



# PROBOARD.

Advanced Cladding Systems Pty Ltd



Member No. 1332198



## 10mm Vertex ProBoard Panel - FRL -/-/-

Installation Manual

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**Building Code Of Australia 2022**

**ProBoard panels and ProBoard External Wall Systems have been rigorously tested and deemed to satisfy provisions and performance requirements of the National Construction Code (NCC) 2022 (Amdt2.) Volume 1 & Volume 2 , BCA, for use in class Class 1 to 10 buildings:**

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**AS/NZS 1530.1 - Non-combustibility.**

ProBoard panels have been tested for non-combustibility by an NATA approved testing laboratory and are deemed non-combustible.

**AS/NZS 1530.3 – Determination of Early Fire Hazard Properties.**

In accordance with AS 1530.3 – Methods for fire tests on building materials components and structures – Part 3: simultaneous determination of Ignitability 0, flame propagation 0, heat 0 and smoke release 0-1.

**AS/NZS 4284:2008 - Testing of building facades.**

ProBoard External Boundary Wall Systems have been tested by a NATA accredited testing laboratory in accordance with verification method F3V1 & H2V1 and achieved the weatherproofing performance requirement F3P1 H2P2 for up to N3 wind classification.

**AS/NZS 4055 - Wind load for housing.**

ProBoards External Boundary Wall Systems have been tested by a NATA accredited testing laboratory in accordance with AS/NZS 1170.2 Structural Design Actions Part 2) and achieved the Classification N1, N2 and N3 for screws installed @ 300 centres or 50mm x 2.5mm stainless steel coil ring nails @ 150 centres. NCC Volume 1 Specification C2D9 and achieved the requirements as an external wall of light weight construction.

**Surface Indentation Test.**

ProBoard External Boundary Wall Systems has been tested by a NATA approved testing laboratory in accordance with NCC Volume 1. specification C2D9, clause 5 (c) Reported to the requirements of clause (6e)

**Sandbag Impact Test ASTM E695.**

ProBoard panels have been tested by a NATA approved testing laboratory to the requirements of NCC Volume 1 specification C2D9, clause 5 (c) Reported to the requirements of clauses 6 (6) and (d)

**Thermal Transmission 3.12.1.4.**

10 mm ProBoard nominally achieves R0.02 m2 K/W, 14 mm nominally achieves R0.03 m2 K/W

## Why Use ProBoard Panels

Advanced Cladding Systems was established to provide the Australian residential and commercial building sectors with a cladding that is cost effective and is fully compliant with Australian Standards. With the building industry becoming increasingly compliance focused, we are committed to providing one of the safest and compliant cladding panels in the Australian construction industry. We have called this panel ProBoard.

Highly versatile, our panels can be used in lieu of traditional cement sheeting or plaster. Our signature ProBoard panel is constructed from magnesium, which is a mineral that, when used as part of a cement mixture, can be cast into cement panels. Our panels are further strengthened by sheets of glass fibre mesh.

Your choice of cladding should be based on a careful assessment and prioritisation of each of the claddings following roles.

Cladding's primary objective is to shield the building from the weather and protect the building from fire. It is also a key element in the aesthetic appeal of the home which directly influences both the building costs and property values.

House cladding also has a significant effect on the environmental performance of your home and the initial impacts of the cladding, such as embodied energy, resource depletion and recyclability. These elements must be balanced against maintenance and durability. Other roles should include acoustic performance, thermal insulation and the capacity to deter pests / termites.

ProBoard's panels address's all the before mentioned issues.



ProBoard panels are water resistant and have been tested to Australian Standard 4284:2008 Weatherproofing – PASSED.



Non-combustible – Tested to Australian Standard 1530.1 Non-combustibility – PASSED.



Building costs – Only standard carpentry tools are required to install ProBoard panels and that, combined with quick installation systems, ensures that our panels are a price competitive cladding solution.



Property values – Can be finished with most external, aesthetically pleasing finishing system that enhances the property's value.



Maintenance – Low maintenance due to the panels rot resistance and longevity.

## Why Use ProBoard Panels cont.



Durability – High Impact.



Mould/mildew – ProBoard panels do not support the growth of mildew or mold



Acoustic qualities – Excellent acoustic qualities – ProBoard's Fireless Party Wall System achieves an acoustic rating up to 54 Ctr.



Thermal qualities – ProBoard panels have excellent thermal qualities.



Termite and pest resistant.



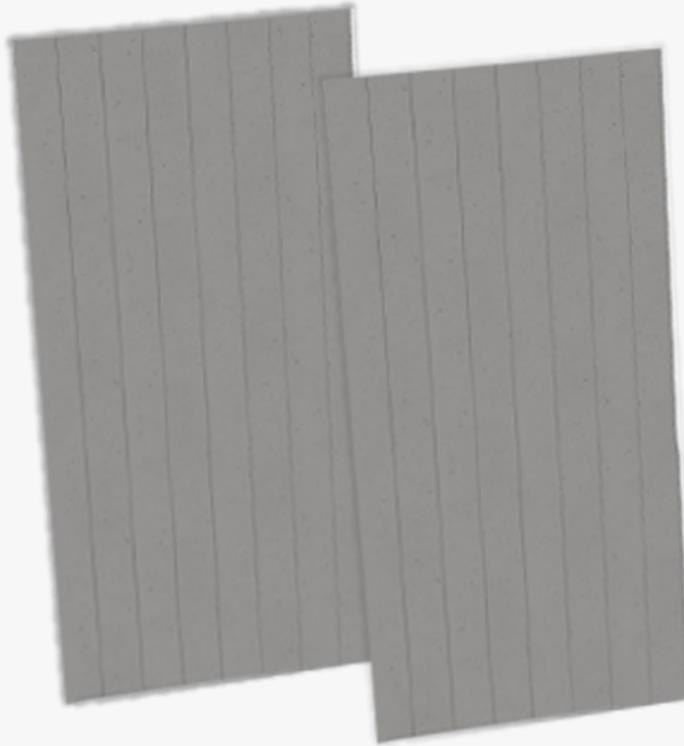
Environmentally friendly – Many environmental benefits come with ProBoard panels, one being the mining of the main element, magnesium. Magnesium is found on the earth's surface and requires no chemicals or energy sapping processes when mined.



The curing process of ProBoard panels captures carbon dioxide and is conducted at room temperature which makes the curing of our ProBoard panels an extremely green process. Our panels contain no asbestos or harmful chemicals. Off cuts can be reground and recycled because ProBoard panels are considered "nutritional waste", meaning they can be placed back into the soil as a nutrient.

## **ProBoard 10mm Vertex Panel - FRL -/-/-**

### **Install Vertically**



## **FRAMING REQUIREMENTS**

### **TIMBER FRAME**

Timber framing to be designed and constructed in accordance with AS 1684.2 or AS 1720.1 to BCA requirements. Only seasoned MGP 10 is to be used with minimum timber dimensions of 90 mm x 45 mm at 600 mm maximum stud spacing.

### **STORAGE AND HANDLING**

When manually moving ProBoard panels carry horizontally. Care should be taken when handling the panels as not to damage the edges and surfaces. Persons moving the panels should have the appropriate Occupational Health & Safety training. All materials must be kept dry, preferably stored inside the building. If being stored outside, ProBoard panels are to be off the ground and protected from the weather. Store on a flat surface or on levelled supports ensuring the support covers the full width of the panel and spaced at the centre point with no more than a 600 mm gap between supports.

## **SAFETY INSTRUCTIONS**

The following safety precautions are recommended when cutting Proboard. Minimise the effects of dust by:

- a) Providing adequate ventilation.
- b) Use mechanical cutting tools fitted with dust extractor and storage bag.
- c) Wear eye protection.
- d) Wear an approved P2 mask.

In addition to the above, observe all Occupational Health and Safety regulations and Safe Work Method Statements.

## **ACCESSORIES**

### **Mechanical Fixing:**

When fixing to timber frame use 40 mm x 8-gauge Stainless steel Class 304 needle point self-tappers at 300 mm maximum spacing's. (Available from Advanced Cladding Systems) or Paslode 50mm x 2.5 stainless steel coil nails can be used for fixing. Coil nails must be fixed at 150 centres.

When fixing to steel frame use 40mm x 8-gauge Galvanised needle point self-tappers with wings at 300 mm maximum spacing's.

### **SEALANTS:**

Use a paintable exterior grade polyurethane joint sealant.

### **JOINT SETTING COMPOUND AND TAPE**

Gyprock Multi-purpose joint setting compound is our preferred supplier of joint setting compound and is to be used in conjunction with 50 mm Fiba Fuse tape.

### **PRIMER/SEALER:**

ProBoard panels must be sealed before applying final finish. Use a good quality primer/sealer on the face and exposed edges.

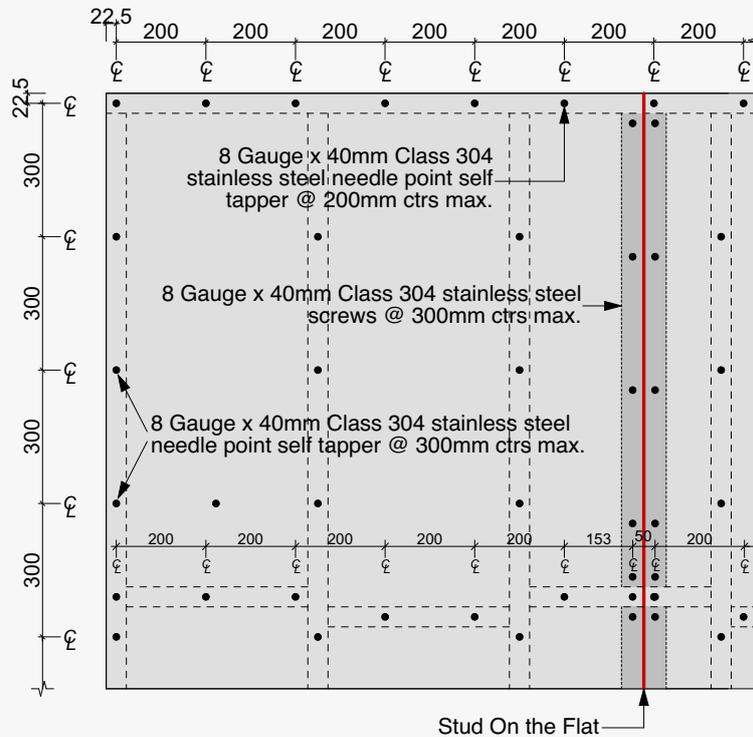
## Important Construction Notes

Notes must be read before installation commences.

- ✓ Plan the job before commencing. Check the frame to ensure it is straight and plumb. Eaves, windows, doors and flashings should be installed before commencing.
- ✓ When planning out the installation of ProBoard's Vertex panels, be sure to allow for any overhang at the commencement of the wall and the end of the wall.
- ✓ Always finish the bottom of the ProBoard Vertex panel as per BCA Requirement 3.5.4.7 Clearance between Cladding and Ground **(see Technical Drawings)**.
- ✓ Expansion joints must be installed at a maximum of every 5 metres or as per working drawings and must be installed on individual studs. Install expansion joints vertically above and below windows and doors.
- ✓ On double storey or higher buildings install expansion joints horizontally between floors. For expansion joint details **(see Technical Drawings)**.
- ✓ All warranties will be voided if the system, important notes, or the installation instructions are deviated from in any way.
- ✓ Before any finishing system is commenced, all surfaces must be thoroughly clean and free of all contaminants, dirt and grease. Any surface imperfections and irregularities (screw holes, etc) should be patched with a stopping compound and sanded flush to the surrounding surface. Then apply a good quality primer/sealer primer/ sealer with a brush, roller, or spray as per manufacturer's instructions.
- ✓ If you are commencing the first Vertex panel next to another cladding type, leave a 10 mm expansion joint between the ProBoard Vertex panel and the other cladding type. Fill all expansion joints with 4-hour fire rated sealant.

## Vertex Installation Instruction

Diagram 1



### Screw Fixing (See diagram 1)

Between any horizontal joins and down the vertical join run a thin bead of paintable exterior grade polyurethane joint sealant.

Fix the first panel approximately 22mm from the corner and 12mm – 15mm from the top sheet perimeter.

Approved screws, 8-gauge x 40 mm Stainless steel Class 304 needle point self-tappers are to be fixed at a maximum of 300mm centres.

Screws are to finish 0.5mm below the surface of the board.

### Back Blocking (See diagram 1)

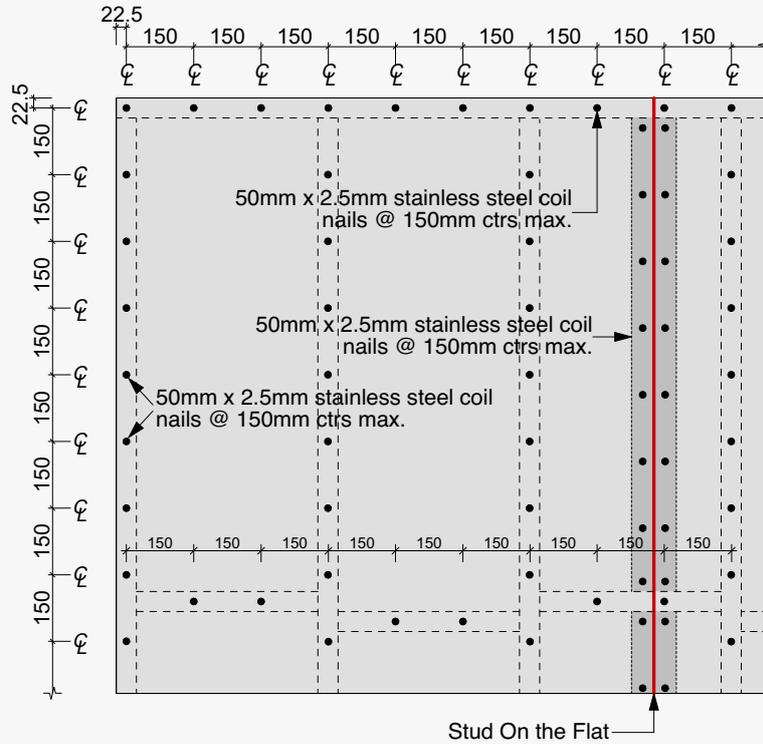
If ProBoard's Vertex panels do not meet vertically on a stud back blocking is required. Use a 90 mm x 45 mm stud on the flat:

Fit back block:

- Tightly to underside of top plate to top of noggin.
- Tightly to underside of noggin to the top of the bottom plate
- Screw fix at 300 centres

## Vertex Installation Instruction cont.

**Diagram 2**



### Coil Nail Fixing (See diagram 2)

Between any horizontal joins and down the vertical ProBoard panel join run a thin bead of paintable exterior grade polyurethane joint sealant.

Paslode 50 mm x 2.5 stainless steel coil nails can be used for fixing. Coil nails must be fixed at 150 mm centres.

### Back Blocking (See diagram 2)

If ProBoard's Vertex panels do not meet vertically on a stud, back blocking is required. Use 90mm x 45mm stud on the flat:

Fit Back Block.

- a) Tightly to underside of top plate of noggins.
- b) Tightly to underside of noggins to the top of bottom plate.
- c) Fix with coil nails at 150mm centres.

## Vertex Installation Instruction cont.

After fixing the first ProBoard Vertex panel, run a small bead of paintable exterior grade polyurethane joint sealant down the ProBoard panel edge of the first panel and then fix the second panel. Ensure that no sealant gets onto the face on the panel. Repeat this process until all the panels are installed.

All imperfections etc. are to be filled with the jointing compound and sanded smooth and flush when dry.

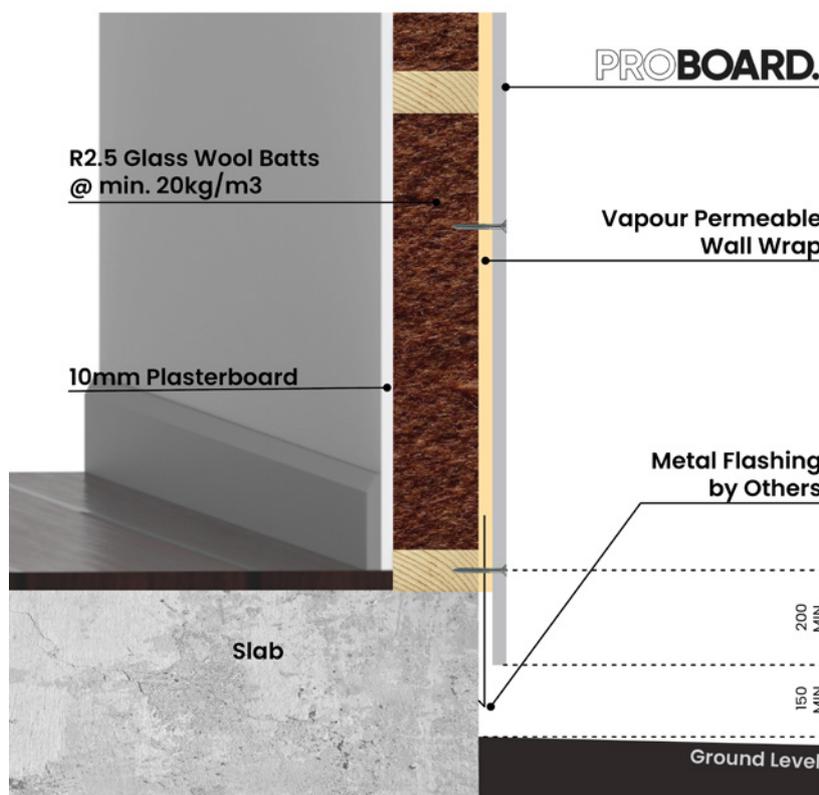
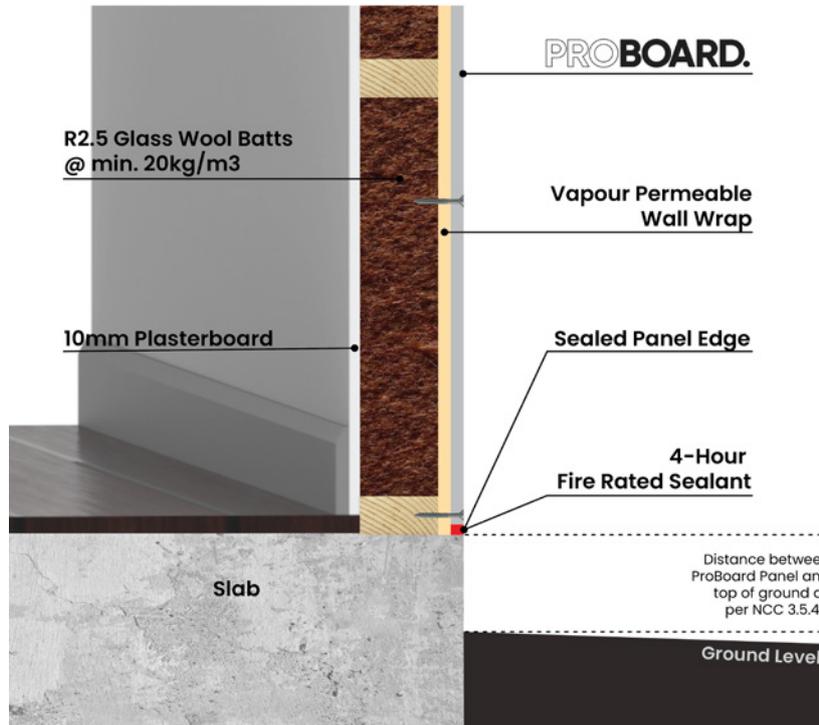
Before any finishing system is commenced, all surfaces must be thoroughly clean and free of all contaminants, oils, dirt and grease. Any surface imperfections and irregularities (screw holes, etc) should be patched with a stopping compound and sanded flush to the surrounding surface. Then apply a good quality primer/ sealer with a brush, roller, or spray as per manufacturer's instructions.

### Paint:

A good quality external paint system should be applied as per manufacturer's instructions ensuring a good quality primer/sealer is first applied.

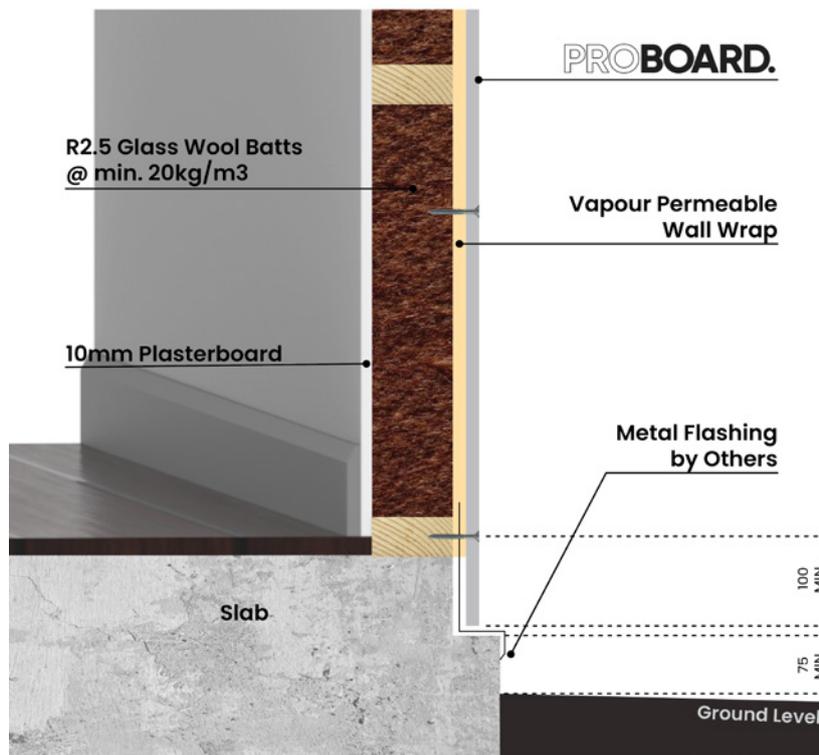
## Typical Technical Drawings

All our fire rated sealants can be replaced IN A NON FRL SYSTEM with a paintable exterior grade polyurathane joint sealant

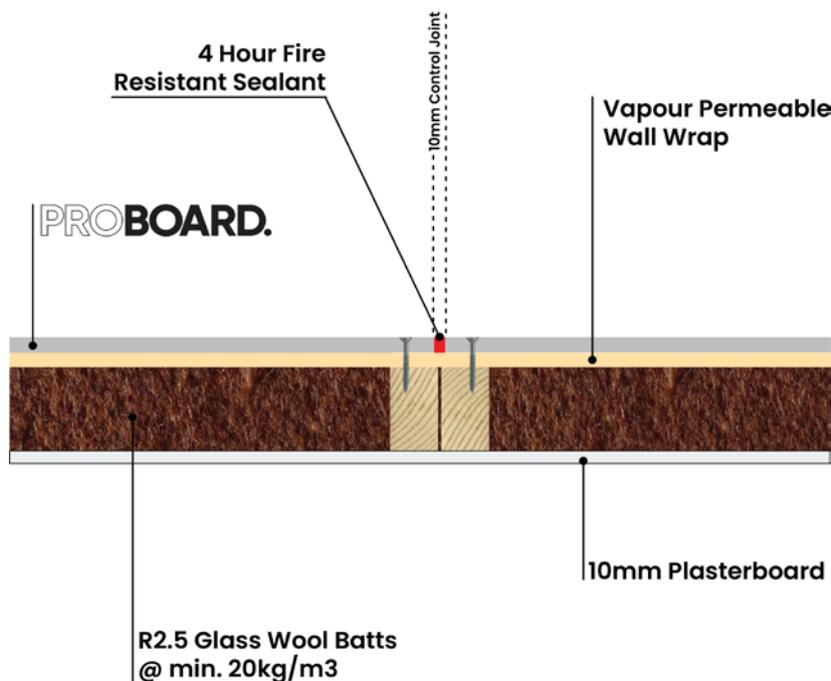


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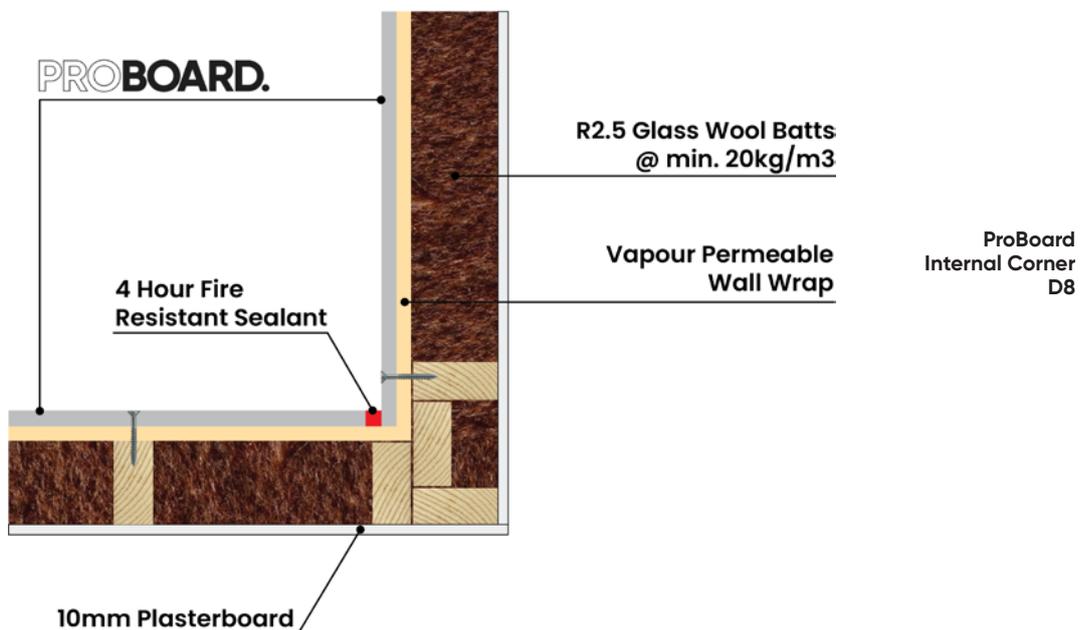
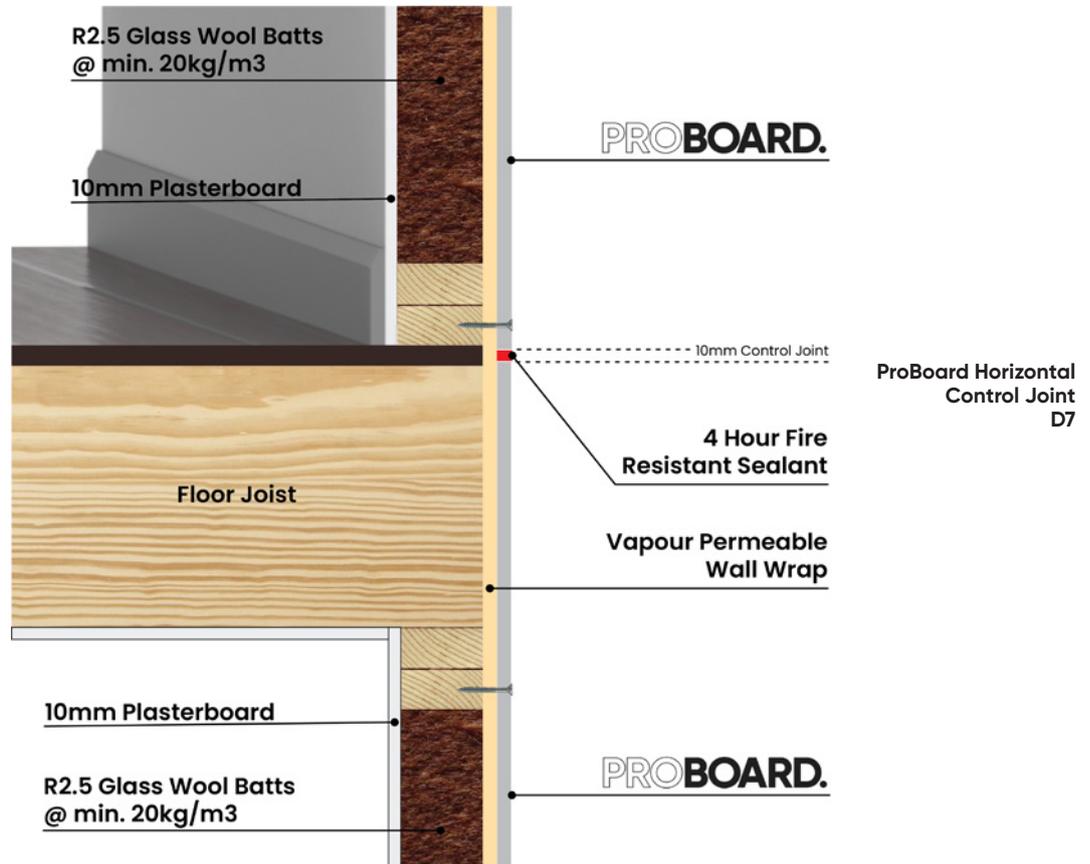
ProBoard Slab Rebate  
D3



ProBoard Vertical Control Joint  
D6

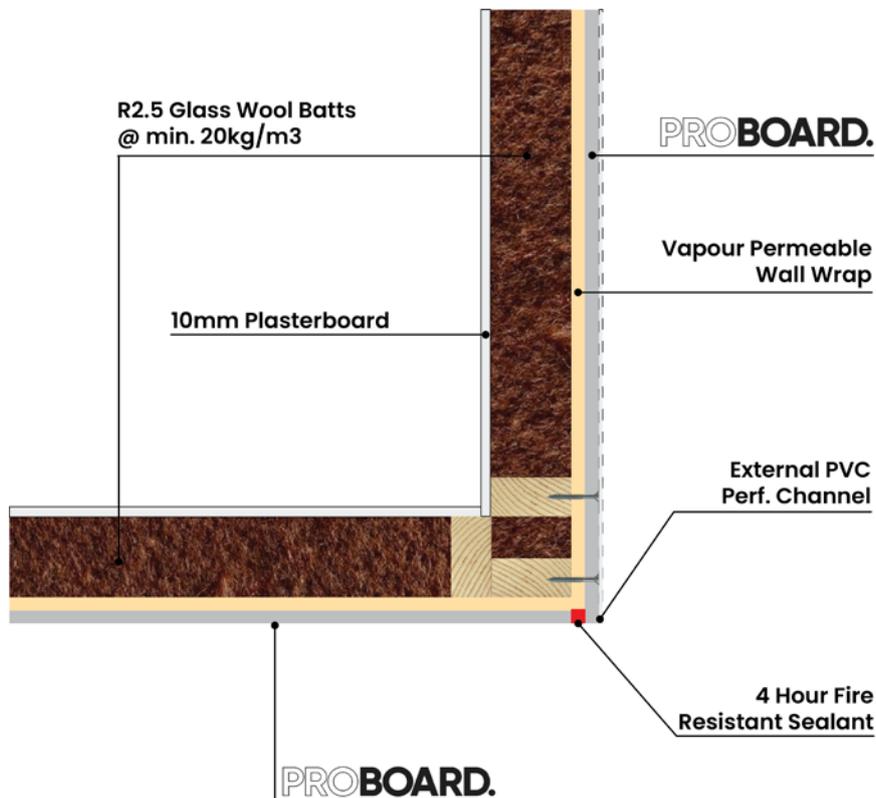
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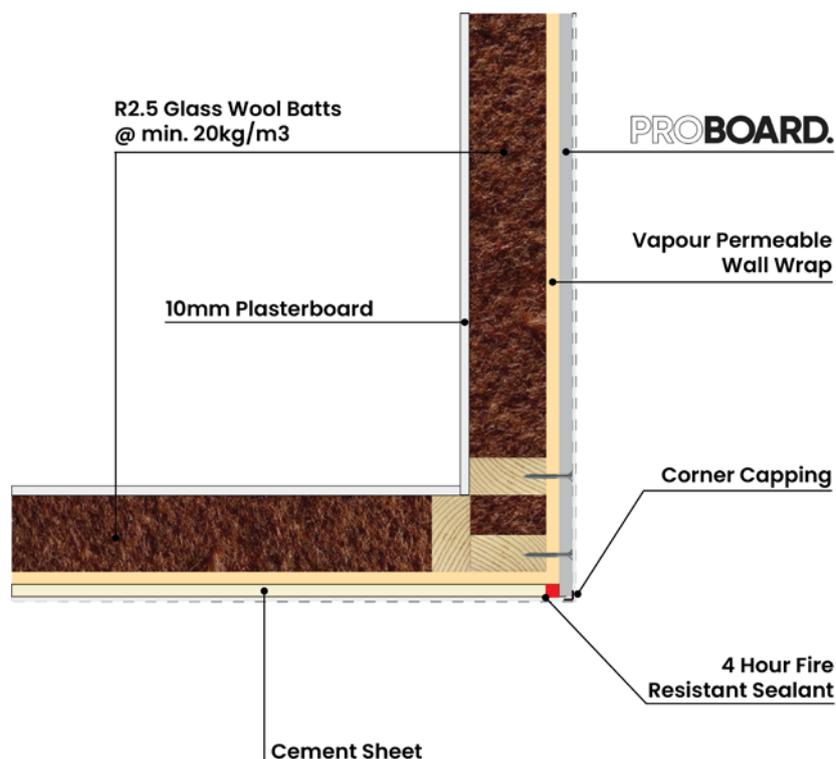


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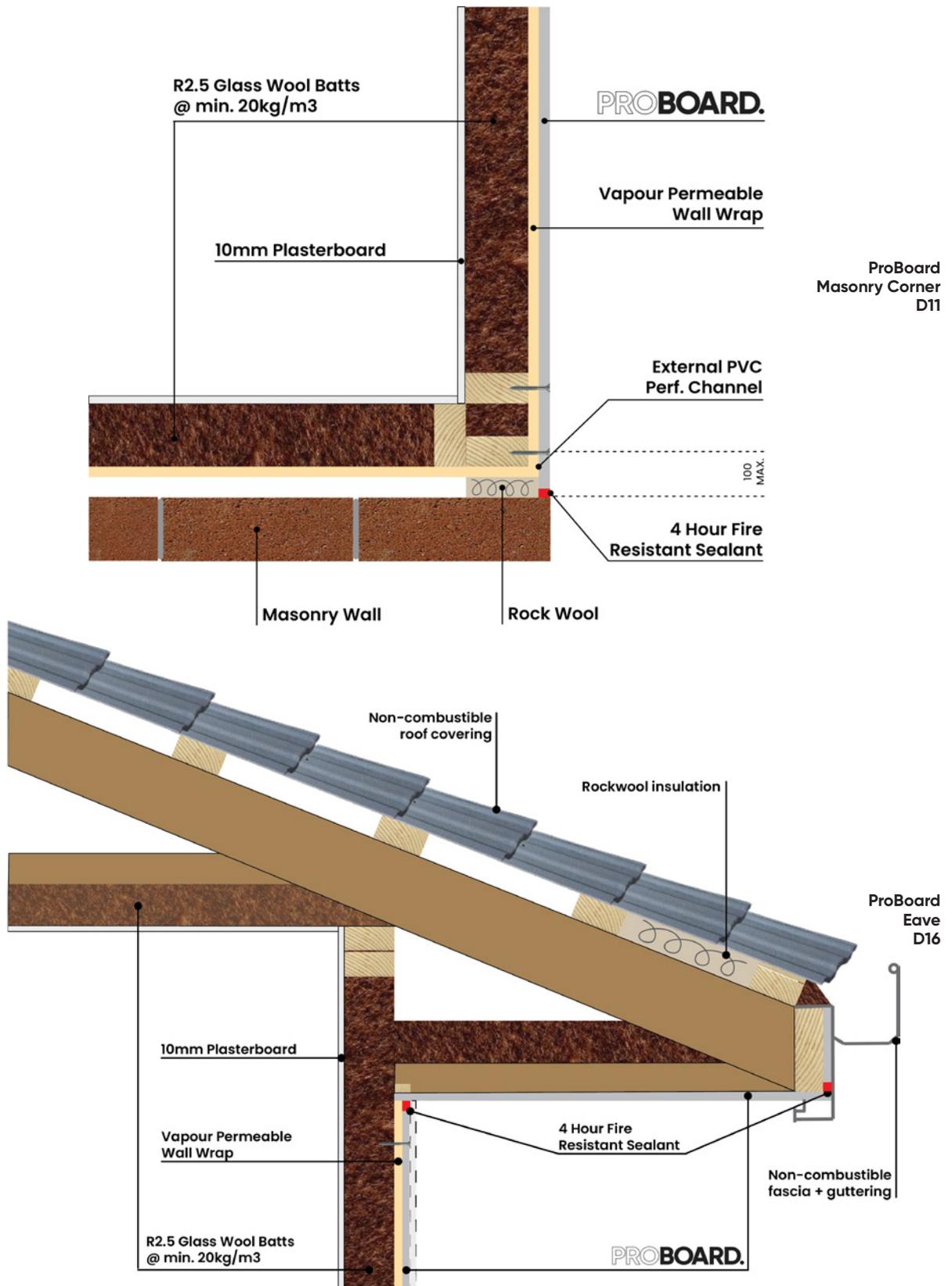
ProBoard  
External Corner  
D9



ProBoard External  
Cladding Corner  
D10

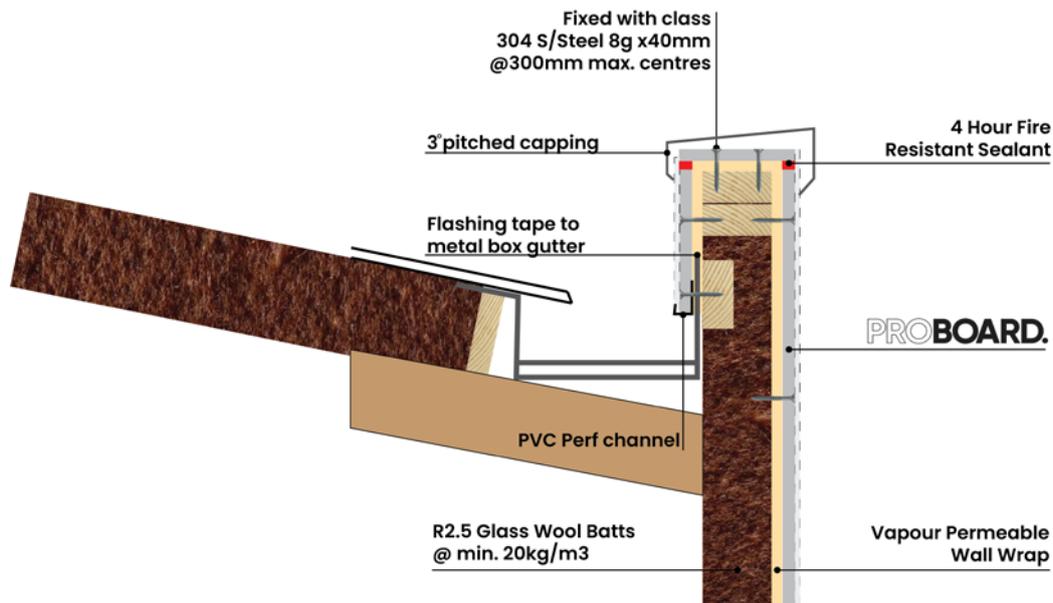
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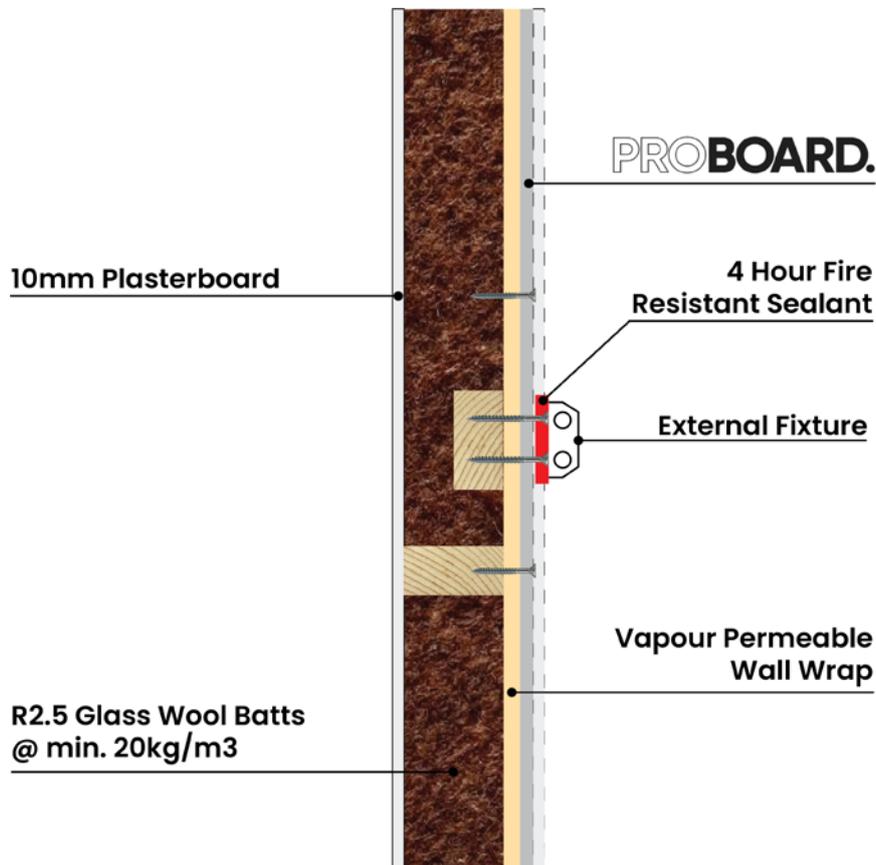


## Typical Technical Drawings

All our fire rated sealants can be replaced IN A NON FRL SYSTEM with a paintable exterior grade polyurathane joint sealant



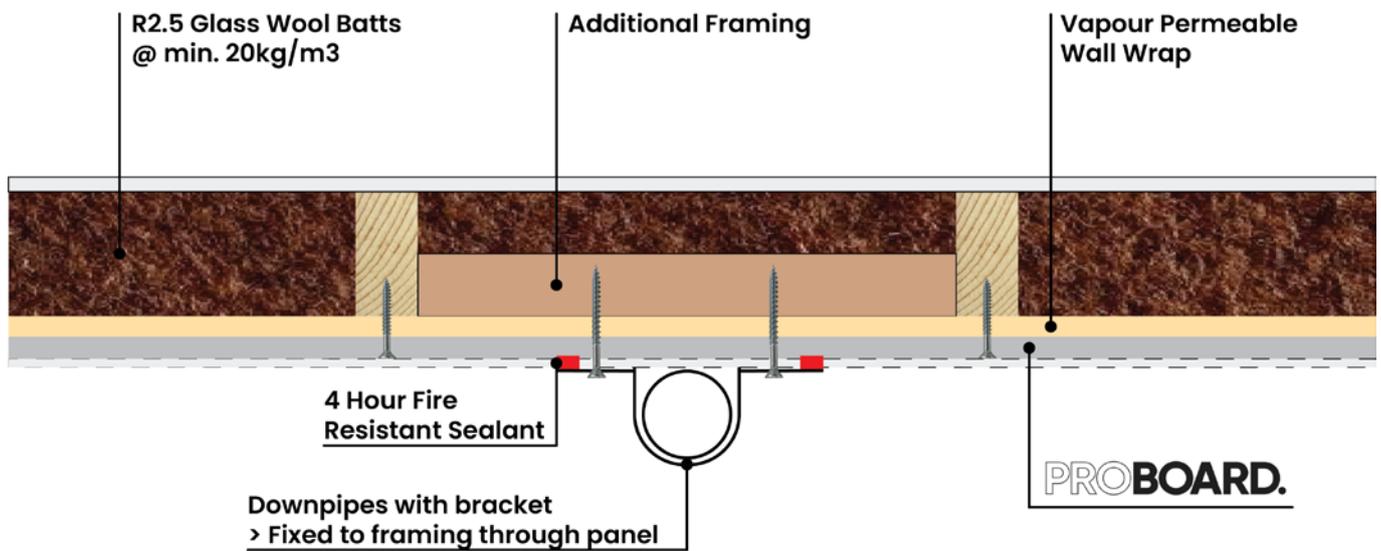
ProBoard Box Gutter D17



ProBoard External Fixing D19

## Typical Technical Drawings

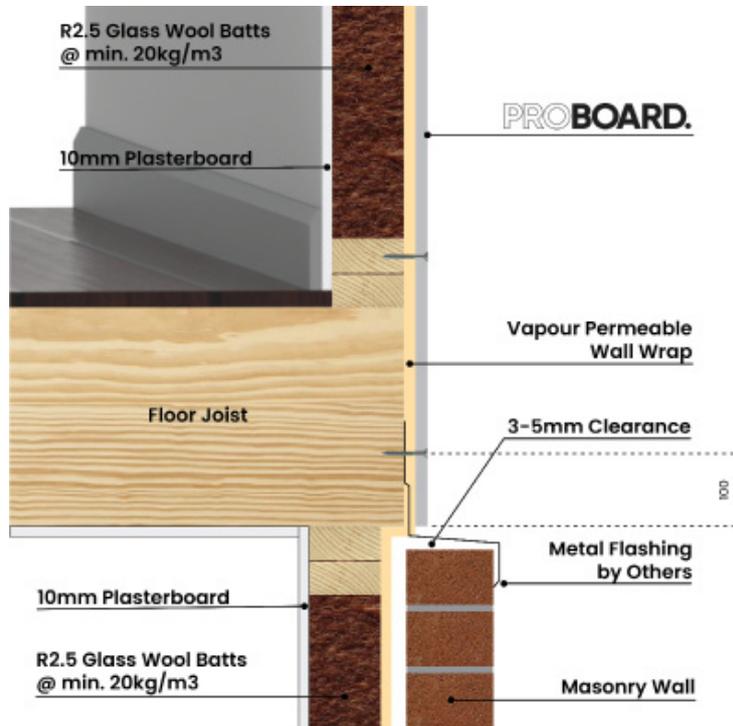
All our fire rated sealants can be replaced IN A NON FRL SYSTEM with a paintable exterior grade polyurathane joint sealant



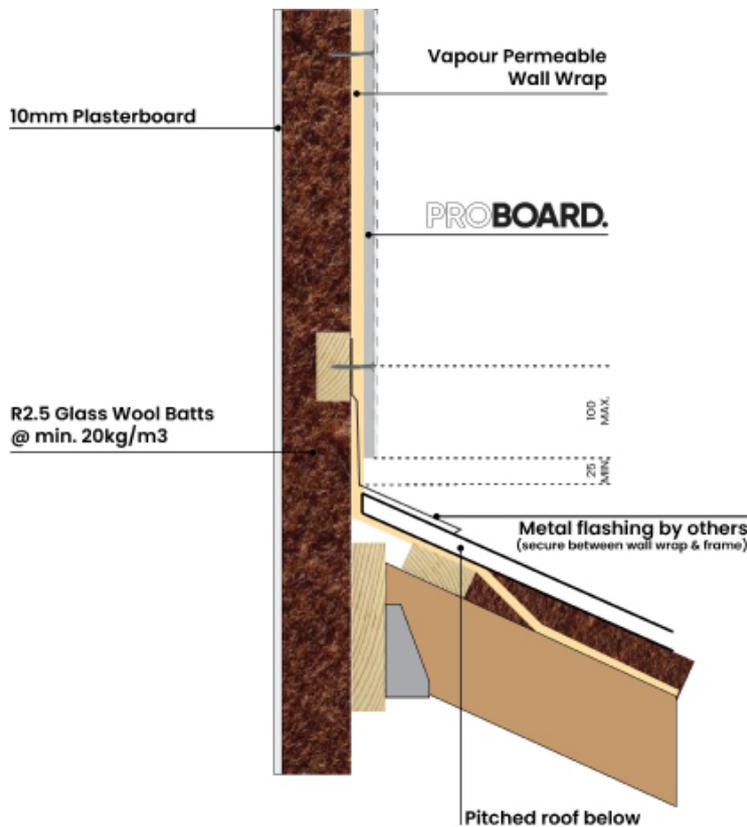
ProBoard  
Down Pipe  
D20

## Typical Technical Drawings

All our fire rated sealants can be replaced IN A NON FRL SYSTEM with a paintable exterior grade polyurathane joint sealant



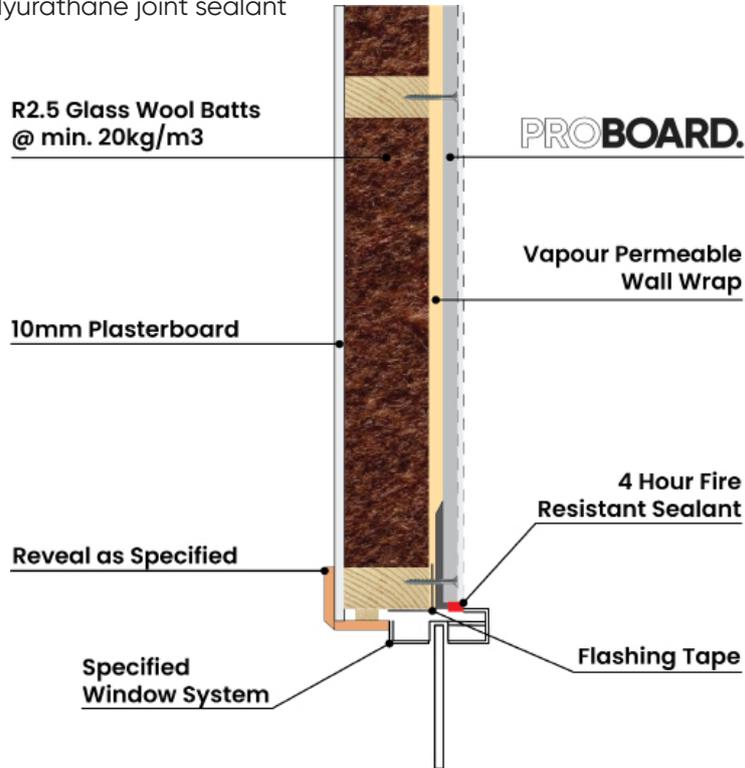
ProBoard Panel Over  
Masonry Wall  
D4



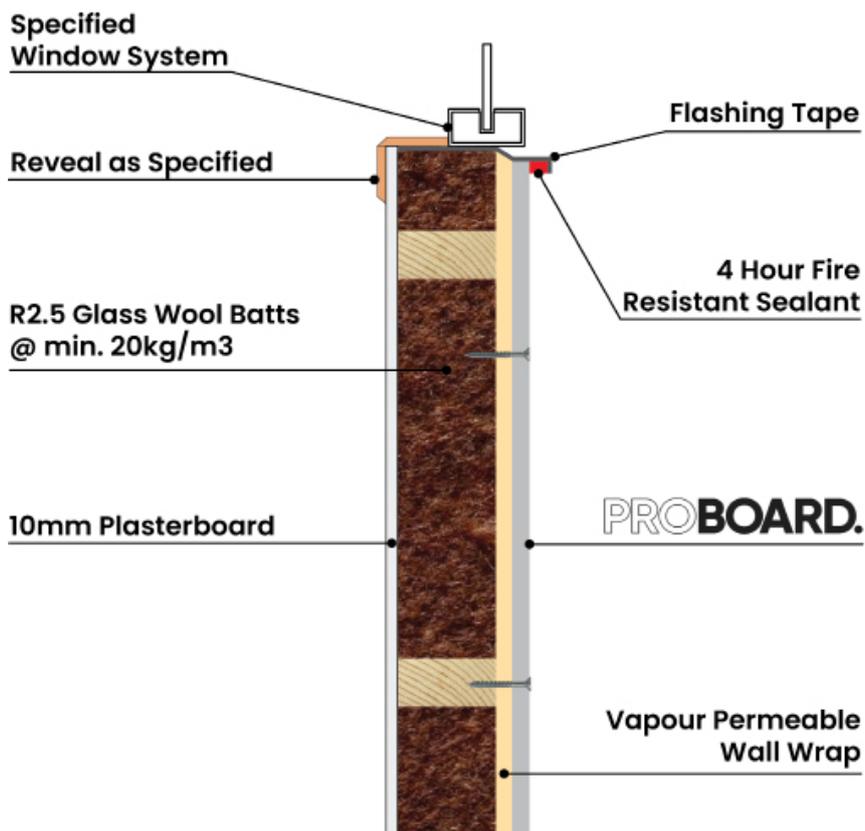
ProBoard Panel  
Over Roof  
D5

## Typical Technical Drawings

All our fire rated sealants can be replaced IN A NON FRL SYSTEM with a paintable exterior grade polyurathane joint sealant



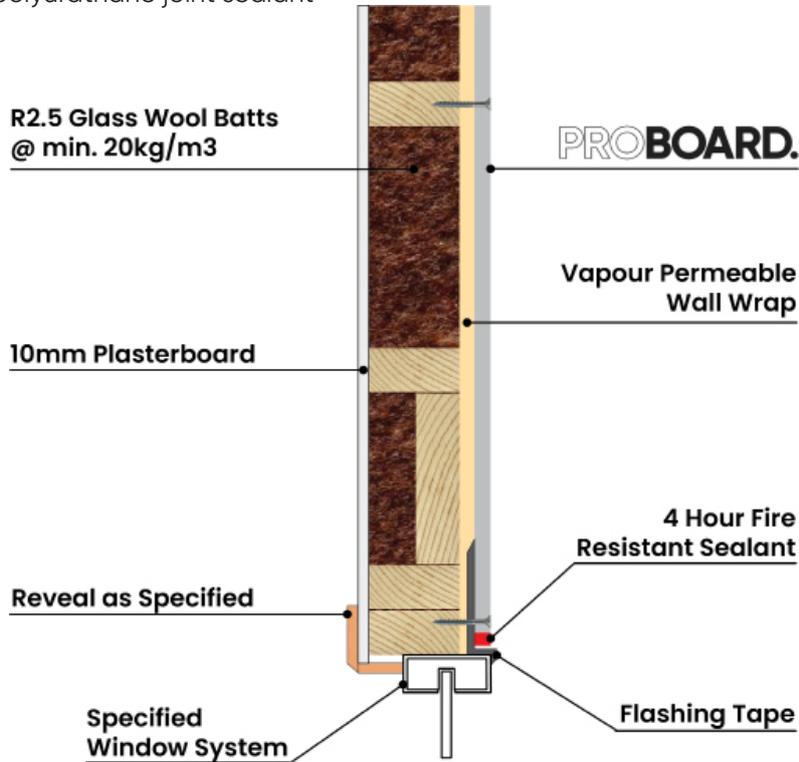
ProBoard  
Window Sill  
D12



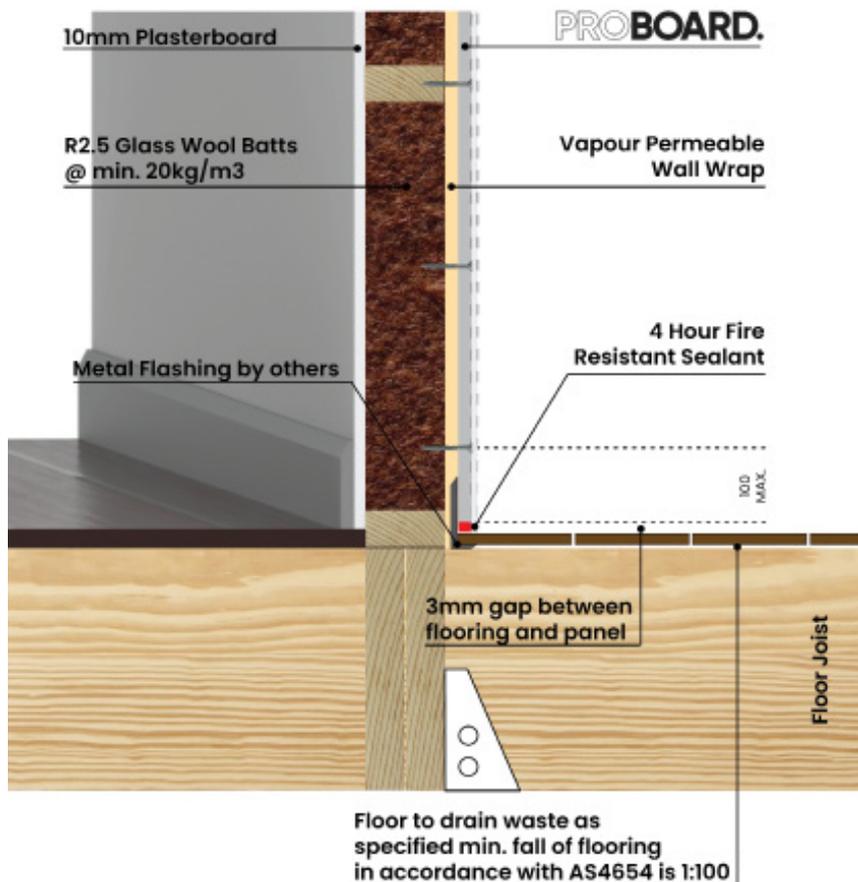
ProBoard  
Window Head  
D13

## Typical Technical Drawings

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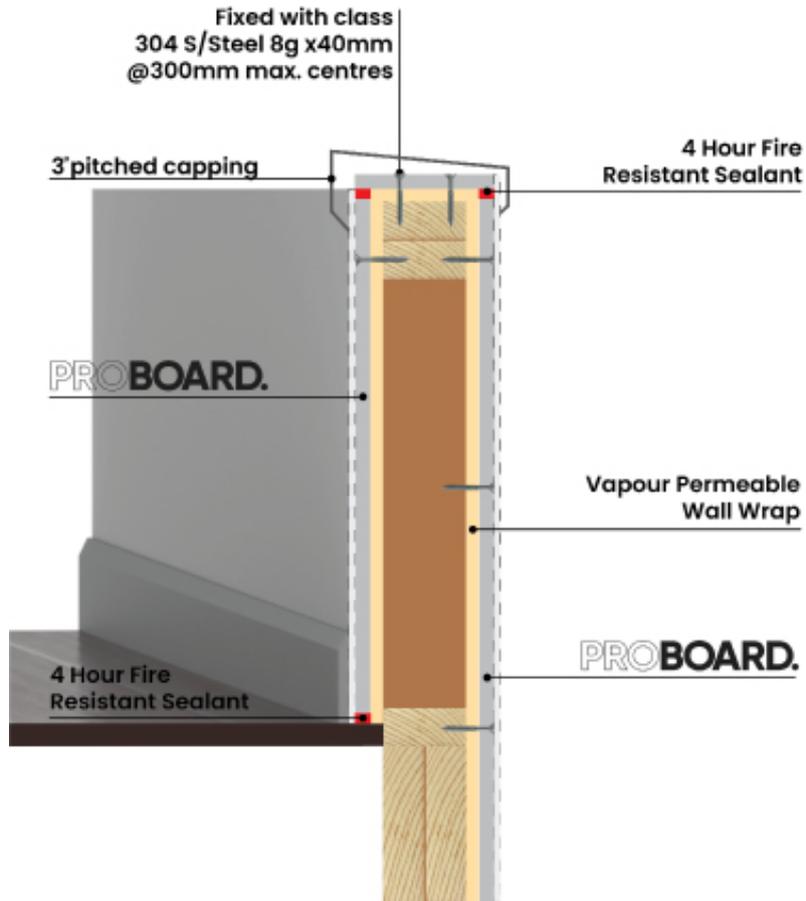
ProBoard  
Window Jam  
D14



ProBoard  
Balcony  
D15

## Typical Technical Drawings

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# PROBOARD.

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## **Disclaimer**

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Our Warranty, Material Data Sheet (MDS) is available from our web site or by contacting our office. All relevant, certifications, assessments and test reports can be supplied to your building surveyor, engineer or certifier upon request.