

# RMAX Batten Cavity EIFS Cladding Technical Data And Installation Manual



EXTERNAL INSULATED FINISHING SYSTEM (EIFS) CLADDING

Codemark  
Accredited

BAL-29 Compliant

## NEW RMAX Orange Board™ Ultra Ground Floor EIFS



RMAX is a division of  
Huntsman Chemical Company  
Australia Pty. Limited  
ABN 48 004 146 338

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Enriching lives through innovation



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### NOTE:

As RMAX continually tests, validates and improves its range of insulation products, the information presented in this technical brochure may have been updated since it was last printed. For the most up to date version of the RMAX Orange Board Ultra Ground Floor EIFS system Technical Data Manual, please visit the RMAX website at [www.rmax.com.au](http://www.rmax.com.au)

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### INTRODUCTION

The premium RMAX OB Ultra Ground Floor EIFS system is a light weight exterior cladding system that not only provides weatherproofing and continuous insulation but now the impact resistance performance that ground floor or single storey residential building market demands. The RMAX OB Ultra Ground floor EIFS system is designed as a totally integrated non-load bearing lightweight facade walling system, delivering a weatherproof external building envelope incorporating an inbuilt cavity system to allow for proper drainage and moisture management, whilst at the same time providing excellent thermal insulation performance and the ultra high impact resistance comparable to traditional masonry walling systems.

RMAX is a pioneer in the use of EPS External Insulation Facade Systems (EIFS), having released its first EPS EIFS cladding panel EXIN to market back in 2002, followed by the first fully BCA certified and accredited EIFS cladding system that being the RMAX Orange Board (OB) EIFS system in 2010. Our constant commitment to quality and continuous improvement has seen our EIFS cladding systems continuously evolve and transform over time to not only meet, but exceed the ever increasing demands of the National BCA construction codes and the building industry in general.

Traditionally, lightweight cladding systems have usually been applied as alternate building solutions primarily for second storey residential facades. Lightweight Cladding systems have not proliferated in single storey residential applications to date, due to their perceived lack of impact strength especially when compared to traditional external cladding materials such as brick veneer. The revolutionary new RMAX OB Ultra Ground Floor EIFS system changes all that.



Photo 1. Typical single storey residential building construction illustrating RMAX EIFS Cladding Panels as installed prior to being rendered.

### RMAX OB Ultra Ground Floor EIFS CodeMark™ Product Certification



The new RMAX OB Ultra Ground Floor EIFS system has been audited and assessed by CertMark International (CMI). CMI is an accredited independent certification body (ISO Guide 65).

In undertaking this assessment, CMI have awarded CodeMark™ certification for the RMAX OB Ultra Ground Floor EIFS system under individual CodeMark™ Certificate Number CM40257.

The CodeMark™ Certificate of conformity outlines National compliance of the RMAX OB Ultra Ground Floor EIFS system for use in **Class 1 and 10** buildings, to the relevant Building Code of Australia (BCA) codes specifically relating to:

- Structural Integrity (wind load resistance and cyclonic wind debris impact resistance)
- Damp and Weatherproofing
- Construction in Bushfire Prone Areas (BAL)
- Energy Efficiency for External Walls (Thermal performance).

CodeMark™ certification provides building certifiers, architects, builders and installers alike with the confidence that the RMAX OB Ultra Ground Floor EIFS system has been subjected to extensive testing and validation to comply with all relevant Australian building codes and standards and meets all the minimum requirements for the relevant criteria as specified above, when installed as per the information set forth in this technical brochure.

For a full list of referenced tests and reports refer to page 53.

The RMAX OB Ultra Ground Floor EIFS system CodeMark™ certificate can also be downloaded directly from the RMAX website at [www.rmax.com.au](http://www.rmax.com.au), or can be sourced through your local RMAX OB Ultra Ground Floor EIFS system distributor. For a list of current RMAX distributors and their contact details, please visit the RMAX website.

## PRODUCT USES AND BENEFITS

### Benefits of Installing the RMAX OB Ultra Ground Floor EIFS system

#### Extreme Impact Resistance

The RMAX OB Ultra Ground Floor EIFS system is the first and only Australian designed and manufactured EPS EIFS system to meet the stringent requirements of Australian Standard AS / NZS 1170.2-2011, Clause 2.5.8 for cyclonic wind debris impact resistance. The combination of the RMAX OB high density EPS panels, the RMAX OB Ultra Starter Panels, the RMAX OB Ultra Impact fibreglass mesh and the proprietary RMAX OB Plus render results in an EPS EIFS panel cladding system that exhibits far superior impact resistance performance compared to any other EPS EIFS cladding system currently available in the market today.

Up until now, builders and specifiers have always been hesitant to specify and install traditional EPS EIFS cladding systems for ground floor or single storey residential construction applications, due to the lower impact resistance performance that these systems typically exhibit as compared to traditional masonry walling systems. The RMAX OB Ultra Ground Floor EIFS system, as the product name suggests however, has been specifically developed to enable all builders and specifiers to confidently specify the system for application in the non traditional ground floor or single storey building applications, knowing that the impact resistance performance of this revolutionary cladding system is proven to perform at a similar level to that of other traditional masonry systems.

The RMAX OB Ultra Ground Floor EIFS system provides a weatherproof, impact resistant cladding and insulation system for **Class 1 and 10** residential building applications and is used as an alternative integrated façade system to traditional masonry facade systems.

**Although The RMAX OB Ultra Ground Floor EIFS system is suitable for application in Class 1 and 10 buildings, it is not applicable for use in any Class 2 to 9 commercial building.**

The RMAX OB Ultra Ground Floor EIFS system comprises of the following proprietary components that go to make up the Codemark certified system:

- DuPont Tyvek breathable home wrap. (sarking)
- RMAX EPS cavity battens (28g/L) 1250 x 40 x (10-25mm) thickness
- 100mm thick RMAX OB Ultra starter panel. (28g/l) density.
- 100mm thick RMAX OB EIFS Panel (28g/l) density.
- RMAX Ground floor EIFS aluminium starter channel assemblies Option A and B. (Design and innovation patent pending)
- Ramset Nylon Anchors with stainless steel nails 5 x 33mm length for starter channel installation into concrete slab. (Ramset part number ED05033SS.)

- RMAX OB Ultra Impact mesh.
- RMAX OB Plus Render.
- RMAX OB Primer.
- 10G x 150mm length CSK head Coarse Ribbed Class 4 needle point fasteners.
- RMAX Orange Board washers
- Bituminous Aluminium flashing tape.
- Aluminium /PVC corner angles.
- Approved Polyurethane construction foam adhesive.
- Selleys Liquid Nails Fastgrab construction adhesive or Selleys Liquid Nails Instant Hold construction adhesive only.

**Please Note:** Other Selleys Liquid Nails products have not been tested and may not be compatible with EPS.

Where required or requested by the relevant project specifier, the EPS panels and battens that go to make up the RMAX OB Ultra Ground Floor EIFS system can be manufactured and supplied with a termite resistant additive as part of their composition.

**Please Note: The addition of the termite additive where requested as part of the RMAX Orange Board Ultra Ground Floor EIFS system, does not preclude the builder from having to install an appropriate termite barrier or termite management system as per the relevant BCA requirements set forth in Australian Standard AS 3660.1**

### RMAX Orange Board Ultra Ground Floor EIFS system Composition

The RMAX OB EIFS panel, RMAX OB Ultra starter panel and EPS battens are all manufactured from expanded polystyrene which is an inert, lightweight, inorganic material. The EPS panels and battens are manufactured in RMAX manufacturing plants across Australia in accordance with the relevant Australian Standard AS1366 Part 3 ~ 1992 Rigid cellular Polystyrene Moulded plastic sheets for Thermal Insulation.

### Variation and Modifications to the RMAX OB Ultra Ground Floor EIFS system

**RMAX does not validate or authorise in any way the use of any non-approved RMAX OB Ultra Ground Floor EIFS system components other than those specified in the components list on this page. RMAX will not be responsible for the performance of a system when installed outside of the CodeMark accreditation and system limitations and when non-approved components are used. In the event that non approved components have been installed as part of the finished system, this may compromise the systems performance. Where this has been found to have occurred, the product warranty and the Codemark certification that would normally be issued for the installed system will be rendered null and void.**

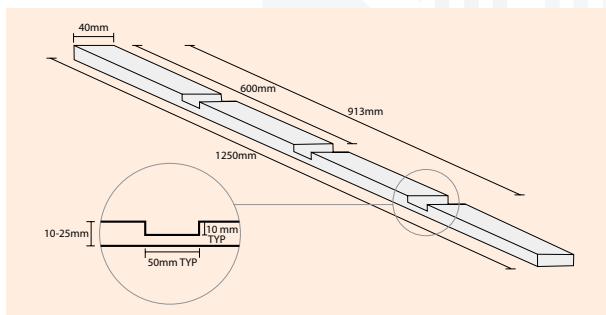


### PRODUCT USES AND BENEFITS

The ability for the RMAX OB Ultra Ground Floor EIFS system to be specified for single storey residential applications now provides architects, builders and specifiers alike with enhanced choice and flexibility as to applicable facade design selection for the single storey residential construction market.

#### Benefits of a fully integrated cavity system.

**RMAX EPS cavity battens are an integral component of the RMAX OB Ultra Ground Floor EIFS system and must be applied as part of the installed system for the RMAX Statutory Warranty and CodeMark certification to apply.** RMAX cavity battens measure 1250mm x 40mm (Can be supplied in thicknesses of 10-25mm inclusive) and are manufactured by RMAX from high density X28 grade (28g/L), Isolite Expanded Polystyrene. The EPS battens each contain three 50mm x (5-10mm) thick tab cut outs located at 313mm centres. The tab cut outs allow for air circulation to occur between the studs.



**Figure 1. Typical Dimensions of the RMAX EPS Cavity Batten in 25mm thickness.**

The addition and installation of the RMAX batten cavity creates a physical separation layer (air gap) between the RMAX EPS Panel and the timber or steel frame assisting in the reduction of moisture contact directly onto the stud frame. The unique RMAX battens having pre cut tabs as part of their design also allows for air flow to naturally occur between each of the studs as well.

The creation of this cavity, allows for air flow to be maintained between the stud frame and the EPS panels, allowing any condensation, moisture or water ingress that may form in the wall cavity or behind the RMAX OB EPS Panel to effectively drain away, greatly reducing potential issues of rot and mould growth from occurring. Any remaining condensation or moisture within the cavity that doesn't drain out naturally, will then be able to dry out over time through the ventilation provided along the bottom of the cavity and through the Tyvek Vapour permeable wall wrap and through the air flow that occurs between the studs.



**Photo 2. RMAX Cavity Batten and batten installation clouts.**

The Installation of the RMAX EPS battens also improves the total R value of the wall system by providing an additional air space between the sarking and the EIFS cladding.

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### PRODUCT USES AND BENEFITS

#### RMAX OB Ultra Starter Panel Product Description

The RMAX OB Ultra starter panels are manufactured from a speciality grade EPS material which contains a proprietary water proof coating. The RMAX OB Ultra Starter panels are supplied in dimensions of 1800 x 400 x 100mm thick. The RMAX OB Ultra starter panels are an integral component of the RMAX OB Ultra Ground floor system as they provide enhanced water and weather proofing performance compared to standard EPS.

**Please Note: The application of the RMAX OB Ultra starter panels is integral to the overall performance of RMAX OB Ultra Ground floor system and cannot be substituted with any other alternate EIFS (or other starter panel type). Failure to install the RMAX OB Ultra Starter panel as part of the overall RMAX OB Ultra Ground floor system or where product substitution has been found to have occurred, will result in the RMAX OB Ultra Ground floor system Codemark certification and product warranty becoming null and void.**



Photo 3. RMAX OB Ultra Starter Panel.

#### RMAX Ground Floor EIFS starter channel Options A and B (design and innovation patent pending) Product Description

RMAX provides the option of two different versions of the RMAX GF EIFS starter channel (Design Options A and B), giving builders and installers added flexibility and choice in the installation of the RMAX Orange Board Ultra Ground Floor EIFS cladding system in a rebated slab edge construction scenario whilst ensuring that both starter channel design options meet all the minimum performance requirements as stipulated by the current NCC building codes and all relevant Australian standards.

The RMAX Options A and B Ground Floor EIFS aluminium starter channels are supplied in lengths of 2500mm x 130mm width and are designed such that they can easily be cut to size on the job site. The Option A or B starter channels once installed, function as a cavity closer for the RMAX Orange Board Ultra Ground floor EIFS system and provide the necessary drainage path via the weep slot design at the base of the starter channels. The RMAX Option A Ground Floor EIFS aluminium starter channel (design and innovation patent pending) can be installed directly to the concrete slab (either to a rebated slab edge or over a non rebated slab edge as per installation drawings on pages 40 and 41.). The Option A starter channels are installed directly to the slab using Ramset stainless steel anchors (Ramset part number ED06042SS). Please see page 24 for Ramset anchor fastening and installation details.

The RMAX Option B Ground Floor EIFS Starter channel (design and innovation patent pending) is supplied to market as a complete assembly which mirrors the design and construction of the RMAX Option A Ground Floor EIFS starter channel (design and innovation patent pending) but also includes the provision of 9mm thick Fibre Cement sheet packers that are attached directly to the underside of the aluminium base of the starter channel. Each 2500mm length of the RMAX Option B Ground Floor EIFS starter channel contains 9 Fibre Cement sheet packers that are equally spaced along the length of the channel as per photo 5 below. This unique design provides the builder / installer with the flexibility of being able to position the RMAX Option B Ground Floor EIFS aluminium starter channels (design and innovation patent pending) directly up against the rebated slab edge without the need to have to fasten the starter channel directly to the slab, whilst still maintaining the necessary drainage path via the patented weep slot design at the base of the starter channels.



Photo 4. RMAX Option A Orange Board Ultra Ground Floor EIFS aluminium starter channel assembly (design and innovation patent pending).



Photo 5. RMAX Option B Orange Board Ultra Ground Floor EIFS aluminium starter channel assembly (design and innovation patent pending).

## DESIGN CRITERIA

### Compliance

All design and construction must comply with the appropriate requirements of the current 2019 Building Code of Australia (BCA) regulations for Volume 2 for Class 1 and Class 10 Buildings and any specific requirements of your local Building Authority.

### Installation Design

All installation, erection and fixing requirements of the RMAX OB Ultra Ground Floor EIFS system must be in accordance with the details contained in this manual.

### Frame Structure

The frame structure must be built in accordance with the Building Code of Australia (BCA) and with all relevant Australian Standards that may apply such as AS 1684 - Residential Timber Framed Construction. Metal framing must comply with: AS 3623 - Domestic Metal Framing - A cold-formed steel frame constructed in accordance with NASH Standard for Residential and Low-rise Steel Framing, Part 1: Design Criteria.

**NOTE: The RMAX OB Ultra Ground Floor EIFS system is non structural and doesn't contribute to the structural integrity of the frame once installed. Hence, structural bracing must be installed as part of the integral wall frame.**

### Design Ultimate Wind Pressures:

The determination of the design wind pressures that the system is likely to be subjected to during its operational life must be determined prior to commencement of construction. It is the project owner's responsibility to consult with a fully qualified engineer for the determination of the appropriate wind pressures that the building structure would be subjected to based on the buildings geographic location and the resulting topography in accordance with Australian Standard AS4055.

### Wind Pressure Design

The capacity of the RMAX OB Ultra Ground Floor EIFS system, as evaluated in accordance with the relevant Australian Standards (AS 4040.0, AS 4040.2, AS 4040.3), to resist different Wind Regions A, B (Non-Cyclonic) and C, D (Cyclonic) (see Figure 2 below) as required by the BCA and defined according to AS/NZS 1170.2:2011 and AS 4055 - 2006 was obtained by testing performed in NATA accredited Laboratories. Refer to page 53, reference 8.

The limitations of the following fixing provisions are:

- Building height to eaves or ridge less than or equal to 10.00 m.
- Buildings built in terrain categories 1 to 3.
- Buildings built on topographic classification T1 (AS 4055-2012).

The provisions of the fixings for the different wind regions A, B, C and D are defined in Table 1 below.



**Table 1: Minimum stud and fastener spacing for the RMAX OB Ultra Ground Floor system in accordance with AS 4055-2012.**

Wind Regions	Non-Cyclonic (A and B)						Cyclonic (C and D)			
Wind category	N1	N2	N3	N4	N5	N6	C1	C2	C3	C4
Panel Thickness (mm)	100									
Stud spacing (mm)	450, 600						450			
Fastener spacing (mm)	300	300	300	300	300	200	200	200	200	200

**Please Note: For Wind Region N6 only 200mm fastener centre spacing must be applied within 1200mm of corners. 300mm fastener centre spacings can be applied elsewhere. Refer pg 33 for more details.**

Please see Detail drawings on pages 30,31,32 and 33 for further information in relation to fastener location and spacing covering both non cyclonic and cyclonic wind regions.

**Figure 2. Wind Region designation around Australia. Refer to the BCA Design Wind Speed-Equivalent Values for more information.**

## DESIGN CRITERIA

### RMAX EIFS EPS Panel Fasteners

Each fastener is composed of:

- 1 galvanised steel screw (Class 4)
- 1 RMAX OB plastic washer (Orange in colour)

Table 2: Panel fixing components details

Fasteners	Timber frame	Steel frame
<b>Screw</b> (100mm panel)	10G x 150mm CSK Head Coarse Ribbed Class 4 Neddle Point	10G x 140mm Wing Tek Class 4
<b>Washer</b>	45mm diameter plastic RMAX OB washer (orange in colour)	

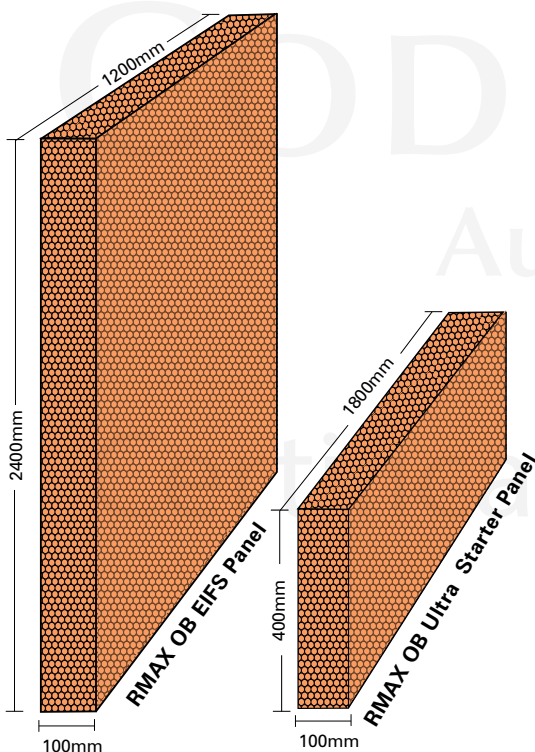
## TECHNICAL SPECIFICATIONS

### Standard Tolerances

Table 3: Panel Dimensions

Panel Dimensions: Thickness x Length x Width
RMAX OB EIFS panel 100mm x 2400mm x 1200mm
RMAX OB Ultra Starter panel 100 mm x 400mm x 1800mm
Tolerance: Panel Length and Width = +/- 2 mm
Tolerance: Panel Thickness = +/- 1mm
The surface mass of each panel is indicated in Table 4. Panel sheet weights are shown Table 5.

Figure 3:  
RMAX OB EIFS  
Panel and OB Ultra  
Starter Panel



Drawings not to scale

NOTE: Screw length = 150mm for timber frame, 140mm for steel frame. As a guide, the screw should be minimum 25 mm longer than the combined thickness of the panel and batten for timber frame construction and 15 mm longer than the combined panel and batten thickness for steel frames. The screw offset from the edge of the panels and the panel joins is to be 20mm. **Where two panels butt up against each other, edge to edge, a double stud is to be used, allowing each panel to be fastened to its own individual stud.** Refer fastener fixing detail on pages 30, 31, 32 and 33 for further information.

### Framing Specification Compliance

In all cases, it is a requirement that the RMAX OB Ultra Ground Floor EIFS incorporates a supporting frame compliant with BCA requirements, e.g. The AS 1684 suite of standards for Residential timber-framed construction for cyclonic and non-cyclonic areas (where minimum framing member dimensions may be less than those referenced in the testing referenced in Appendix D so long as the minimum screw penetration depth into the stud is maintained); or, NASH Standard for Residential and Low-rise Steel Framing with minimum stud specification of 0.75 mm BMT G550 for non-cyclonic applications. For cyclonic applications, while the strength of RMAX OB Ultra Ground Floor EIFS has been verified for a 10G screw/washer combination, the strength of the screw-to-steel-frame connection must be independently verified.

Table 4: Nominal panel surface mass (kg/m<sup>2</sup>) – unrendered

Thickness (mm)	Surface Mass (kg/m <sup>2</sup> )
100mm	2.80

Table 5: Average sheet weight in kg – unrendered

OB EIFS Panel 100mm thick	OB Ultra Starter Panel 100mm thick
Weight 8.06kg	Weight 2.02kg

RMAX OB EIFS panel  
Tyvek Breathable Sarking  
Plaster Board  
RMAX OB Plus Render Finish  
RMAX OB Ultra Mesh  
Class 4 Fastening Screw  
and OB Washer  
RMAX EPS Cavity  
Batten 40mm x (10-25mm)  
Stud Frame

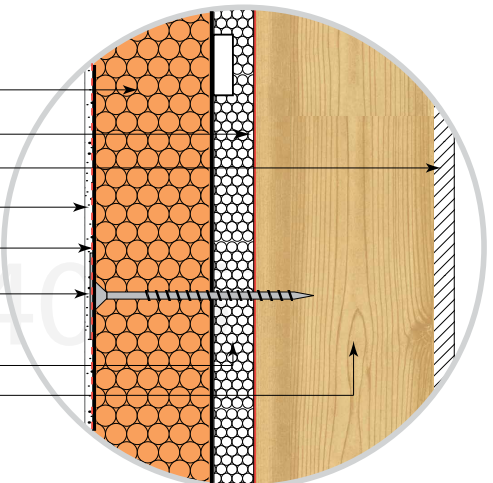


Figure 4: Example of the installed RMAX OB Ultra  
Ground Floor EIFS cladding system



TECHNICAL SPECIFICATIONS

Table 6: NCC 2019 Climate Zone Requirements  
NCC 2019, BCA Vol 2, Table 3.12.1.3a

Climate Zones	1, 2,3	4, 5,	6,7	8
Minimum Total R-Value for External Walls	Typical wall - R2.8 - R2.4 Shaded with a projection angle of: 15 degrees	Typical wall - R2.8 - R2.4 Shaded with a projection angle of 15 degrees	Typical wall - R2.8	Typical wall - R3.8

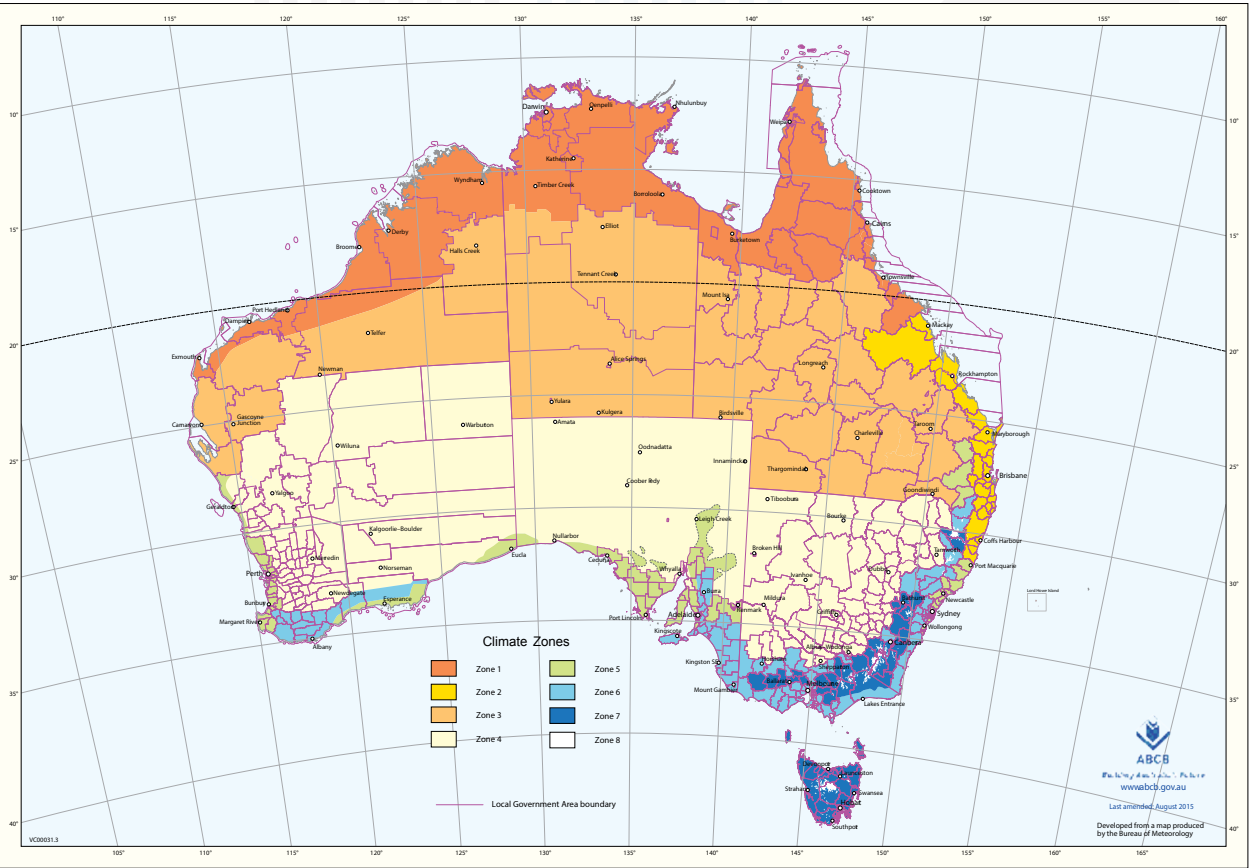


Figure 4. ABCB Climate Zone Map.

The RMAX OB Ultra Ground Floor EIFS System achieves compliance to the NCC 2019 Climate requirements for minimum R-Value performance of external walls in climate zones 1 through 7. Compliance to minimum R-Value performance in Climate zone 8 can be achieved with the addition of R 1.0 and higher insulation batts being installed in the stud cavity.

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## TECHNICAL SPECIFICATIONS

### Early Fire Hazard Properties (AS/NZS 1530.3-1999)

From tests conducted by AWTA, Division of Building Materials – NATA Accreditation # 1356, the following indices given in Table 7 below have been determined.

**Table 7: Early Fire Hazard Properties Of The RMAX OB Ultra Ground Floor EIFS Cladding Product Range Rendered Panel**

Material	Ignitability Index (0-20)	Spread of Flame (0-10)	Heat Evolved Index (0-10)	Smoke Produced Index (0-10)
RMAX EPS cavity battens (28g/L) density.	6	0	2	5
RMAX OB Ultra starter panel (28g/L) density.				
RMAX OB EIFS Panel (28g/L) density.				

**NOTE:** The core material in all RMAX EIFS Cladding Products is expanded polystyrene. As with all other organic material, insulation products must be considered combustible and to constitute a fire hazard if improperly used or installed. Each of the RMAX OB Ultra Ground Floor EIFS Cladding panels contains a flame retardant additive to inhibit accidental ignition from small fire sources.

### Thermal Insulation

**Table 8: R value of RMAX OB EIFS Cladding Panel (28g/L) and RMAX OB Ultra Starter Panel (28g/L)**

Panel thickness	100mm
Thermal conductivity at 23°C (W/m²K)	0.0358
R value at 23°C (m²K/W)	2.79

### RMAX OB Ultra Ground Floor EIFS system Thermal Performance

From calculations in accordance with AS/NZS 4859.1: 2018 the total R value for RMAX OB Ultra Ground Floor EIFS system is provided in the Table 8 below.

**Table 9: Total R value of RMAX OB Ultra Ground Floor EIFS system**

Total R value of RMAX	
Panel thickness (mm)	Total R value <b>Summer</b> (m²K/W)
100	3.35
	Total R value <b>Winter</b> (m²K/W)
100	3.53

**NOTE:** The R value calculations indicated above are based on a standard wall system construction comprising of 10mm thick plaster board internal wall lining, 90mm x 45mm thick timber stud frame, Tyvek home wrap breathable sarking (wall wrap), 25mm thick X28 grade RMAX EPS Cavity Battens and the 100mm thick RMAX OB X28 EIFS EPS Cladding panels and RMAX X28 OB Ultra Starter panels finished with a nominal 5mm thick Orange Board™ Plus finish render coating applied.

### RMAX OB Ultra Ground Floor EIFS system Weighted Sound Reduction Index (Rw) Performance.

RMAX has previously tested the weighted sound reduction index (Rw) performance of its standard Codemark certified RMAX Orange Board Batten Cavity EIFS system. The system as tested achieved a weighted sound reduction index (Rw) of 38dB. It is expected that the RMAX OB Ultra Ground Floor EIFS system being composed of a thicker panel of higher density will achieve at a minimum, the same sound reduction performance of 38dB.

**Table 10: Perceived Change In Decibel Levels**

Change in Sound Level	Perceived Change to the Human Ear
+1dB	Not perceptible
+3dB	Threshold of perception
+5dB	Clearly noticeable
+10dB	Twice (or half) as loud
+20dB	Fourfold (4x) change

**NOTE:** The threshold of perception of the human ear is approximately 3 decibels. A 5 decibel change is considered to be clearly noticeable to the ear whilst a 10 decibel change would be perceived to be twice as loud.



**Photo 6. Complete RMAX OB Ultra Ground Floor EIFS clad wall.**

## TECHNICAL SPECIFICATIONS

### Slab & Footings

The concrete slab and footings on which the building is to be built upon, must be designed and certified by a qualified structural engineer. The design must be in accordance with Australian Standard AS2870 Residential Slabs & Footings and / or AS 3600 Concrete Structures. Slab edge design must also be taken into consideration and must be in accordance with Australian Standard AS 2870-2011.

### Ground Clearance

The RMAX OB Ultra Ground Floor EIFS system must be installed with a minimum 75mm clearance to ground level (refer to construction drawings on pages 40 and 41 for details) or in accordance with local building codes. Adjacent finished grade must slope away from the building in accordance with local building codes.

The RMAX OB Ultra Ground Floor EIFS cladding system should not be installed in areas where it may remain in contact with standing water or debris.

Back filling over the RMAX OB Ultra Ground Floor EIFS cladding system is not permitted under any circumstance. Back filling over the installed system will render the RMAX OB Ultra Ground Floor EIFS product warranty and Codemark certification as null and void.

### Termite and Pest Control

The project manager/ builder must comply with all relevant BCA and local council requirements as they pertain to termite and pest control in accordance with Australian Standard AS 3660.1:2000.

### Render top Coat Colour Selection

RMAX advises that the use of dark render colours or shades be avoided where ever possible - Dark colours absorb the suns radiant heat energy much more so than lighter colours resulting in higher average cladding surface temperatures compared to lighter colours. These elevated temperatures can lead to premature deterioration and damage to the render system. In order to avoid this potential for premature deterioration or damage, **RMAX recommends the use of render colours or shades with a minimum Light Reflective Value (LRV) of 35%.**

### Fire Resistant Level (FRL)

Volume 2 of the BCA (Part 3.7.1) specifies the requirements for residential buildings for minimum fire resistance performance for external walls, where the external wall is located at less than 0.9m from an allotment boundary or less than 1.8m from a separate building structure on the same allotment. In these circumstances where a party or boundary wall requirement exists, a minimum Fire Resistance Level (FRL) of 60/60/60 is required for BCA compliance in Class 1 and 10 buildings.

The RMAX OB Ultra Ground Floor EIFS system is not suitable for use as a FRL rated external wall cladding system for boundary walls and / or party walls as a standalone walling system. Where a FRL level / rating is required for such installations, an appropriate FRL rated wall cladding system must be specified.

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## TECHNICAL SPECIFICATIONS

### Bushfire Attack Level (BAL)

After the Canberra bushfires in 2003, the Australian Standard relating to building was reviewed and a new Australian Standard (AS 3959) Construction of Buildings in Bushfire prone areas was introduced nationally in 2009. The new building standard has 5 risk levels (Bushfire Attack Levels-BALs). These being BAL12.5, 19, 29, 40 and BAL Flame Zone (FZ). There are increasing construction requirements that range from ember protection at the lower BAL levels to direct flame contact protection at the highest. The AS3959 standard increases the construction requirements on residential buildings so they are better bushfire protected.

Products used in external construction of houses should have a minimum BAL rating to ensure that building is undertaken in such a way that risk to people and property is minimised. It is a legislative requirement that a person or organisation who has suitable qualifications and experience undertakes the BAL assessment. RMAX commissioned Exova Warringtonfire, a


NATA accredited testing authority, specialising in BAL testing and certification to undertake their BAL 29 conformance testing.

The RMAX OB Ultra Ground Floor EIFS system has been tested for heat intensity and ember attack of bushfires in relation to AS 3959-2009. In doing so the RMAX OB Ultra Ground Floor EIFS system has met the requirements of AS 1530.8.1:2007 and is approved for use in bushfire prone areas up to and including BAL 29 as per information contained in the Exova BAL29 conformance certificate below.

**To meet the BAL 29 conformance requirements as tested by Exova Warringtonfire, RMAX Orange Board Plus™ render must be used and applied over the RMAX OB EIFS cladding panels and RMAX OB Ultra Starter panels at a minimum thickness of 5mm.** Furthermore The AS3959 standard for construction in bushfire prone areas specifies all joints in the external surface material of walls shall be covered or sealed, to prevent gaps no greater than 3mm.

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EWFA CERTIFICATE OF ASSESSMENT		CERTIFICATE No: SFC 47899700.5 Page 1 of 1	
<b>Report Sponsor</b>	<b>Certificate Issue Date</b>	<b>Product Name</b>	
RMAX 2-4 Mephan Street Maribyrnong VIC, 3032	24/07/2018	RMAX Orange Board RMAX ThermaWall RMAX ThermaWall Plus	
<b>Assessment Report Reference</b>		<b>Referenced Standard</b>	<b>Report Issue Date</b>
EWFA 47899700.5		AS 1530.8.1-2007	24/10/2018
			<b>Report Validity Date</b>
			31/08/2022
<b>Introduction</b>			
The element of construction described below was assessed by this laboratory on behalf of the report sponsor in accordance with the stated test standard and achieved the results stated below. Refer to the referenced test report(s) or Regulatory Information Reports for a complete description of the assessed construction.			
<b>Assessed Framed Wall system description and performance</b>			
<b>Framed wall Description</b>			<b>BAL</b>
<p>The scope of the assessment includes the bushfire resistance performance of a framed wall system incorporating various rendered RMAX panels when tested in accordance with AS1530.8.1-2007 as appropriate for external walls. The assessed external wall system consisting of;</p> <ul style="list-style-type: none"> <li>Timber framing or light gauge steel framing at least 70mm deep.</li> <li>Unexposed side faced with 10mm Gyprock plasterboard.</li> <li>Exposed side faced with 4.8mm minimum thickness RMAX OB Plus Orange Board render system coated over optionally M or X28 density grade 75mm or 100mm thick RMAX Orange Board or 28g/l PERIPOR® 300E EPS Board, RMAX ThermaWall Board, RMAX ThermaWall Plus Board, RMAX ThermaSilver Board, RMAX ThermaWall Silver Board or RMAX ThermaWall Plus Silver Board.</li> <li>Render mesh shall optionally be RMAX OB Ultra impact mesh or RMAX OB fibre glass Render Mesh</li> <li>Starting channel and meshed external angle shall optionally be made of PVC or aluminium alloy.</li> <li>Optional inclusion of X28 EPS Battens 40mm wide with thicknesses optionally from 10 to 25mm attached to framing for all systems, the EPS panels are then fastened to the stud frame through the EPS battens.</li> <li>Optional construction shall include a direct fix method, where the EPS panels are fixed directly to the stud frame.</li> <li>Sarking type to be generic in specification and installation.</li> <li>RMAX aluminium starter channel system incorporating 4.5mm thick x 100mm wide fibre cement sheeting coated with Supersec 2413 waterproofing membrane optionally replacing PVC starter channels</li> </ul> <p>Refer the referenced assessment report No. EWFA 47899700.2 and R &amp; D Test Reports EWFA 50050500.1 &amp; EWFA 55326400.2 for a complete description of the assessed construction and EWFA 27710-05 referenced in the report for previously assessed variations.</p>			BAL: A29
<b>Conditions/Validity</b>			
<ul style="list-style-type: none"> <li>THIS CERTIFICATE IS PROVIDED FOR GENERAL INFORMATION ONLY AND DOES NOT COMPLY WITH THE REGULATORY REQUIREMENTS FOR EVIDENCE OF COMPLIANCE.</li> <li>Reference should be made to the relevant test report or regulatory information report to determine the applicability of the test result to a proposed installation. Full details of the constructions and justification for the conclusions given, along with the validity statements, are given in the assessment reports.</li> <li>The assessment report or short form assessment report does not provide an endorsement by Exova Warringtonfire Aus Pty Ltd of the performance of the actual products supplied. It is intended to provide a brief outline of the above referenced assessment reports and not to replace them.</li> <li>The conclusions in this certificate of assessment relate to the configurations as detailed, and should not be applied to any other configuration. The conclusions expressed in this document 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.</li> <li>Full copies of the assessment and relevant test reports may be obtained from the sponsor.</li> </ul>			
<b>TESTING AUTHORITY</b>		Exova Warringtonfire Aus Pty Ltd	
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<b>Authorisation</b>		Prepared By:	Reviewed By:
		H. Wong	T. Bhat

Figure 5. RMAX Exova BAL29 Certificate.



## TECHNICAL SPECIFICATIONS

### Moisture Management – Batten Cavity System

The RMAX OB Ultra Ground Floor EIFS system assists with wall cavity moisture management through the use of its self draining starter channel / cavity closer (design and innovation patent pending) and the Tyvek breathable water barrier wall wrap as part of the fully integrated walling system. Where condensation occurs within the wall cavity up against the RMAX EPS panels, moisture build up can effectively drain from the cavity through the specially designed weep slots in the RMAX OB Ultra Ground Floor EIFS starter channels. The weep slot design in the RMAX Ground floor EIFS aluminium starter channel assembly (design and innovation patent pending) also enables air circulation to occur throughout the entire wall cavity.



Photo 7a & 7b. RMAX OB Ultra Ground Floor EIFS patented aluminium Starter Channel assembly option A and B



The 100mm thick RMAX OB Ultra EIFS and RMAX OB Ultra Starter Panels are fixed to the vertical cavity spacer (X28 grade EPS battens). The batten cavity allows water to naturally drain to the bottom of the panel which interfaces with the RMAX Ultra Ground floor EIFS aluminium starter channel assembly option A and B (design and innovation patent pending) / cavity closer. The cavity battens create a physical air gap separating the OB Ultra EIFS cladding panels from the timber framing limiting the amount of moisture contact with the stud frame. Any remaining moisture that doesn't happen to drain out and persists within the cavity, will be able to dry out naturally over time due to the ventilation provided along the bottom of the RMAX Ultra Ground floor EIFS aluminium starter channel assembly option A and B (design and innovation patent pending) and between the studs via the in built tab cut outs in the EPS battens.

### Water Vapour Resistance

RMAX OB Ultra EIFS panels and RMAX OB Ultra starter panels exhibit very low water vapour transmission rates, however they cannot be considered to be a complete vapour barrier. Therefore the Tyvek Wall Wrap (vapour barrier) must be installed as part of the finished wall system. **Incorporation of the Tyvek wall wrap is mandatory as part of the full RMAX OB Ultra Ground Floor EIFS system irrespective of where the building is located.**

**Failure to Install the Tyvek Home wrap wall sarking or replacement of the Tyvek sarking with an alternative non approved sarking is not permitted under any circumstance. Substitution of Tyvek sarking with a non approved sarking will render the RMAX OB Ultra Ground Floor EIFS system product warranty and Codemark certification as null and void.**

### Weatherproofing & Water Resistance

The RMAX OB Ultra Ground Floor EIFS system weatherproofing performance complies with the minimum requirements of the National Construction Code (NCC-2016) Weatherproofing Verification Method V2.2.1. Details can be found on page 53, reference 7.

## TECHNICAL SPECIFICATIONS

### UV Exposure

Continuous exposure to the elements of unrendered RMAX OB Ultra EIFS panels and RMAX OB Ultra starter panels may result in deterioration causing minor fretting of the exposed edges of the RMAX OB Ultra EIFS cladding panels. Therefore, if the RMAX OB Ultra EIFS Cladding panels, RMAX OB Ultra starter panels or battens are to be stored outside for extended periods of time prior to installation, the individual panels or panel stacks should be completely covered by a canvas or Ultra Violet light (UV) resistant type material. **Under no circumstances however should a clear plastic cover be used to cover the panels.**

### High Wind Exposure

When handling or installing the RMAX OB Ultra EIFS Cladding panels or the RMAX OB Ultra Starter panels or EPS cavity battens in windy conditions, particular care should be taken. Due to the light weight nature of the panels and battens, unsecured panels or battens can be severely damaged or may cause damage if whipped up during windy conditions.

### Heat Exposure

As EPS foam will begin to soften and shrink when exposed to elevated temperatures above 80°C, the RMAX OB Ultra EIFS Cladding panels and render finished wall facades should not be continuously exposed to temperatures in excess of 80°C, as expansion and blistering of the panels and or rendered wall may occur. Thus it is highly recommended that **any equipment that generates high levels of radiant heat such as outdoor barbecues or outdoor patio gas heaters etc, should be kept at a minimum of 2 metres away from any exposed RMAX OB EIFS Cladding Panels.**

### Chemical Resistance

RMAX OB Ultra EIFS Cladding Panels, RMAX OB Ultra Starter panels and RMAX EPS battens are chemically resistant to most water based materials. Resistance to diesel fuel, paraffin oils and vegetable oils however is limited, thus prolonged contact should be avoided. EPS will however be attacked by hydrocarbons, ketones, esters and solvents. Exposure to these chemicals should be completely avoided. Refer to the RMAX Isolite® EPS Material Safety Data Sheet for further details regarding storage and handling and compatibility with other chemicals. The RMAX Isolite® EPS Material Safety Data sheet can be provided upon request.

### Impact Resistance

The RMAX OB Ultra Ground Floor EIFS system when installed according to the RMAX specifications and installation manual will provide very high resistance to most impact loads that are likely to occur in normal residential operating conditions. **In line with good building practice however, a design engineer should always be consulted to assess suitability.**

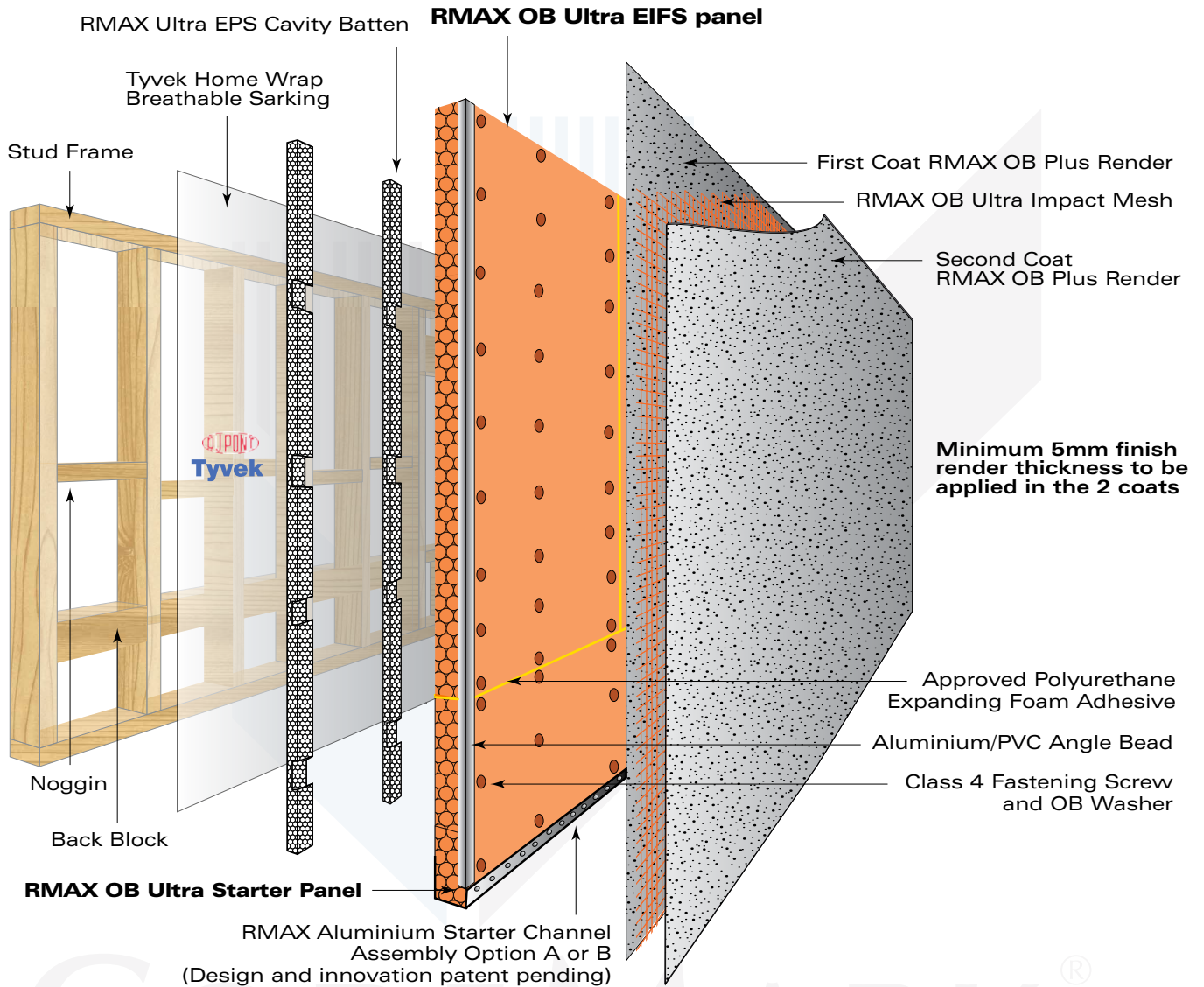
### Product Handling and Storage

The RMAX OB Ultra EIFS cladding panels should be stored elevated, under cover and laid flat. Edges and corners of the panels are to be protected at all times. **The RMAX OB Ultra EIFS cladding panels and RMAX OB Ultra Starter panels should be rendered within 48 hours after installation.** Prolonged exposure to the elements should be avoided, including exposed edges.

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## INSTALLATION GUIDELINES



### Exploded View of RMAX OB Ultra Ground Floor EIFS System

### Cross Section Detail of RMAX OB Ultra Ground Floor EIFS System

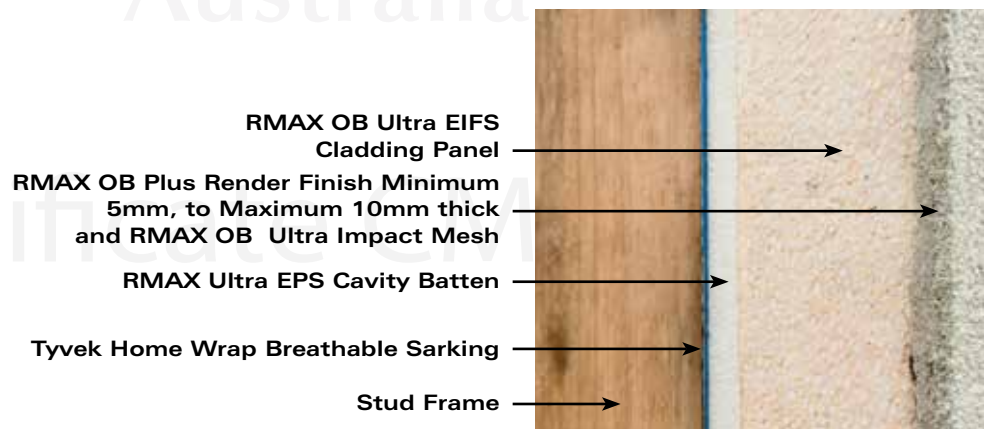


Photo 8. Cross section of complete RMAX OB Ultra Ground Floor EIFS System.

## INSTALLATION GUIDELINES

### Product Waste Management

Due to the lightweight nature of the RMAX OB Ultra EIFS cladding panels, all panel off cuts and waste should be collected, secured in appropriate waste collection bags and disposed of in accordance with local council or government regulations.

### Penetrations

All penetrations are a potential source of water ingress and spread of fire if not properly installed and are therefore required to be properly sealed with an approved fire rated flexible sealant such as Fire Sound acoustic Fire Rated sealant. Back blocking should be installed to allow for attachment of items that may be required such as electricity meter boxes, external taps, external light fittings, HVAC connections, balustrades and other building services.

### Placement of Expansion / Control Joints

Prior to installation of the RMAX OB Ultra Ground Floor EIFS system Cladding Panels to the stud frame, determine expansion joint placement by consulting with a Design Engineer to calculate the deformation / stress due to soil / structure movement, deflection due to load bearing on roofing structures and to specify location of expansion/control joints.

**Placement Guide: The following is a guide only and does not negate the user's responsibility to consult a Design Engineer.**

In line with good building practice, placement of vertical expansion joints should not exceed 5 metres where the wall length is greater than 8 metres. Joints should be placed to align with large door and window openings and internal corners. Double studs are necessary at all vertical expansion joints.

Vertical expansion (Control) joints must be continuous across all panels. i.e. They must be continuous from the top of the wall to the bottom of the wall and must cut across the RMAX OB Ultra Starter Panel and Starter Channel.

Spacing of horizontal expansion joints should not exceed 3 metres.

**Expansion joints must occur where any of the RMAX EIFS Cladding Product Range of panels meet other substrates / cladding materials.**

Typical vertical control joints are nominally 10mm-12mm wide and horizontal control joints are nominally 15mm-20mm wide and filled with an approved paintable flexible sealant.

For expansion joint installation details please see pages 35 and 36.

### Before Commencing Installation

Before commencing installation of the RMAX OB Ultra Ground Floor EIFS system, ensure that you have read the RMAX OB Ultra Ground Floor EIFS system Technical Specification and Installation Manual in full.

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## INSTALLATION GUIDELINES

### DuPont Tyvek Wall wrap (Sarking )

Install the Tyvek Wall Wrap to the stud frame. Appropriate head flashings over the top of the building wrap must be fitted before the Tyvek wrap tape is used to seal the junction of the head flashing and Tyvek wall wrap. If head flashings cannot be used, an acceptable alternative flashing must be provided.

The Stud frame is to be completely wrapped in Tyvek home wrap, ensuring that there is at least 150mm overlap between the two differing sheets / rolls of wrap. Where ever there is overlap of the Tyvek wrap the top positioned sheet must overlap and sit on top of the bottom positioned sheet. Once installed the wrapped frame should be checked to ensure that there are no visible tears or break points in the installed sarking. Where tears or breaks are found in the wrap, these will need to be covered over and taped with approved flashing tape ensuring that a weatherproof seal is able to be maintained.

**Failure to Install the Tyvek Home wrap wall sarking or replacement of the Tyvek sarking with an alternative non approved sarking is not permitted under any circumstance. Substitution of Tyvek sarking with a non approved sarking alternative will render the RMAX OB Ultra Ground Floor EIFS system product warranty and associated Codemark certification as null and void.**

### Weatherproof Flashing Tape

Install approved self adhesive aluminium flashing tape for weatherproofing around all window frames, including sills, doors, openings, penetrations, intersections, connections, heads and jambs. All areas must be flashed prior to batten and panel installation. The approved flashing tape must cover both wall wrap and substrate to ensure a closed weatherproof seal is achieved.



Photo 9. Installation of Tyvek Home Wrap Sarking to stud frame.

### RMAX Option A, Ground Floor EIFS starter channel installation (design and innovation patent pending)

The RMAX Ground Floor EIFS aluminium starter channel assembly option A (design and innovation patent pending) are to be installed ensuring that there is a 10mm gap above the slab rebate edge to allow for drainage of the system. The 10mm gap must be provided and maintained around the entire perimeter of the concrete slab rebate. In the case of an over slab edge installation requirement where there is no rebated slab edge present, the starter channel assembly should be installed allowing clearances to ground level of 75mm minimum. The starter channels should be butt joined and sealed at the junction or interface of the channel ends using the approved Fire Sound Fire Rated acoustic sealant.



Photo 10. RMAX Option A, OB Ultra Ground Floor EIFS aluminium Starter Channel assembly (design and innovation patent pending)

Ensure that the Tyvek home wrap bottom edge is sitting on the inside of the option A starter channel. This installation detail ensures that any water that drains down the face of the Tyvek sarking will be collected within the starter channel and will be able to effectively drain out through the weep slot design at the base of the channel. Refer to Ground slab rebate and over slab edge RMAX Installation details on pages 40 for further details.

A minimum of four Ramset stainless steel anchors are to be applied for each 2500mm length of RMAX patented starter channel. A Ramset stainless steel anchor is to be applied at either end of the 2500mm long option A starter channel. Once the channel ends have been installed, the Ramset Stainless steel anchors are to be placed at 800mm intervals ensuring that they are evenly spaced. Refer to page 23 for Ramset stainless steel anchor installation details.

**The RMAX Option A, aluminium starter channels (design and innovation patent pending) are to be installed such that the base of the channel is located 80mm from the top edge of the slab. This location point should be applied for both rebated edge and over edge slab installation.**

Where possible the starter channel installation should be installed around the entire perimeter of the slab in the appropriate position. Where this is not feasible, installation can be undertaken in sections.

**NOTE: Refer to the RMAX OB Ultra Ground Floor EIFS system Drawings on page 42 for "over slab edge" installation details.**

## INSTALLATION GUIDELINES

### RMAX Option B Ground Floor EIFS starter channel (design and innovation patent pending) installation procedure.

The RMAX Option B Ground Floor EIFS Starter channel (design and innovation patent pending) closely follows the same installation process as that applied for the RMAX Option A Ground Floor EIFS aluminium starter channels (design and innovation patent pending) as explained on page 15 with some minor variations.

Application of RMAX Option B Ground Floor EIFS Starter channel (design and innovation patent pending) to the rebated slab edge should occur only after the Tyvek home wrap has been installed directly to the stud frame. The Tyvek home wrap should be installed in such a way that the end of the Tyvek home wrap terminates 25-35mm above the bottom of the slab edge rebate. (i.e. Tyvek home wrap runs 55mm to 65mm down past the slab edge). Having this length of sarking hanging down past the slab edge allows for its adjustment by hand, such that it can be positioned to sit directly within the starter channel, once the channel has been installed up against the slab rebate edge. This allows for the Tyvek home wrap bottom edge to sit on the inside of the starter channel ensuring that any water that drains down the face of the Tyvek sarking will be collected within the starter channel and will be able to effectively drain out through the weep slots at the base of the channel. Refer to Ground slab rebate and over slab edge RMAX Installation details on page 41 for further details.

The Option B RMAX Ground Floor EIFS Starter channels (design and innovation patent pending) can then be directly applied on top of the rebated slab edge, such that the back leg of each of the starter channels is positioned to be located directly up against the vertical concrete slab face, behind the already installed Tyvek home wrap sarking. See page 41 for details. Once the Option B starter channel has been located on the rebated slab edge and the Tyvek home wrap has been repositioned such that it is sitting on the inside of the channel, the RMAX EPS cavity battens can then be installed directly over the Tyvek Sarking directly to the stud frame as per the instructions on page 17. The RMAX EPS cavity battens are to be installed such that they terminate at a height of 20 mm above the slab rebate edge (i.e. RMAX EPS cavity Battens extend down 70mm past the slab edge into the starter channel). See page 41 for details.



Photo 11. Section of RMAX Option B Ground Floor EIFS Starter Channel.

**Please Note: When installing or positioning the RMAX Option B GF EIFS Starter channel (design and innovation patent pending) against the rebated slab edge, ensure that the rebated slab edge is thoroughly clean and free from any debris or build up of dirt, leaves, or other foreign matter that may be present, which could affect its levelness.**

Installation of the RMAX Orange Board Ultra Ground Floor EIFS system using the RMAX Option B GF EIFS Starter channel (design and innovation patent pending), should be done in such a way that one length of the RMAX Option B Ground Floor EIFS Starter channel (design and innovation patent pending) is installed at a time. Each starter channel length, once located on the slab rebate edge and positioned such that the back leg is sitting behind the Tyvek sarking and the RMAX EPS battens, is then held in position by the installation of the RMAX OB Ultra starter panels which are attached directly to the stud frame at the appropriate fastening locations as per the information shown on pages 30 - 33. The installation of the OB Ultra starter panels will hold each of the starter channels in place under tension.

Where necessary, a bead of Selleys Liquid Nails Fast Grab or Selleys Liquid Nails Instant Hold construction adhesives can be applied to the bottom of the RMAX OB Ultra starter panel before it is located into the RMAX Option B Ground Floor EIFS starter channel (design and innovation patent pending). This can be done to further assist with location of the OB ultra starter panel into the Option B starter channel during fastening of the panel to the stud frame.

Once the RMAX Ultra starter Panels are rendered with the RMAX OB Plus Render, the render will be applied over the front leg of the starter channel further securing it in place ensuring that it does not move or become displaced. The RMAX Option B starter channels should be butt joined and sealed at the junction or interface of each of the channel ends using the approved Fire Sound Fire rated acoustic sealant.

**Please Note: The rebated concrete slab edge that the RMAX Option B Ground Floor starter channel (design and innovation patent pending), is to be applied to, must be square and plumb. It is the installers responsibility to check and confirm that this is the case prior to the installation of the channel to the rebated slab edge. RMAX takes no responsibility for application of the RMAX Option B Ground Floor starter channel to a slab rebate that is not square and plumb, which may result in cracks and other defects appearing in the finished facade over time. Where it has been found that the RMAX Option B Ground Floor EIFS starter channel design has been installed on a non square and plumb rebated concrete slab edge, the RMAX Orange Board Ultra Ground floor EIFS system's Codemark certification and product warranty coverage will be rendered null and void.**

## INSTALLATION GUIDELINES

### RMAX Ultra EPS Batten Cavity Installation Method of fixing

The RMAX Ultra EPS cavity battens are to be attached directly to the individual stud members with Class 4 galvanised clouts. The cavity battens should only be installed directly over the stud frame vertical members (**i.e. not to be applied to noggins**) only after the frame has had the Tyvek Home Wrap breathable sarking applied.

Although the RMAX Ultra EPS battens are nominally supplied in 1250mm lengths, they can be cut to shorter lengths as and where required, assisting with ease of installation in certain situations. If the RMAX EPS battens are to be cut to a shorter length, the installer must ensure that the entire stud length from floor level to ceiling height, is completely covered by the RMAX Ultra EPS cavity batten.

The cavity battens should be installed so that they are positioned centrally over each stud. Two clouts attached at either end of the batten are required as a minimum to securely fasten the batten to the stud. Clouts should be minimum 35mm in length. Battens should be installed such that they butt up against one another ensuring that no gaps are present between individual battens. Ensure that all the studs have been battened over prior to installation of the RMAX OB Ultra EIFS cladding panels.

Installation of the RMAX Ultra EPS cavity battens facilitates the creation of a cavity between the RMAX OB Ultra EIFS EPS Cladding panels and the stud frame and building wrap.



Photo 12. Installation of Cavity Battens to frame over Sarking.

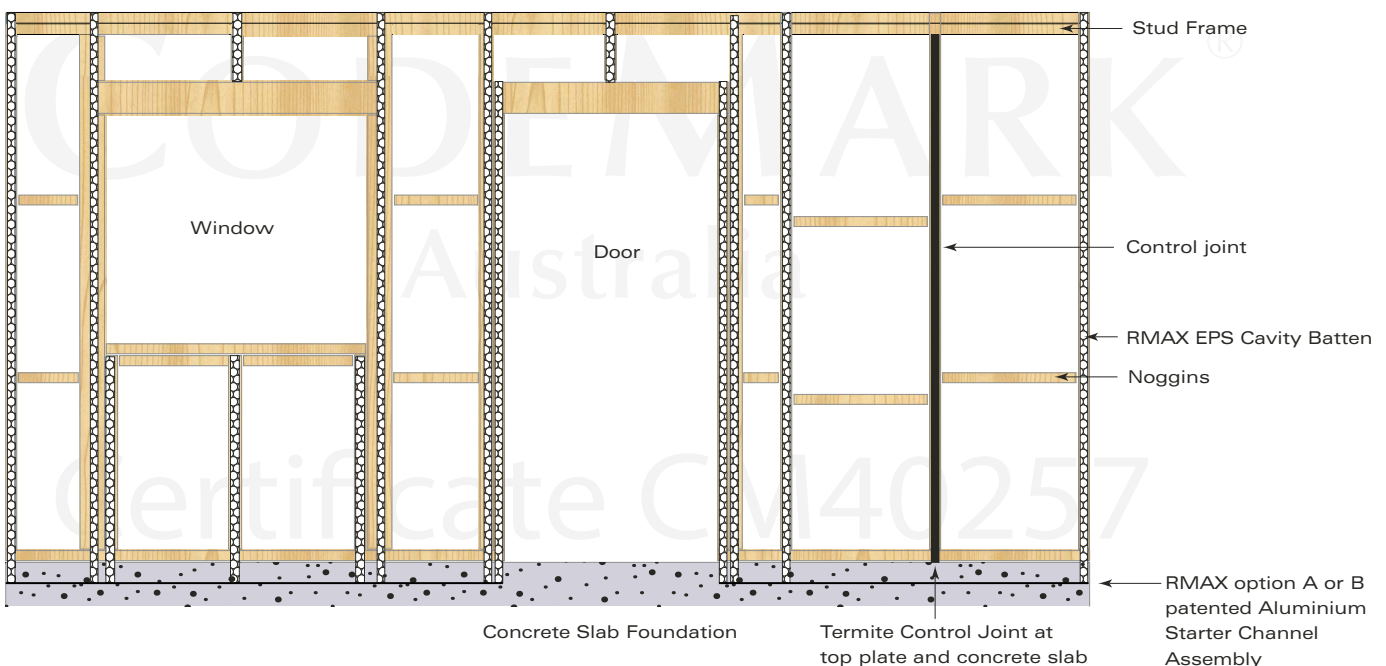


Figure 6. Installation of RMAX Ultra EPS Cavity Battens to Stud Frame



## INSTALLATION GUIDELINES

### RMAX OB Ultra Starter Panel Installation

The RMAX OB Ultra starter panels are designed to be installed horizontally to the stud frame through the EPS cavity battens as per the details as shown on pages 30, 31, 32 and 33.

**The RMAX OB Ultra starter panels should not be installed vertically.** All joins between the OB Ultra Starter panels are to be filled with an approved compatible Polyurethane construction foam adhesive. Ensure that the Polyurethane adhesive is applied on the exposed end of an already fastened RMAX OB Ultra Starter panel. The next RMAX OB Ultra starter panel to be installed should then be positioned so that it is butted up hard against the already installed starter panel with the polyurethane expanding foam adhesive already applied.

Where possible the entire perimeter of the construction should be clad with the RMAX OB Ultra starter panels before the larger RMAX OB EIFS panels are installed on top of the RMAX OB Ultra starter panels. Compatible Polyurethane construction foam adhesive is to be applied at the panel interface between the RMAX OB Ultra starter panels and the RMAX OB EIFS cladding panels.

**Where RMAX OB Ultra starter panels require to be cut such that they line up at corner junctions (be they external or internal corners) or at the interface with door or window openings, a Class 3 waterproofing membrane is to be applied to the cut edge of the panel. The waterproofing membrane should be allowed to cure before polyurethane sealant is applied.**

Prior to installing the RMAX OB Ultra starter panels, please see pages 5 and 30 through 33 for provision of the appropriate fastener spacing installation details, depending on the pre determined wind region and wind category classification (non cyclonic or cyclonic) for the construction to be built. Determination of the design ultimate wind pressures that the construction will encounter, should be reviewed and approved by a suitable qualified engineer at the design stage of the project prior to construction commencement.

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## INSTALLATION GUIDELINES

### RMAX OB Ultra EPS Panel Installation

The RMAX OB Ultra EIFS cladding panels are to be installed vertically against the stud frame on top of the RMAX OB Ultra starter panels. The RMAX OB Ultra EIFS cladding panels are screwed directly to the frame through the cavity battens. When fastening the panels to the frame through the battens, **take note of the batten clout installed positions on the studs prior to installation of the panels, to ensure that the panel fastening points are not placed in the same position as the batten fastening points.** Fastening screw heads and washers should be installed and tightened such that they are slightly recessed into the surface of the panel.

**Note: Care should be taken so as to not overdrive the fixing into the panel as this could strip or crack the OB washer reducing the effectiveness of the fixing). Panels should never be bonded (glued) to studs.** This allows the frame to flex without stressing the external render.

### RMAX OB EPS Panel Joins

All panels should be glued with a suitable polystyrene compatible polyurethane construction adhesive. Contact your local RMAX distributor for a list of compatible polyurethane construction adhesives. **Ensure that the polyurethane adhesive is applied on the exposed end of an already fastened panel as shown in the picture below.** The next panel to be installed should then be positioned



Photo 13. Installation of RMAX OB Ultra EIFS Panel through RMAX EPS Cavity Battens to frame.

so that it is butted up hard against the already installed panel with the polyurethane expanding foam adhesive already applied. Once applied, the polyurethane foam adhesive will expand to fill any gaps between the panels as they cure. This helps to maintain water and weather tightness of the cladding system as required by NCC-2019 Weatherproof Verification Method V2.2.1.



Photo 14. Polyurethane Adhesive Foam application to RMAX OB Ultra EIFS panel ends.

## INSTALLATION GUIDELINES

### RMAX OB Ultra Impact Mesh Application

Apply a 2-3mm basecoat of the RMAX Orange Board Plus™ render system onto the RMAX OB Ultra EIFS and RMAX OB Ultra starter panels using a steel trowel with enough pressure to adhere the product. Whilst the basecoat is wet, embed a full layer of the RMAX OB Ultra Impact mesh ensuring that the mesh pieces overlap by a minimum of 150mm at mesh joins.

RMAX OB EIFS Cladding panel joins and RMAX OB Ultra Starter Panel joins should be evenly covered with the same embedded mesh (avoid overlap of mesh joins near the main panel joint). **Strips of mesh at 45 degree angle or equivalent, 400mm long by 200mm wide, should be embedded across the corner of all window and door openings.** Refer window application detail page 29. In the same sequence, apply another coat of RMAX OB Plus™ render at a thickness of 2-3mm on top of the full mesh, embedding the mesh between these two layers of render. Use a straight edge and screed surface or if using a polystyrene float, finish the surface to achieve an even and true surface. **Do not render over control joints.**



Photo 15. Embedding of Fibreglass Mesh into first Orange Board™ Plus render coat.

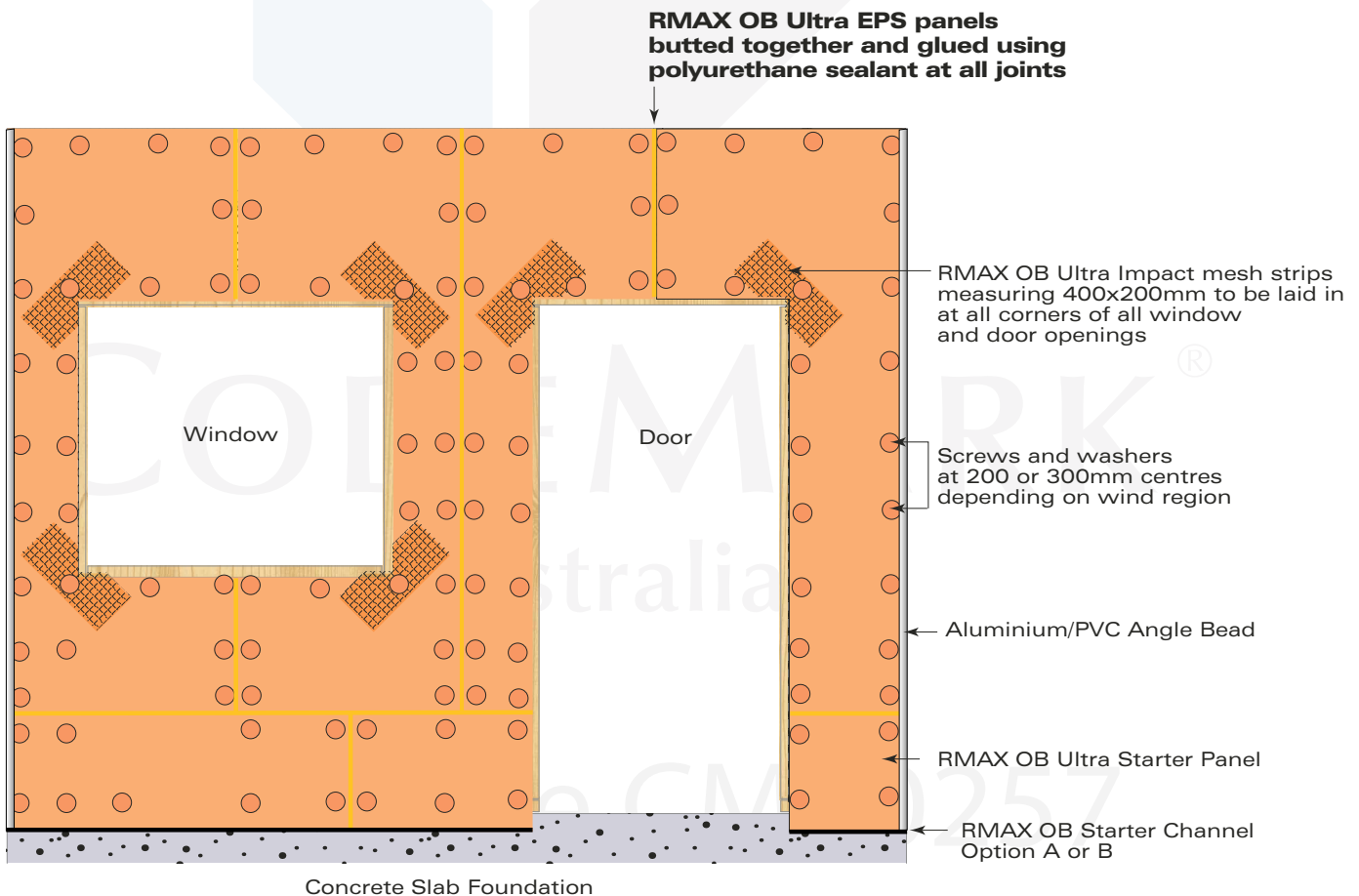


Figure 7. Panel install layout around windows and dooors.

## INSTALLATION GUIDELINES

### Back Blocking of Stud Joints

Where RMAX OB EIFS panel sides or ends do not finish on a stud, solid back blocking should be installed to strengthen and align panel joints. Back blocks are cut from off cuts of stud material. The back blocks can be placed aligned with the joint or placed at 300mm centres perpendicular to the joint. Back blocks are to be nailed securely to the stud frame.

Where possible, double studs should be installed in accordance with the diagram on pages 30, 31, 32 and 33 whenever two RMAX OB EIFS panels butt up to each other. Where panel joints occur other than at the stud interface, double back blocking is to be installed to ensure that each RMAX OB EIFS panel is fastened to its own individual block. Where the end of an RMAX OB EIFS Panel does not line up with a stud and does not adjoin another RMAX OB EIFS panel, a single back block is sufficient. RMAX OB EIFS panels are to be fixed to back blocks in the same manner as fixing panels to the stud frame. Refer to Fastener Positioning detail on pages 30 through to 33. Typical Corner and Joint details are to be adhered to. Refer to pages 34 and 35.

### Cutting of Panel

For a clean, fast, accurate and no mess cut, RMAX recommends using a standard diamond masonry blade or fibre cement blade to cut both the RMAX OB EIFS Panels and the RMAX OB Ultra Starter Panels. For more intricate cuts a hot knife or handsaw is recommended to be used.

### Expansion (Control) Joints

Prior to installation, determine expansion joint placement by consulting with a Design Engineer to calculate the deformation / stress due to soil / structure movement, deflection due to load bearing on roofing structures and to specify location of expansion / control joints. **Expansion joints must occur where the RMAX Batten Cavity EIFS Ultra Cladding Panels meet other substrates / cladding materials. Vertical expansion (control) joints must be continuous across all panels. i.e They must be continuous from the top of the wall to the bottom of the wall and must cut across the Starter Panel and Starter Channel.** This technical manual provides some practical details to perform the expansion joint.

Refer to page 35 and 36 for more information.

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## INSTALLATION GUIDELINES

### Corner Details

Corners are butt joined and glued together with polyurethane expanding foam adhesive. Refer to page 28 and 29 for corner details.

### Internal and External Window Details

The RMAX OB EIFS panels are to be affixed to the window sill, head and jam as per details shown on page 37.

An 8-10mm gap should be left underneath all window sills to allow for fitment of external trims to be installed around window. Once trims have been installed, the gap is to be filled with an approved polyurethane construction foam adhesive. Once cured cut away adhesive such that it is flush with the bottom of the window. This process will allow for adequate fall to be maintained on the window sills once rendered.

### Parapet Detail

Metal flashing is required for waterproofing. Refer to pages 45 and 46 for parapet installation detail.

### Balcony & Terraces

Please refer to the Drawings on page 49 for balcony construct and installation details.

### Installation of External Beads and Angles

All 90° angle corners must be protected with an approved aluminium or PVC bead. Any exposed edges (roof line, windows, doors, edge of concrete slab, etc.) should be covered with fibreglass mesh as specified on pages 28, 29, 34 and finished with an aluminium or PVC bead, which will protect the panel and provide a clean finish line for coatings.

Aluminium or PVC meshed corner angles should be affixed directly to all RMAX OB Ultra EIFS panels where two RMAX OB EIFS panels butt up and intersect at external or internal corners as per the details on page 29 and 34.

The corner beads should be installed directly to the RMAX OB Ultra EIFS panels using either Selleys Liquid Nails Fast Grab or Selleys Liquid Nails Instant Hold construction adhesive as per the details shown on page 28. **(Polyurethane foam adhesive cannot be used for this particular application).**

Apply a 3-4mm thick bead of Selleys Liquid Nails down the centre of both sides of the angle before positioning the angle up against the OB Ultra EIFS panel edge. Where a corner angle junction occurs (window or door corner) cut a 45 degree angle on both intersecting ends of the angle so that the ends of the bead will sit flush against one another (mitre join).

Once the corner angles have been installed around the door or window reveals, wipe off any excess adhesive that may be protruding through the perforated openings in the angle and check that the angles are straight and level using a spirit level gauge.

**NOTE: External beads must be installed wherever RMAX OB EIFS Panels or RMAX OB Ultra starter panels have been installed such that they are adjacent to another building substrate i.e. brick, timber, concrete etc.**

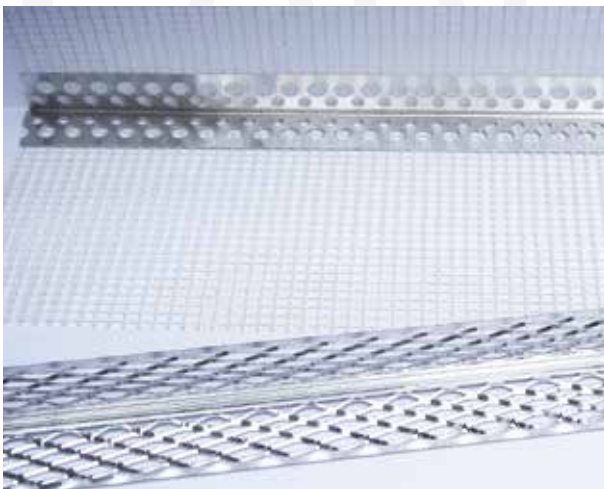


Photo 16a Aluminium External Angle.
















Photo 16b UPVC External Angle.



## INSTALLATION GUIDELINES

### Ramset Nylon Anchors required for installation of RMAX Option A, Starter Channel to concrete slab

PERFORMANCE RELATED	MATERIAL SPECIFICATION	INSTALLATION RELATED
  	  	      

#### Product

The Ramset EasyDrive™ Nylon Anchor is light duty, impact setting interface fit anchor.

#### Benefits, Advantages and features

##### Fast Installation:

- Anchor simply hammered or screwed in.

##### Corrosion Resistant:

- Stainless steel nail.

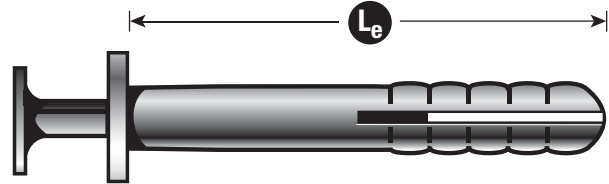
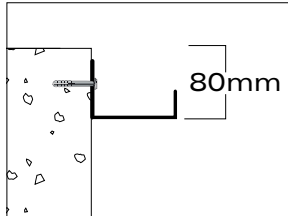


Figure 7. Ramset Part Number ED05033SS



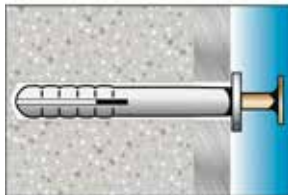
**1.** RMAX Option A, Ground Floor EIFS Starter Channel fastening drill hole location to be installed such that the bottom of the Channel (aluminium base) is positioned so that it sits 80mm from the top of the slab as per drawing.

**5.** Four Ramset Anchors to be installed per RMAX option A, Ground Floor EIFS starter channel (design and innovation patent pending). Anchors to be installed at both ends of the channel at 30mm inboard from the channel edge.

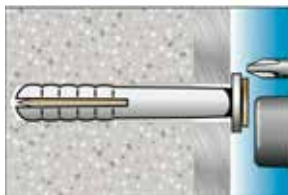


**2.** Drill hole to correct diameter and depth using fixture as template. Clean the hole thoroughly with brush. Remove debris with a hand pump, compressed air or vacuum.

**6.** A further two anchors to be placed at maximum 800mm intervals along the length of the RMAX option A, Ground Floor EIFS Starter Channel (design and innovation patent pending).



**3.** Insert the anchor through the fixture and drive with a hammer until the lip of the EasyDrive™ nylon anchor makes contact with the fixture.



**4.** Screw or tap home the expansion nail with a hammer. The expansion nail is easily removed with a screwdriver.

Table 11. Installation and Working Load Limit performance details

Anchor size, $d_b$ (mm)	Installation details			Minimum dimensions			Working Load Limit (kN)		
	Drilled hole diameter, $d_h$ (mm)	Fixture hole diameter, $d_f$ (mm)	Anchor effective depth, $h$ (mm)	Edge distance, $e_c$ (mm)	Anchor spacing, $a_c$ (mm)	Substrate thickness, $b_m$ (mm)	Shear, $V_s$	Tension, $N_a$	
								Conc. compressive strength, $f_c$	
5	5	5	20	20	30	45	0.50	20 MPa	40 MPa

Table 12. Description and Part Numbers

Anchor size, $d_b$ (mm)	Effective length, $L_e$ (mm)	Part No.
		Flat Head S/S*
5	33	ED05033SS

## INSTALLATION GUIDELINES



Photo 17. RMAX OB™ Plus Render.

### RMAX OB™ Plus Render System

Forming part of the certified RMAX OB Ultra Ground Floor EIFS system, RMAX OB™ Plus Dry Mix Render is a superior quality polymer modified render containing washed and graded medium silica sand, acrylic powder and proprietary additives. RMAX OB™ Plus render provides the ideal base for the subsequent application of a variety of top coats.

#### Key Benefits

- Factory blended for dependable consistency and performance.
- Superior adhesion to all RMAX OB EIFS and RMAX OB Ultra Starter panels.
- Eliminates on-site mixing errors.
- Just add water - No other additives required.

#### Substrate Preparation

Ensure RMAX OB EIFS cladding panels and the RMAX OB Ultra starter panels have been installed in accordance with the requirements in this brochure.

Ensure that the RMAX OB EIFS cladding panels and the RMAX OB Ultra starter panels and any other surfaces to be rendered are clean and free of any contaminants including oil, mould release, dust, dirt, silicone, mud, grease, salt, animal droppings and any loose or flaking material that may compromise the adhesion of the render system.

**RMAX OB EIFS cladding panels and the RMAX OB Ultra starter panels should always be rendered within maximum 48 hours (2 days) from time of installation to stud frame.** Prolonged exposure to Ultra Violet (UV) light may cause uncoated RMAX OB EIFS cladding panels or RMAX OB Ultra Starter Panels to deteriorate, which may lead to failure of the render system.

**Areas of the wall system not being rendered / coated should be masked and protected from render and coating materials until completion of the job whereby the masking material can be removed.**

Australia

Certificate CM40257

## INSTALLATION GUIDELINES

### Preparation of RMAX OB™ Plus Render Mix

Add approximately 3 litres of clean water to a suitable mixing vessel and slowly add RMAX OB™ Plus Render powder whilst stirring with a power mixer.



Photo 18. Preparation of RMAX OB™ Plus Render Mix by addition of render and water.

- Continue stirring until all lumps have been dispersed and a uniform paste has been achieved.
- Add extra water (as required) to achieve the desired consistency. The final mix should hold a soft peak on the hawk. Mixing the material so that it is too runny or too stiff will make the material difficult to apply and finish.
- Adjust RMAX OB™ Plus Render consistency with a small amount of water and re-stir if necessary. Do not add water after setting has commenced.
- RMAX OB™ Plus render will require approximately 3.5 - 4.0 litres of water per 20kg bag of RMAX Orange Board™ Plus Dry Mix Render for a correct mix ratio to be achieved.
- Allow RMAX OB™ Plus Render to activate for around 3 to 5 minutes prior to application to the RMAX EIFS Cladding Panels.

### RMAX OB™ Plus Render Application and Finishing

#### Render Tools and Equipment Required:

- Hawk and steel trowel, polystyrene float, plastic floats, straight edge, sponge, power mixer, masking tapes, drop sheeting, appropriate personal protective equipment, (PPE).
- Apply a 2 - 3 mm base coat of RMAX OB™ Plus render on to the RMAX EIFS Cladding Panel using a steel trowel with enough pressure to adhere the product.



Photo 19. Application of first coat of RMAX OB™ Plus render.

Whilst the RMAX OB™ Plus render is wet, embed the RMAX OB Ultra Impact mesh and trowel over to ensure full immersion of the mesh. Where RMAX OB Ultra Impact fibreglass mesh strips meet, a 150 mm overlap must be provided. **Always avoid overlapping of RMAX OB Ultra Impact fibreglass sheet edges at RMAX EIFS Cladding Panel joins as this may compromise system integrity.**



Photo 20. Application of OB Ultra Impact Fibreglass Mesh over first RMAX OB™ Plus render coat.

## INSTALLATION GUIDELINES

All openings such as windows and doors must be diagonally reinforced with 400 mm x 200 mm RMAX OB Ultra Impact mesh strips embedded in the first render coat. Refer page 29.

Once the initial RMAX OB™ Plus render coat has sufficiently set, apply a second coat of RMAX OB™ Plus Render at a thickness of 2-3mm directly on top of the RMAX OB Ultra Impact mesh, embedding the RMAX OB Ultra Impact mesh between the two layers of RMAX OB™ Plus Render. The application of the two coats of RMAX OB™ Plus Render and embedded RMAX OB Ultra Impact mesh should bring the total finished render thickness to between 5-10mm. **(5mm is the minimum finished application thickness required for CodeMark certification and BAL 29 compliance to be achieved).**



Photo 21. Embedding of RMAX OB Ultra Impact Mesh into first RMAX OB™ Plus render coat.

Use a straight edge, screed surface or if using a polystyrene float, finish the surface to achieve an even and true level surface appearance ready for the application of the primer coat and decorative finish.

- Where possible, freshly applied render should be protected from rain or running water for a period of 48 hours.
- Allow rendered surface to cure for a minimum of 4 days from final RMAX OB™ Plus render coat application prior to priming. (In cold and or humid/wet conditions a minimum of 7 days curing time is recommended).



Photo 22. Application of final RMAX OB™ Plus render coat. Total render thickness should be between minimum 5mm and 10mm.

RMAX OB™ Plus Render should not be applied in hot or windy conditions and should be protected from rain or running water until hard initial set has been achieved.

**Do not render over control joints.**

### RMAX OB Plus™ Render

**RMAX takes no responsibility for NON RMAX OB™ Plus render coating performance, BAL performance and effect on surface properties of the RMAX EIFS Cladding Panels. RMAX OB™ Plus Render to be applied strictly in accordance with the RMAX render installation instruction requirements, in 2 coats, at a minimum thickness of 5mm and a maximum thickness of 10mm to ensure compliance to BAL 29 and CodeMark™ certification requirements.**

Certificate CM40257



## INSTALLATION GUIDELINES

### Primer Coat Application

Ensure rendered surface to be primed is dry and free from any loose or flaky material prior to commencing. Apply primer using a brush roller or proper spray equipment at a rate of approximately 5-6 square metres per litre.



**Photo 23.** Application of primer coat onto finished RMAX OB™ Plus rendered surface using a brush roller.

### Application of Finish Coat

RMAX recommends the use of the RMAX OB Texture and RMAX OB Membrane finishing coating systems in conjunction with the base RMAX OB Plus Render system.

The RMAX OB™ Plus render system is also compatible with most acrylic and some cement based finish coating systems. Apply selected coating system in strict accordance with the manufacturer's specifications. **To maximise longevity of the overall coating system, RMAX recommends the application of an elastomeric membrane with a Light Reflective Value (LRV) of minimum 35%, (light to mid shades only). Always confirm suitability and compatibility of the selected finish coating system for application over the RMAX OB™ Plus render system with the manufacturer, prior to application.**

### Pot Life

RMAX OB™ Plus Render will have a pot life of approximately 1 hour from time of initial mixing with water. Warmer weather may reduce this time significantly. **Do not add water to mix as it begins to harden.** Addition of water after commencement of set will result in a reduction of strength in the finished render.

### Wash Up

Due to the high polymer content, RMAX Orange Board™ Plus Render should not be allowed to dry on tools. **Always clean tools with clean water immediately following use.**

### Curing

Whilst the initial set of RMAX OB™ Plus Render will occur in a matter of hours, full coating strength will only be achieved after a minimum 28 days cure from date of final render coat application.

### Supply and Packaging

RMAX OB™ Plus Render is supplied in 20 kg plastic multi-lined paper sacks. Where required, RMAX OB™ Plus Render can also be supplied in pallet lots.

**Table 13: RMAX OB™ Plus render material technical data**

Appearance	Light grey gritty powder with slight odour when mixed.
Application	Hawk and trowel, render machine or hopper gun.
Specific Gravity	2.57 - 2.6
Bulk Density	1600 -1850 kg/m3
Particle Size	<2 mm
Flammability	Not applicable
Curing Time	Apply top coat after 4-7 days. Full cure in 28 days.

### Shelf Life

RMAX OB™ Plus Render has a shelf life of one year from date of render manufacture, if stored in dry conditions above floor level. See packaging for date of manufacture information.

## SAFETY AND HANDLING OF RMAX OB™ PLUS RENDER

The RMAX OB™ Plus Render raw material is hazardous according to criteria of National Occupation Health and Safety Commission (NOHSC). Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail. Please refer to RMAX OB™ Plus Render Material Safety Data Sheet before use, (available on request); when working with render observe the usual precautions for handling cement based mortars and renders including:

- Avoid inhalation of the dust, wear suitable skin contact with wet mortar and eye contact (contains sand based crystalline silica).
- Wear personal protective clothing and protective gloves to minimise skin contact and wear safety glasses / goggles or a full face mask when mixing or applying render.

## FIRST AID MEASURES

### Ingestion

If swallowed, wash mouth out with water. **DO NOT induce vomiting.** Drink at least two (2) glasses of water (500mL). Seek medical attention.

### Eye

Wash with copious amounts of water for a minimum of 15 minutes holding eyelid(s) open. Take care not to rinse contaminated water into non-affected eye. Seek medical attention.

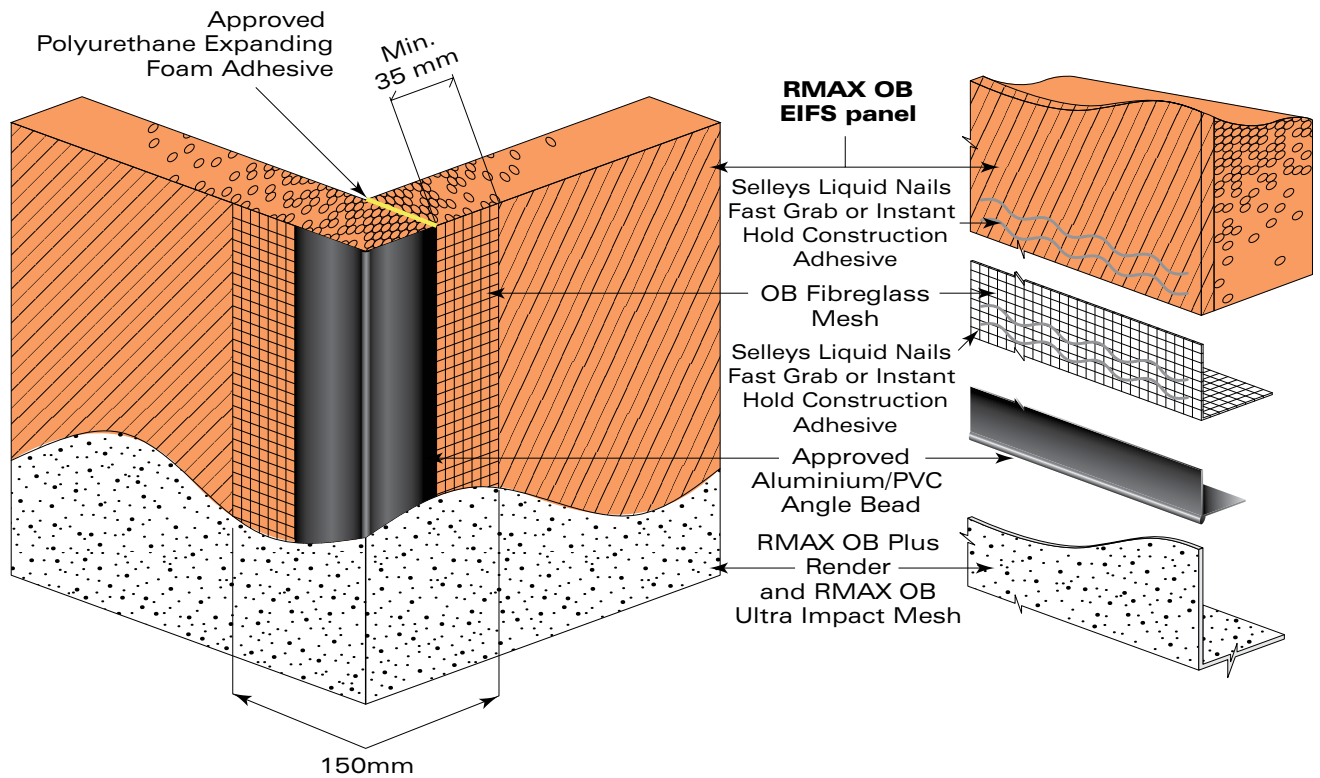
## General Health and Safety Procedures Think Safe. Act Safe.

To assist in maintaining a safe and healthy workplace, take note of the following:

- Ensure the workplace is safe. This includes attention to plant and equipment.
- Insist that safe work methods are always practiced.

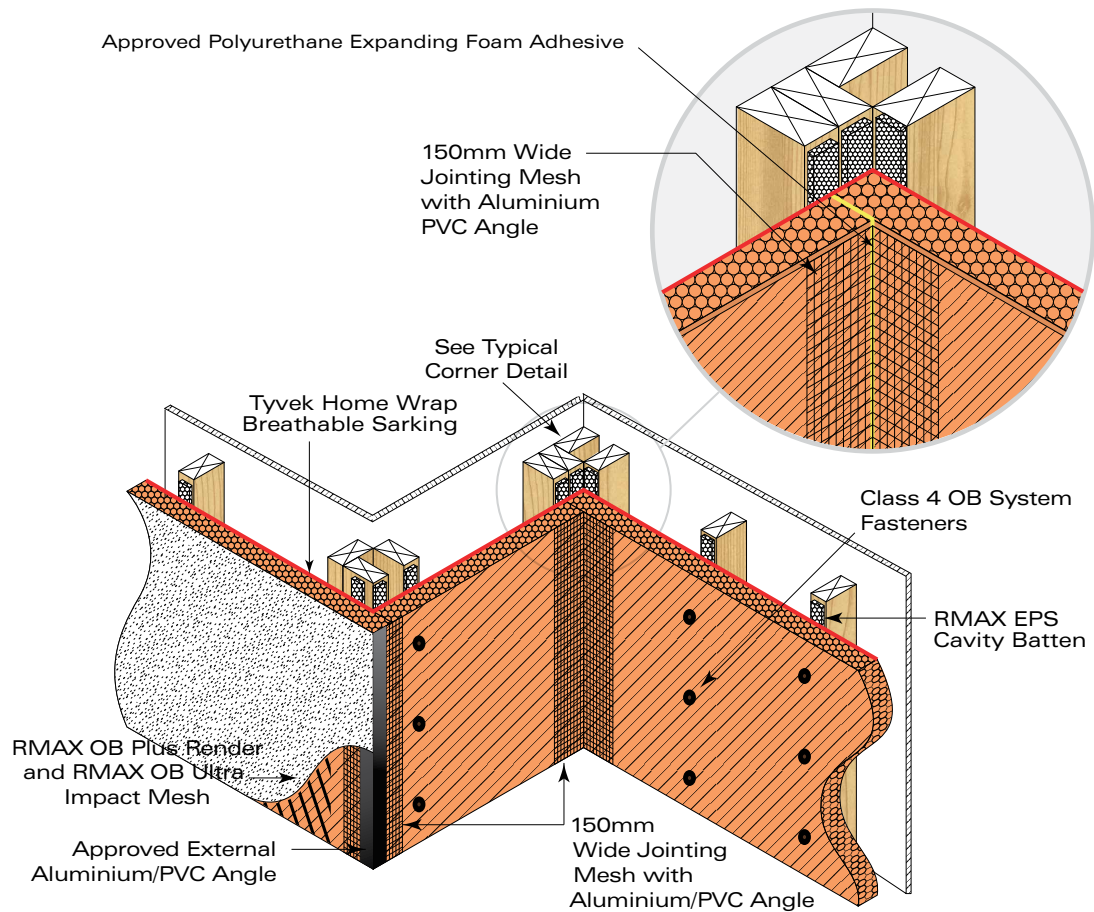
**NOTE: DRAWINGS THROUGHOUT NOT TO SCALE**

## INSTALLATION AND FIXING DETAILS

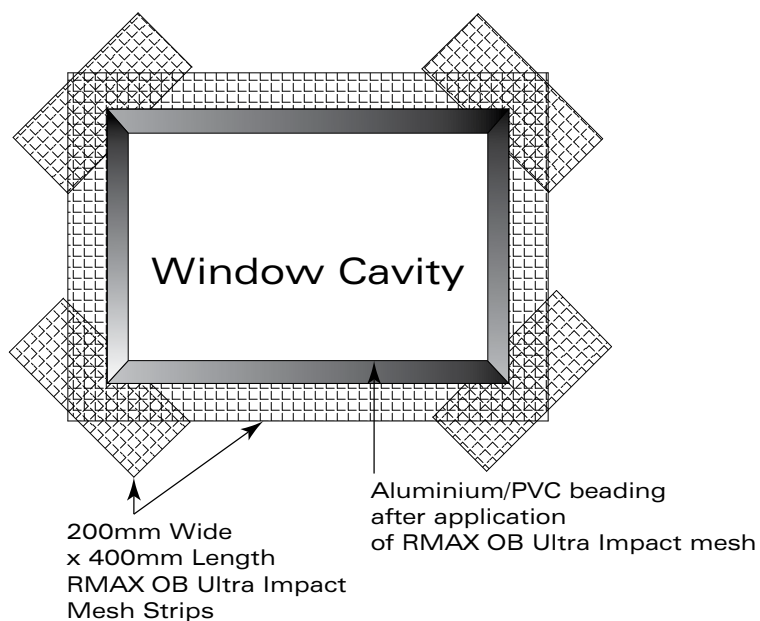


**Typical Corner Detail**

## INSTALLATION AND FIXING DETAILS



## Typical Internal And External Corner Detail

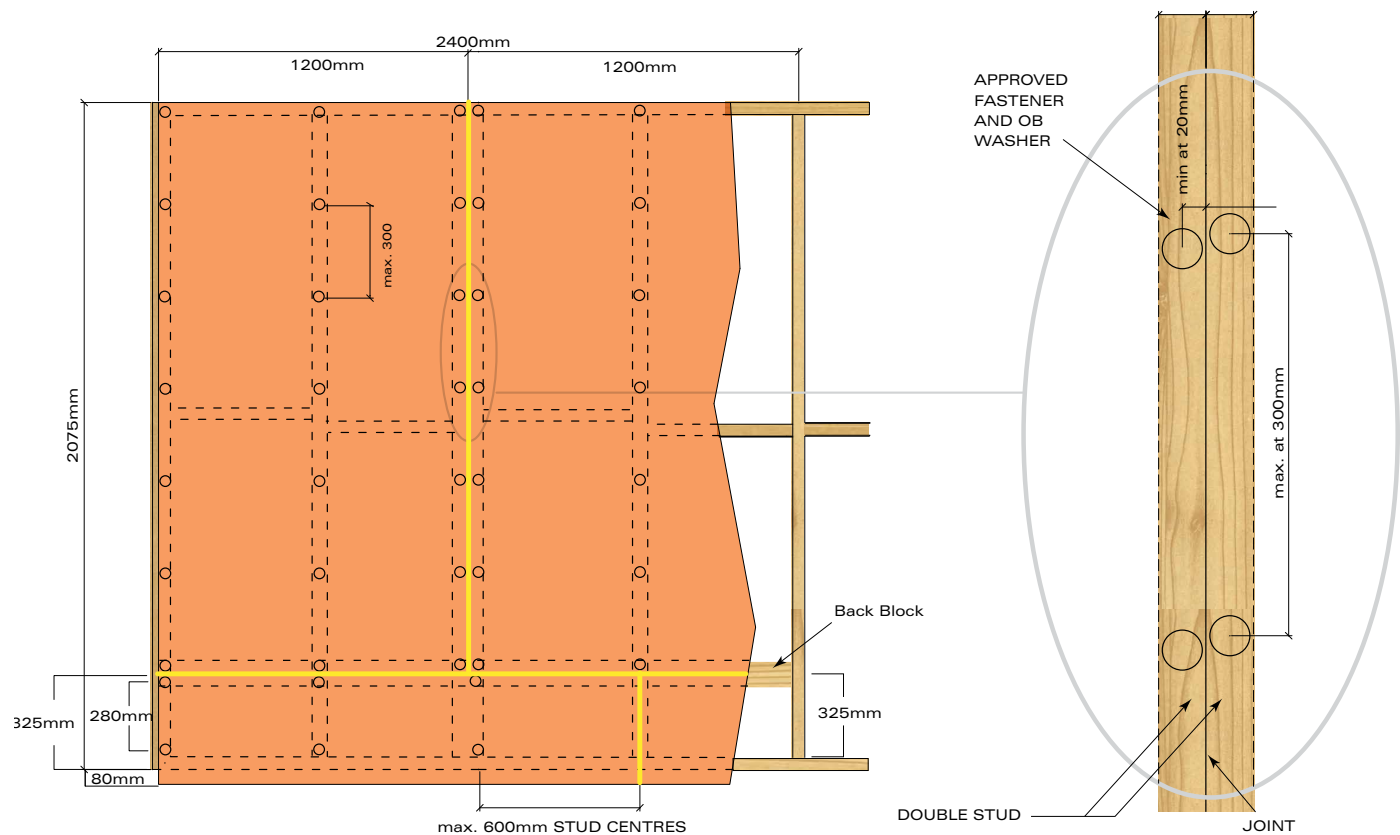


## Window Application Detail

**NOTE: Drawings are not to scale.**

INSTALLATION AND FIXING DETAILS

In Non Cyclonic Regions (A and B) wind category N1-N5  
(Maximum 600mm stud centres)

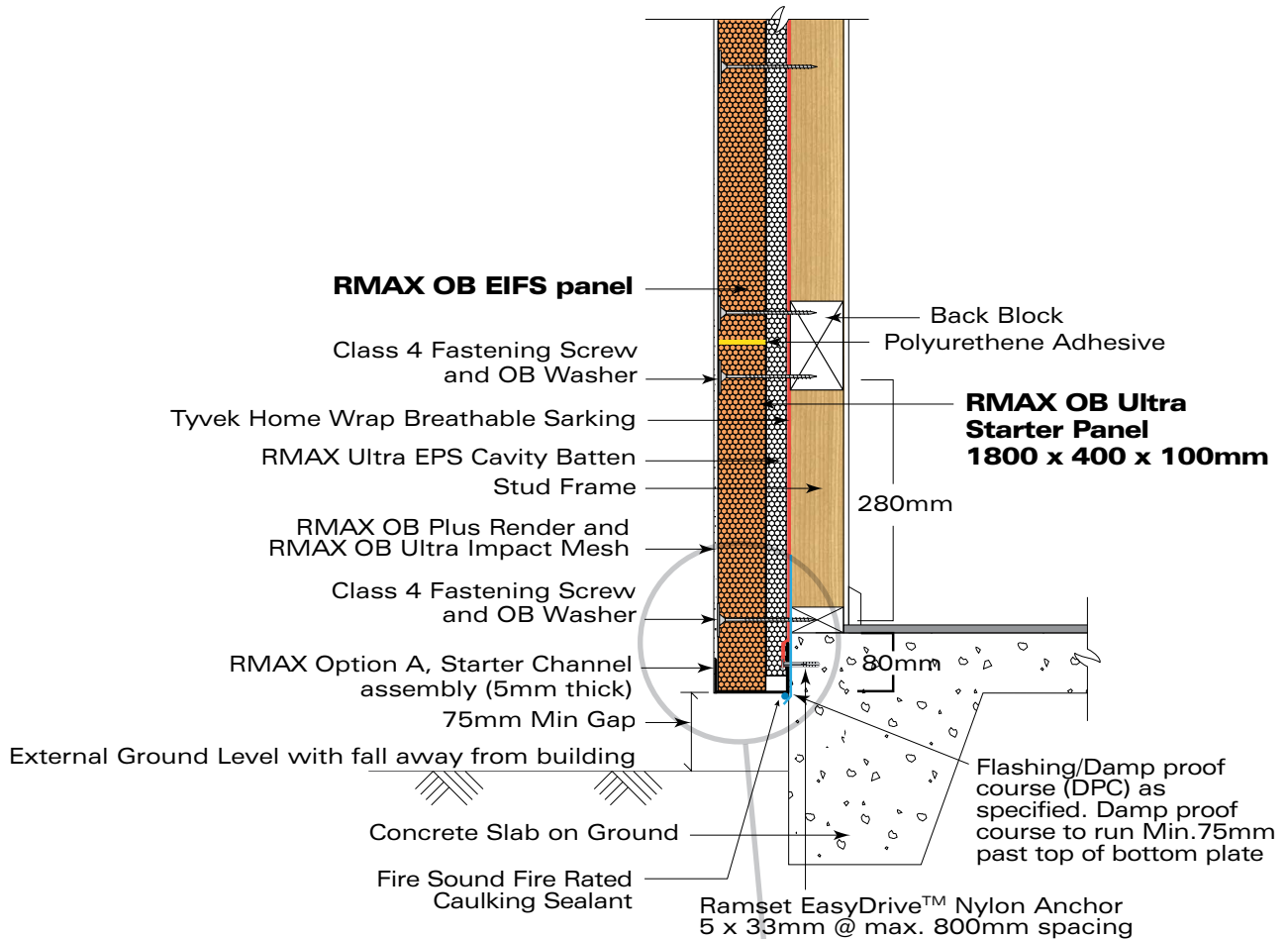


Please refer to page 5 Table 1 Minimum stud and fastener spacing for both cyclonic and non cyclonic areas.

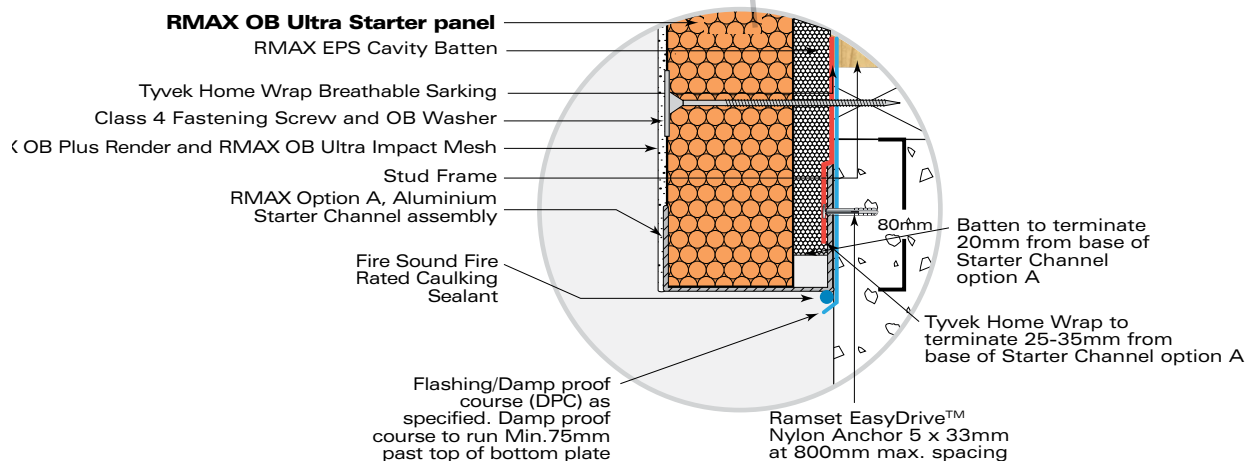


## INSTALLATION AND FIXING DETAILS

**Detail: In Non Cyclonic Regions (A and B) wind category N1-N5  
(Maximum 600mm stud centres)**



**The below expanded detail also applies to diagrams on page 32 and 33**

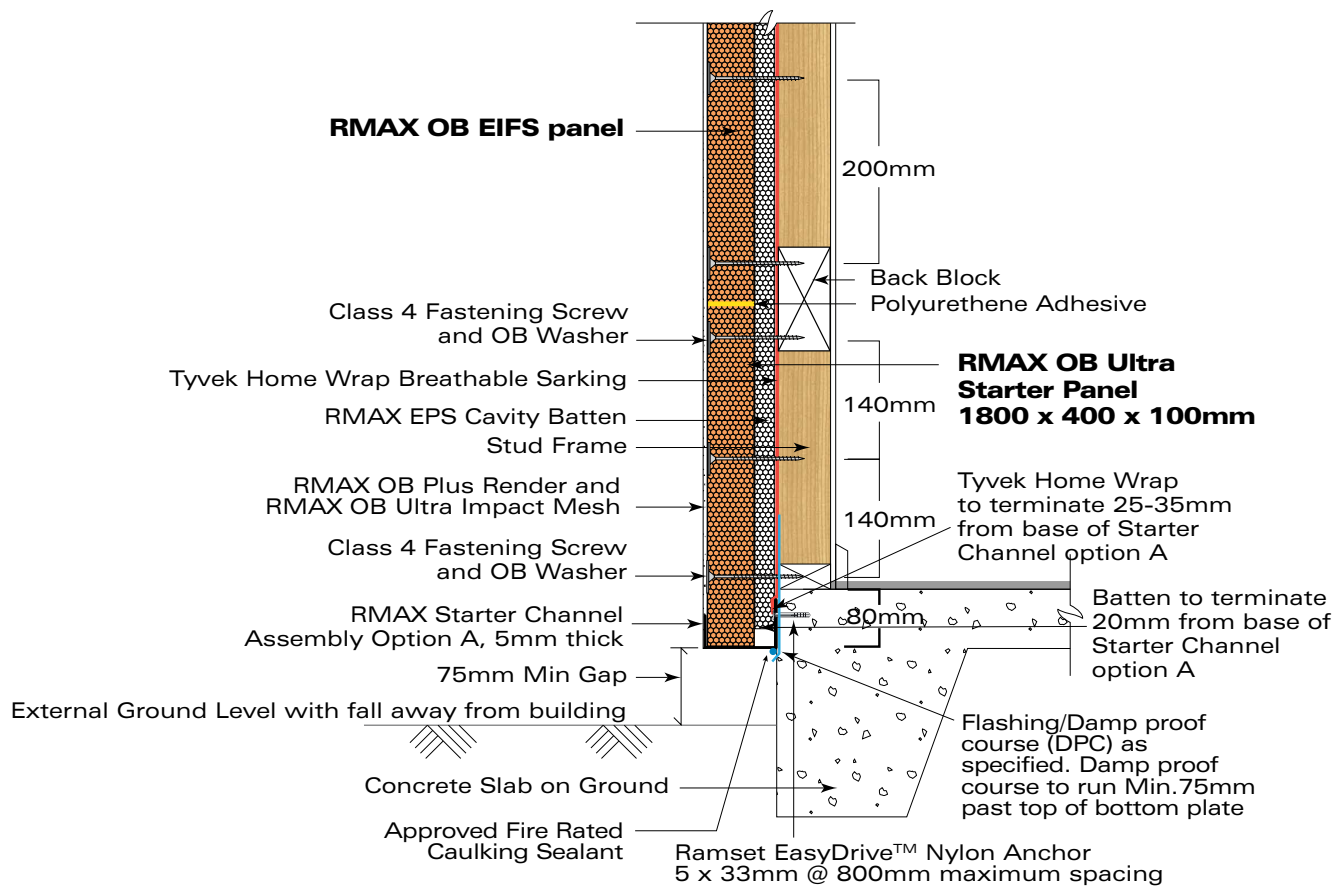
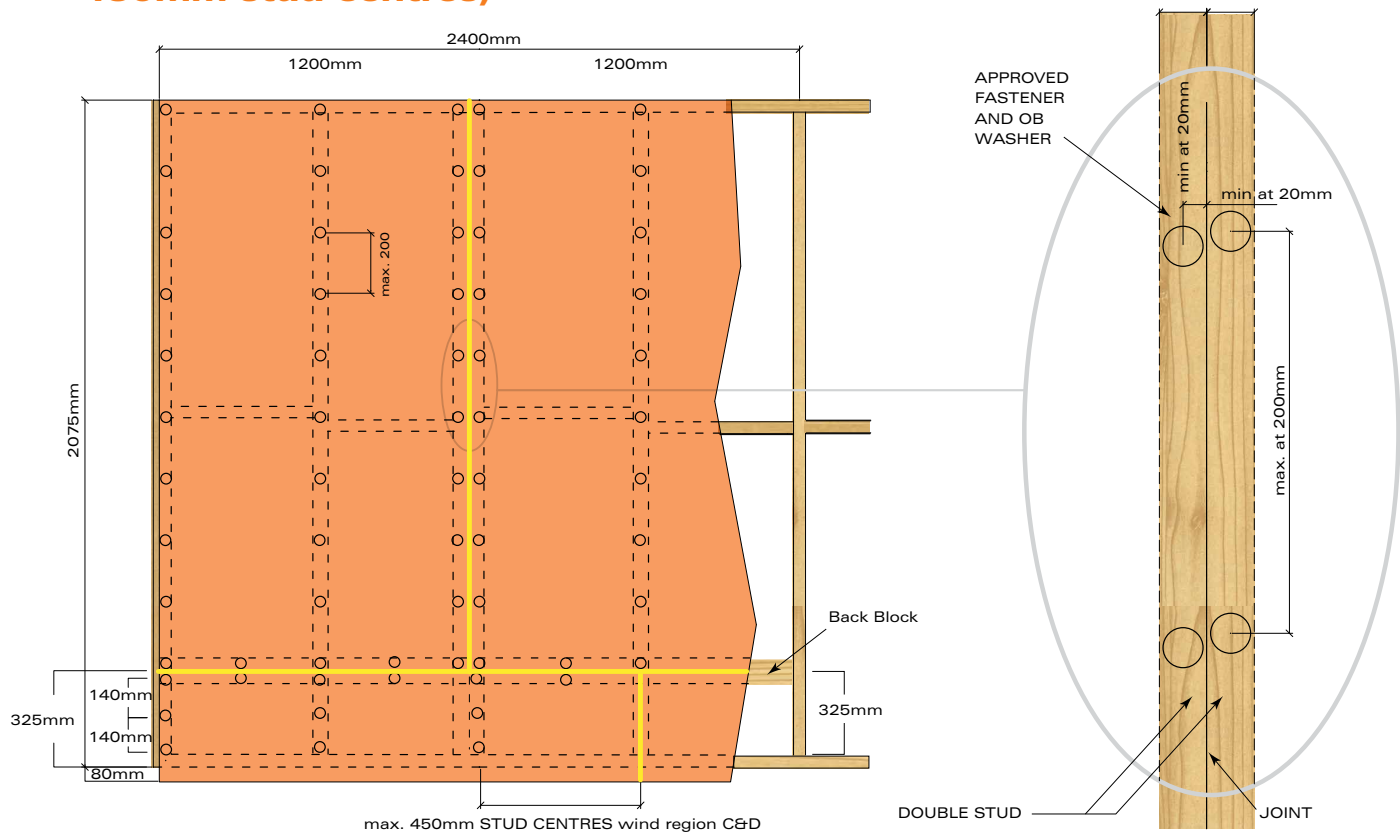


Please refer to page 5 Table 1 Minimum stud and fastener spacing for both cyclonic and non cyclonic areas.

**NOTE: Drawings are not to scale.**

INSTALLATION AND FIXING DETAILS

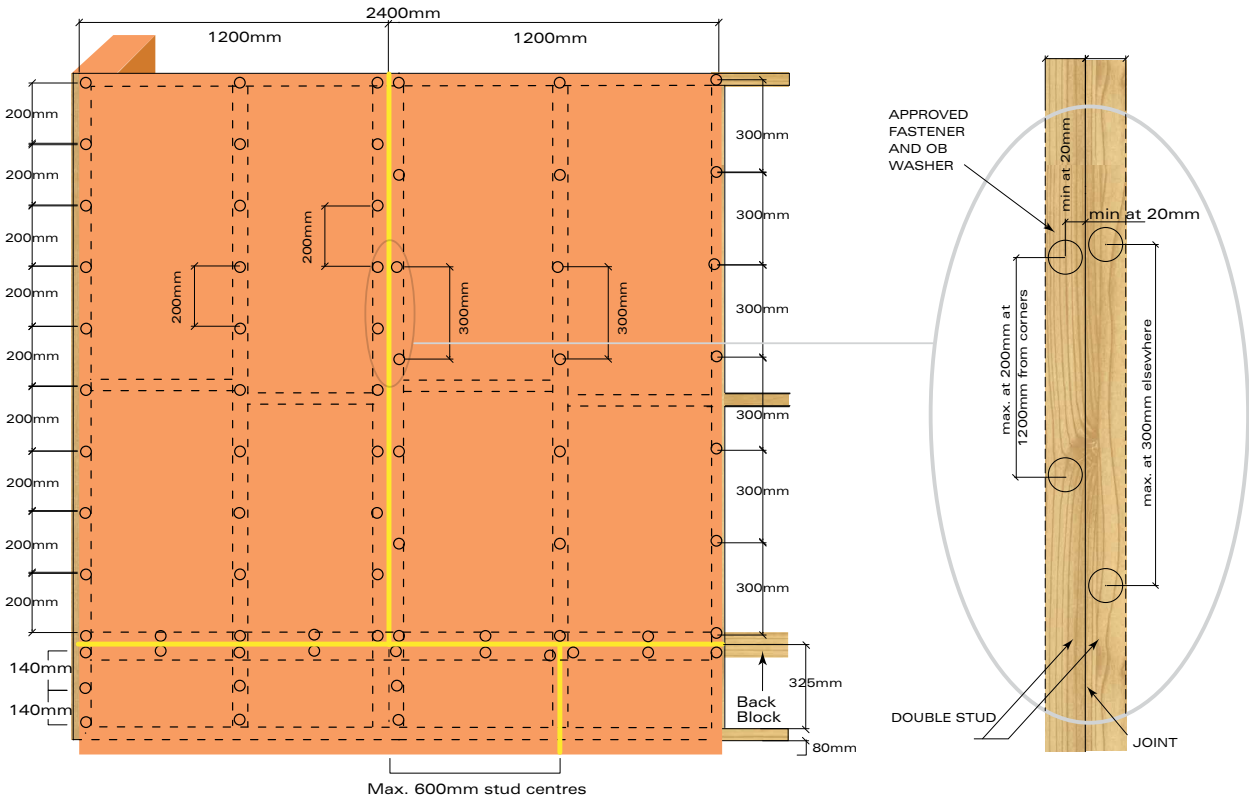
In Cyclonic Regions (C and D) wind category (C1-C4) (Maximum 450mm stud centres)



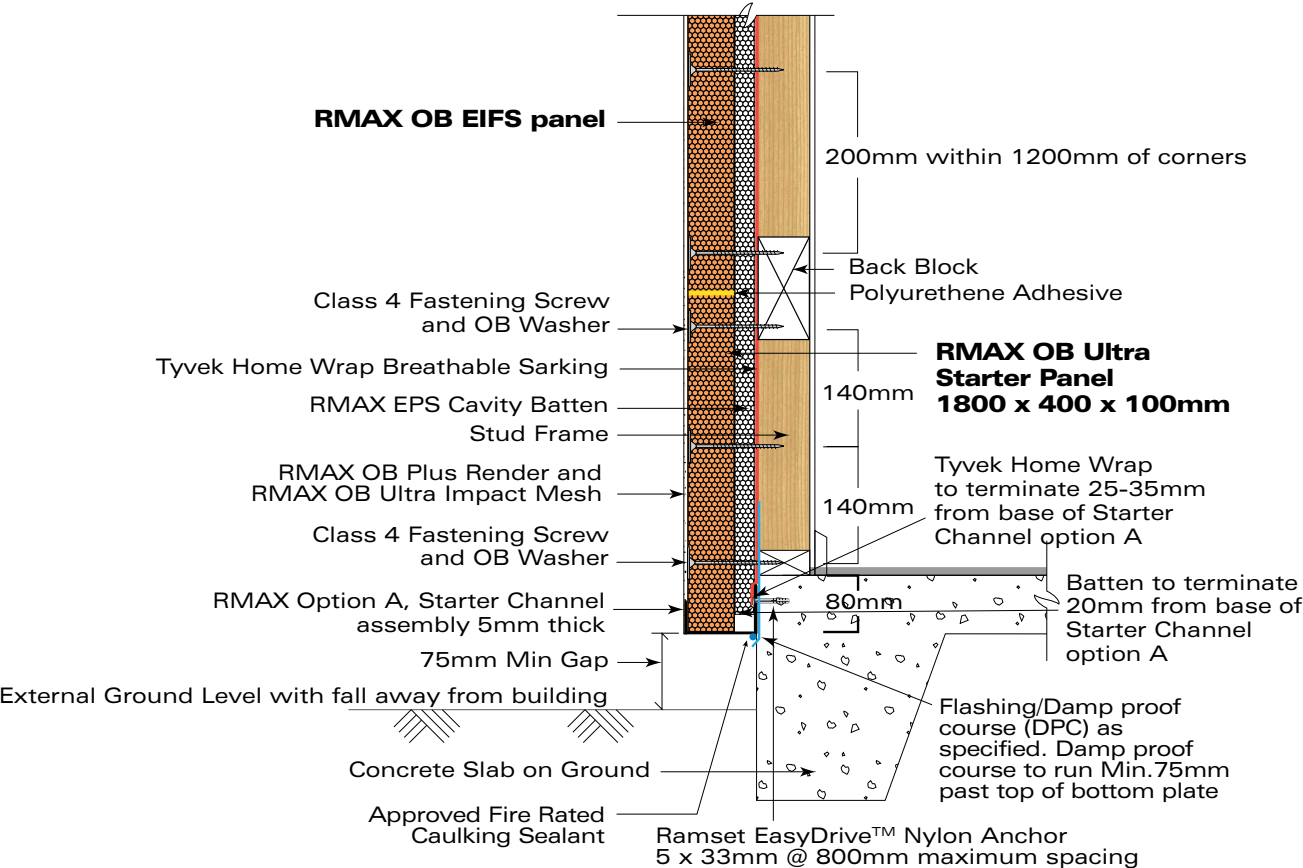
Please refer to page 5 Table 1 Minimum stud and fastener spacing for both cyclonic and non cyclonic areas.

INSTALLATION AND FIXING DETAILS

External Corner Detail for Non-Cyclonic Regions (A and B) Wind Category N6 indicating fastner centre spacings 1200 from corner. (Maximum 600mm stud centres)



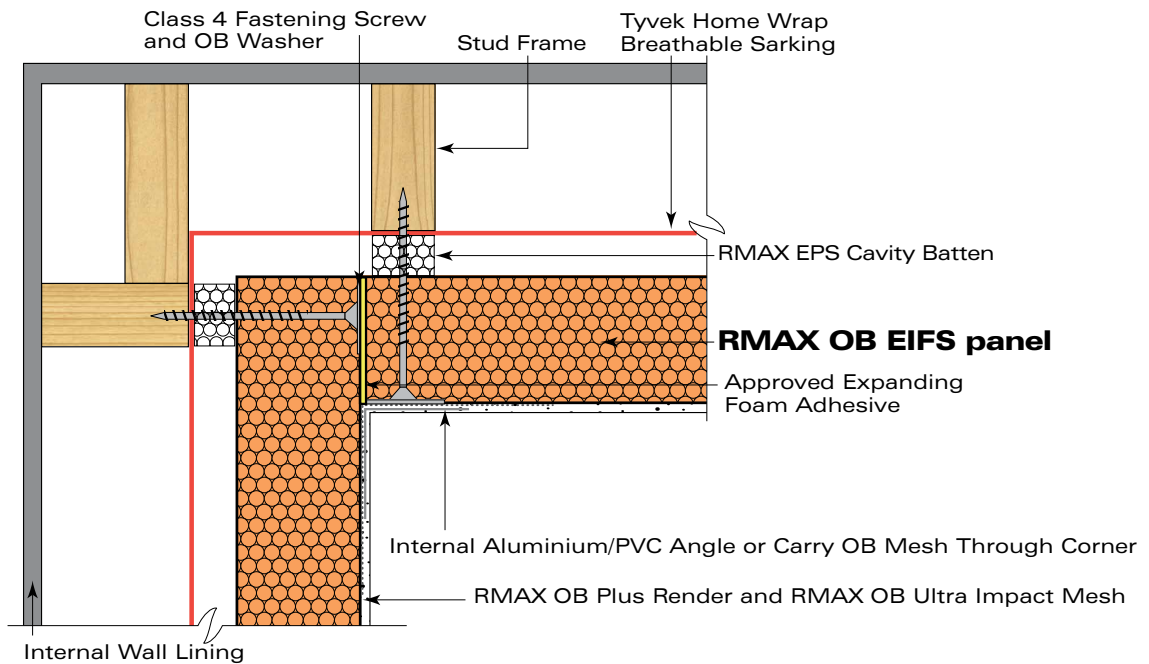
Please Note: For Wind Region N6 only, 200mm fastener centre spacings must be applied within 1200mm of corners. 300mm fastener centre spacings can be applied elsewhere.



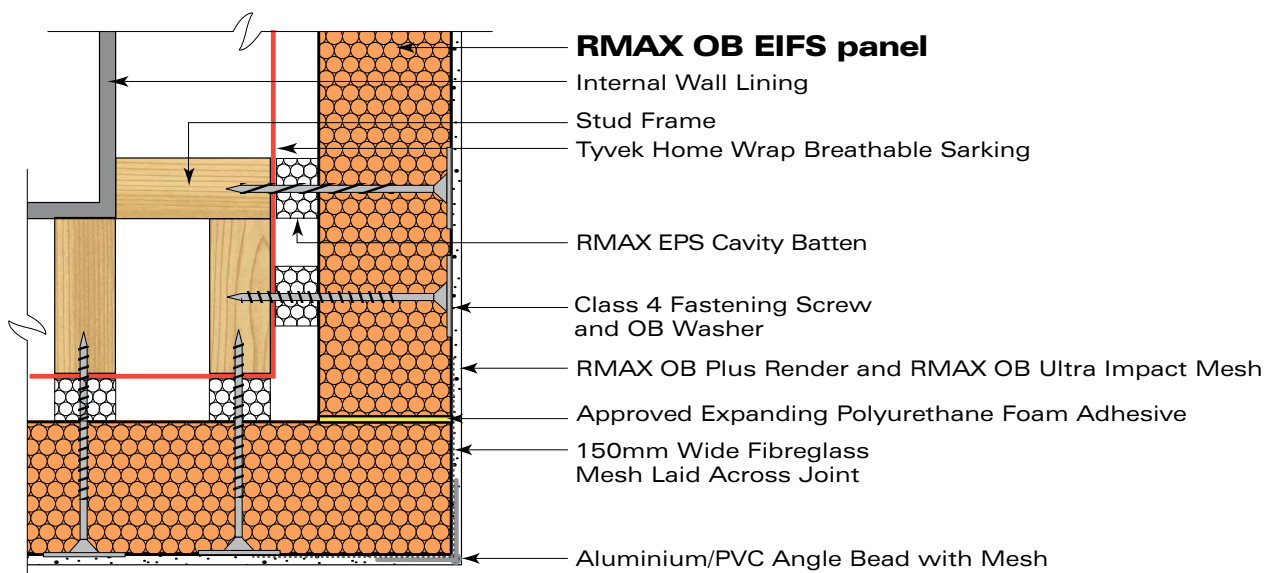
Please refer to page 5 Table 1 minimum stud and fastener spacing for both cyclonic and non cyclonic areas.

NOTE: Drawings are not to scale.

## INSTALLATION AND FIXING DETAILS



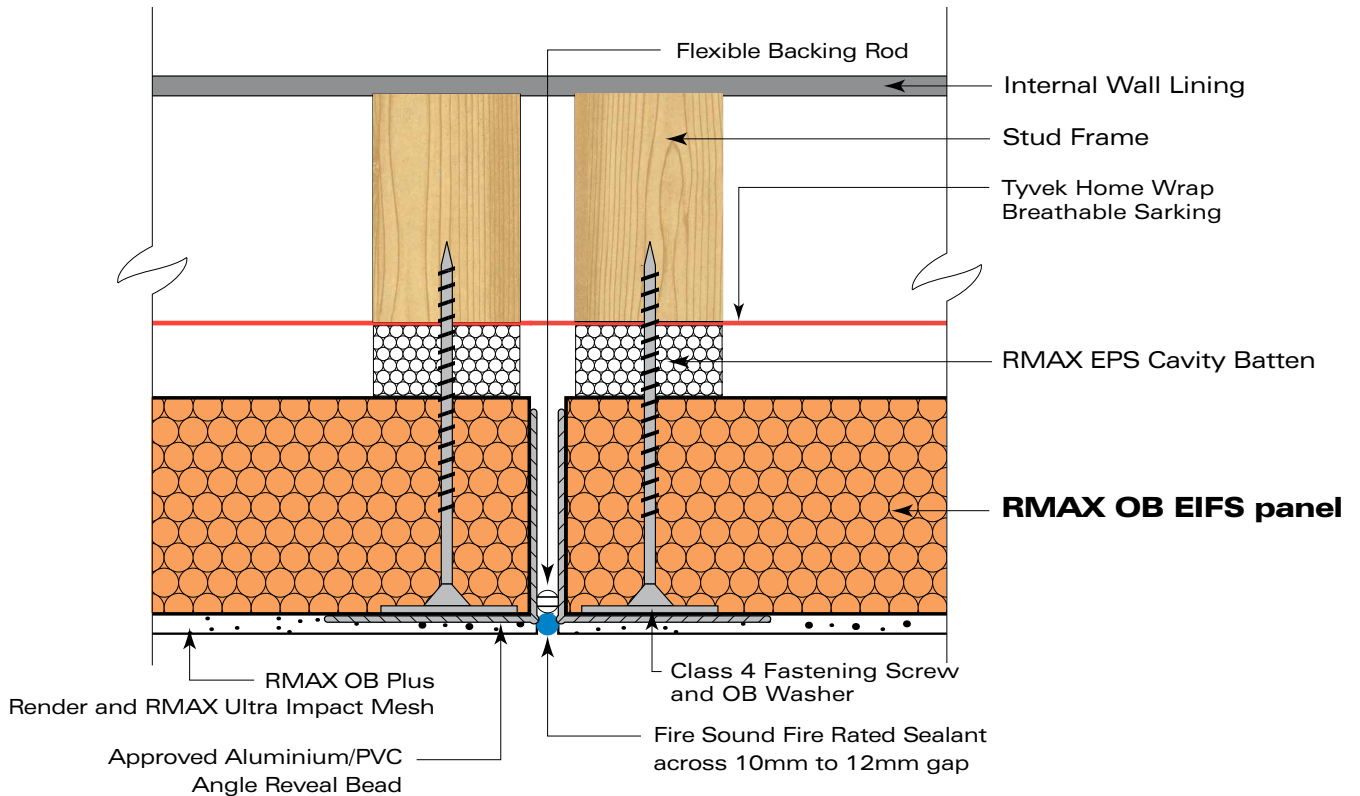
### Internal Corner Detail



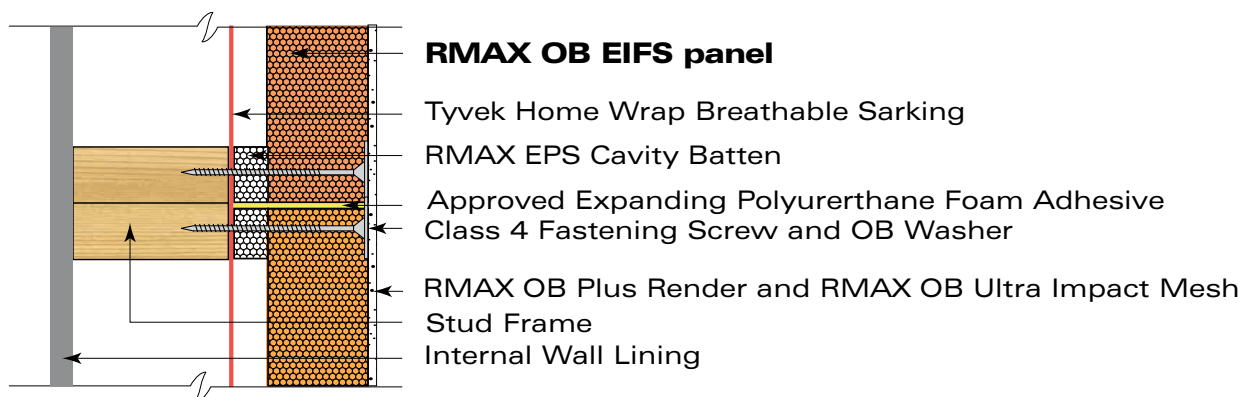
### External Corner Detail



## INSTALLATION AND FIXING DETAILS

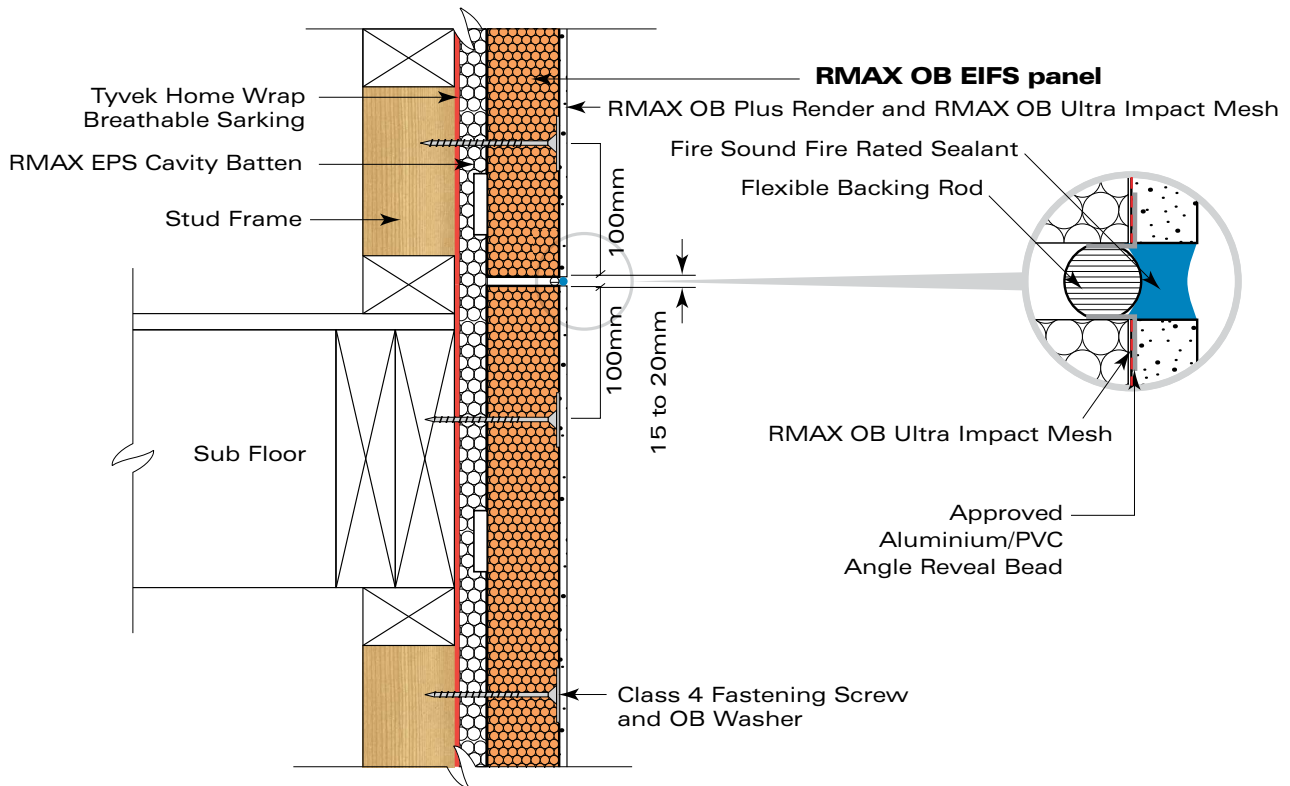


## Expansion (Control) Joint Detail



## Panel Joint Detail

## INSTALLATION AND FIXING DETAILS



### Horizontal Control Joint Detail

#### Expansion (Control) Joints

Prior to installation of the RMAX OB EIFS panels to the stud frame, determine expansion joint placement by consulting with a Design Engineer to calculate the deformation / stress due to soil / structure movement, deflection due to load bearing on roofing structures and to specify location of expansion/control joints.

**Placement Guide: The following is a guide only and does not negate the user's responsibility to consult a Design Engineer.**

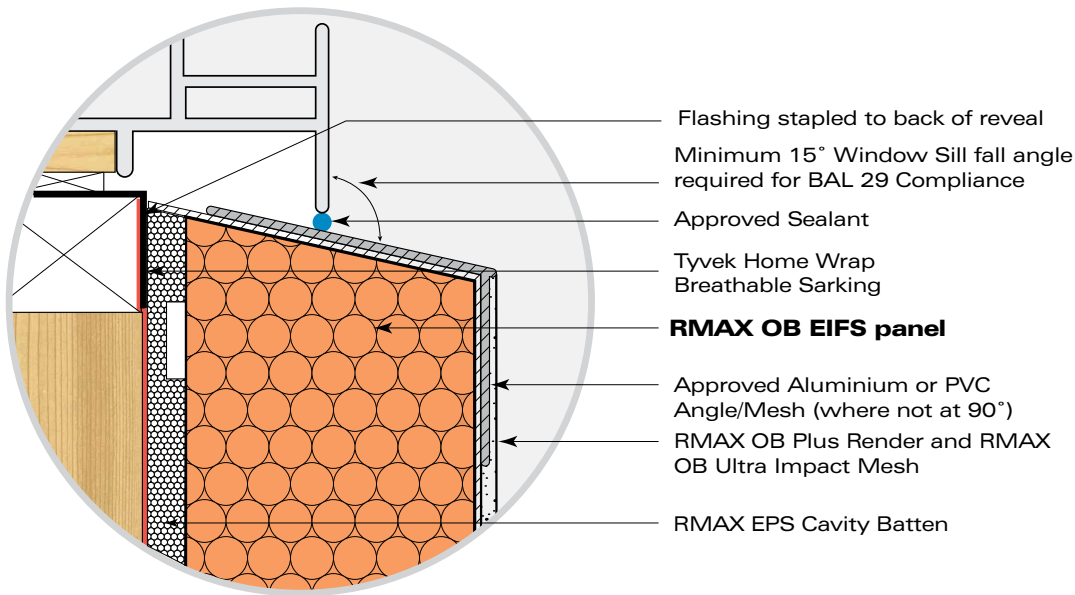
In line with good building practice, placement of vertical expansion joints should not exceed 5 metres where the wall length is greater than 8 metres. Joints should be placed to align with large door and window openings and internal corners. Double studs are necessary at all vertical expansion joints.

**Vertical expansion (control) joints must be continuous across all panels. i.e They must be continuous from the top of the wall to the bottom of the wall and must cut across the Starter Panel and Starter Channel.**

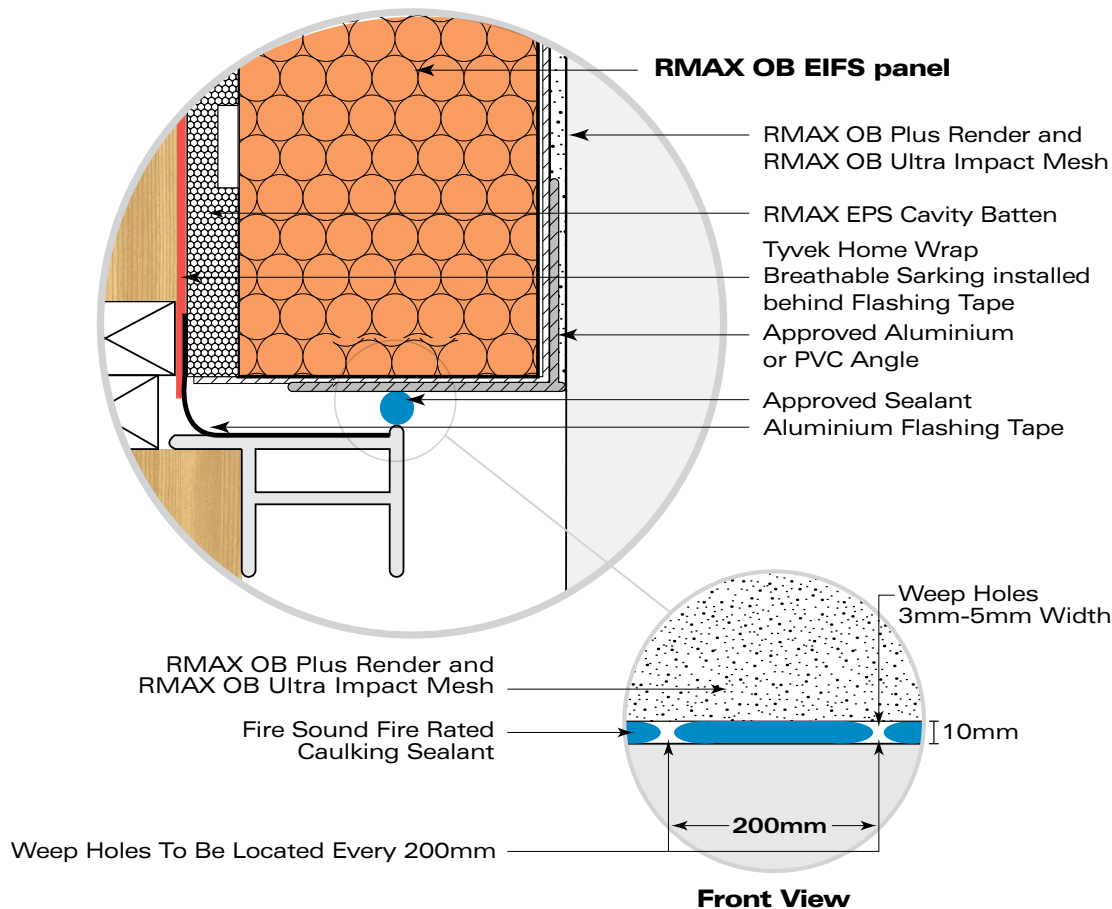
Spacing of horizontal expansion joints should not exceed 3 metres.

**Expansion joints must occur where any of the RMAX OB EIFS panels or the RMAX OB Ultra Starter Panels meet other substrates / cladding materials.**

INSTALLATION AND FIXING DETAILS

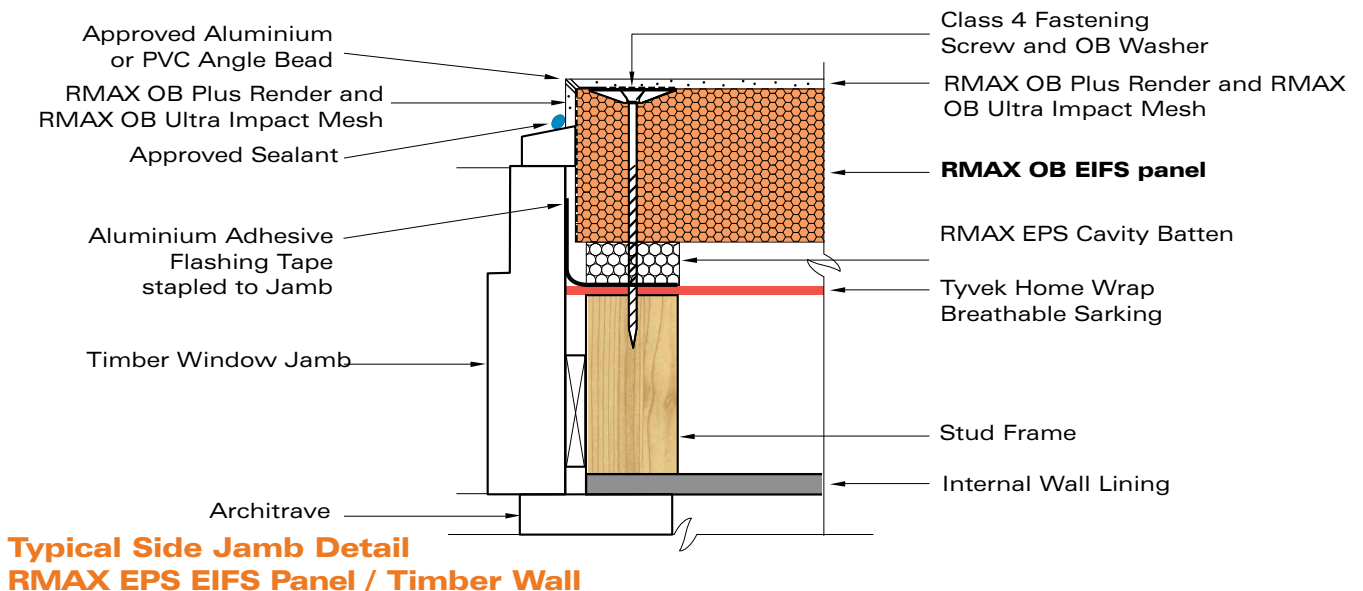
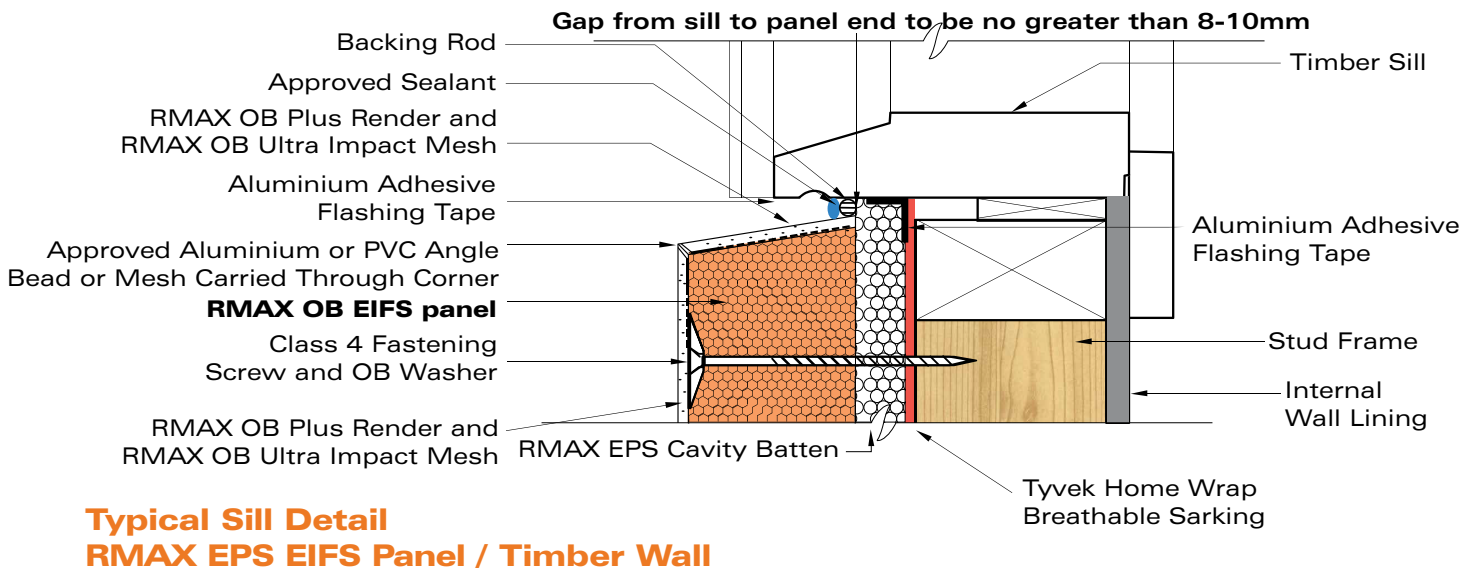
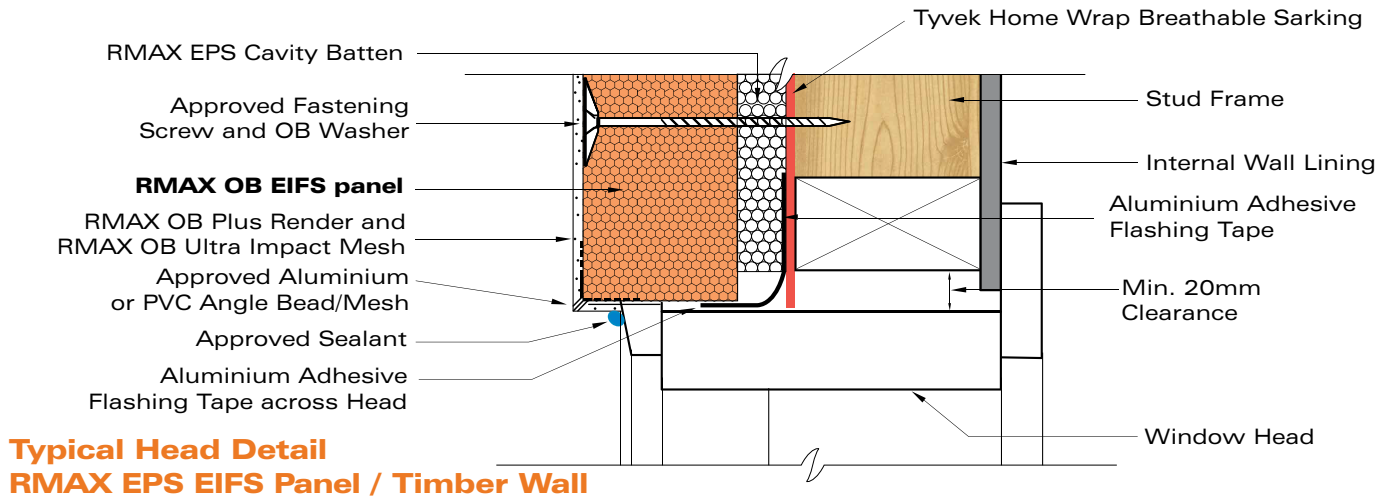


Window Sill Detail



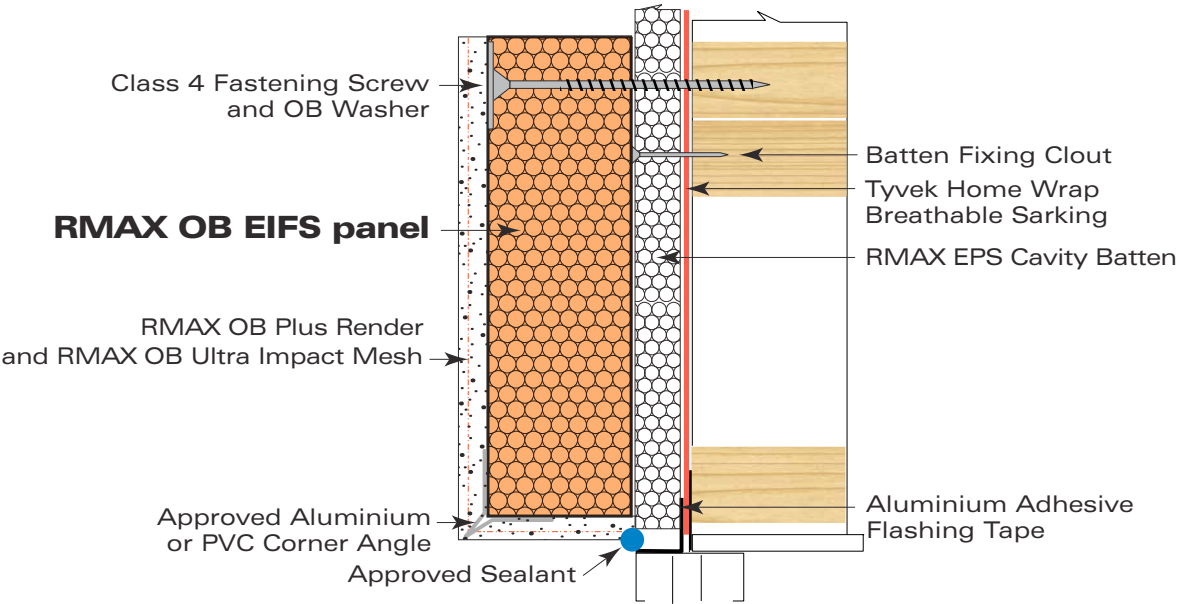
Window Head Detail

## INSTALLATION AND FIXING DETAILS

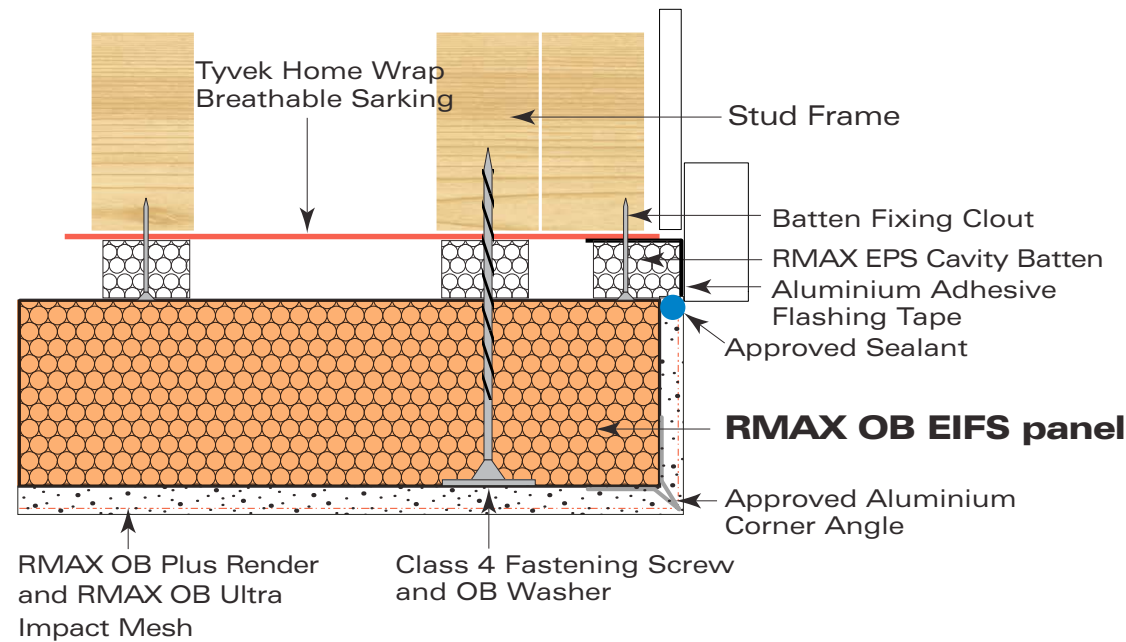




INSTALLATION AND FIXING DETAILS

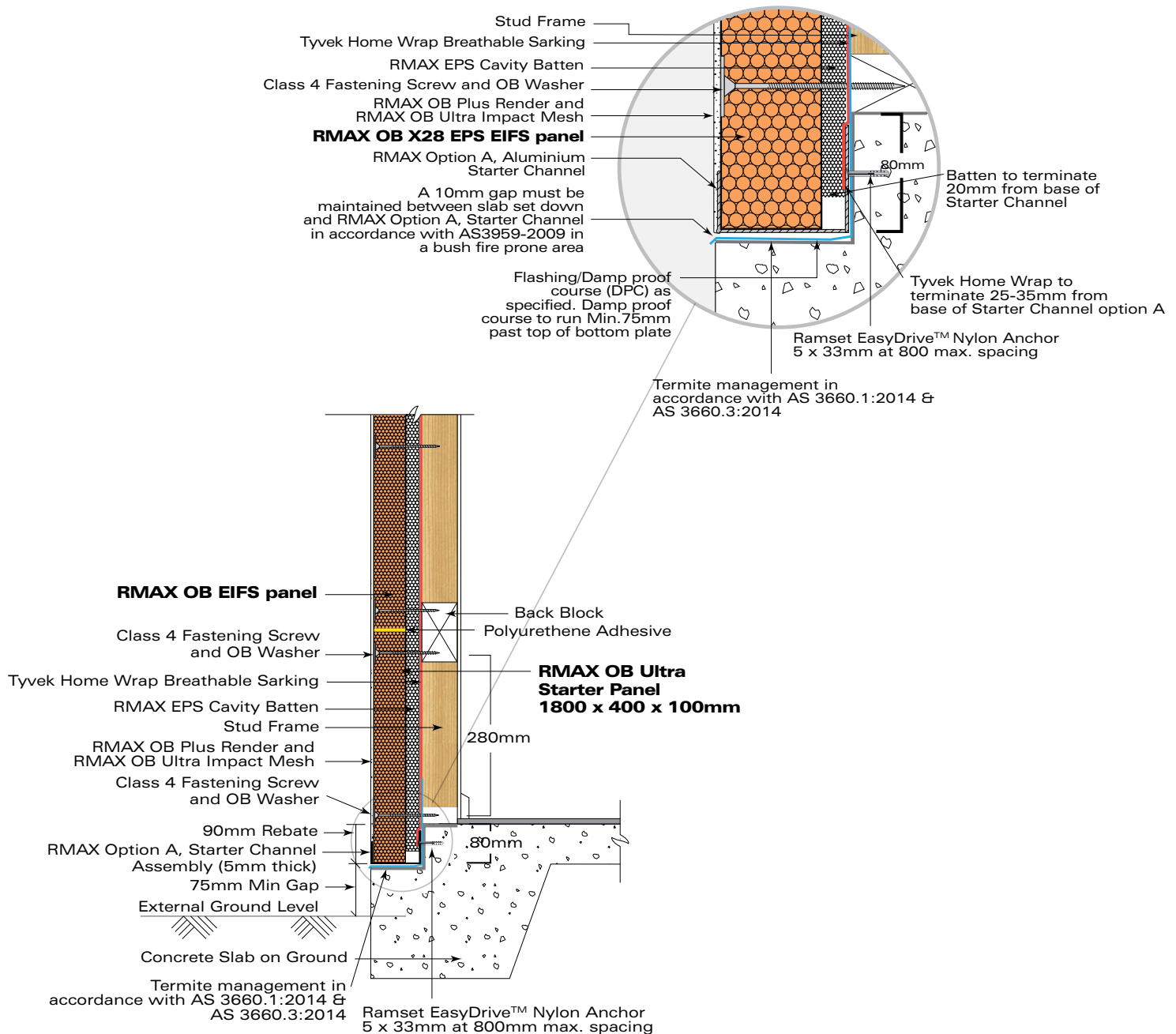


Door Head Detail



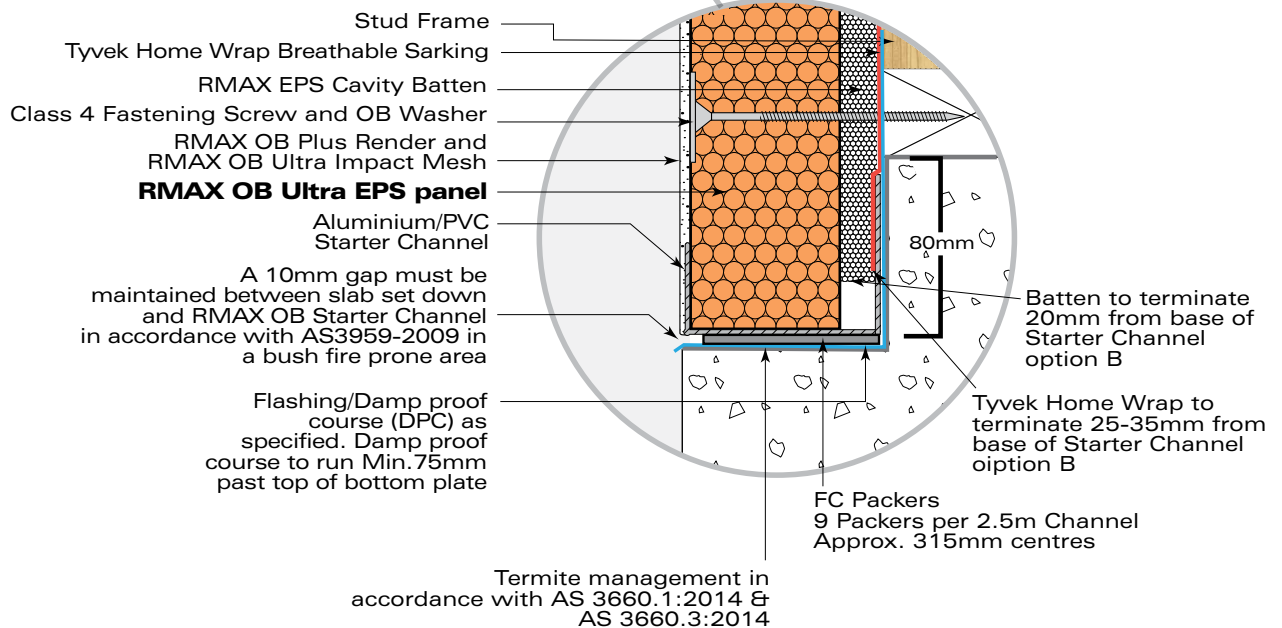
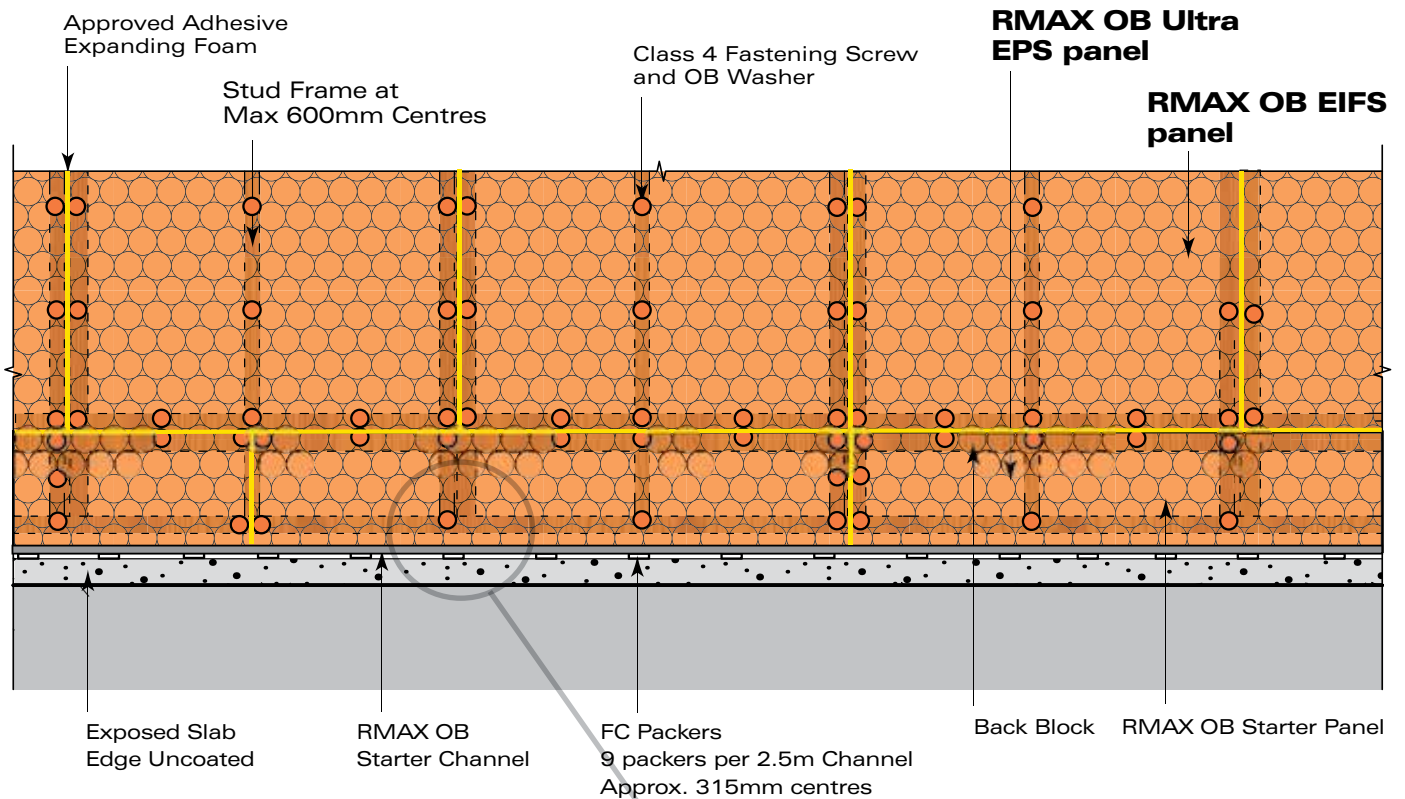
Door Jamb Detail

## INSTALLATION AND FIXING DETAILS



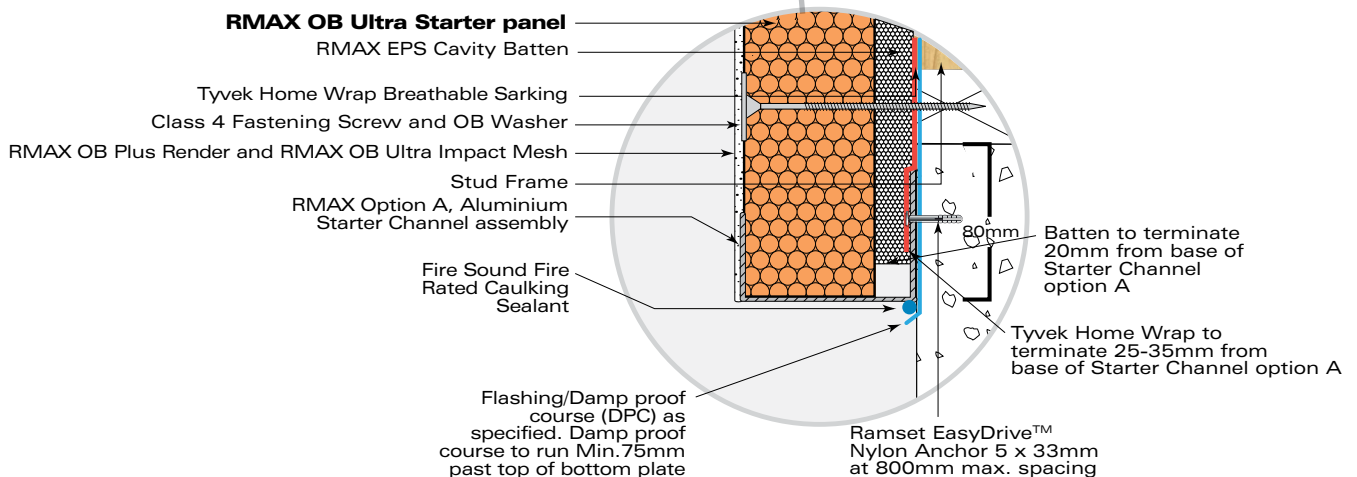
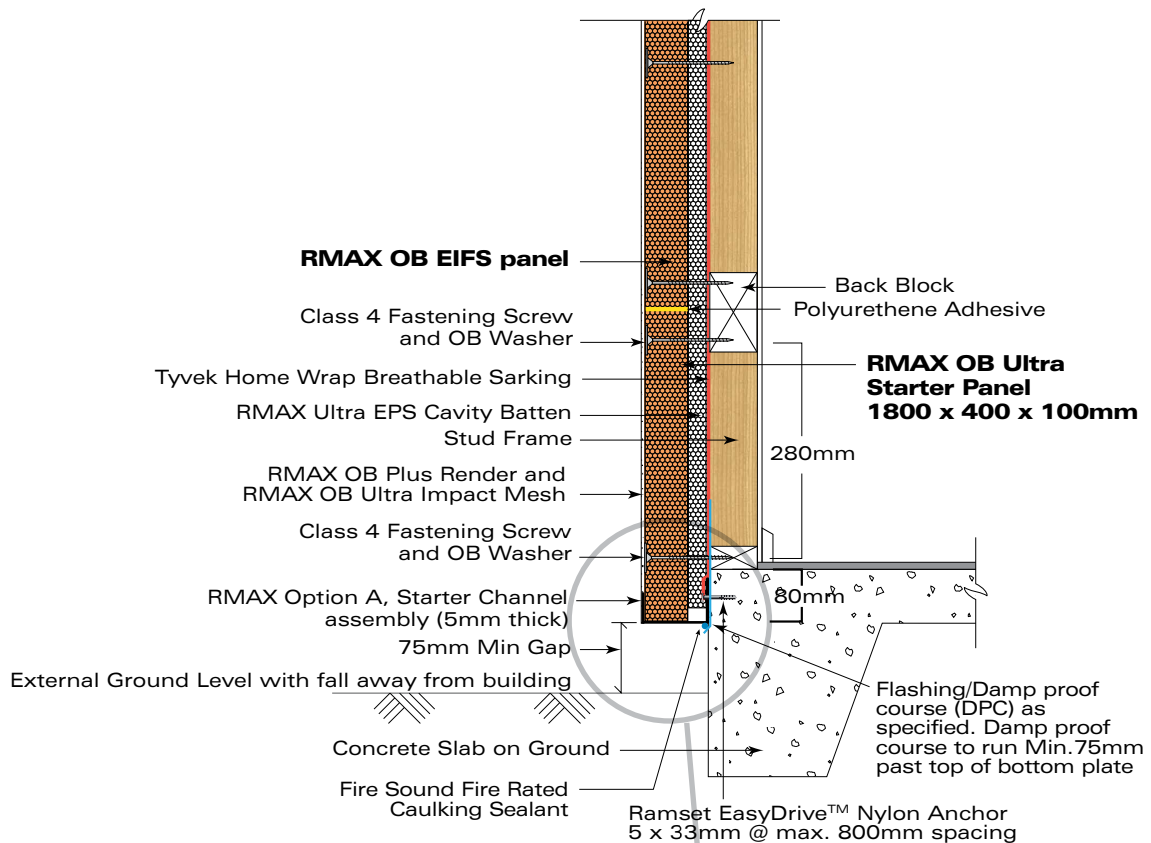
### Ground Slab Rebate Installation Detail with RMAX Option A, Ground Floor EIFS Starter Channel attached with Ramset EasyDrive™ Nylon Anchors

## INSTALLATION AND FIXING DETAILS



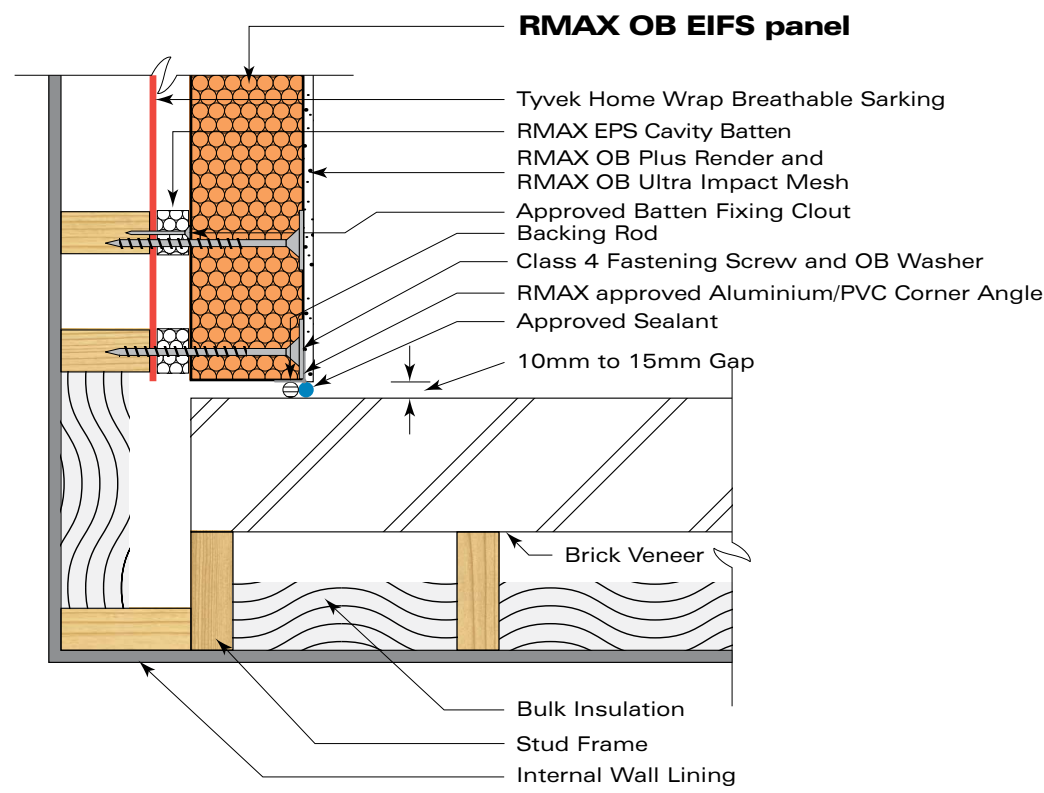
### Ground Slab Rebate Installation Detail using RMAX Option B, Ground Floor EIFS Starter Channel Installation

## INSTALLATION AND FIXING DETAILS - Non-Cyclonic



### Over Slab Edge Detail

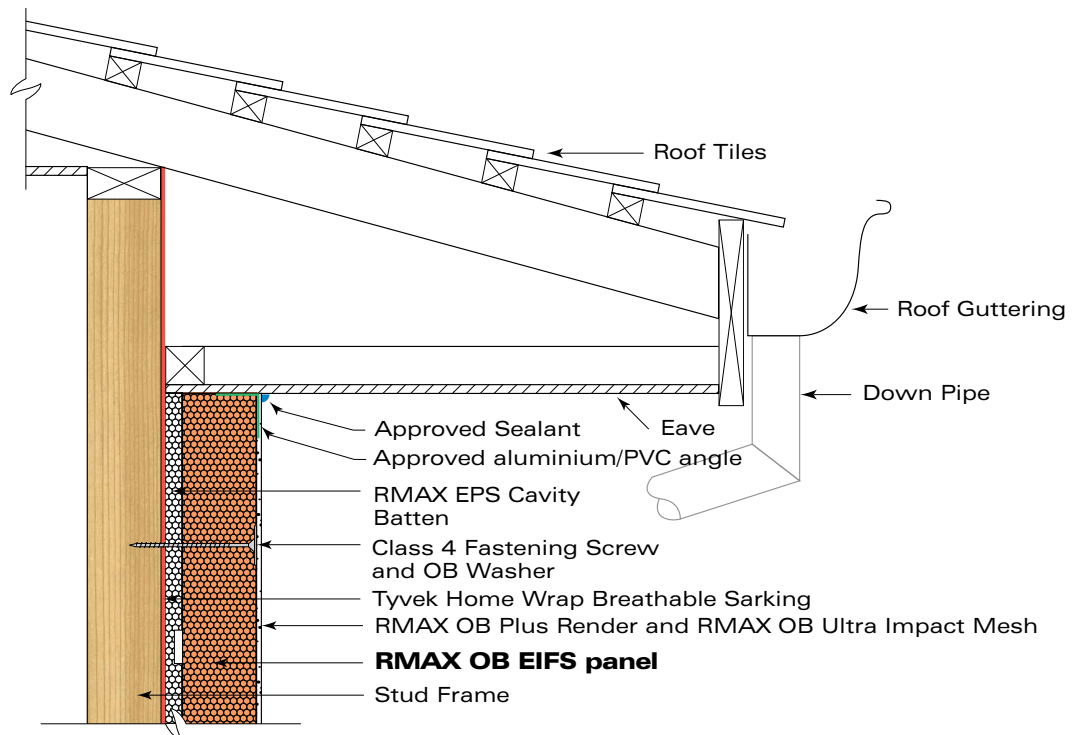
**INSTALLATION AND FIXING DETAILS**



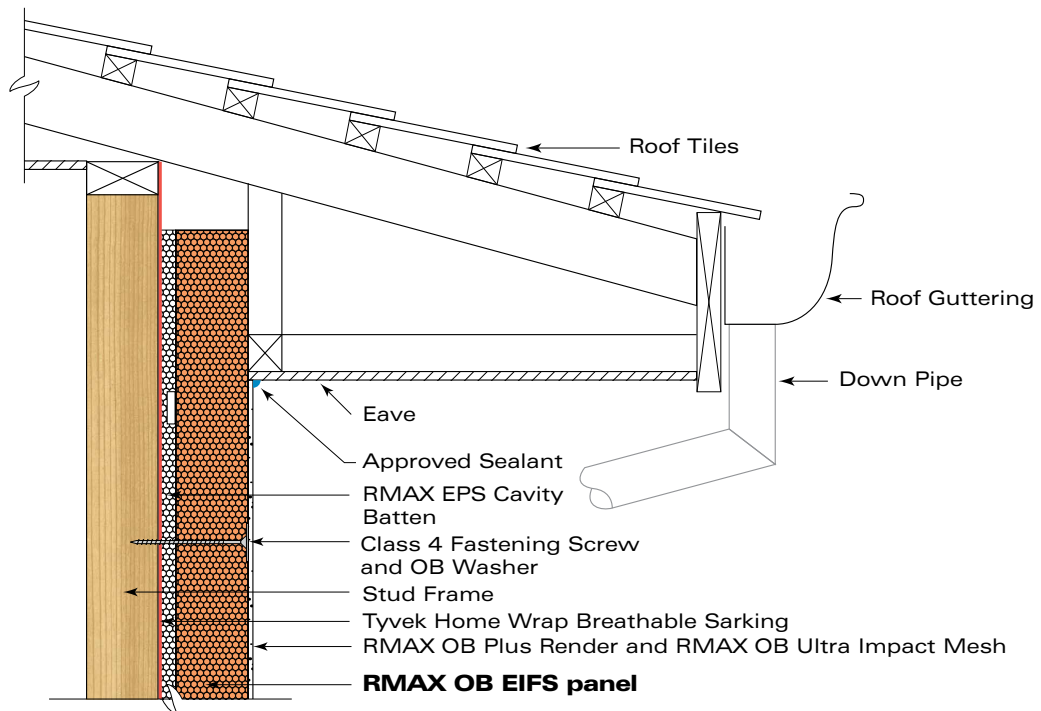
**Cladding to Brick Detail - Internal Corner**



## INSTALLATION AND FIXING DETAILS

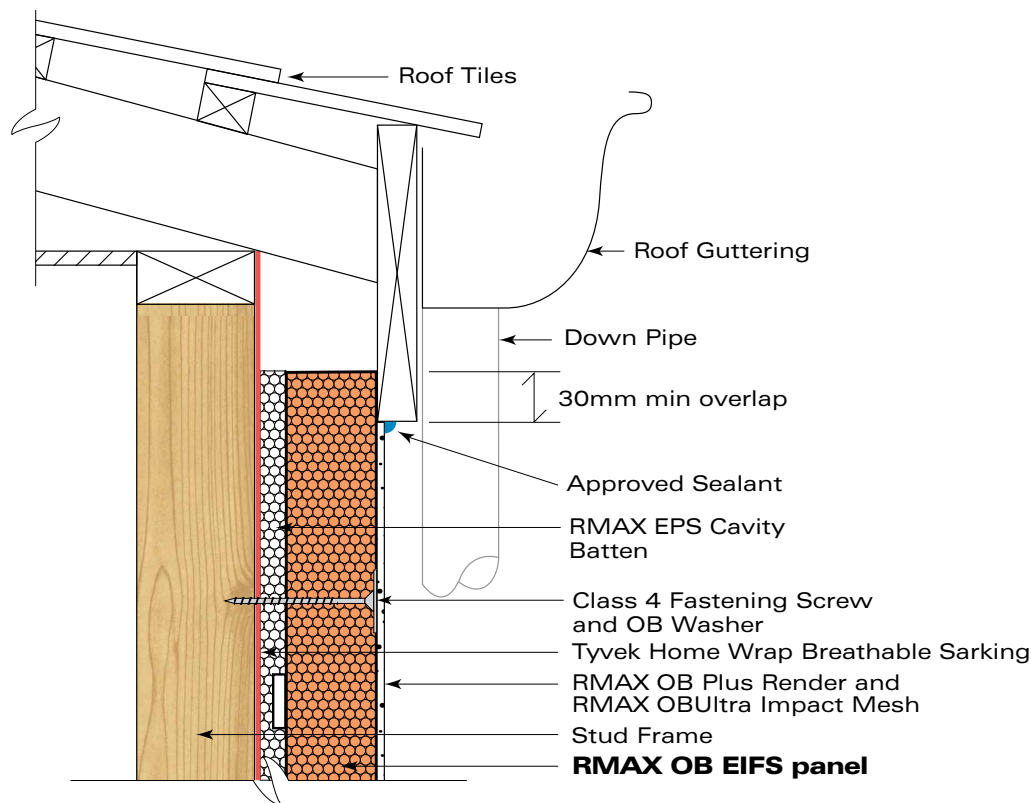


### Eave Detail - Type 1

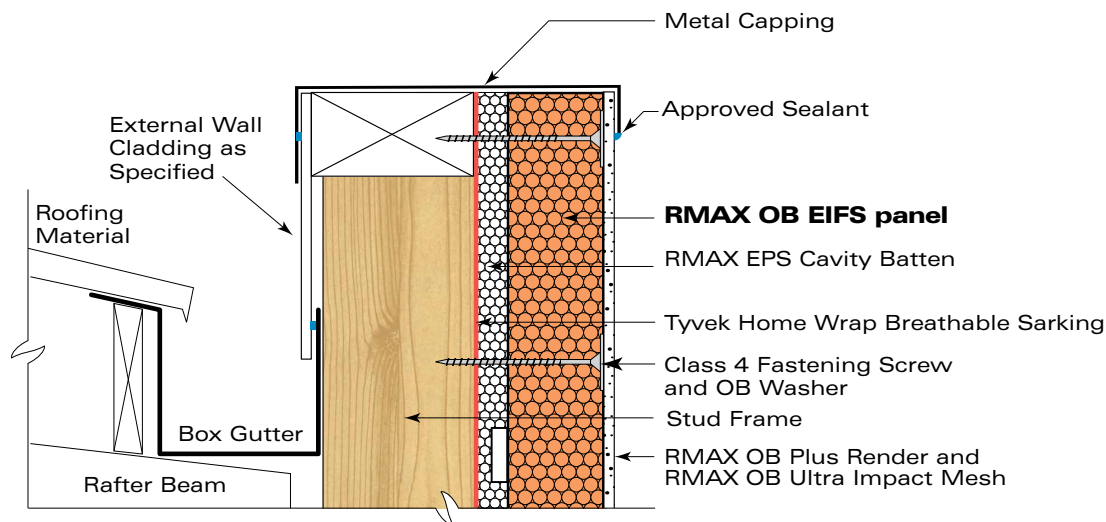


### Eave Detail - Type 2

INSTALLATION AND FIXING DETAILS



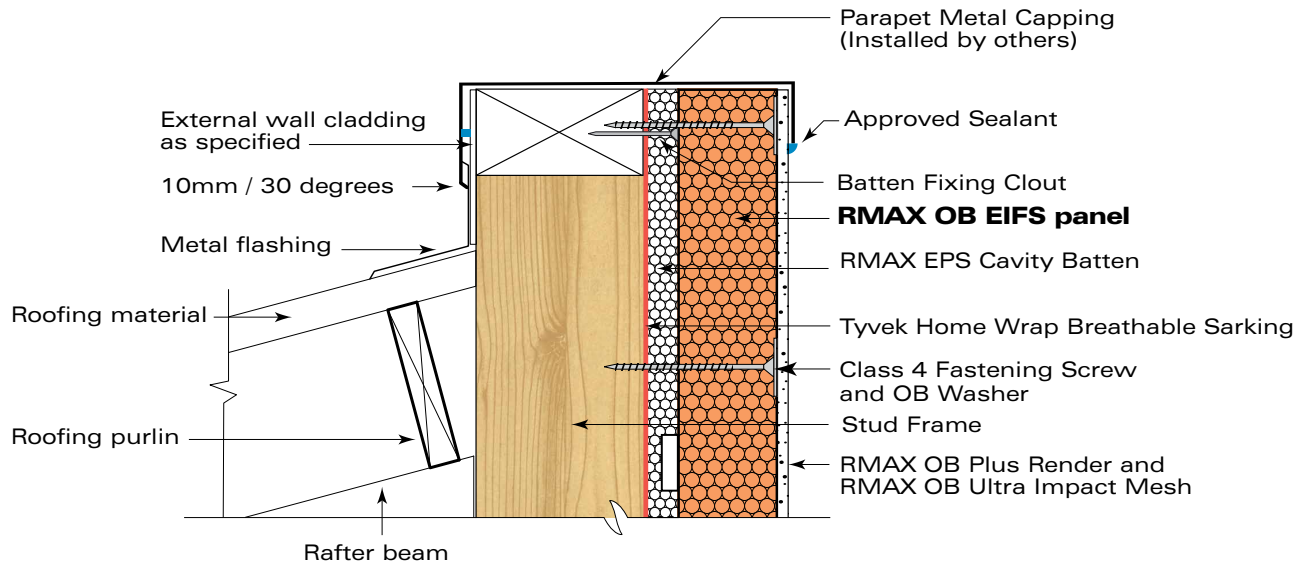
Flush Eave Detail



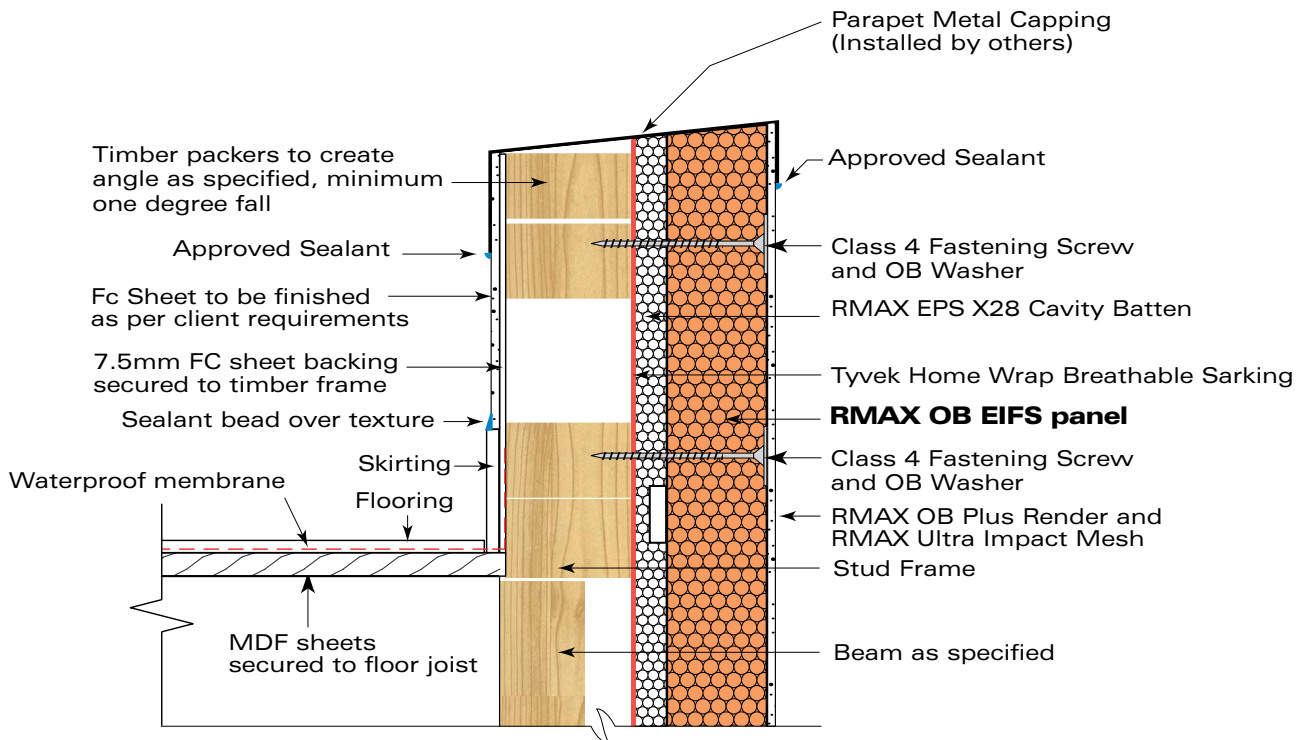
Parapet Detail

NOTE: Drawings are not to scale.

## INSTALLATION AND FIXING DETAILS

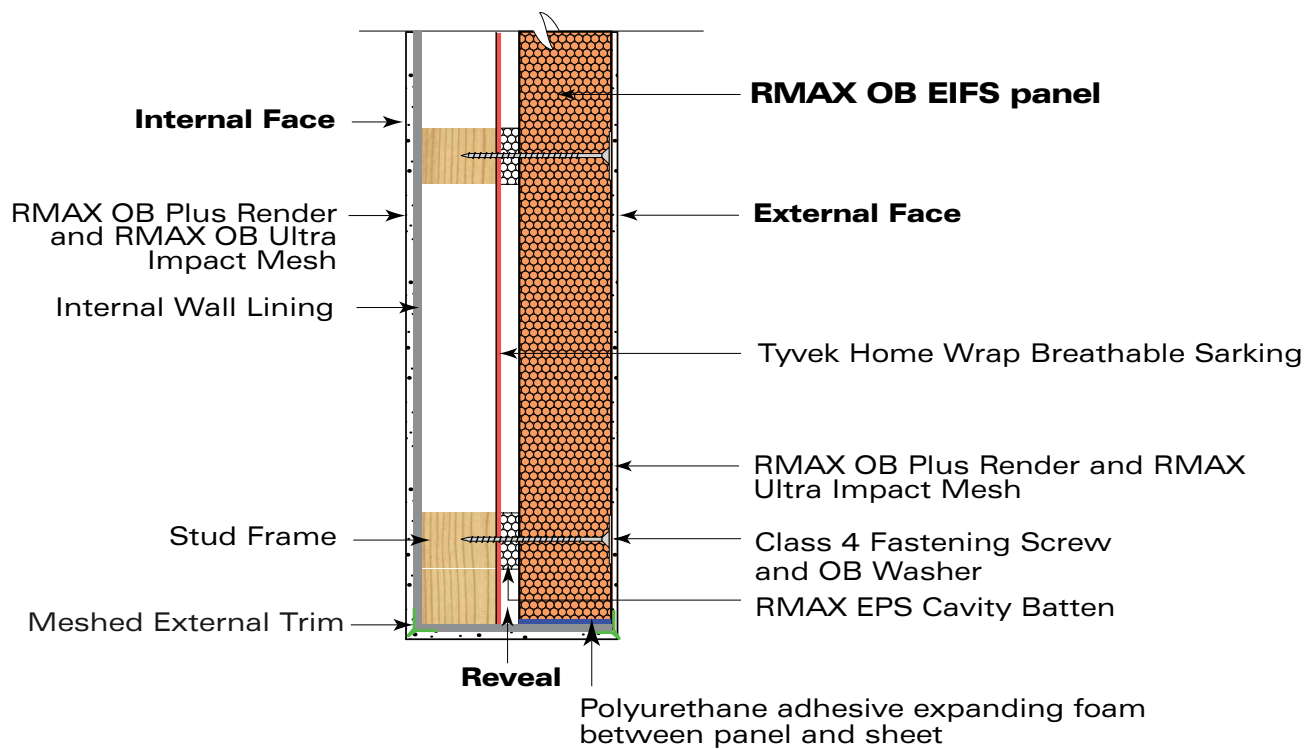


### Metal Capping Parapet Detail



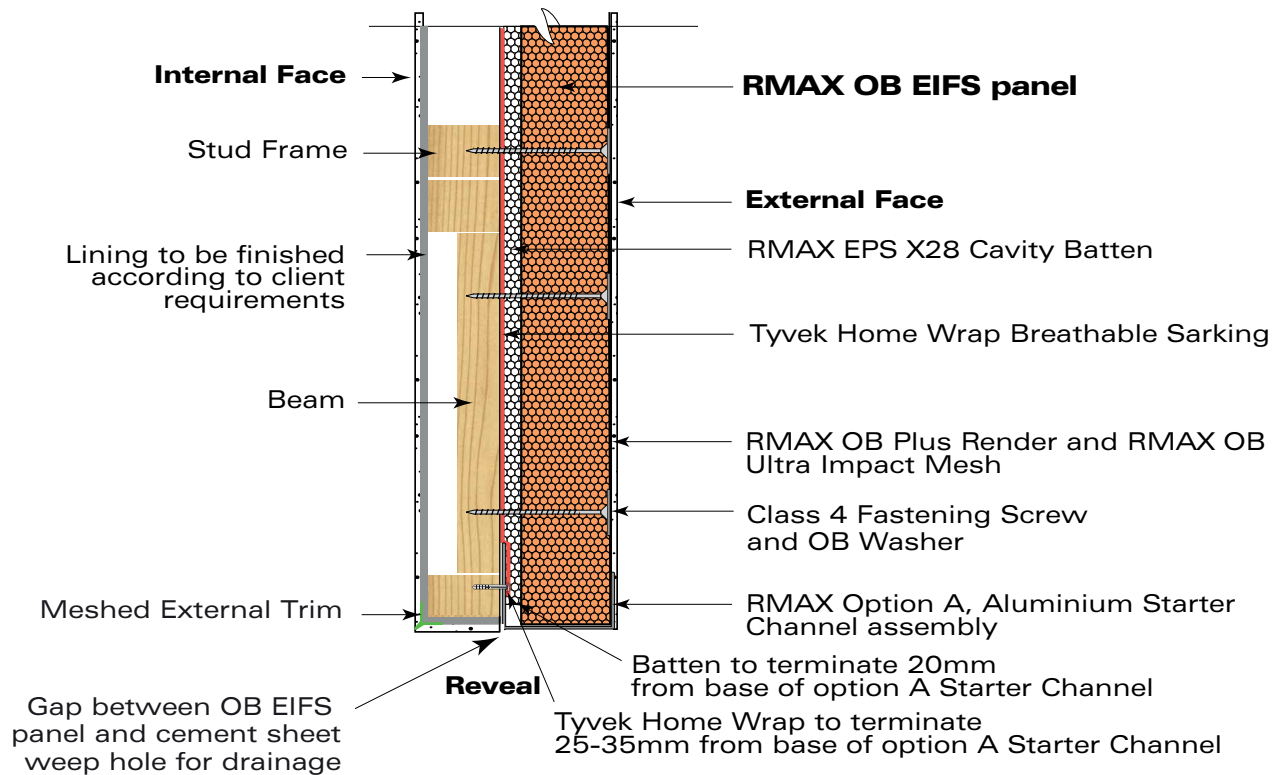
### Balustrade Wall Detail

INSTALLATION AND FIXING DETAILS



Garage Opening Detail (Jamb)

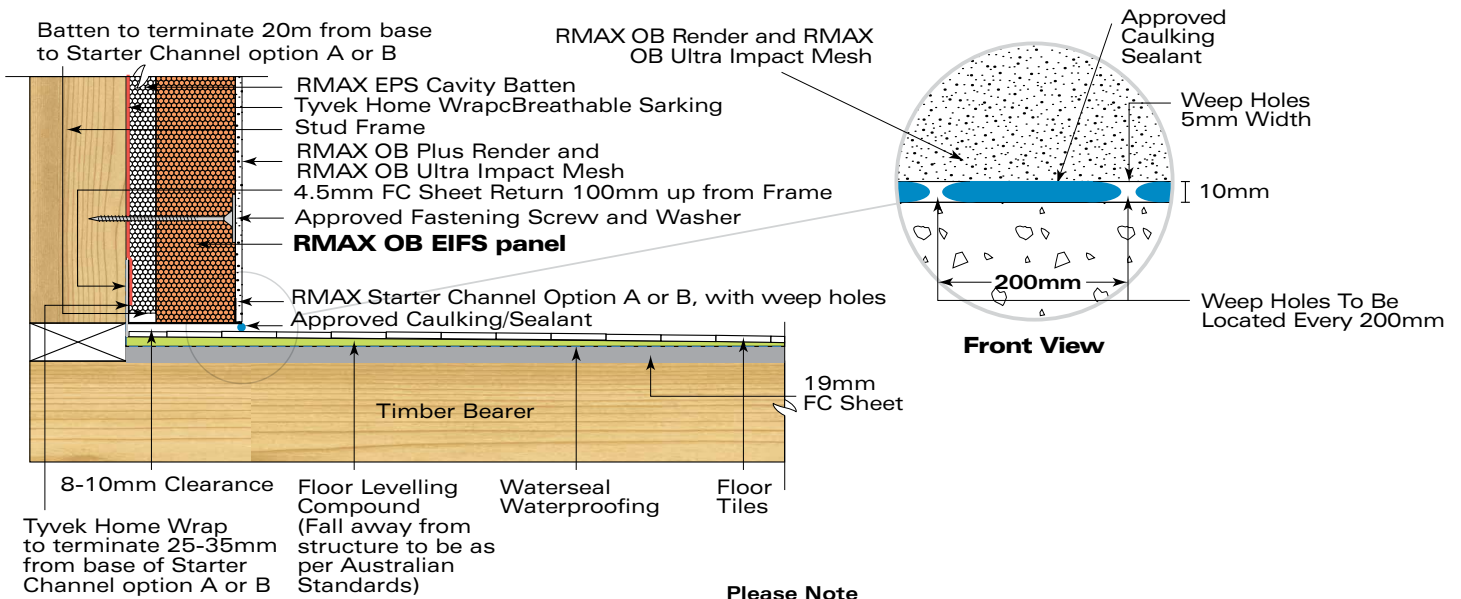
## INSTALLATION AND FIXING DETAILS



## Garage Bulkhead Detail



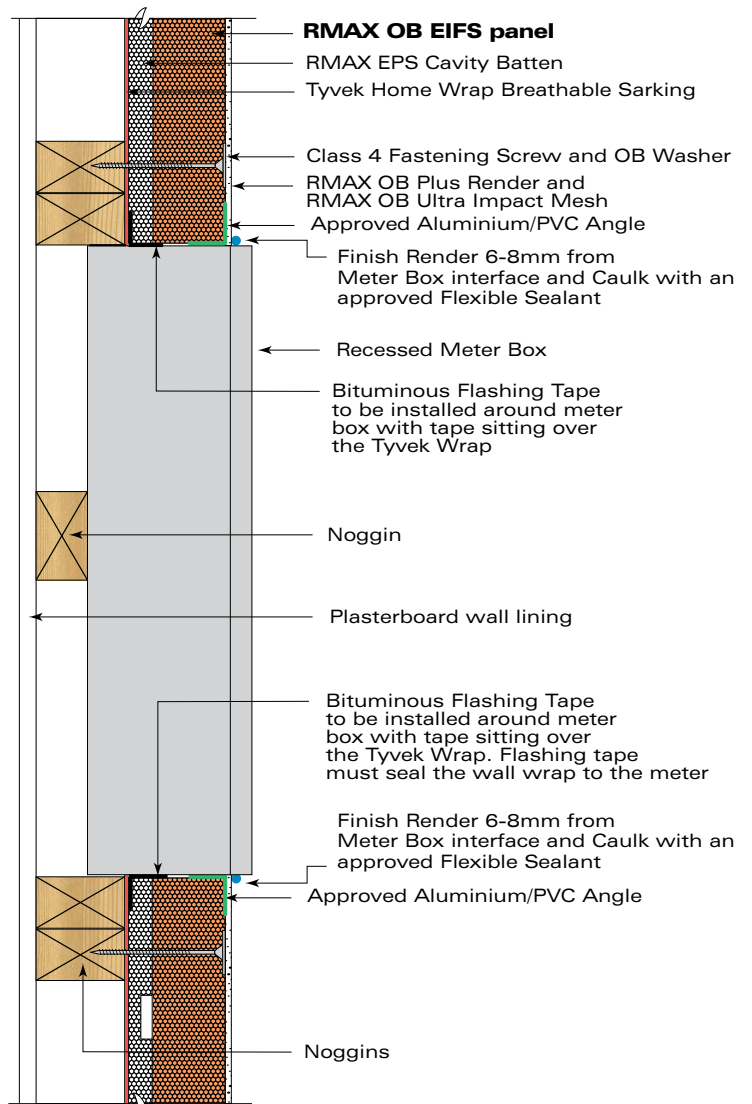
## INSTALLATION AND FIXING DETAILS



**Please Note**

- Tiles need to run through to base plate of horizontal wall.
- Panel (Vertical) needs to be lifted 8-10mm above tiles and caulked (inclusive of weep holes) as per Australian Standards.

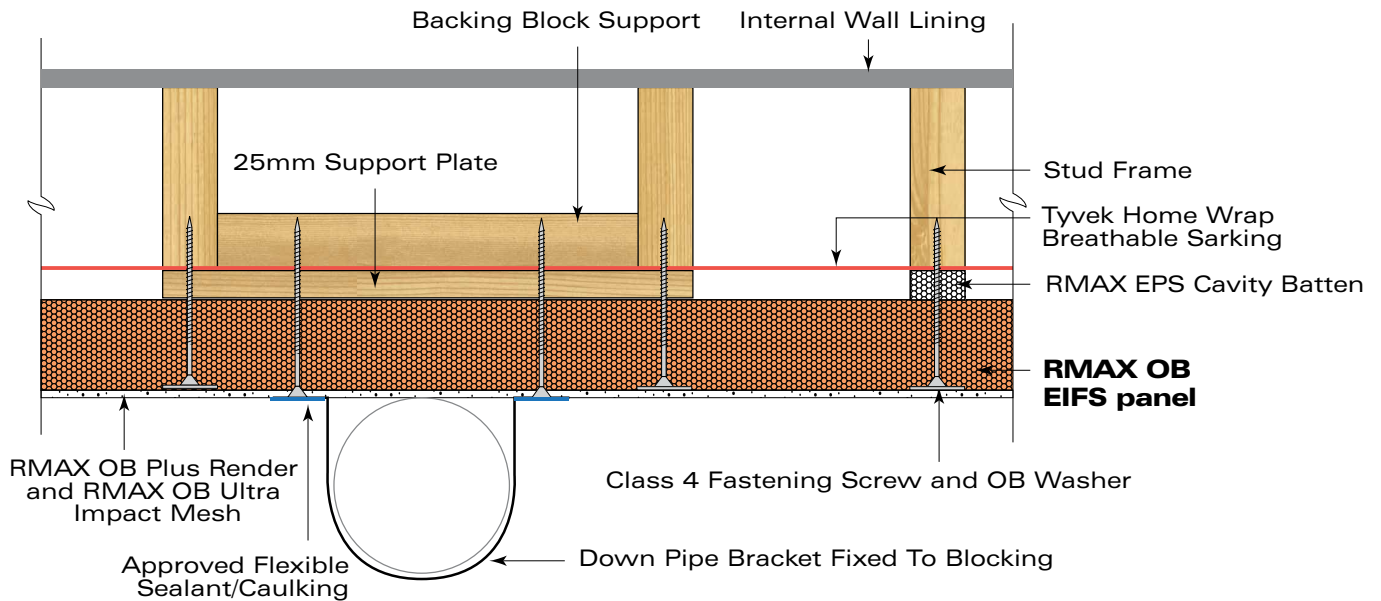
## Alfresco/Balcony Floor With Cavity Detail



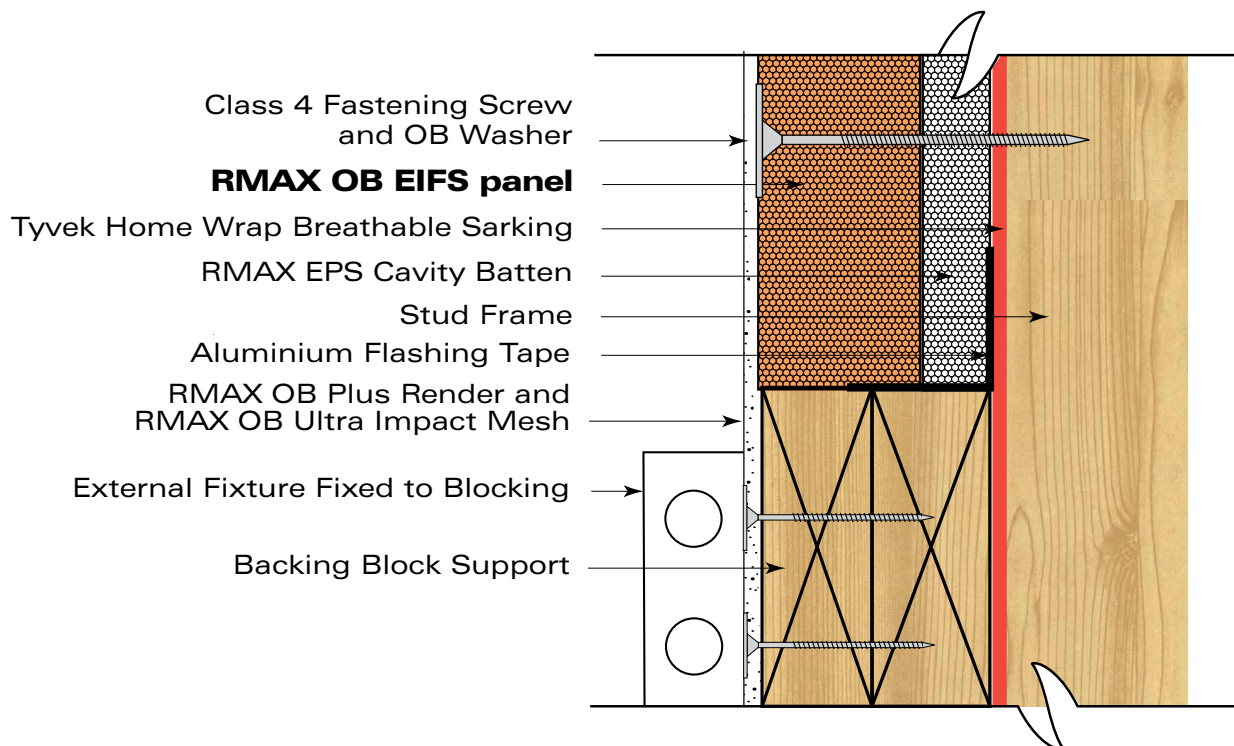
## Meter Box Penetration Detail

**NOTE: Drawings are not to scale.**

## INSTALLATION AND FIXING DETAILS

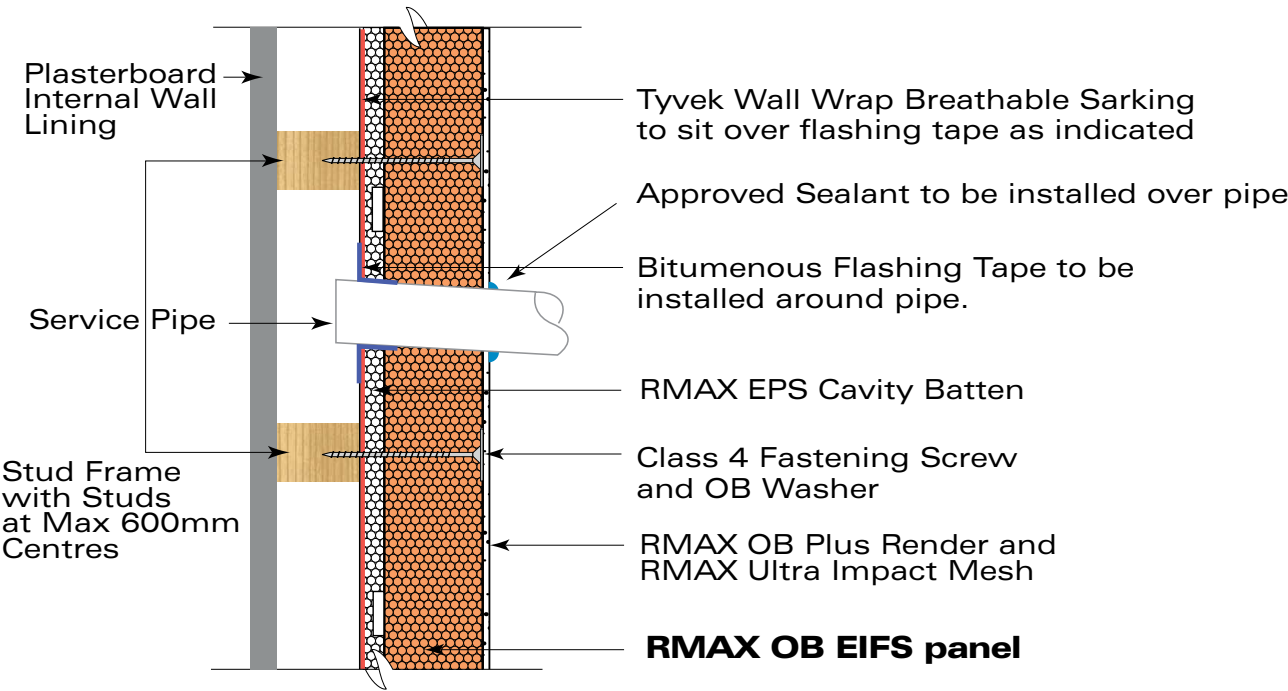


### Down Pipe Fixture Detail



### External Penetration Fixture Detail

INSTALLATION AND FIXING DETAILS



Wall Penetration Detail

## **GENERAL INFORMATION**

### **Warranty**

RMAX, a division of Huntsman Chemical Company Australia Pty. Ltd. is the manufacturer of the RMAX OB Ultra Ground Floor EIFS system.

### **RMAX Batten Cavity EIFS Cladding Product Range Warranty Conditions**

1. RMAX warrants that the RMAX OB Ultra Ground Floor EIFS system is free from defects caused by faulty manufacture or faulty materials for a period of 10 years from the date of sale to the purchaser.
2. This warranty is a material only replacement warranty where there is a defect in manufacture. This warranty only applies where the product is applied correctly by a skilled and experienced installer in accordance with all current installation recommendations as per the RMAX Orange Board Ultra Ground Floor EIFS system Technical Installation and Data Manual, including but not limited to, frame and fastener details, installation and fixing details and installation guidelines.
3. In case of Goods "RMAX Orange Board Ultra Ground Floor EIFS system" no claim may be made where:
  - (a) The Goods have not been installed in accordance with sellers published installation guidelines; or
  - (b) Back filling over any part of the Goods has occurred during the warranty period
4. To make a warranty claim the customer must provide the following:
  - (a) The details of the items purchased (application dates and quantities must be recorded and supplied as a minimum to commence potential product failure investigation).
  - (b) The date and location of purchase.
  - (c) A description of the fault observed with the product, providing photographs and samples if possible.
  - (d) Contact details of the customer.
5. The above information can be provided by:
  - (i) Mail: RMAX Sales, 2-4 Mephan St, Maribyrnong, VIC 3032;
  - (ii) Email: sales@rmax.com.au; or
  - (iii) Fax: 03 9319 5422
6. Unless otherwise agreed to in writing by RMAX, the Buyer shall bear the expense of claiming the warranty.
7. RMAX provides no warranty, expressed or implied, against damage due to movement of the substrate or structure.
8. Whilst RMAX takes every care to ensure that any impurities in the product are eliminated at the time of manufacture, components of the product may occasionally result in minor visual blemishes. RMAX shall not be liable for any such blemishes.
9. Where the Buyer is a consumer under the Competition and Consumer Act 2010, the benefits given under this warranty are in addition to the statutory rights and remedies available to the consumer under the Australian Consumer Law. Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.
10. To the full extent permitted by law the liability of RMAX for any defect or a breach of the Purchaser's statutory rights is limited solely to any one or more of the following as determined by RMAX in its sole discretion, namely:
  - (i) The supply of replacement products or similar products.
  - (ii) The repair of the products; or
  - (iii) The costs of replacement or repair of the products.
11. Except as expressly provided in this warranty, to the full extent permitted by law, RMAX will in no circumstances be liable for any loss or damage, whether direct or indirect (including consequential loss, economic or financial loss) to persons or property howsoever arising and whether from any defect in or unsuitability of a product or from negligence on the part of RMAX or any of its servants, contractors or agents. In particular, RMAX will not be responsible for any loss or damage arising from normal wear and tear, weather conditions, any act of God, poor installation or rendering or caused by wildlife or organisms. RMAX is not, and will not be, responsible or liable to any person in any manner whatsoever for incorrect fixing, joining, installing, finishing and / or rendering by any person.

### **Disclaimer**

The information contained in this manual is presented as a guide to users of the RMAX OB Ultra Ground Floor EIFS system, and while to the best of RMAX's knowledge it is correct and reliable, RMAX shall not be liable for defects associated with incorrect use of the RMAX OB Ultra Ground Floor EIFS system, misuse, wilful damage, neglect, accidental damage, or any modifications or alterations to the RMAX OB Ultra Ground Floor EIFS system.

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RMAX Recyclable EPS

### **RMAX and the Environment**

The RMAX OB Ultra Ground Floor EIFS system is highly energy efficient. The energy saved over the lifetime of an RMAX OB Ultra Ground Floor EIFS system in reduced heating and cooling demand, more than compensates for the raw material used in its production.

The effective application of EPS insulation can cut carbon dioxide emissions by up to 50%. The energy used in its manufacture may be recovered within six months by the energy saved in the buildings when EPS is used to insulate the building depending on the building design and the climatic conditions.

RMAX promotes the use of EPS, with its superior thermal insulation properties, to lower energy requirements and reduce the impact of buildings on the environment.

RMAX EPS is free from ozone depleting substances in manufacture and composition. EPS is manufactured without CFCs, HCFCs or HFCs. Manufacturing is done with blowing agents that have Zero Ozone Depleting Potential (ODP).

### **Recycling EPS**

EPS products are recyclable and RMAX has established recycling facilities in all of its plants throughout Australia. RMAX is a member of PACIA (Plastics and Chemical Industries Association).

### **Energy Efficient Manufacture**

The manufacture of EPS is a low pollution process. There is no waste in production as all off cuts or rejects are re-used or recycled.

### **RMAX - Innovation Working for You**

RMAX is a company driven by innovation. We have pioneered Rigid Cellular Plastics product technologies, leading the development of innovative product solutions for our customers and international partners.

Other new and innovative products from RMAX are ThermaSlab™ and ThermaProof™. For details on these and other products in our range, visit [www.rmax.com.au](http://www.rmax.com.au).

We are committed to working with our customers to deliver high quality creative solutions to construction problems. Contact us and see how our innovative approach using EPS in building construction can help you.

### **Developed in Australia. Made in Australia.**

The RMAX OB Ultra Ground Floor EIFS system has been developed in Australia by RMAX specifically for Australian conditions and to meet the stringent Australian Building Codes in all states. It is manufactured in RMAX plants around Australia in controlled production processes to maintain consistent quality.

The pictures and illustrations shown in this brochure are for illustrative purposes only to demonstrate creativity and design and construction flexibility. They do not imply the RMAX OB EIFS Panels were used in their construction.



[www.rmax.com.au](http://www.rmax.com.au)

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