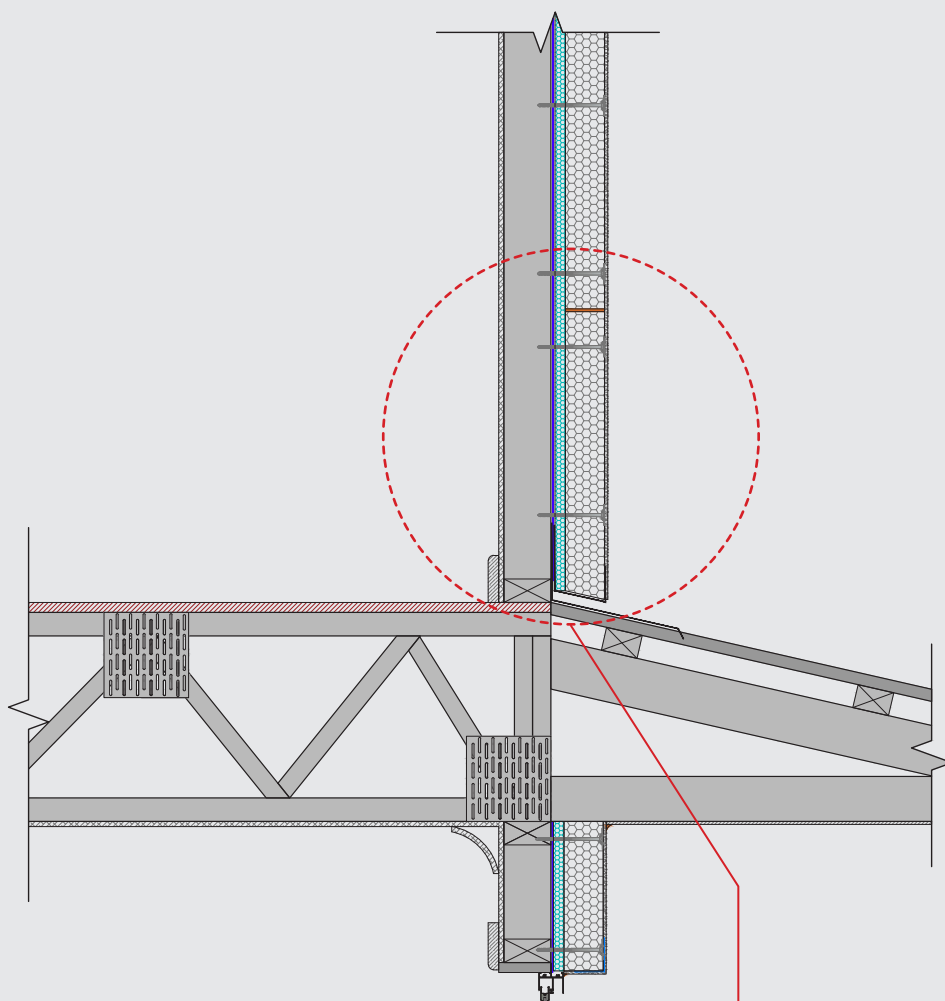
11

PENETRATION DETAIL | SYSTEM 2



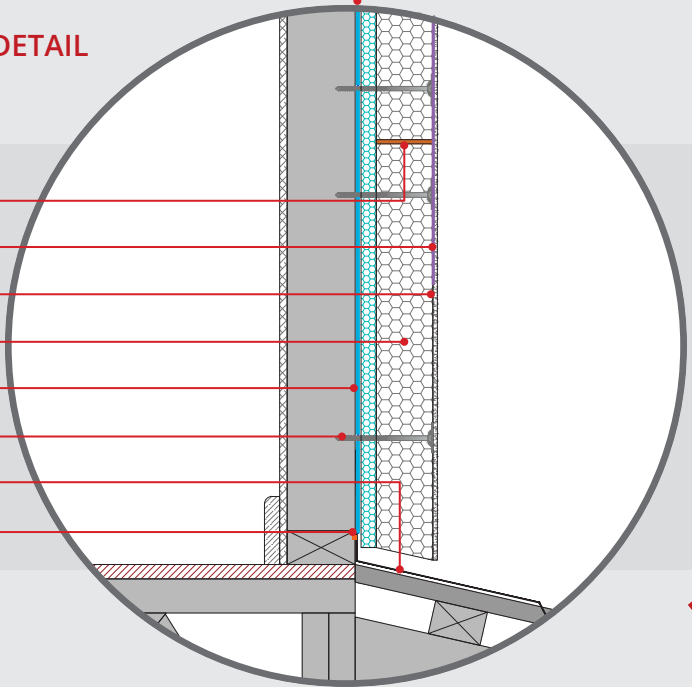
12

RendeX® STARTER PANEL ROOF ARRANGEMENT | SYSTEM 2



RendeX® STARTER PANEL ROOF DETAIL
SYSTEM 2

- Expanding foam
- 200mm fibreglass mesh tape
- Acrylic render
- Starter panel
- Sarking
- Approved fixing
- Metal flashing
- Approved sealant





10

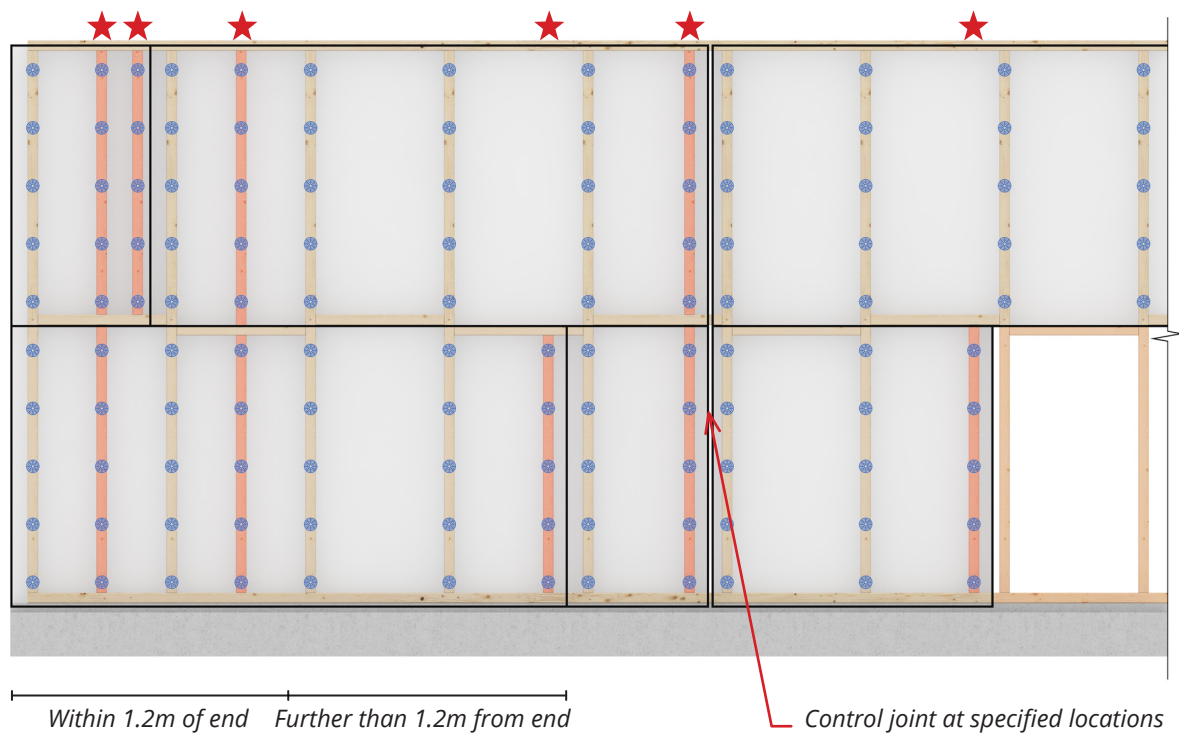
INSTALLATION DETAILS | **SYSTEM 3**

Horizontal RendeX® panel fixed to steel or timber studs

FIXING LOCATIONS

Fixing and stud locations: horizontal panels fixed to steel or timber studs.

★ Indicates additional studs to provide required support.



Fixings must not be placed less than 50mm or more than 150mm from the edge or end of a panel.

Within 1.2m of end:

WIND CLASSES N1, N2 & N3: AT LEAST 12 FIXINGS PER M²

Typically 20 fixings per **half** panel 1.2x1.2m

WIND CLASSES N4 & C1: AT LEAST 14 FIXINGS PER M²

Typically 20 fixings per **half** panel 1.2x1.2m

Further than 1.2m from end:

WIND CLASSES N1, N2 & N3: AT LEAST 6 FIXINGS PER M²

Typically 25 fixings per **full** panel 1.2x2.4m or 30 fixings per **full** panel 1.2x3.0m

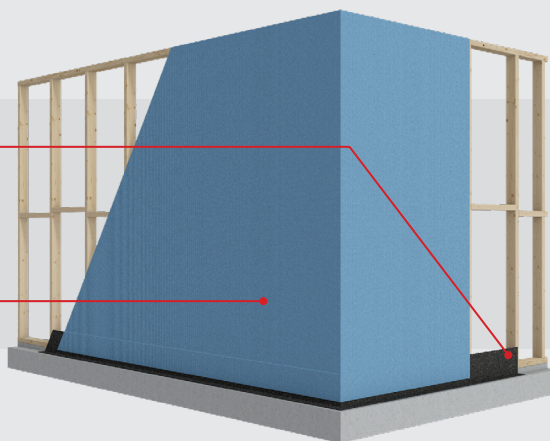
WIND CLASSES N4 & C1: AT LEAST 7 FIXINGS PER M²

Typically 25 fixings per **full** panel 1.2x2.4m or 30 fixings per **full** panel 1.2x3.0m

STEP BY STEP

STEP 1 | Install DPC

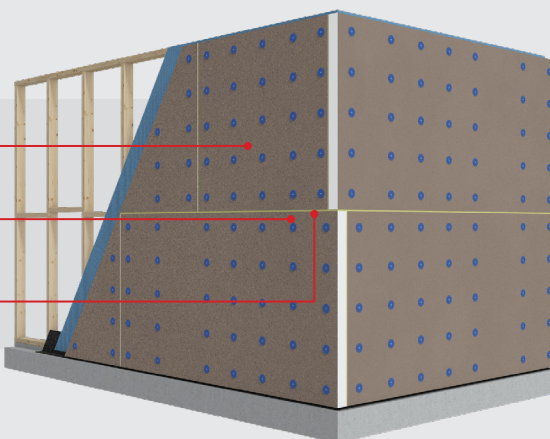
STEP 2 | Install Sasalation



STEP 3 | Cut panel to size

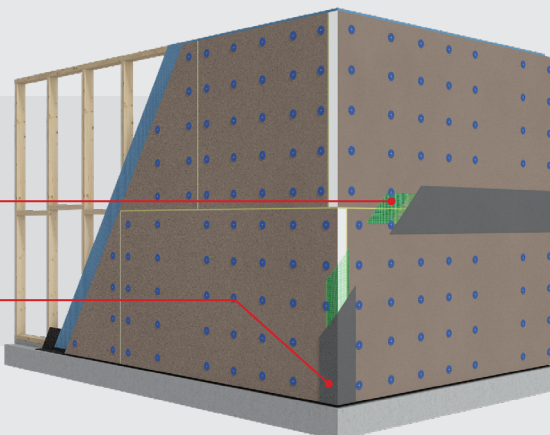
STEP 4 | Fix panel with screws and washers

STEP 5 | Fill gaps between the panels with expanding foam



STEP 6 | Install fiberglass mesh to joints and corners
Apply extra mesh to external corner

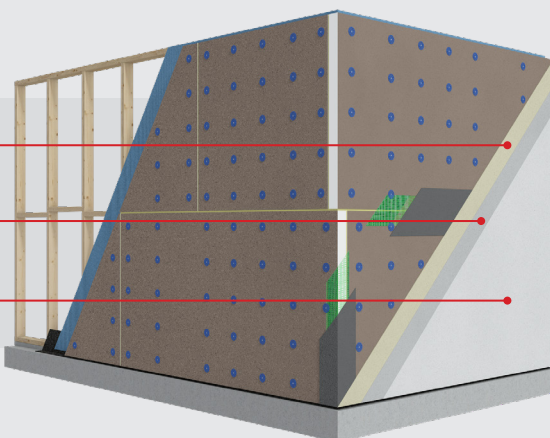
STEP 7 | Patch with patching compound

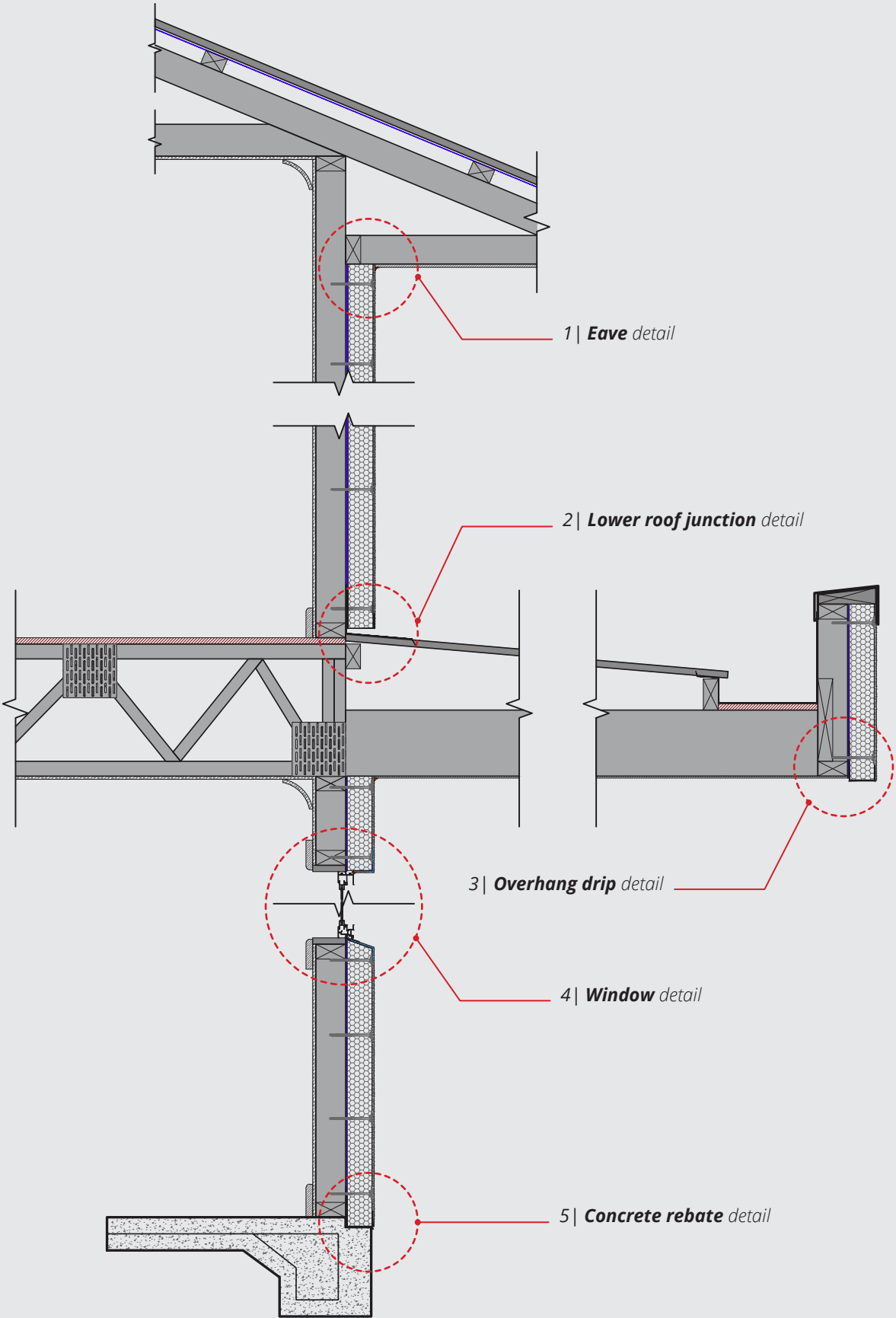


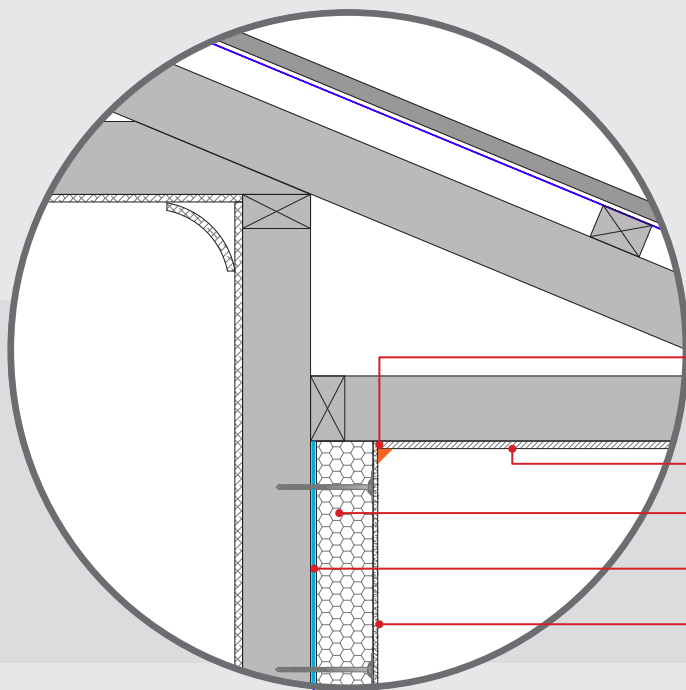
STEP 8 | Basecoat acrylic render to manuf. specs

STEP 9 | Texture

STEP 10 | Acrylic membrane







EAVE DETAIL | OPTION A
SYSTEM 3

Sealant

Eave lining

RendeX® panel

Sarking

Acrylic render

1A

EAVE DETAIL | OPTION B
SYSTEM 3

Sealant

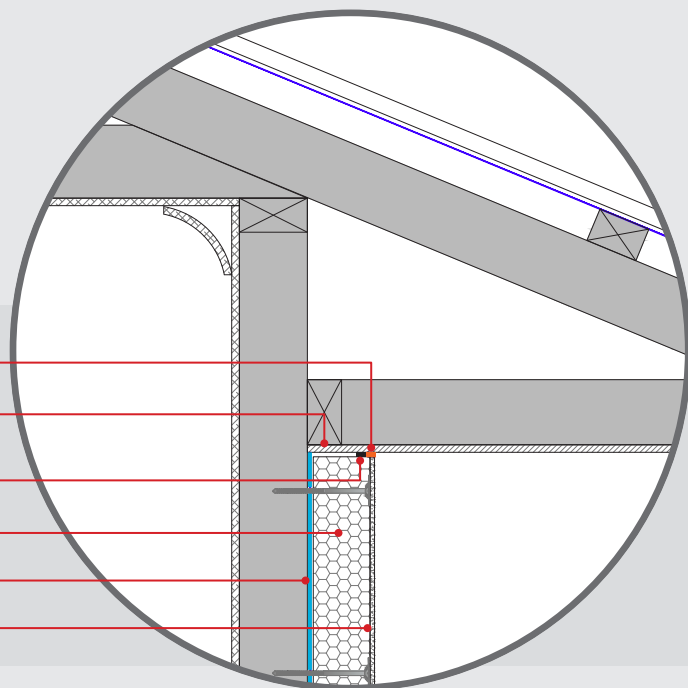
Eave lining

Backing rod

RendeX® panel

Sarking

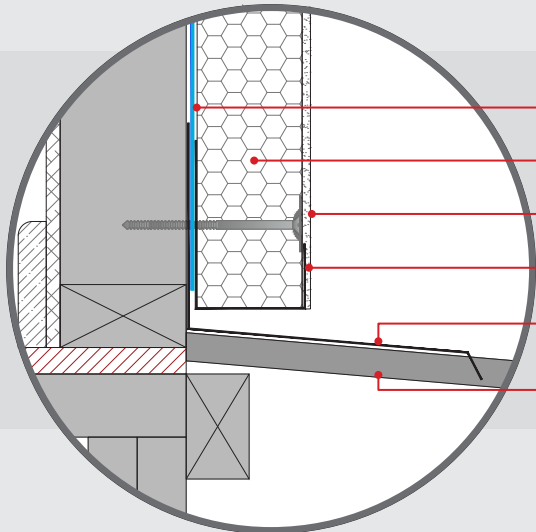
Acrylic render



1B

LOWER ROOF JUNCTION DETAIL | SYSTEM 3

2



Sarking

RendeX® panel

Acrylic render

Starter trim

Metal flashing

Metal roof

* Please check **detail 13 | RendeX® starter panel roof detail (page 49)** for Starter Panel alternative.

OVERHANG DRIP DETAIL | SYSTEM 3

Sarking

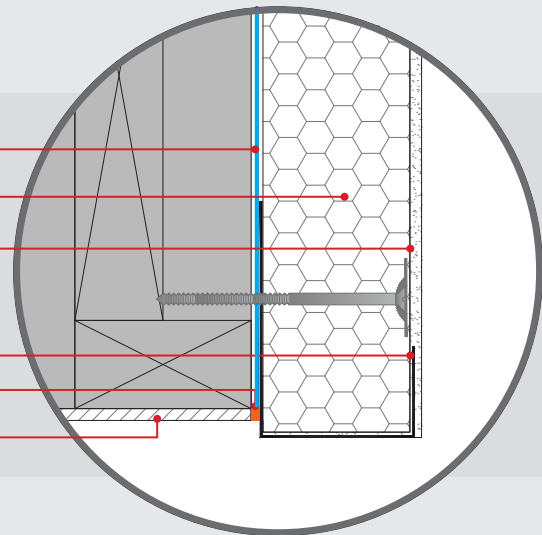
RendeX® panel

Acrylic render

Starter trim

Sealant

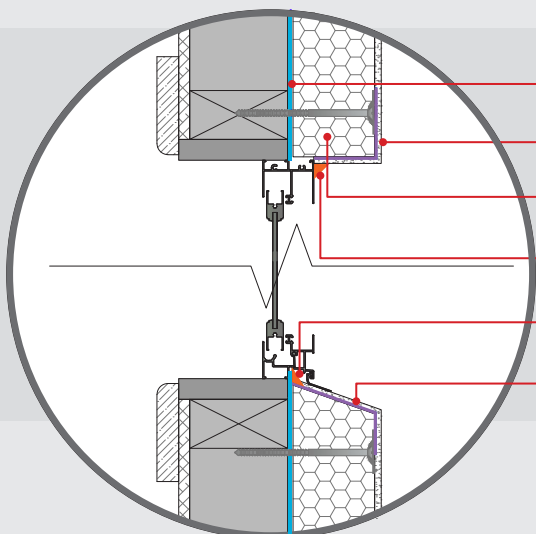
Soffit lining



3

WINDOW DETAIL | SYSTEM 3

4



Sarking

Acrylic render

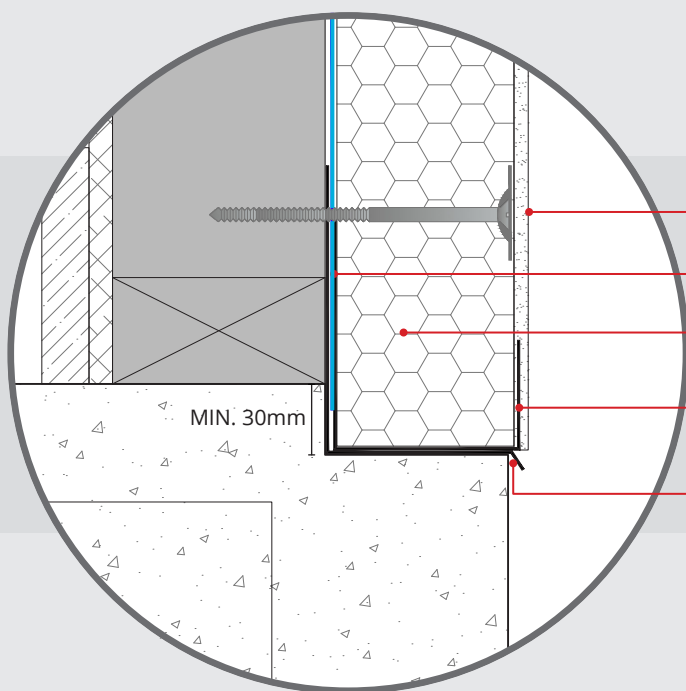
RendeX® panel

Sealant

Sealant

Meshed corner bead

5



CONCRETE REBATE DETAIL SYSTEM 3

Acrylic render

Sarking

RendeX® panel

Starter trim

DPC

RendeX® AND BRICK VENEER DETAIL SYSTEM 3

Sarking

Acrylic render

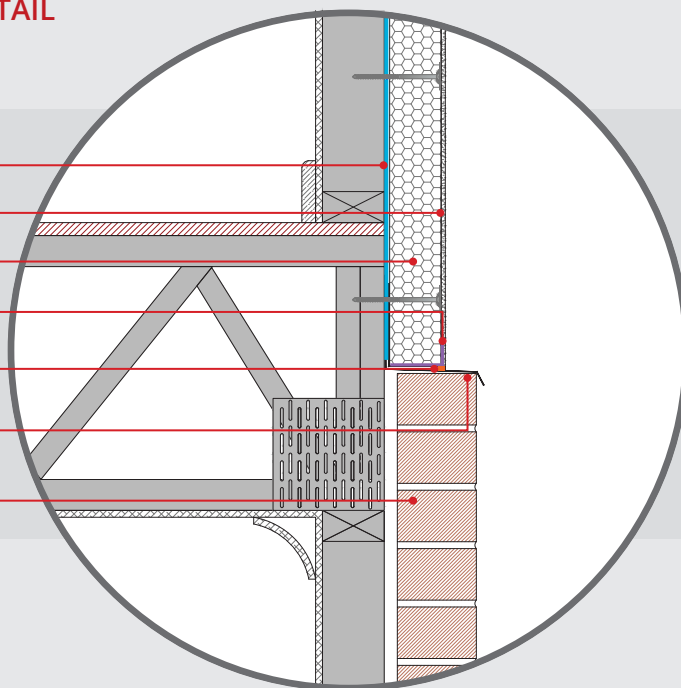
RendeX® panel

Meshed corner bead

Sealant

Metal flashing

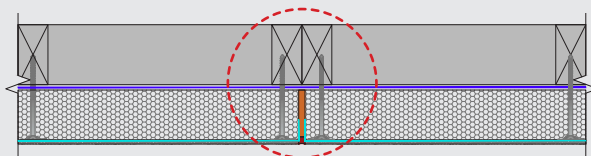
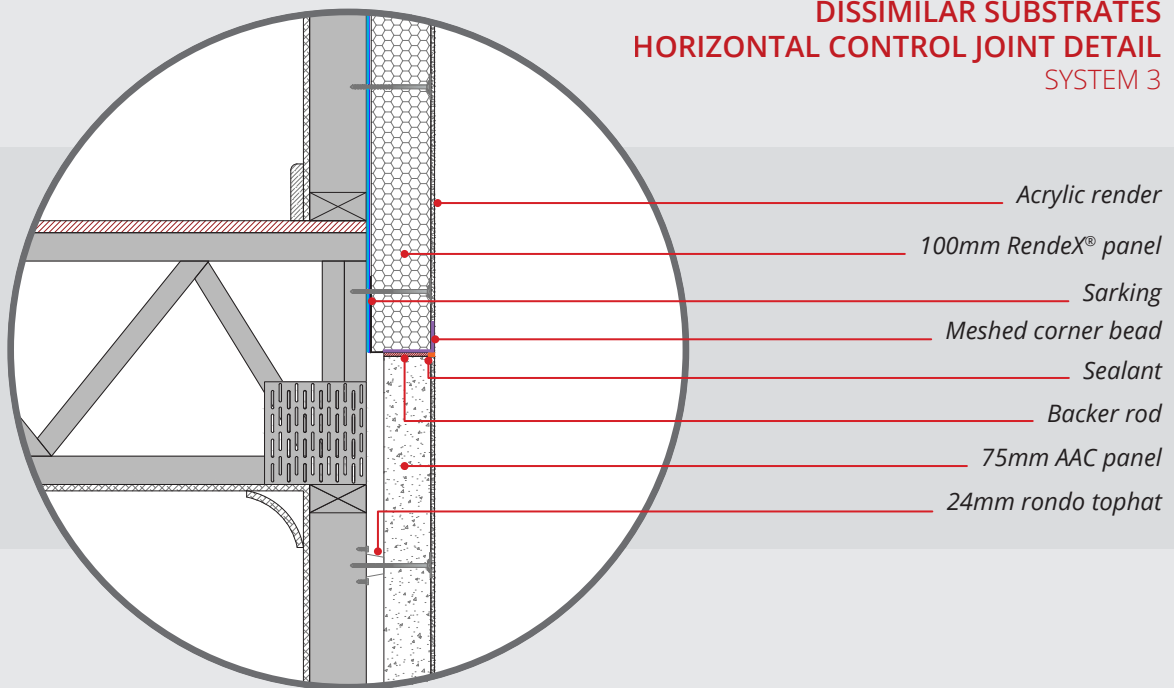
Brick



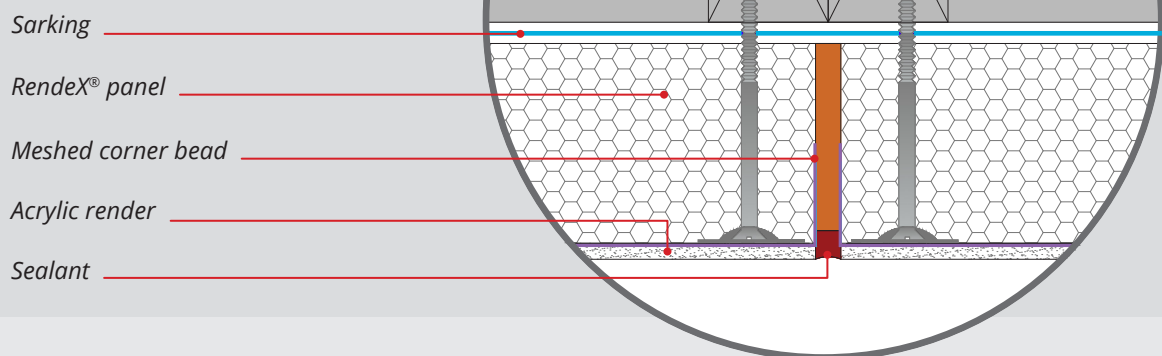
6

DISSIMILAR SUBSTRATES HORIZONTAL CONTROL JOINT DETAIL SYSTEM 3

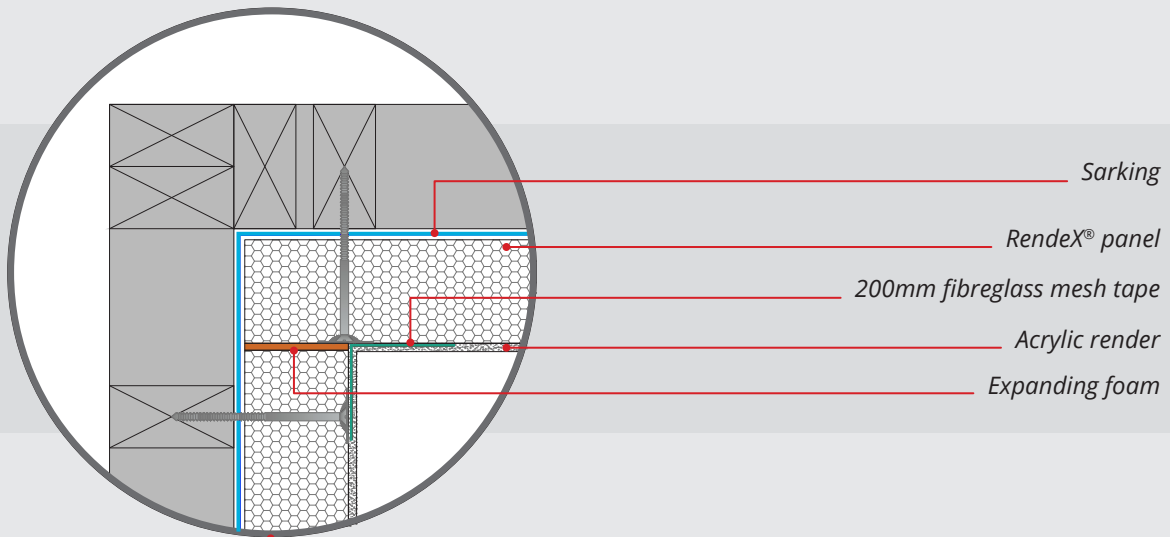
7



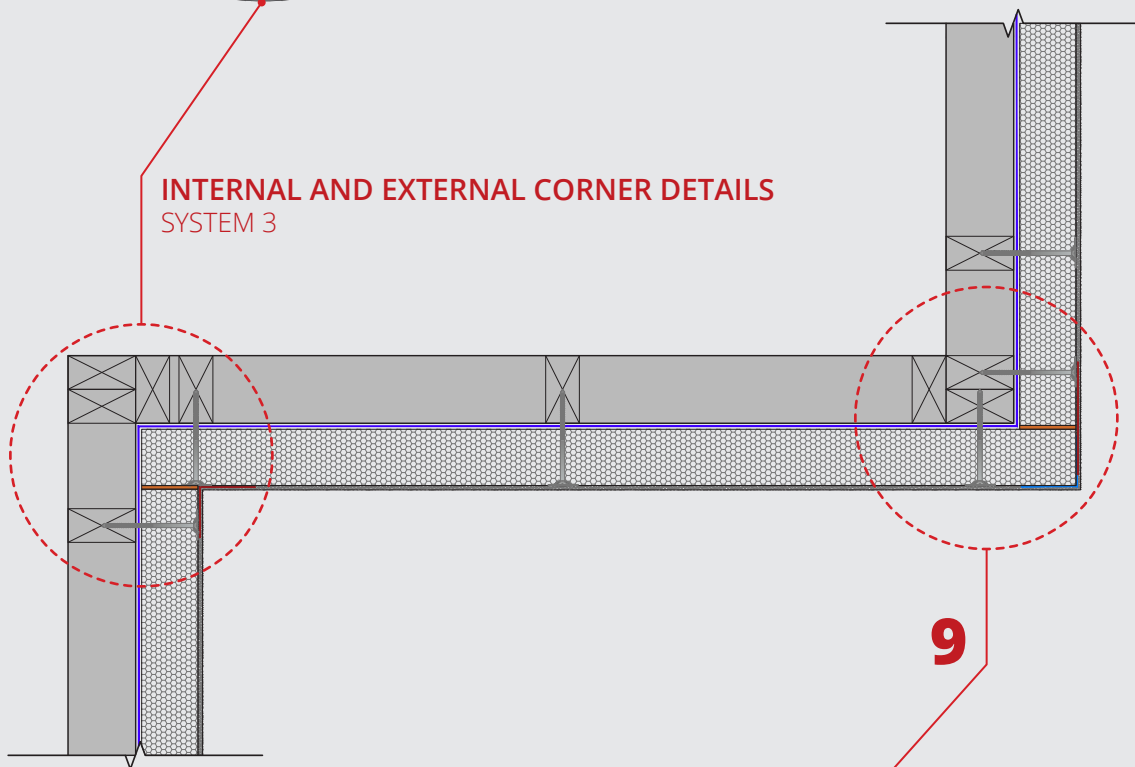
VERTICAL CONTROL JOINT DETAIL SYSTEM 3



8



INTERNAL AND EXTERNAL CORNER DETAILS SYSTEM 3



Acrylic render

Sarking

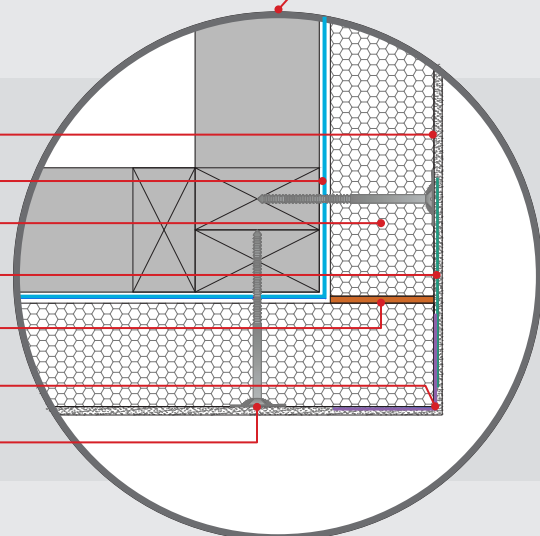
RendeX® panel

200mm fibreglass mesh tape

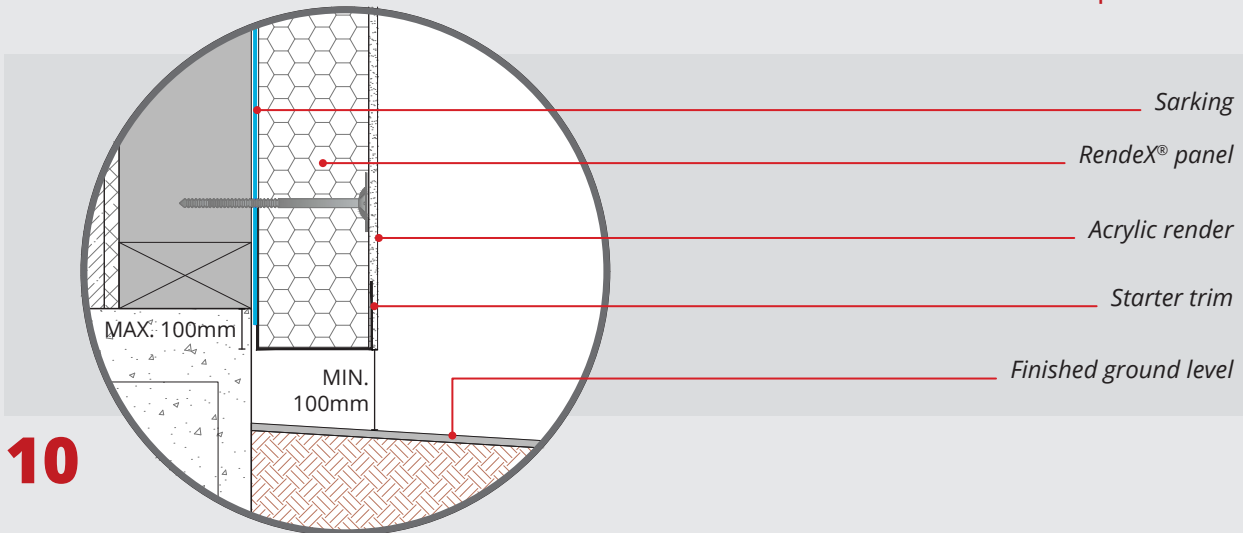
Expanding foam

Meshed corner bead

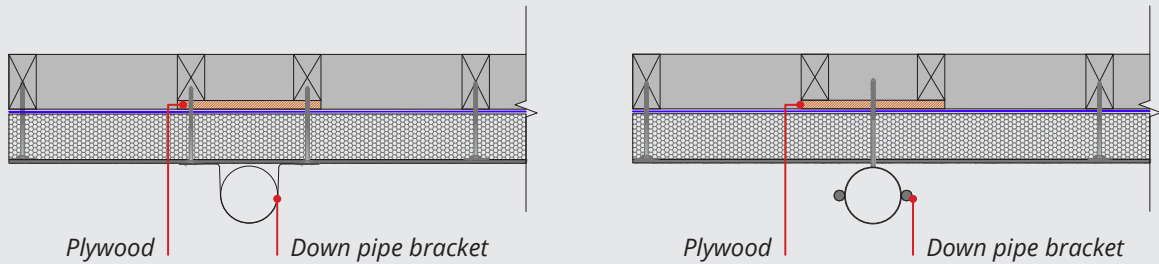
Approved fixing



GROUND SLAB DETAIL | SYSTEM 3

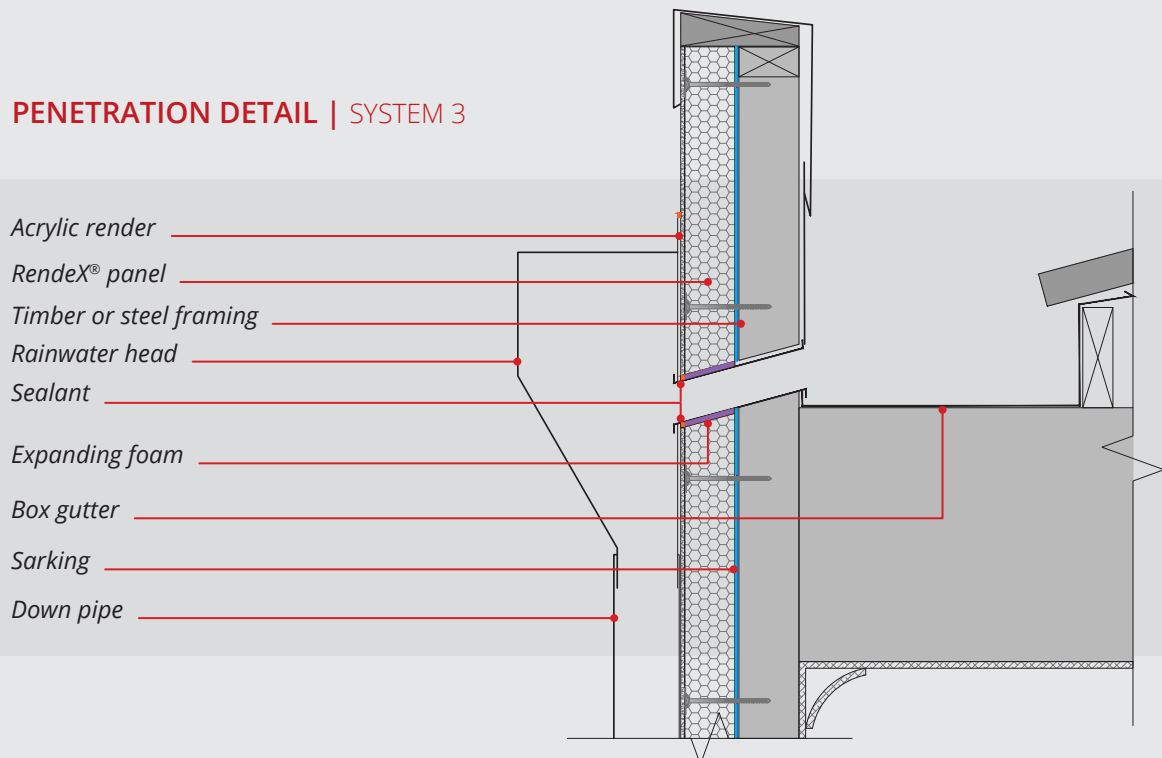


DOWNPIPE FIXING DETAIL | SYSTEM 3



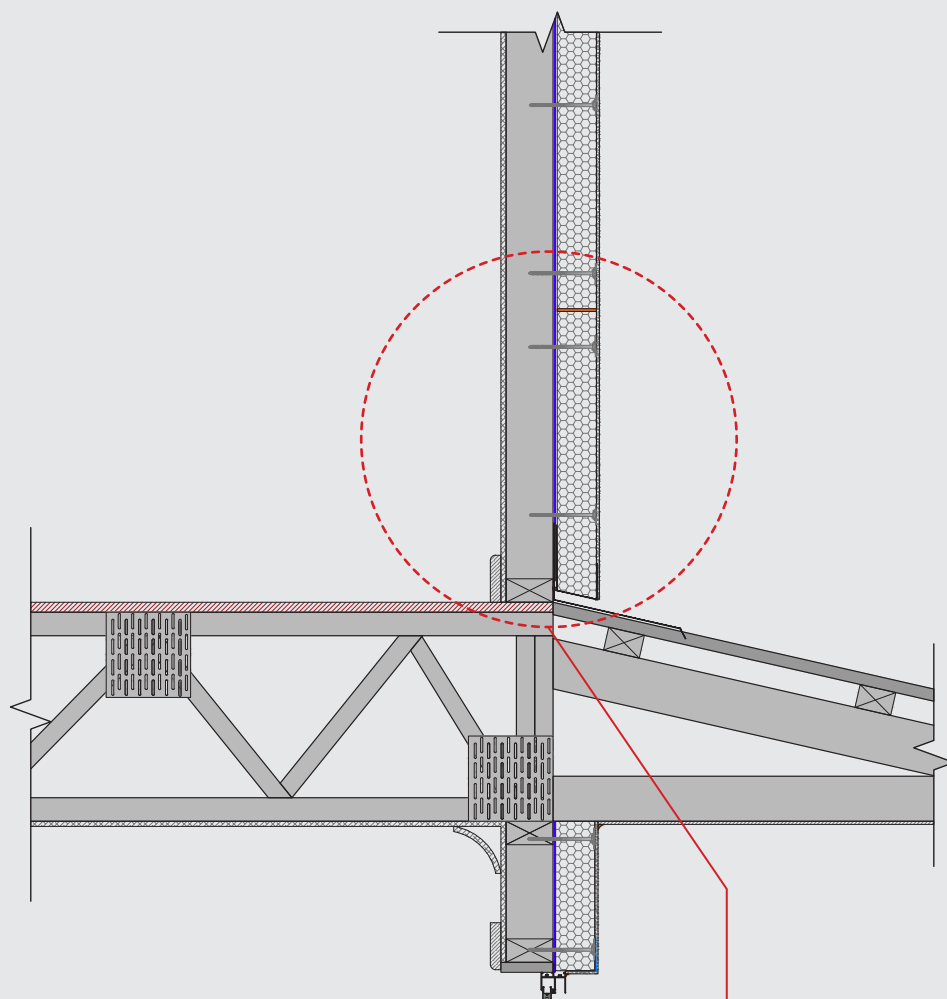
11

PENETRATION DETAIL | SYSTEM 3



12

RendeX® STARTER PANEL ROOF ARRANGEMENT | SYSTEM 3



RendeX® STARTER PANEL ROOF DETAIL SYSTEM 3

Expanding foam

200mm fibreglass mesh tape

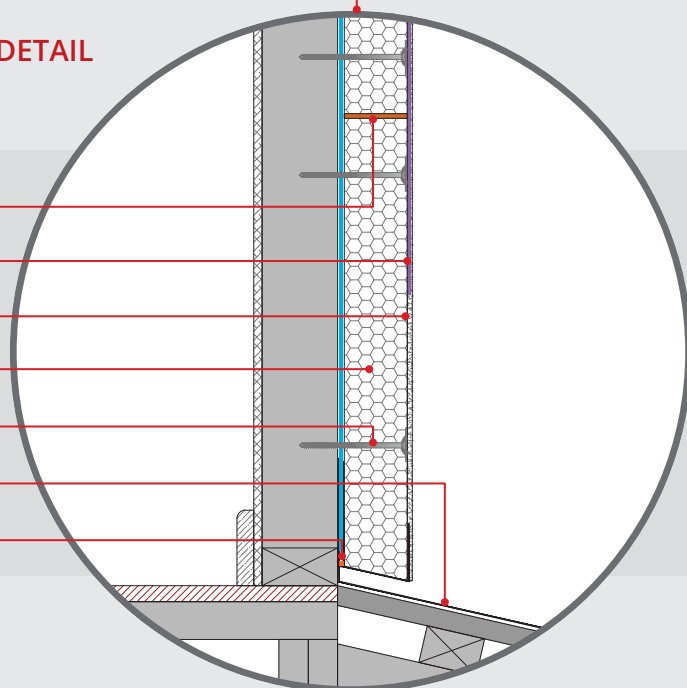
Acrylic render

Starter panel

Approved fixing

Metal flashing

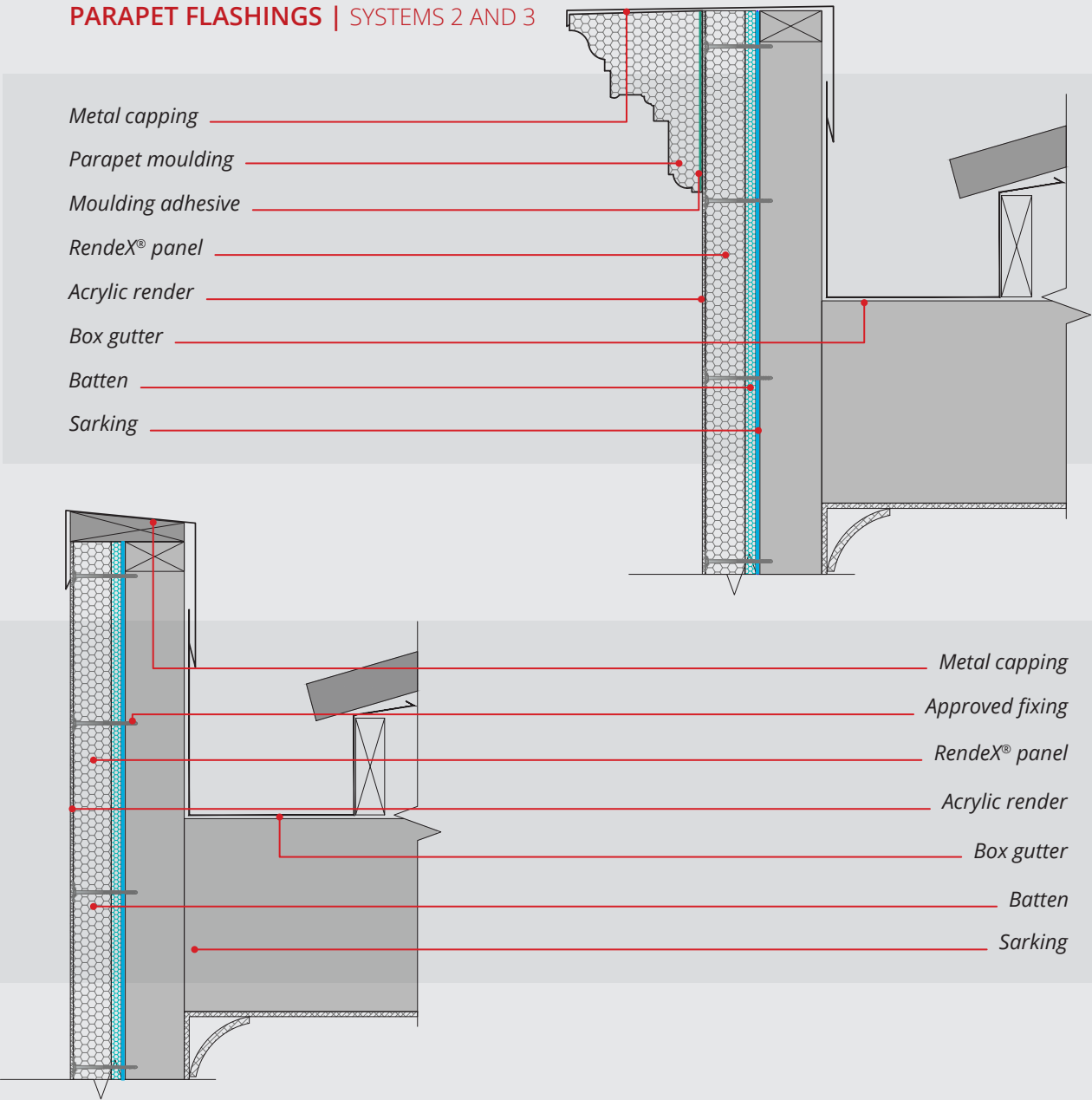
Approved sealant



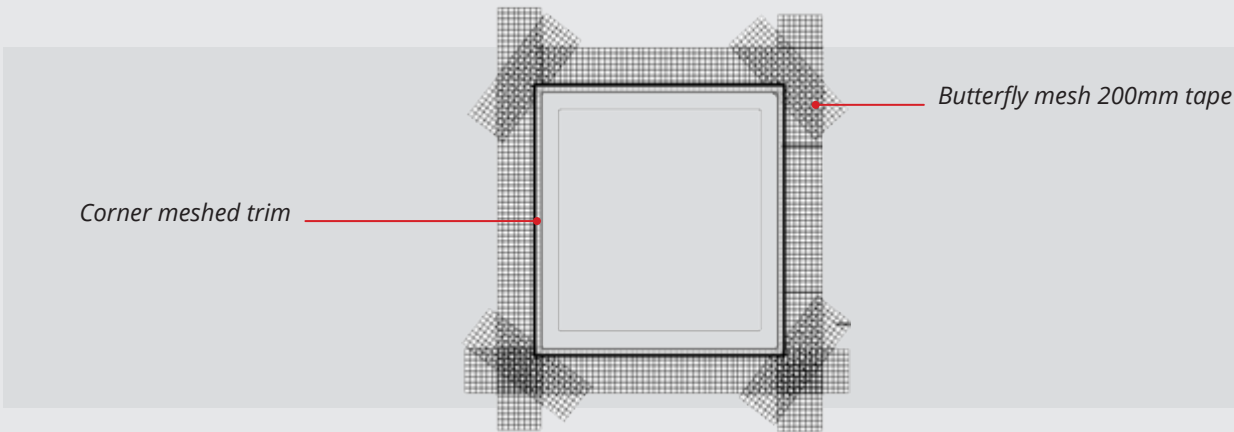
13

11. COMMON DETAILS

PARAPET FLASHINGS | SYSTEMS 2 AND 3



MESHING OF RENDEX PANELS AT WINDOW OPENINGS | SYSTEMS 1, 2 AND 3



12. CERTIFICATION OF ALTERNATIVE SOLUTION

The RendeX® External Cladding System is suitable as an Alternative Solution complying with the following Parts of the National Construction Code (NCC) – Building Code of Australia (BCA):

- Volume One BP1.1, BP1.2 and Volume Two P2.1 (a), (b), (c) in respect of structural performance of external walls designed and constructed in accordance with this Manual, where the net wind pressure does not exceed 2.01kPa, the net general wind suction does not exceed 1.72kPa and local net wind suction does not exceed 3.01kPa; calculated using AS/NZS1170.2 or AS4055. This includes AS4055 Wind Classifications N1, N2, N3, N4 and C1 (and excludes AS4055 Wind Classifications N5, N6, C2, C3 and C4).
- Volume One FP1.4 and Volume Two P2.2.2 in respect of weatherproofing for walls, if properly flashed in accordance with this Manual.
- Volume One FP1.5 and Volume Two P2.2.3 in respect of damp-proofing for external walls, if provided with not less than 100mm clearance to ground level in accordance with this Manual.
- Volume One JP1 and Volume Two P2.6.1 in respect of energy efficiency of walls in applications where complying thermal resistances of the walls have been determined in accordance with this Manual.

SUBJECT TO THE FOLLOWING CONDITIONS

- Product selection, and incorporation into the building design, must be made by a person who is conversant with the application and technical aspects of the product, and has ready access to the relevant technical information related to the product use.
- Product installation must be carried out by a competent carpenter or other tradesman under the direction of a Builder, both of whom are conversant with the method of product installation, and have access to all relevant technical information on product installation.

BASIS OF CERTIFICATION

This Certification is based on the following test reports:

Laboratory	Report No and Date
Ian Bennie and Associates	2011-057-S2 August 2011 test date 15/07/11
Ian Bennie and Associates	2011-057-S3R February 2013 test date 15/07/11

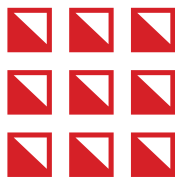
LIMITATIONS

- This certification does not deal with fire resistance or fire hazard properties. The RendeX® External Cladding System is designed to be used as an external cladding in non-fire rated wall applications. As such, it is not subject to the fire hazard properties of NCC, BCA Vol.1, Specification C1.10.
- This certification does not apply to AS4055 Wind Classifications N5, N6, C2, C3 or C4.
- This certification does not deal with material safety and should be considered in conjunction with a suitable Safety Data Sheet, which considers all aspects of safety including threats to respiration and the possibility of electrocution.
- These reports only provide an NCC and BCA compliance appraisal of the RendeX® External Cladding System and do not deal with the quality assurance aspects of the manufacturing, construction and installation processes.

Prestige Wall Systems Pty Ltd (PWS) as the manufacturer of the RendeX® Panel provides a seven year warranty as follows:

- PWS provides the warranty from date of purchase for replacement of defective product only.
- PWS will be in no circumstances liable for any loss or damage (including consequential loss), whether direct or in direct to persons or property.
- PWS will not be responsible and/ or liable to any person in any way for incorrect fixing, installing, finishing and rendering by any person.

Warranty is null and void if product is not installed in accordance with guidelines given and set by this Manual.



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SA 24 Humphries Tce, Kilkenney 5009

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