



MANUAL

MASONS ENVIRO AAC ON 45mm CAVITY [Steel Frame]

DISCLOSURE NOTE:

The information provided is for guide only and must be used alongside professional architectural/structural design. Professional architectural/structural design takes preference with any conflicting areas of the building design. All documents or data downloaded from www.mpb.co.nz or emailed from Masons Plastabrick Limited is the intellectual property of Masons Plastabrick Limited. Masons Plastabrick Limited takes no responsibility for any of the documents or data being used for any other purpose than for professional architectural/structural design.

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AAC ENVIRO PANEL VENEER TECHNICAL INFORMATION

- Reference Document : CodeMark Assessment Brief # CMA-AM130241

Issued by CertMark Australia PTY Ltd.



CONSIDERATIONS

General:

AAC ENVIRO Panels must be installed as per the details shown in this manual to ensure the quality of the cladding system. AAC ENVIRO Panels must not be installed in any situation where it will come into contact with the ground. AAC ENVIRO Panels cannot be used as retaining walls.

Pre-Installation checks and installation guide can be found on page 7 of the CodeMark Assessment Brief # CMA-AB 130241

AAC ENVIRO Panel Properties:

Dry Density:	525kg/m ³
Intensity:	4.0Mpa
Dry Shrinkage Value:	0.6mm/m
Water Absorption (by volume):	Up to 24 – 35%
Thermal Conductivity:	0.13w/mk
Sound Transmission Class (STC):	33 (50mm bare panel)
Fire Resistance:	1.5 hours
Panel Size:	2000mm x 600mm x 50mm

Performance:

AAC ENVIRO Panels fixed in accordance with the instruction and details in this manual will meet the requirements and relevant section of the New Zealand Building Code including:

- B1 – Structure
- B2 – Durability
- E2 – Moisture
- F2 – Hazardous Building Materials

Structure:

In terms of NZS 3604:2011 incorporating amendments 1 & 2, AAC Panels as per this manual are able to withstand all earthquakes and wind loadings in all areas of New Zealand.

Safety Precautions:

AAC ENVIRO Panel is Autoclaved Aerated Concrete. As with all concrete and fibre cement products, the dust produced when cutting or grinding them contains crystalline silica. This dust is irritating to the eyes, skin and respiratory system. Inhalation of this dust can cause irreversible damage to health. Wear suitable protective clothing and gloves at all times. When cutting, drilling or grinding panels do so in an open air environment or areas that are well ventilated and wear approved safety glasses and dust mask. All aspects of cutting, drilling or grinding must comply with the latest regulations of the Occupational Safety and health division of the Labour Department.

Handling & Storage:

AAC ENVIRO Panels should be stored on site on the pallets they are delivered on and kept covered and free of dampness until required. Care should be taken when handling to limit damage to edges or corners.

Durability & External Moisture:

AAC ENVIRO Panel fixings in accordance with this manual will meet the requirements of NZBC Clause B2.3.1 (b). The cavity is provided to;

- Allow moisture to run down the inside of the AAC ENVIRO Panel and escape through the weepholes without bridging the cavity.
- Provide sufficient air space permitting air to circulate within the cavity and dry the AAC ENVIRO Panel.

The Plastabrick plastering system meets the requirements of NZBC Clause B2.3.1 & E2.2.3 to finalise this wall cladding system.

Hazardous Building Materials:

AAC ENVIRO Panels are non-hazardous in terms of Clause F2 of the NZBC provided the safety precautions included in the manual are adhered to.

Scope and Limitations:

AAC ENVIRO Panel System is to be installed on timber framed buildings within the scope of paragraph 1.2 of Acceptable Solution E2/AS1 that are designed to NZS 3604 or steel framed buildings that are designed to NASH

Maintenance & Damage:

All information relating to the maintenance and repair of the coating system is provided by the applicator. Or refer to the CodeMark Assessment Brief # CMA-AB130241 Pages 6 & 10.

PLASTER SPECIFICATIONS

- 1mm Finishing Plaster: Factory-mixed polymer modified cement based finishing plaster.
- Pre-Coloured Texture Finishing Plaster: Factory-mixed 100% acrylic plaster.
- Adobe Finishing Plaster: Polymer modified cement based plaster.
- Skimming Render: A specially blended polymer modified cement based plaster.

Finished with:

- Plastabrick Lime Stop Sealer: Applied over plaster finish to seal the plaster prior to painting.
- Plastabrick Premium Build 100% Acrylic Latex Paint: Applied in two coats to the exterior plastered surface.

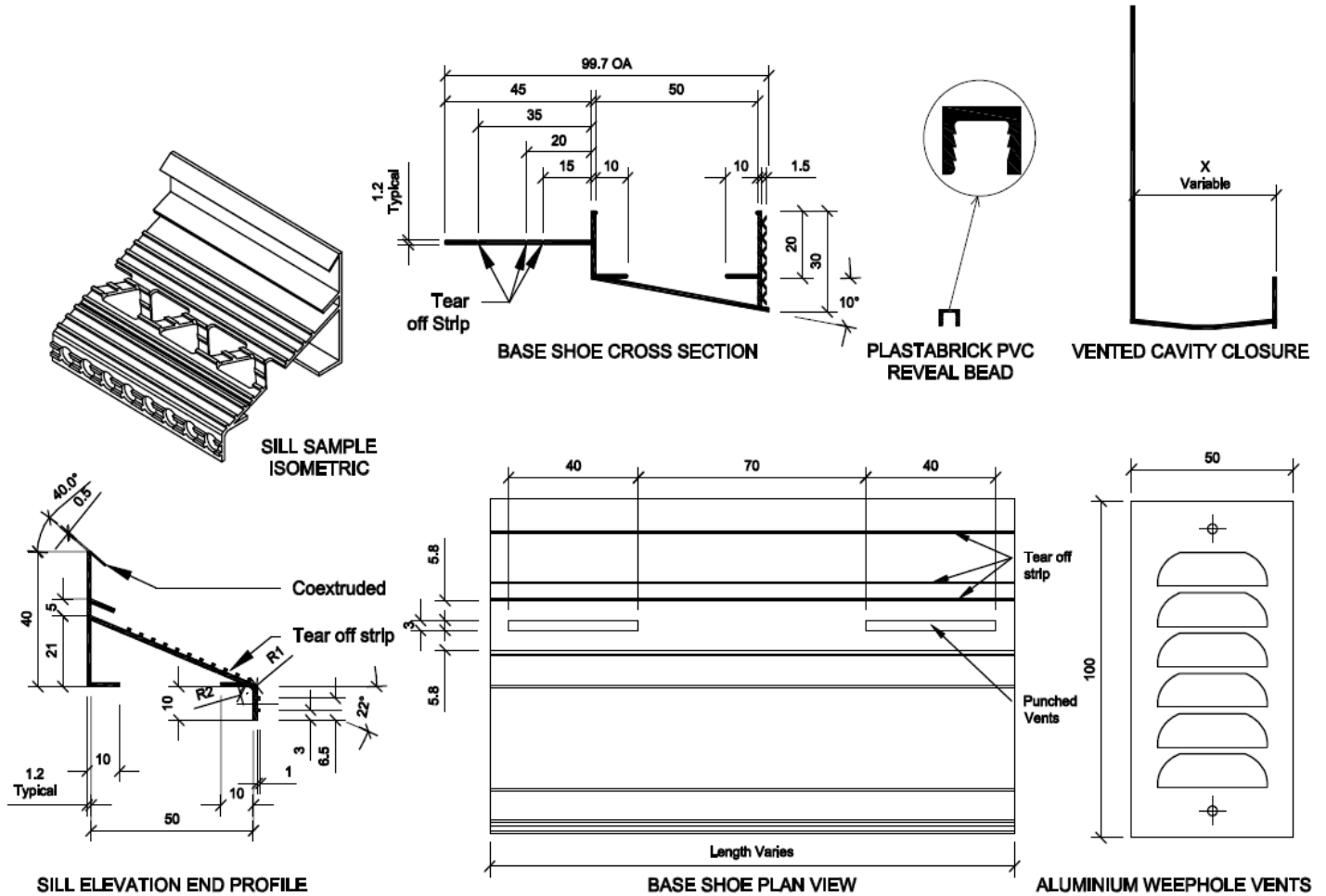
Licensed Installers:

For full comprehensive supply and installation advice, plus 15 year warranty the Masons ENVIRO AAC Panel System must be installed and plastered by a Masons Licenced Applicator. Contact Masons on 0800 522 533 or visit www.mpb.co.nz for your local applicator.

Further Details:

This manual covers the most commonly used applications of the Masons ENVIRO AAC Panel System in the pages following. If specifiers require additional or modified details please contact Masons Plastabrick Limited.

LIST OF COMPONENTS:



PANELS:

2000mm x 600mm x 50mm size Sheet.
 50mm Autoclaved aerated concrete (AAC) panels.
 AAC ENVIRO Tie is a 45mmx45mm H3.2 timber batten cut to 200mm lengths, see Detail 01

NAILS:

90mm galvanised ring shank nails are used to fix the ENVIRO ties to the framing. All nails shall

PLASTER SYSTEM:

Masons AAC coating system is used over ENVIRO panels. Plastabrick reinforcing mesh. Plastabrick pre-meshed corner beads.

Supplied by Masons Plastabrick Ltd.

MORTAR GLUE

ENVIRO jointing glue is used in jointing and stopping of ENVIRO panels.

comply with Compliance document E2/AS1 Table 20.

Supplied by Masons Plastabrick Ltd.

LIST OF COMPONENTS

Continued:

SCREWS:

14 x 75mm class 3 bugle head screws (14x75 bugle head stainless steel screws in sea spray zones) are used for fixing the 50mm panels to the ENVIRO ties. All screws shall comply with Compliance Document E2 / AS1 Table 20

Supplied by Masons Plastabrick Ltd.

SEALANTS:

Low expandable PU foam that complies with AAMA 812-04 for use in control joints of ENVIRO panels. BOSTIK Safe Seal paintable urethane sealant should be applied in strict accordance with the manufacturers specifications.

FLASHINGS & MOULDINGS:

Plastabrick PVC Revel Bead Flashing

Plastabrick PVC Sill Flashing

Plastabrick PVC Base Shoe & Cavity Closure

Plastabrick PVC Vented Cavity Closure

Plastabrick Corner Soaker

Powder coated aluminium Head Flashing

Supplied by Masons Plastabrick Ltd.

ADHESIVE:

All PVC flashing's and mouldings are glued to the ENVIRO panels using BOSTIK Safe Seal construction adhesive.

ANTI-CORROSION PAINT:

CRC Zinc It (aerosol can 350g) or similar complying with AS/NZS 2311:2000, Part 2.3 is applied to all exposed reinforcing steel.

DAMP PROOF COURSING (DPC)

Masons DRYFIX DPC

supplied by Masons Plastabrick Ltd.

VENTS:

50 mm x 100mm aluminium vents

supplied by Masons Plastabrick Ltd.

TAPE:

EIFS Tape, NZ Tape Specialists Future Seal Tape or Masons Barricade PLUS Window Tape.

APPRAISAL NOTE: Design Information

Framing

Timber Framing

7.1 Timber used in timber framing shall be treated as required by NZS 3602.

7.2 Timber framing must comply with NZS 3604 for both buildings or parts of buildings within the scope limitations of NZS 3604. Where buildings or parts of buildings are outside the scope of NZS3604 then they must be to specific design in accordance with NZS 3603 and AS/NZS 1170. Where specific design is required, the framing must be of at least the equivalent stiffness to the framing provisions of NZS 3604. In all cases, studs must be at a maximum of 600mm centres.

7.3 Timber framing and AAC Enviro™ Tie battens must have a maximum moisture content of 18% at the time of cladding application. (Problems could arise later on due to timber shrinkage if over 18%)

Note: For the latest steel framing information refer to <http://www.nash.au/nash/>

Steel Framing

7.4 Steel framing must be to a specific design meeting the requirements of the NZBC. (NASH 3405: 2006)

7.5 The minimum steel framing specification is 'C' section studs and nogs of overall section dimensions of 76mm web by 40mm flange. Steel thickness must be a minimum 0.55mm.

7.6 For steel framed buildings situated within NZS3604 defined wind zones up to and including 'Very High' studs, must be at maximum 600mm centres. All other buildings studs must be at maximum 400mm centres. Dwargs must be fitted flush with the stud.

ENVIRO™ AAC Panel Layout

7.7 Enviro™ AAC Panels are installed horizontally in a stretcher bond pattern. Vertical panel edges may be jointed on stud or off stud. Enviro™ AAC Panels must be supported at fixing locations with vertical cavity battens or cavity spacers 100mm long max. in accordance with the requirements of NZBC Acceptable Solution E2/AS1, paragraph 9.1.8.2(f). At the base of the wall the Enviro™ AAC Panel can be either rested on a concrete rebate (100mm below finished floor level) or hang 50mm below the finish floor level.

General

8.1 Punchings in the cavity closer and head flashing provide a minimum ventilation opening area of 1000mm² per lineal metre of wall as per the requirements of NZBC Acceptable Solution E2/AS1, paragraph 9.1.8.3 (b).

8.2 The Masons Plastabrick aluminium weep hole vents provide a minimum ventilation opening area of 1000mm² per lineal metre of wall when fixed at 1200mm centres as per the requirements of NZBC Acceptable Solution E2/AS1 paragraph 9.1.8.3 (b).

8.3 The clearance between the finished floor level and ground level as outlined in NZS 3604 must be adhered to at all times. At ground level, paved surfaces must be kept clear from the bottom edge of the Enviro™ AAC Panel System by a minimum of 100mm, and unpaved surfaces by 175mm in accordance with the requirements of NZBC Acceptable Solutions E2/AS1, Table 18.

Design Information Continued

8.4 At balcony, deck or roof to wall junctions, the bottom edge of the Enviro™ AAC Panel must be kept clear of any adjacent surface, or above the top surface of any adjacent roof flashing by a minimum of 35mm in accordance with the requirements of NZBC Acceptable Solution E2/AS1, paragraph 9.1.3.6.

8.5 Where the Enviro™ AAC Panel Systems abuts other cladding systems, designers must detail the junction to meet their own requirements whilst meeting performance requirements of the NZBC. The Technical Literature does provide some guidance. Details not included within the Technical Literature have not been assessed and are therefore outside the scope of this Appraisal.

Control Joints

9.1 Control joints where Enviro™ AAC Panels are used must be constructed in accordance with the Technical Literature and provided as follows;

- Horizontal control joints - To be installed when intermediate floor joists are not seasoned and/or when the height of the wall exceeds 10m
- Vertical Control Joints - at maximum 10m centres; aligned with any control joint within the structural framing, or where the system abuts other cladding systems. Located at both internal and external corners.

(Note: Where possible control joints shall be located in line with window and door openings. Horizontal and vertical control joints must be located over structural supports. The Technical Literature provides some guidance for the design of vertical control joints where the system abuts different cladding types. Details not included within the Technical literature or those that are marked as 'Specific Design Only' are outside the scope of the Appraisal Certificate and are the responsibility of the designer.)

Interstorey Junction

10.1 Inter-storey drained joints must be provided for walls over 2 storeys in height, in accordance with the requirements of NZBC acceptable solution E2/AS1, paragraph 9.1.9.4 (b).

Structure - Clause B1

Mass

11.1 The mass of Enviro™ AAC Panel is approximately 25kg/m² and when the Plastabrick Plaster System is applied, the wall cladding is then considered a medium wall cladding in terms of NZS 3604.

Impact Resistance

11.2 The system has adequate resistance to impact loads that the cladding system is likely to be subjected to when used in a residential situation. The likelihood of impact damage to the system when used in light commercial situations should be considered at the design stage, with appropriate protection provided such as bollards or barriers where necessary.

Wind Zone

11.3 The Enviro™ AAC Panel system is suitable for use in all building wind zones as per NZS 3604, up to, and including 'Very High' where buildings are designed to meet the performance requirements of NZBC Acceptable solution E2/AS1, or up to the ultimate limit state (ULS) wind pressure of 2500Pa when the building is subject to specific design.

Design Information Continued

ENVIRO™ AAC Panel Fixing

11.4 Where a 45mm cavity is produced the Enviro™ Tie Batten is fixed through to the wall framing at 500 centres vertically. The Enviro™ AAC Panel must then be fixed through into the Enviro™ Tie Batten and cavity spacers at 500mm vertical fixing centres.

11.5 Where a 20mm cavity is produced the Enviro™ AAC Panel must be fixed through the cavity battens and cavity spacers to the wall framing at maximum centres of 500mm.

Note:

- *500mm centres is applicable to both Low– very high NZS 3604 defined building wind zones with studs at maximum 600mm centres, and; Specifically designed buildings up to design differential 2.5kPa ULS wind pressure with studs at maximum 600mm centres.*
- *Fixings to be positioned minimum 50mm in from the edge of the panel giving an overall layout of 500mm centres per panel.*
- *Fixings are also required horizontally at 600mm centres.*
- *A minimum of 6 bugle head screws per panel is required*
- *Bugle head screws must be embedded a maximum 10mm into the Enviro™ AAC Panel.*

Durability - Clause B2

12.1 The Enviro™ AAC Panel System when used in accordance with this Appraisal Certificate and subjected to normal conditions of environment and use will meet the performance requirements of NZBC B2.3.1 (b), 15 years for the cladding system and plaster finish, and the performance requirements of NZBC B2.3.1 (c), 5 years for the exterior paint system (the life of the product not being less than 5 years).

Maintenance

12.2 Regular maintenance is essential to ensure the performance requirements of the NZBC are met and to ensure the maximum serviceability of the Enviro™ AAC Panel System.

12.3 Regular cleaning (at least annually) of the paint coating is required to remove grime, dirt and organic growth as per the Technical Literature in order to maximize the life and appearance of the acrylic paint coating. Paint coatings must be reapplied every 5 years in accordance with the paint manufacturers instructions. Re-coating colours shall have an LRV (light reflectance value) of 40% or greater.

12.4 Regular inspections (at least annually) must be made on the system to ensure that all aspects of the Enviro™ AAC Panel System including the coating system, plasters, flashings and any sealed joints remain in a weatherproof condition. Any cracks, damaged areas or areas showing signs of deterioration that could allow water ingress, must be repaired immediately. The Enviro™ AAC Panel System must be maintained and repaired in accordance with the instructions from Masons Plastabrick Ltd.

12.5 Minimum ground clearance as set out in this Appraisal and Technical Literature must be maintained at all times during the life of the system to maintain the durability and weathertightness of the system.

Control Of External Fire Spread

13.1 The Enviro™ AAC Panel System is considered to meet the performance requirements of NZBC C3.3.5 for use as an external wall cladding when restricted to:

- Single storey buildings 1m or more from the boundary for all purpose groups

- Buildings up to 7m high, 1m or more from the boundary, for all purpose groups other than SC and SD.

Design Information Continued

13.2 Clearance separations from chimneys and flues are not required for the Enviro™ AAC Panel. Where the panel is used with or attached to a heat sensitive material, the heat sensitive materials must be separated from chimneys and flues in accordance with the performance requirements of NZBC Acceptable Solution C/AS1, part 9 for protection of combustible materials.

External Moisture - Clause E2

14.1 When installed in accordance with this Appraisal Certificate and Technical Literature, the Enviro™ AAC Panel System will prevent the penetration of water that could cause undue dampness and/or damage to building elements and will therefore comply with clause E2.3.2.

14.2 The cavity must be sealed off from the roof and subfloor space in order to meet the performance requirement of E2.3.5.

14.3 The Enviro™ AAC Panel System allows excess moisture present at the completion of construction to be dissipated without causing permanent damage to the building elements to meet the performance requirement of Clause E2.3.6.

14.4 The details provided within the Technical Literature for weather resistance are based on the design principle of employing both a 1st and 2nd line of defence against moisture entry for joints, penetrations and junctions. Moisture ingress is prevented by detailing joinery or wall junctions as shown in the Enviro™ AAC Panel System technical manual. Any weathertightness details developed by the designer are outside the scope of this Appraisal Certificate and are the responsibility of the designer.

14.5 The presence of a drained cavity does not reduce the requirement to ensure the cladding wall and all the relevant junction, penetrations etc remain weather resistant in order to comply with Clause E2.3.6.

Water Vapour

14.6 The Enviro™ AAC Panel System is not impermeable therefore allows the escape of water vapour.

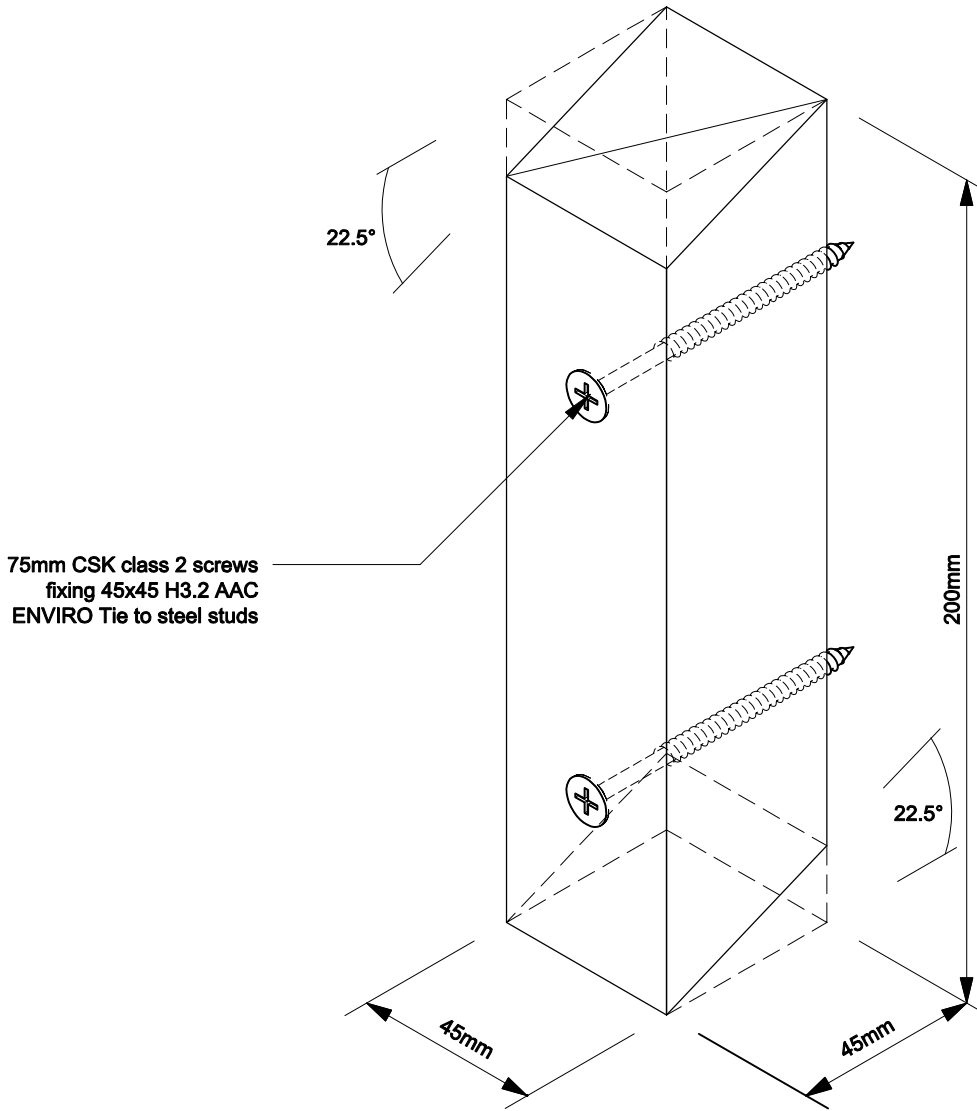
14.7 When the Enviro™ AAC Panel System is installed over a steel frame, an expanded polystyrene thermal break must be installed over the building wrap over each steel member (stud, nog, top and bottom plate) to provide a thermal break in accordance with the requirements of NZBC Acceptable Solution E3/AS1, Paragraph 1.1.4(d). The thermal break will also act as the cavity batten for the Enviro™ AAC Panel System and will therefore be a minimum 20mm thick in accordance with the requirements of Acceptable Solution E2/AS1, paragraph 9.1.8.4.

14.8 Where the thermal break is used across steel nogs it shall be reduced in thickness to 10mm thick to comply with the requirements of Acceptable Solution E2/ AS1, Paragraphs 9.1.8.2(f) and 9.1.8.3 (b)





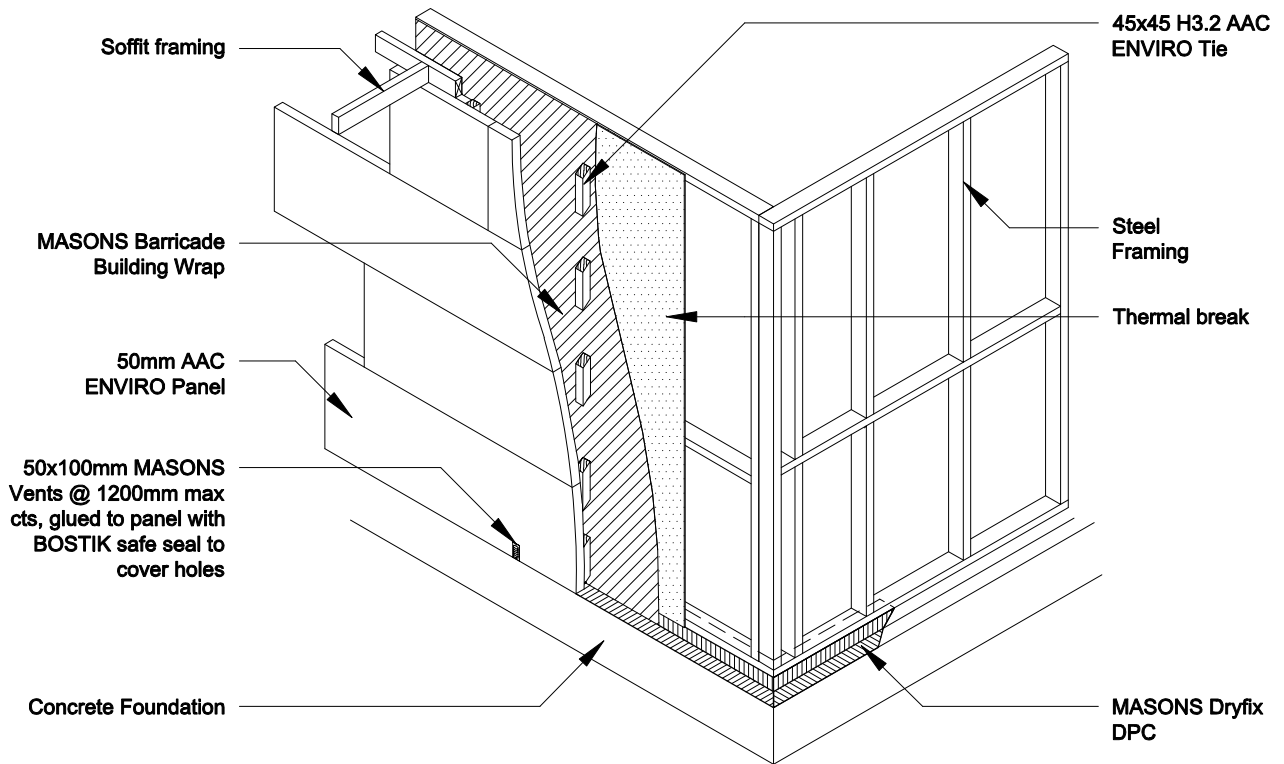




H3.2 AAC ENVIRO TIE

Detail 01 Scale 1:1.5

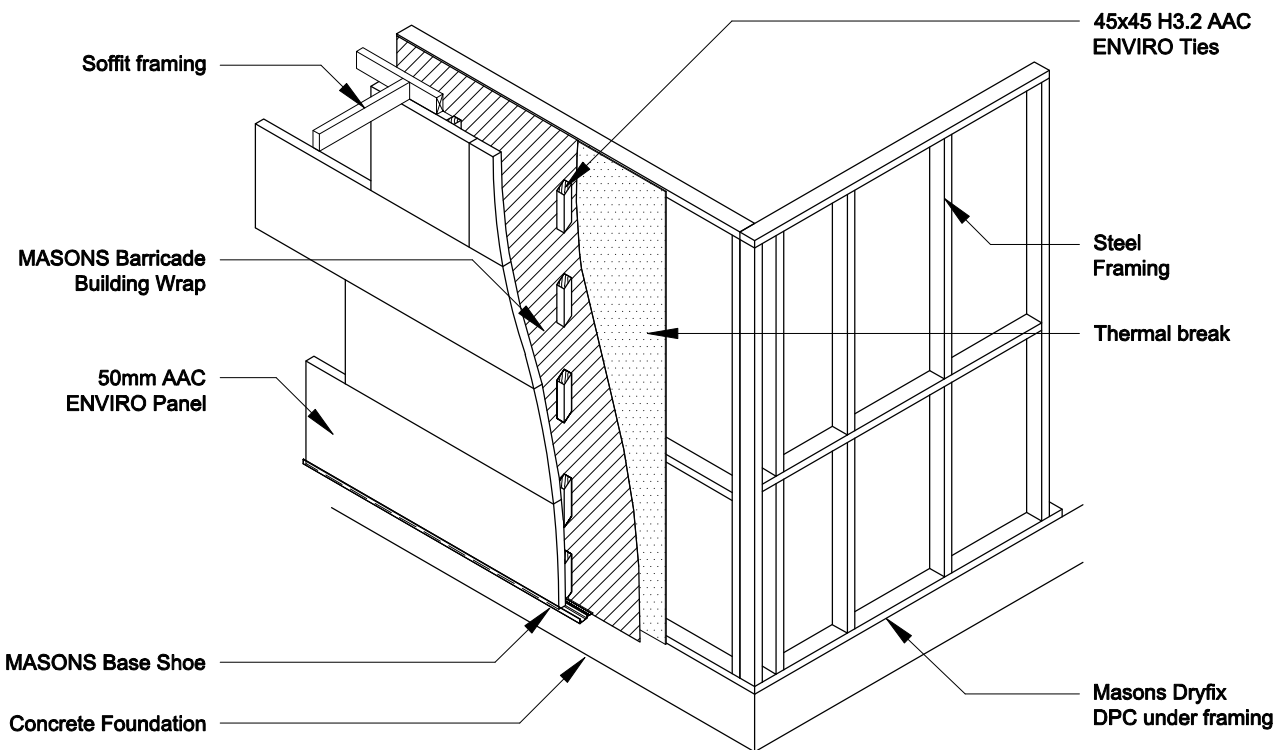
MASONS ENVIRO AAC ON 45mm CAVITY STEEL FRAME



**GENERAL LAYOUT
Concrete Floor With
Rebate**

Detail 02 NTS

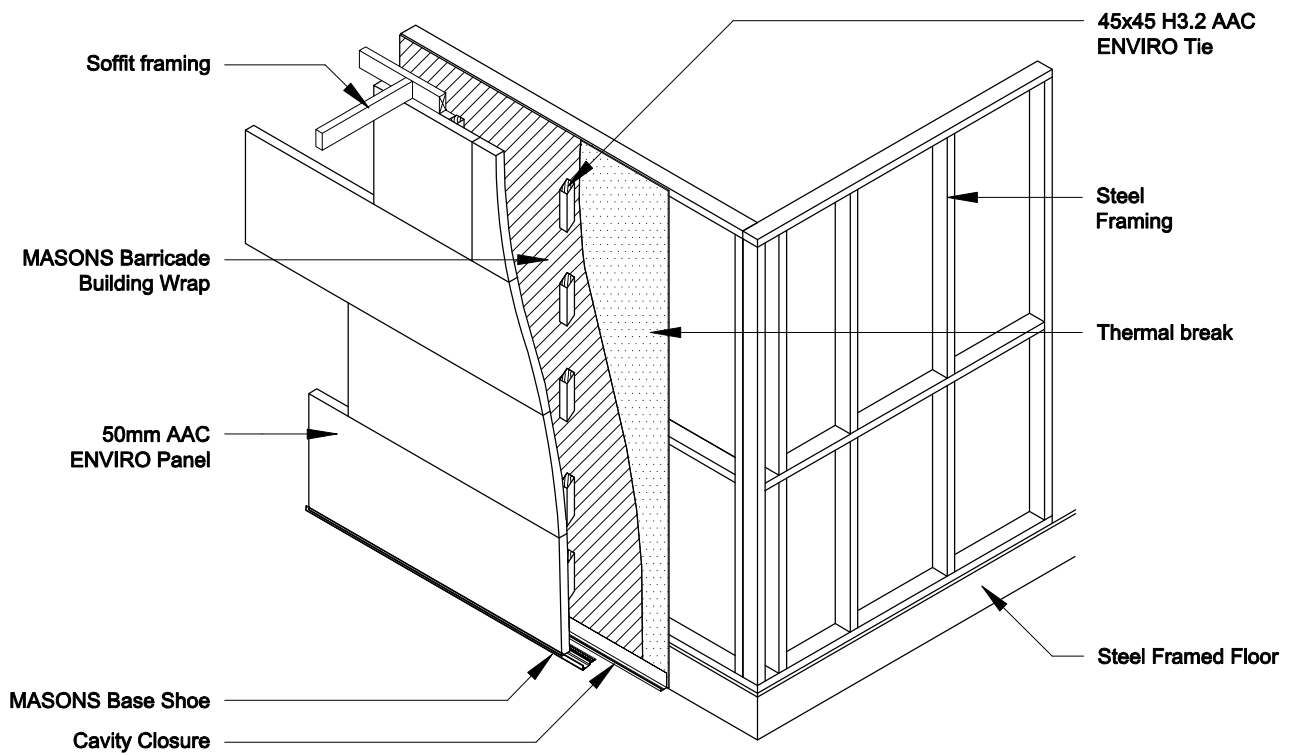
**MASONS ENVIRO AAC ON 45mm CAVITY
STEEL FRAME**



GENERAL LAYOUT
Concrete Floor Without
Rebate

Detail 03 NTS

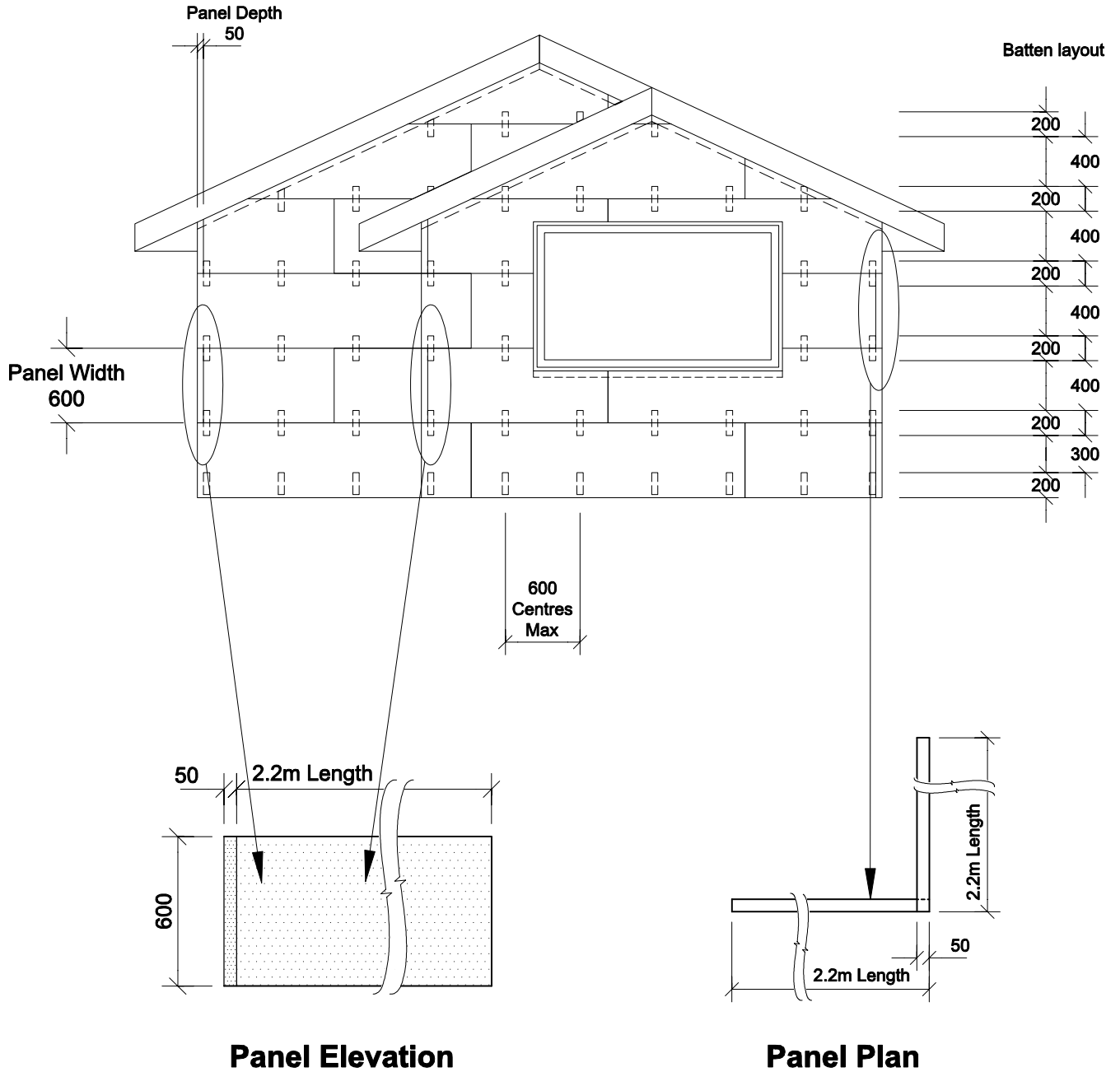
MASONS ENVIRO AAC ON 45mm CAVITY
STEEL FRAME



GENERAL LAYOUT
Steel Floor

Detail 04 NTS

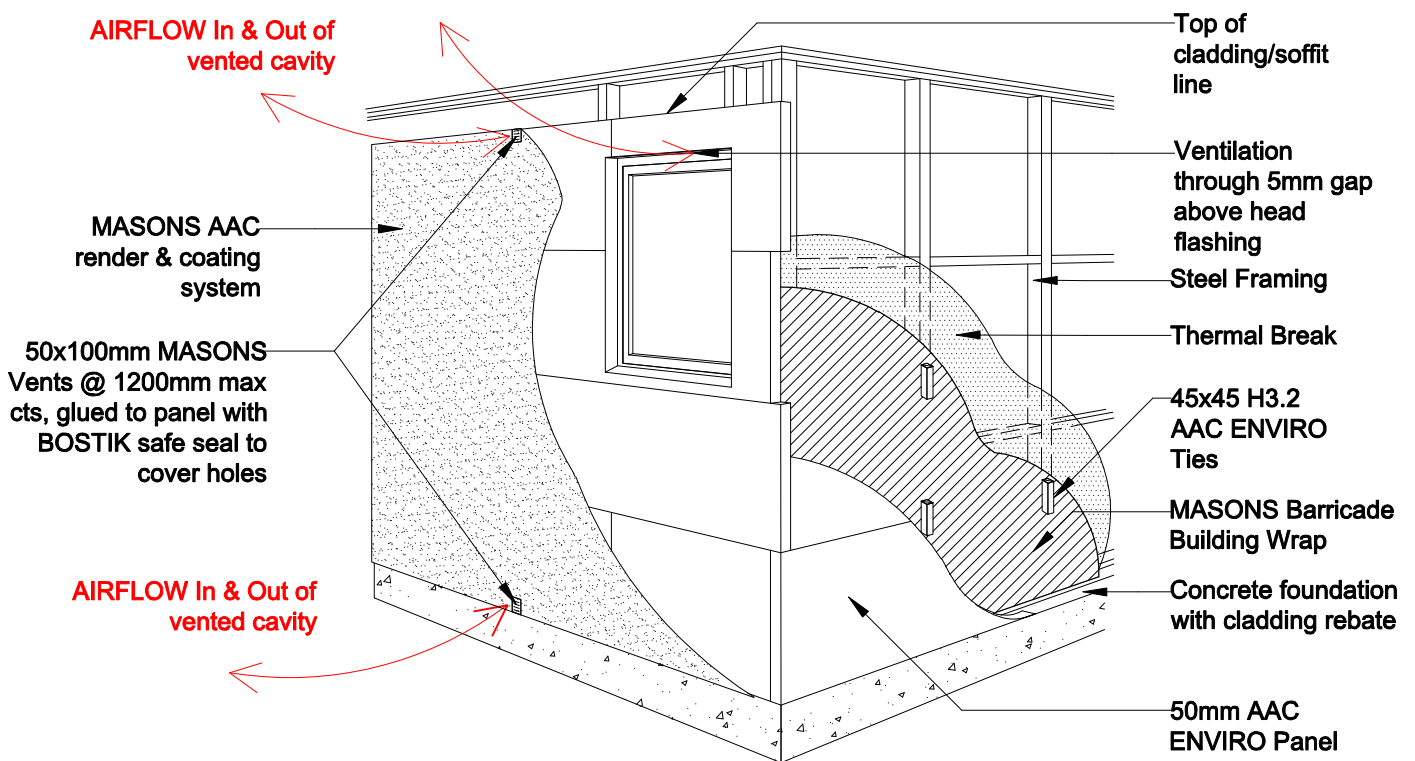
MASONS ENVIRO AAC ON 45mm CAVITY
STEEL FRAME



TYPICAL AAC ENVIRO TIE & PANEL LAYOUT

Detail 05 NTS

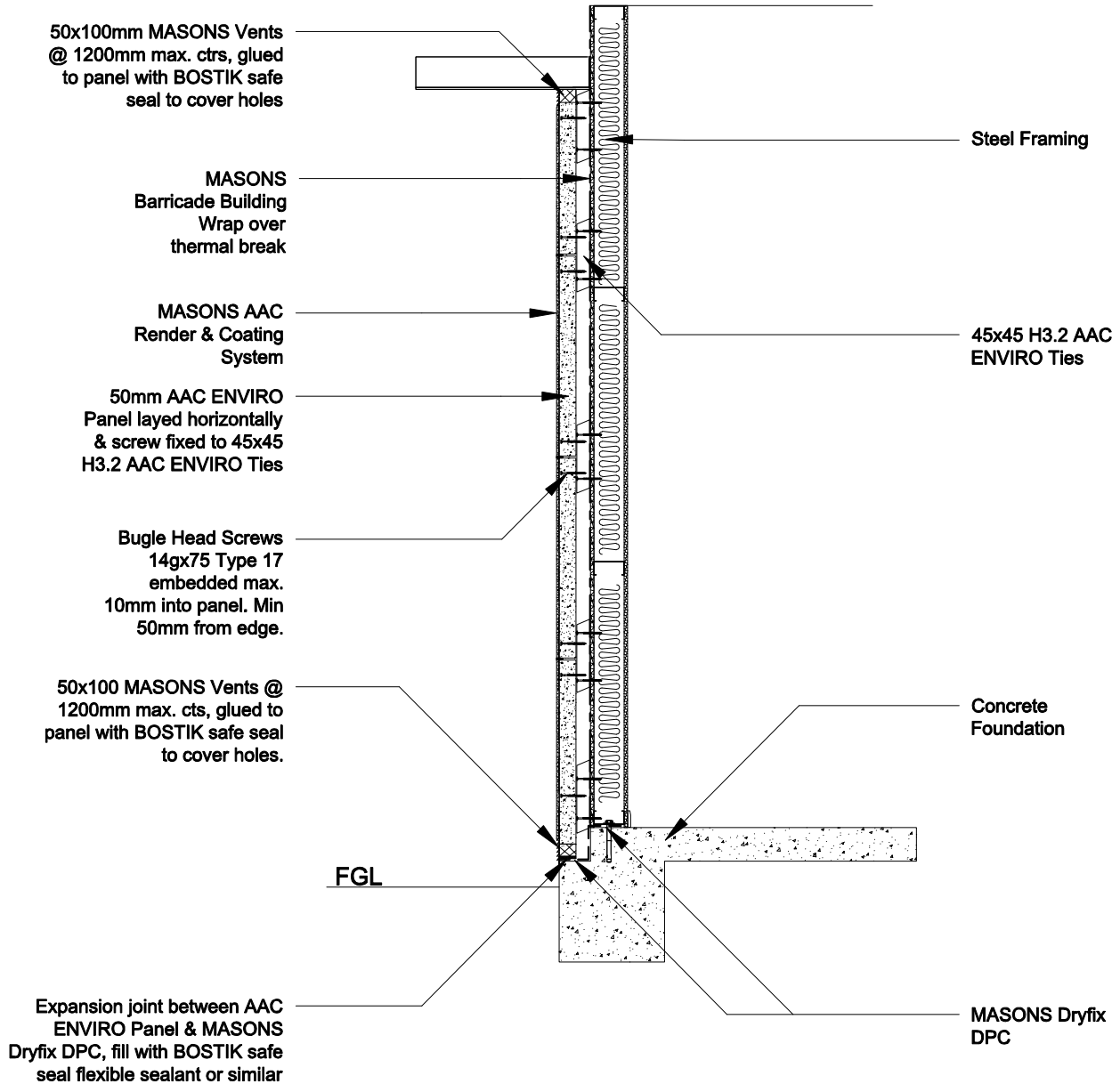
MASONS ENVIRO AAC ON 45mm CAVITY STEEL FRAME



GENERAL LAYOUT AND AIRFLOW

Detail 06 NTS

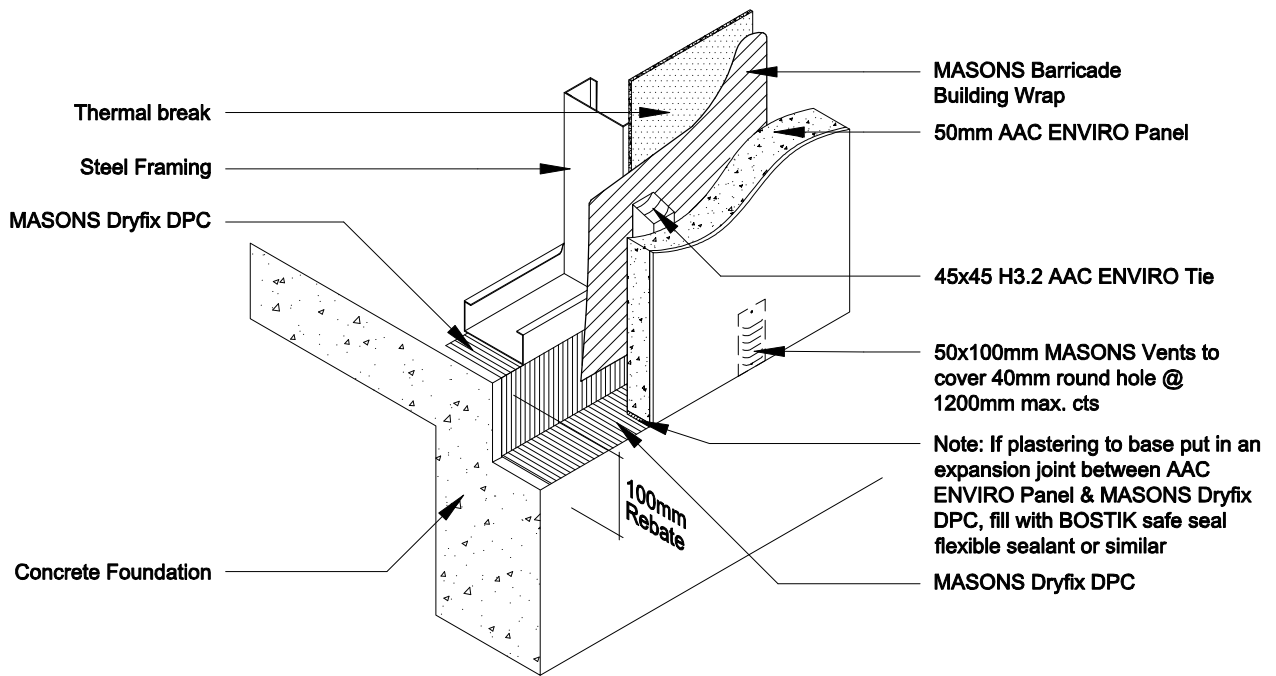
MASONS ENVIRO AAC ON 45mm CAVITY STEEL FRAME



**TYPICAL WALL
CROSS SECTION**

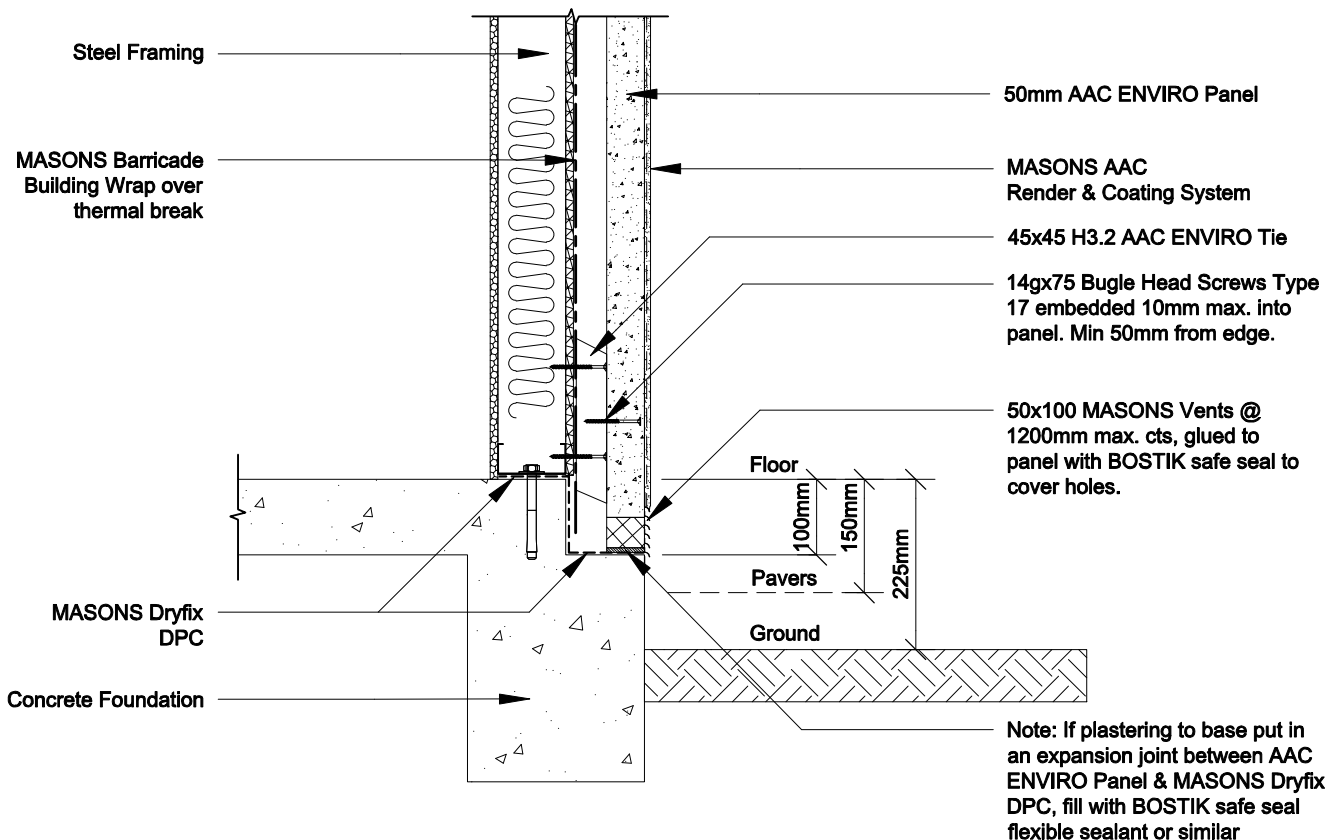
Detail 07 NTS

**MASONS ENVIRO AAC ON 45mm CAVITY
STEEL FRAME**



**CONCRETE FOOTING
With Rebate - 3D View**

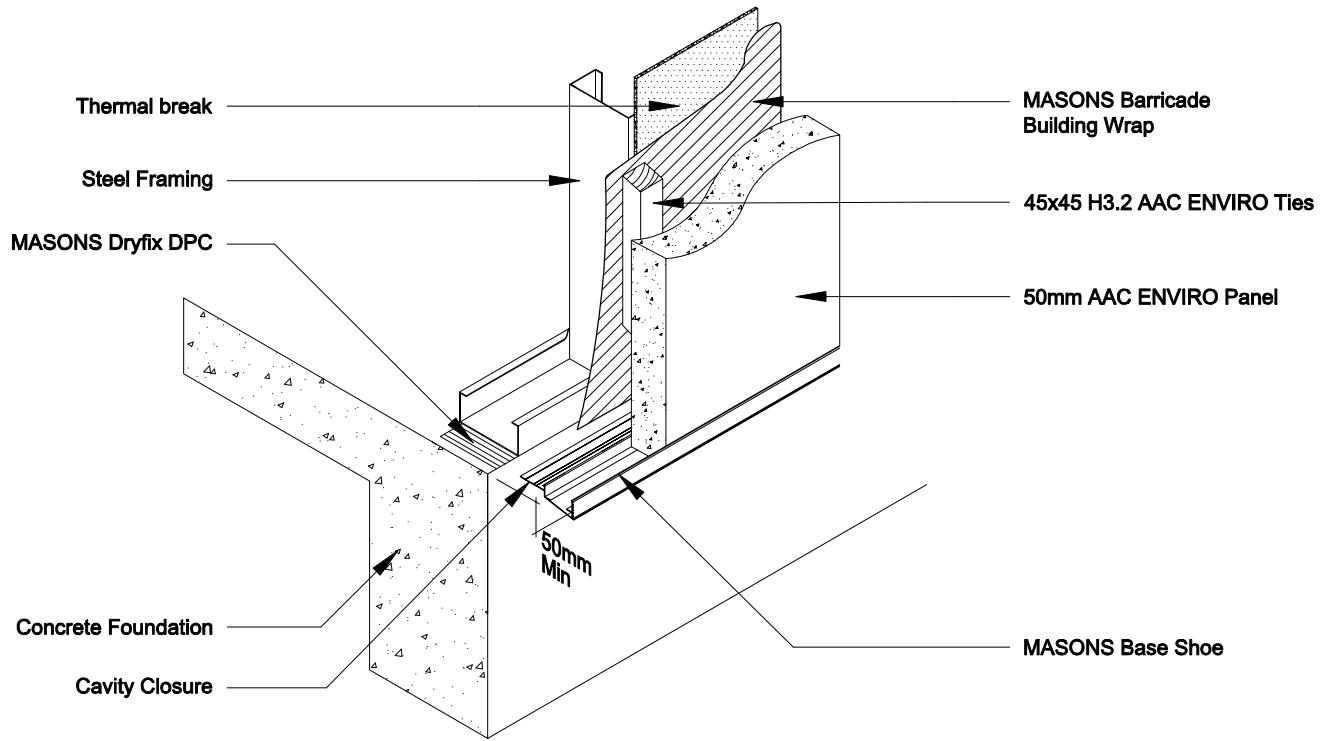
Detail 08 NTS



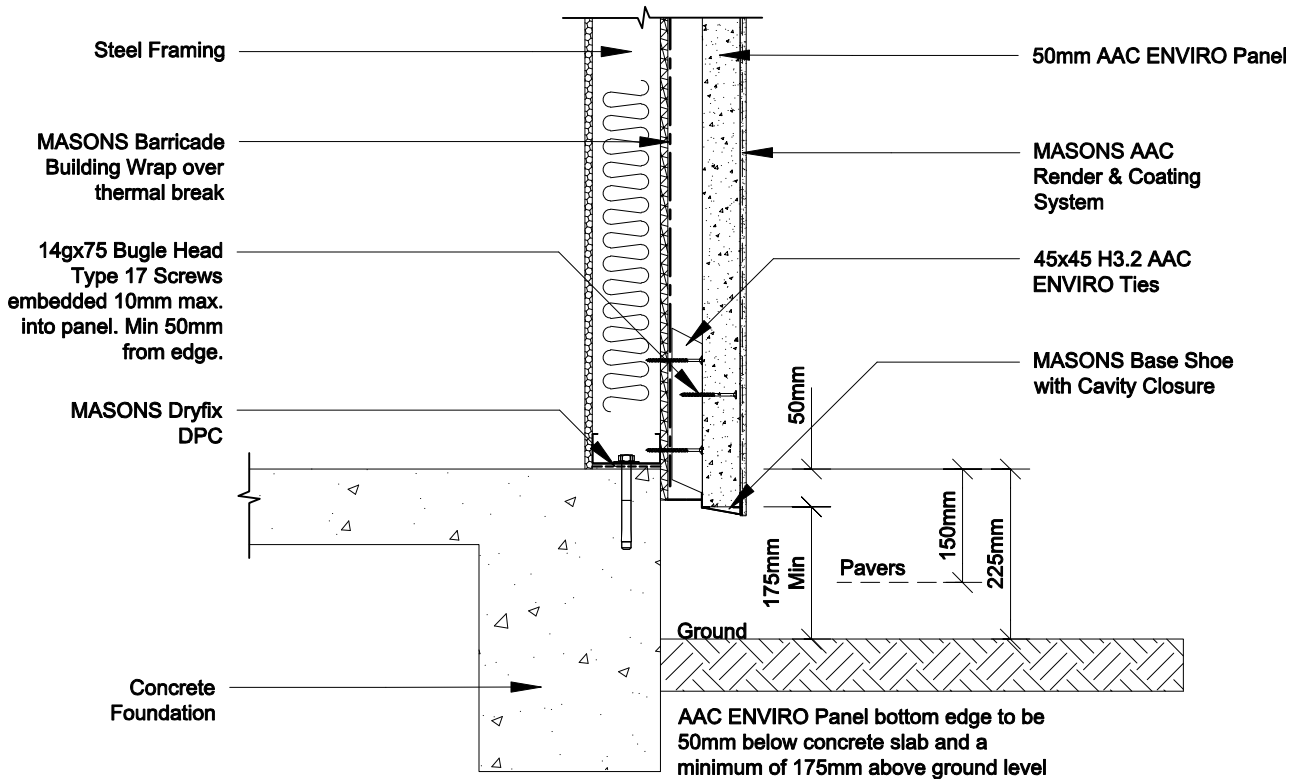
**CONCRETE FOOTING
With Rebate**

Detail 09 Scale 1:10

**MASONS ENVIRO AAC ON 45mm CAVITY
STEEL FRAME**

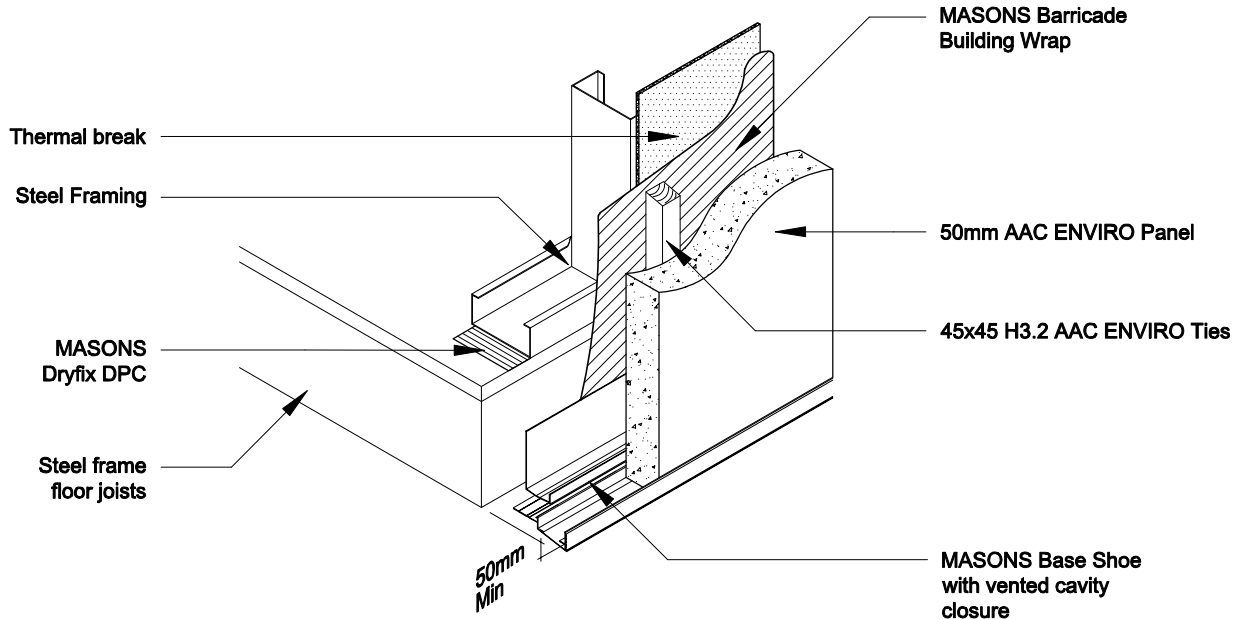


CONCRETE FOOTING Detail 10 NTS
Without Rebate - 3D View



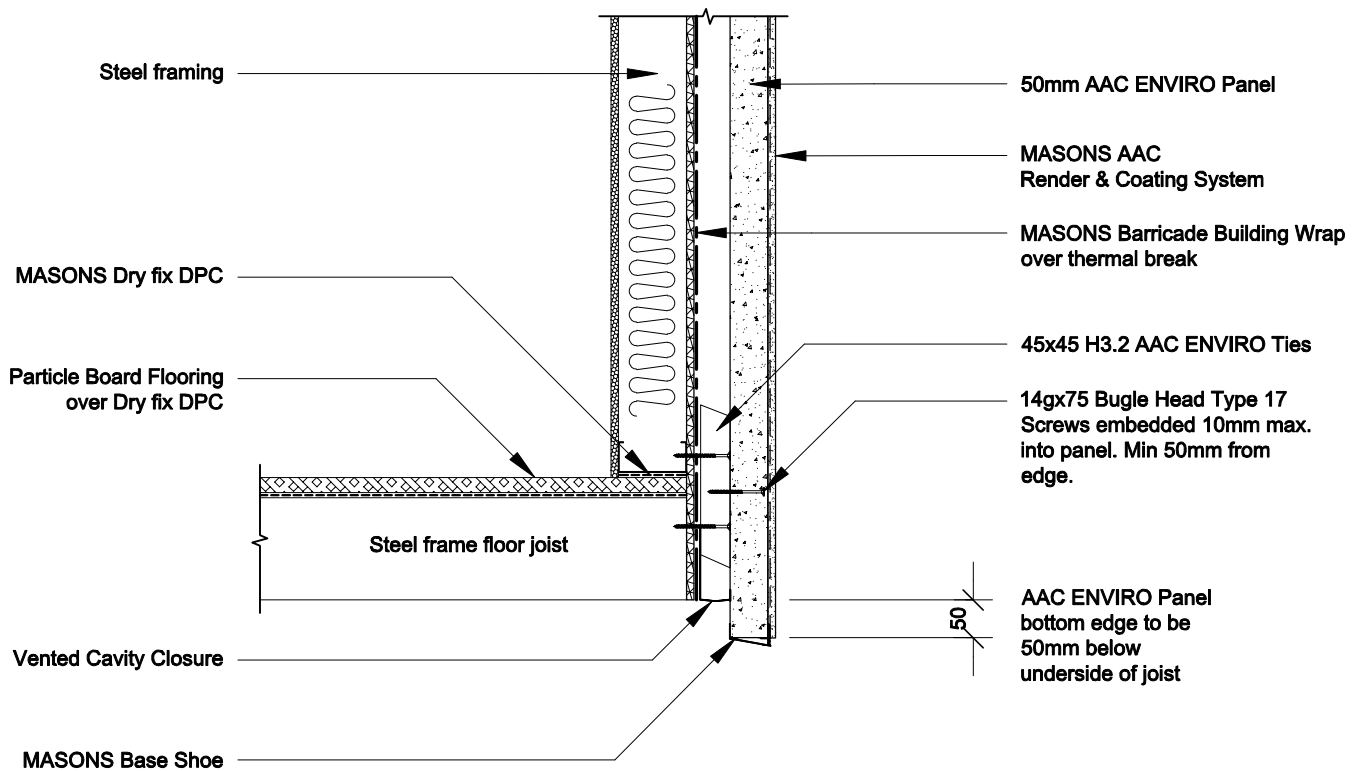
CONCRETE FOOTING Detail 11 Scale 1:10
Without Rebate

**MASONS ENVIRO AAC ON 45mm CAVITY
STEEL FRAME**



**STEEL FRAME FLOOR
3D View**

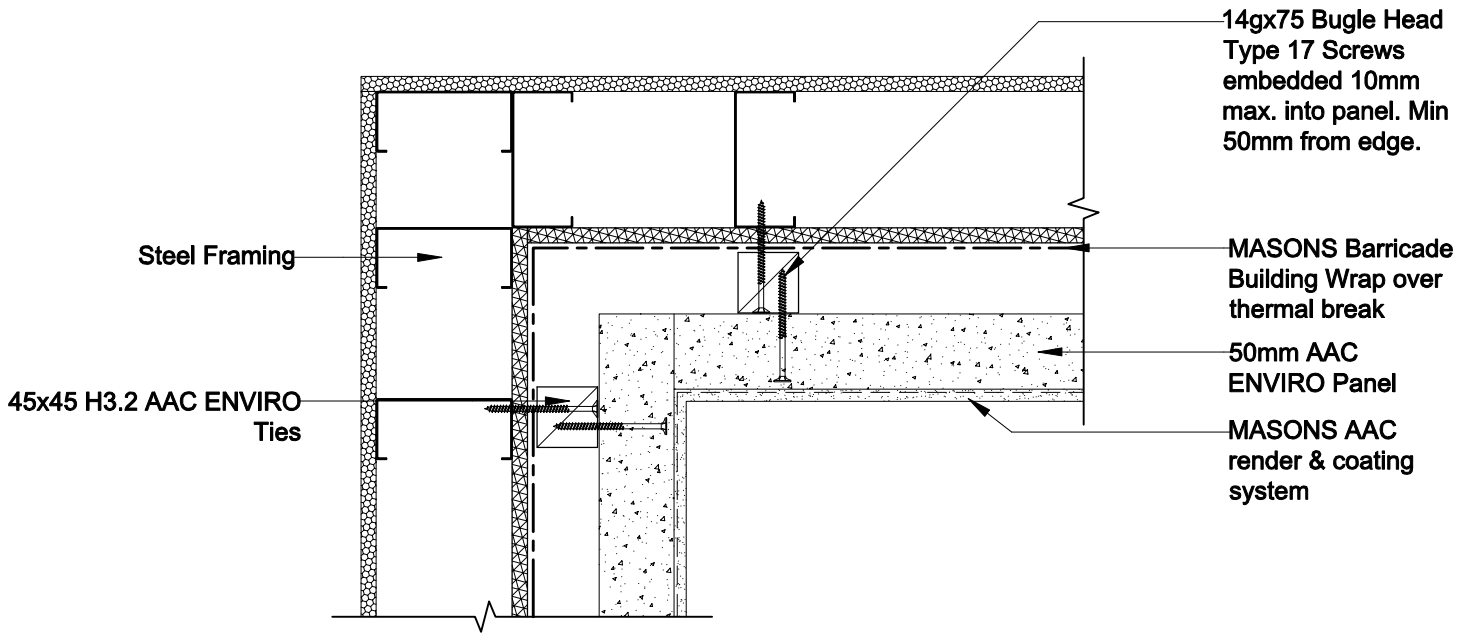
Detail 12 NTS



STEEL FRAME FLOOR

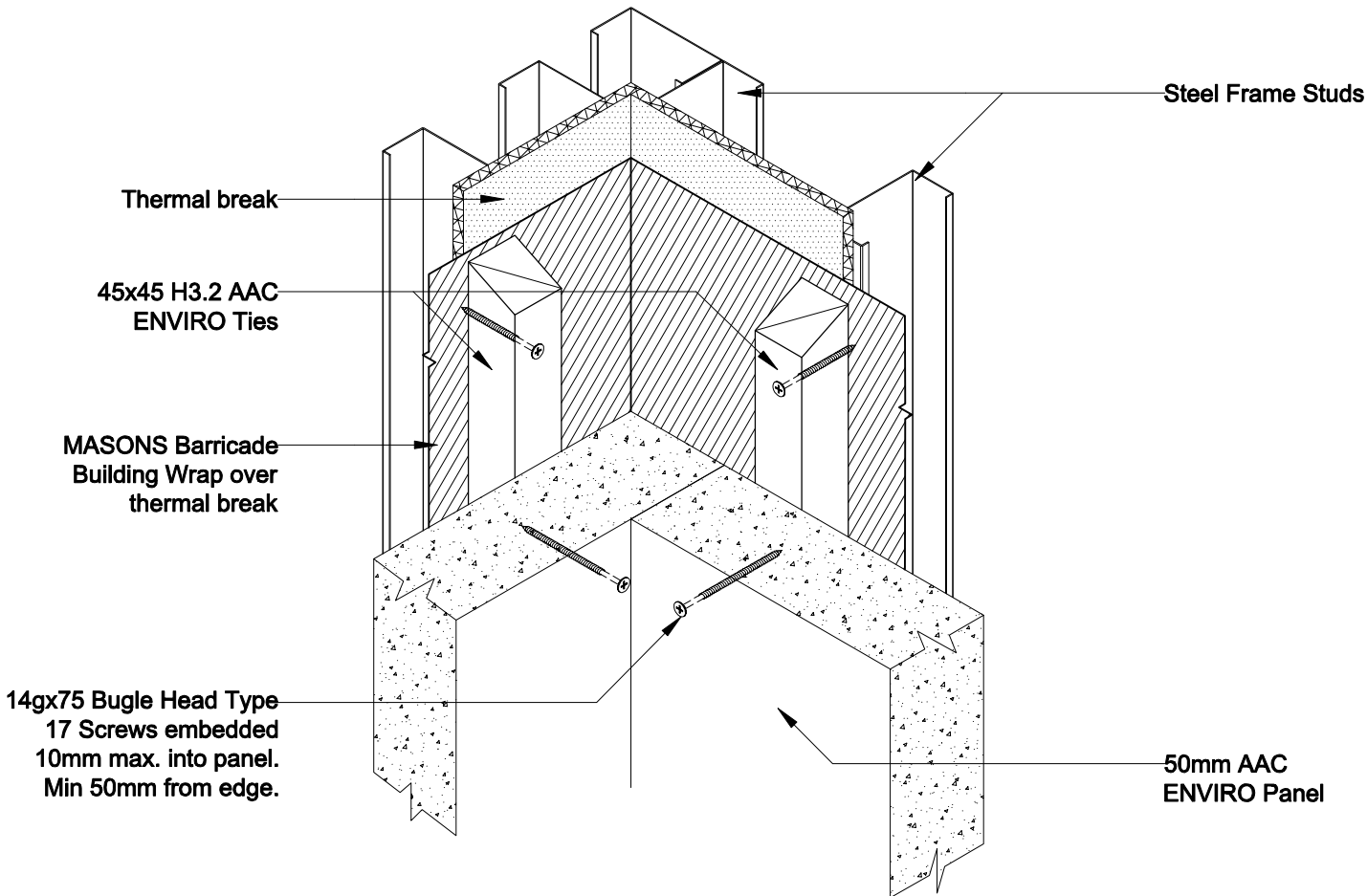
Detail 13 Scale 1:10

**MASONS ENVIRO AAC ON 45mm CAVITY
STEEL FRAME**



INTERNAL CORNER

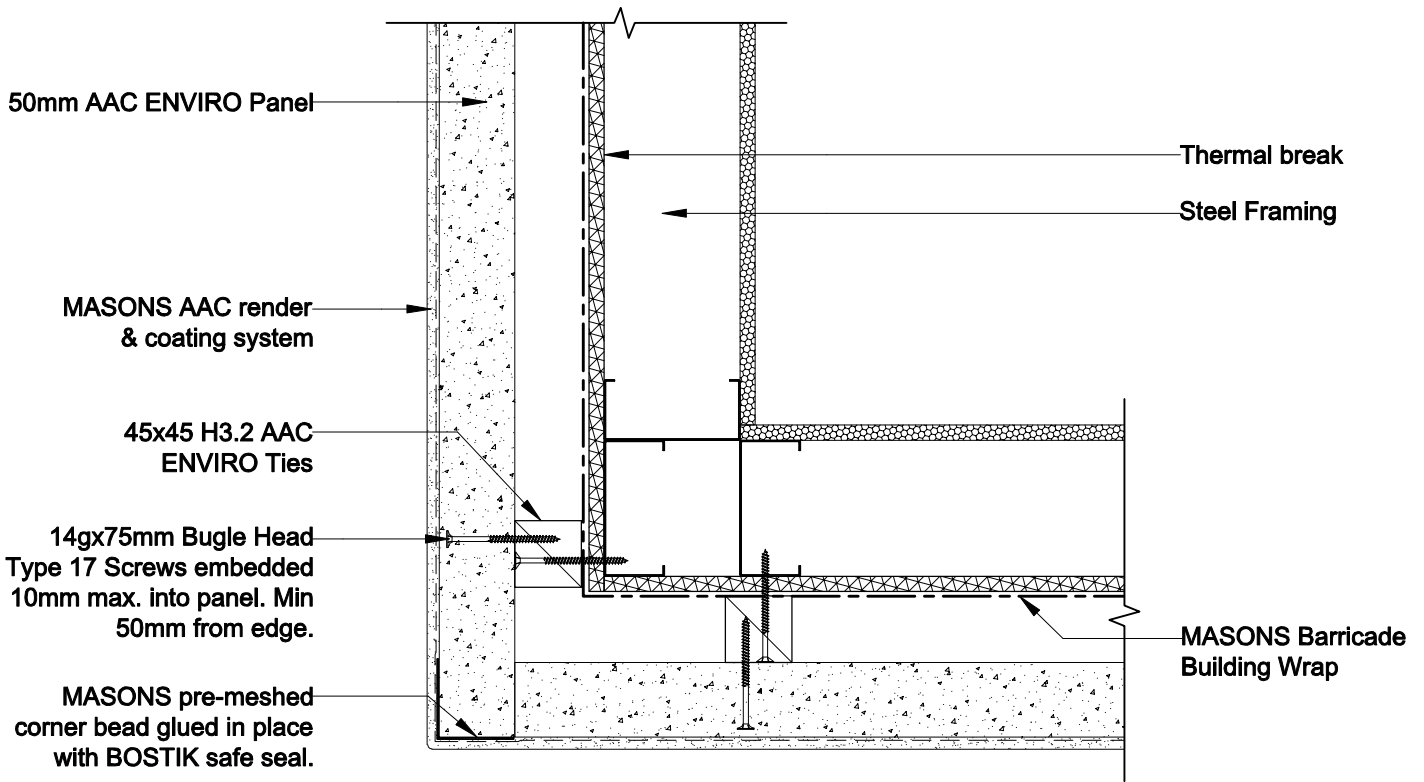
Detail 14 Scale 1:5



INTERNAL CORNER
3D View

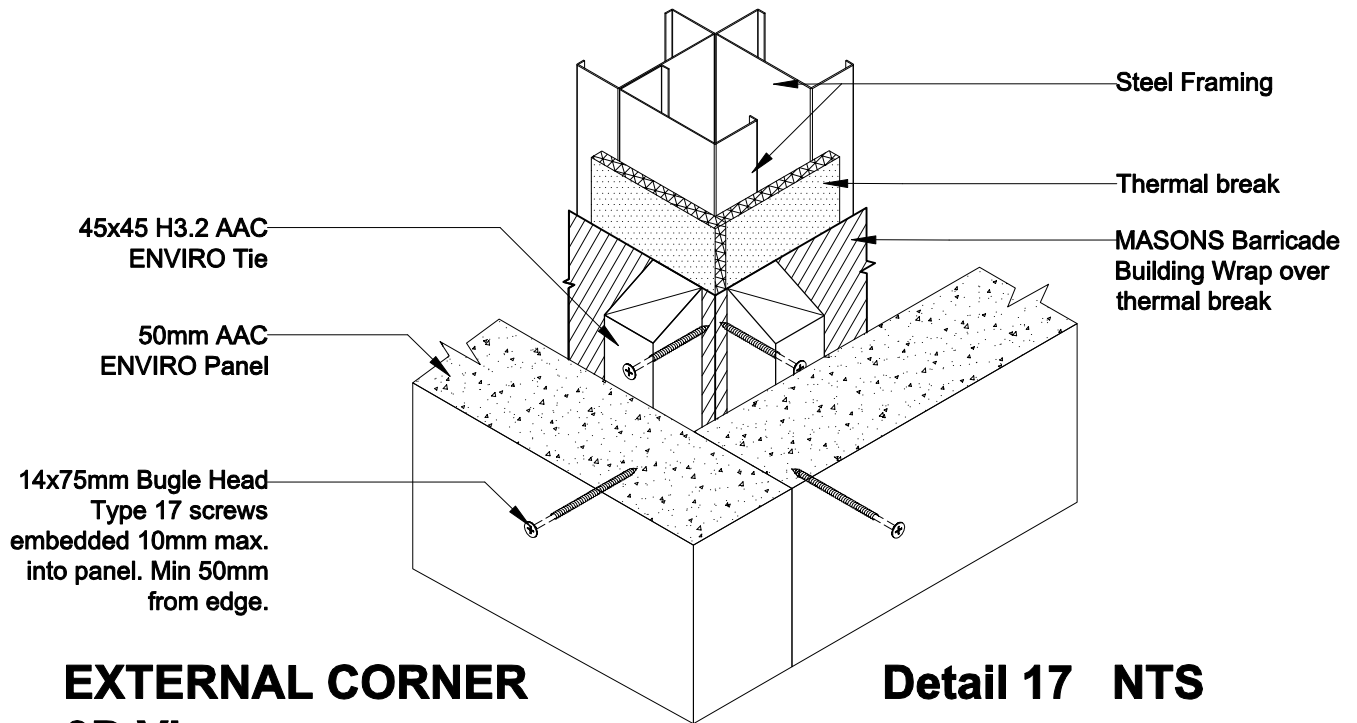
Detail 15 NTS

MASONS ENVIRO AAC ON 45mm CAVITY STEEL FRAME



EXTERNAL CORNER

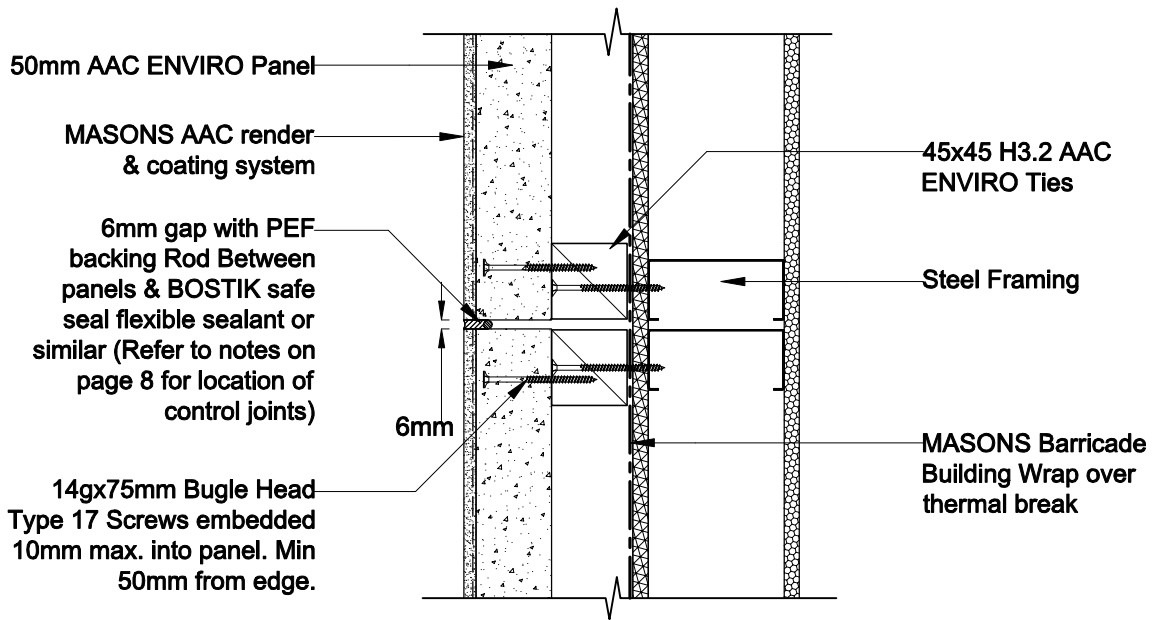
Detail 16 Scale 1:5



**EXTERNAL CORNER
3D View**

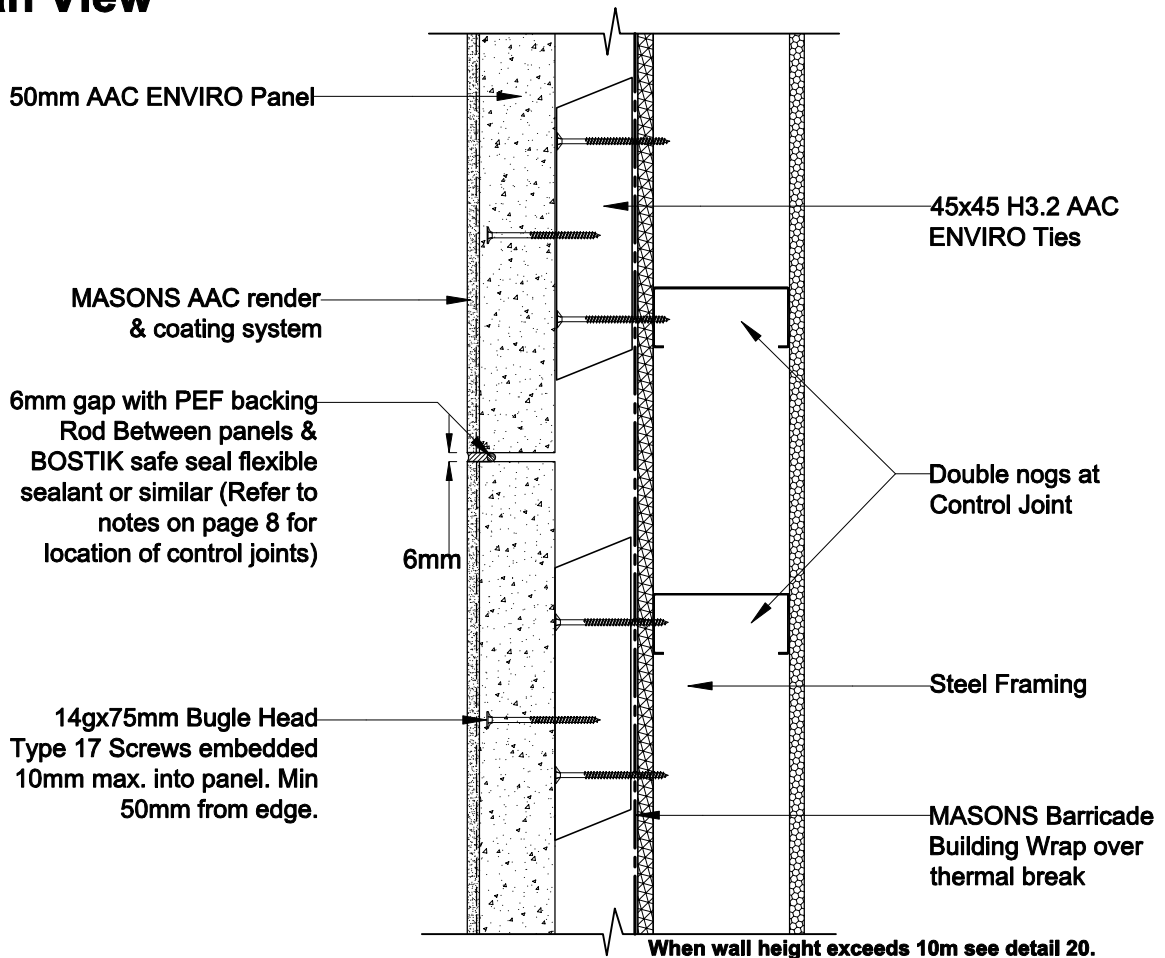
Detail 17 NTS

**MASONS ENVIRO AAC ON 45mm CAVITY
STEEL FRAME**



CONTROL JOINTS - VERTICAL
Plan View

Detail 18 Scale 1:5

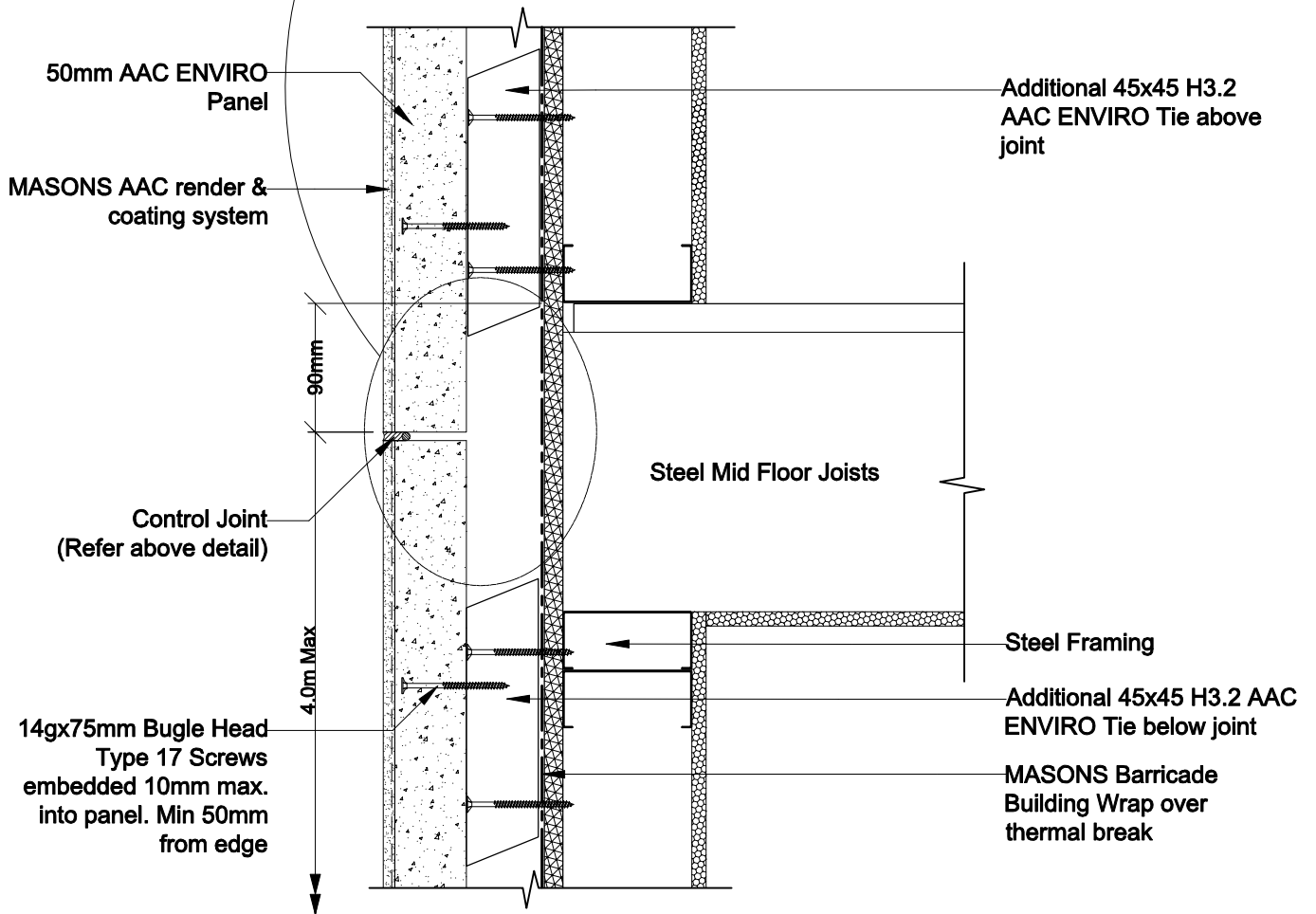
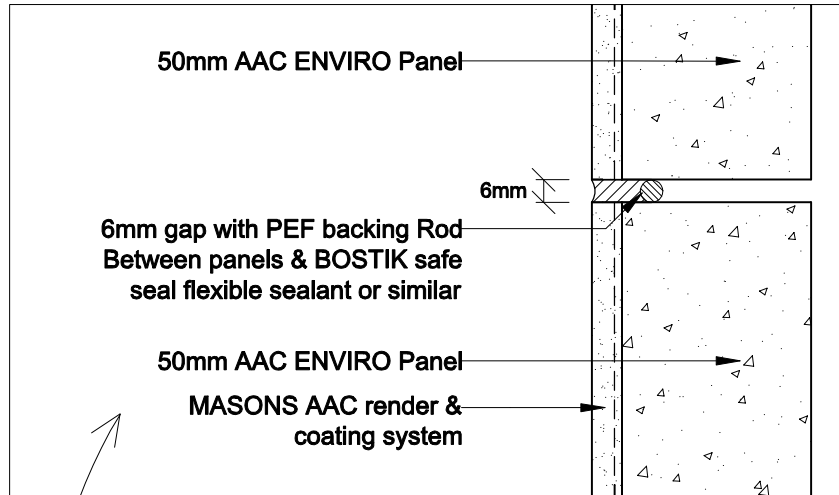


When wall height exceeds 10m see detail 20.

CONTROL JOINTS - HORIZONTAL
Section View

Note: Refer to page 8 Section Control Joints Re: For the placement of control joints.

**MASONS ENVIRO AAC ON 45mm CAVITY
STEEL FRAME**

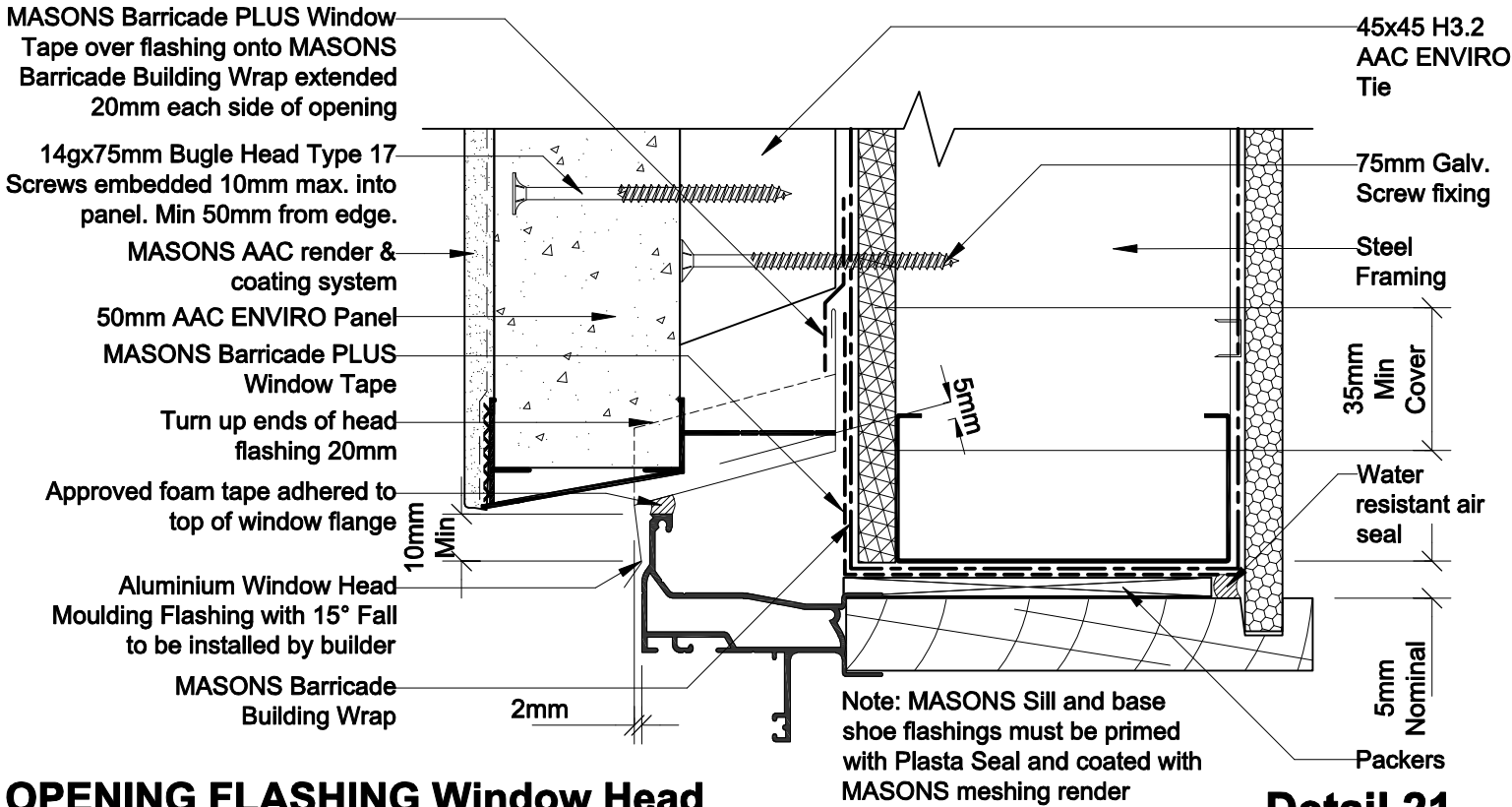


**CONTROL JOINT
Mid-Floor**

(Required where wall height exceeds 10m)

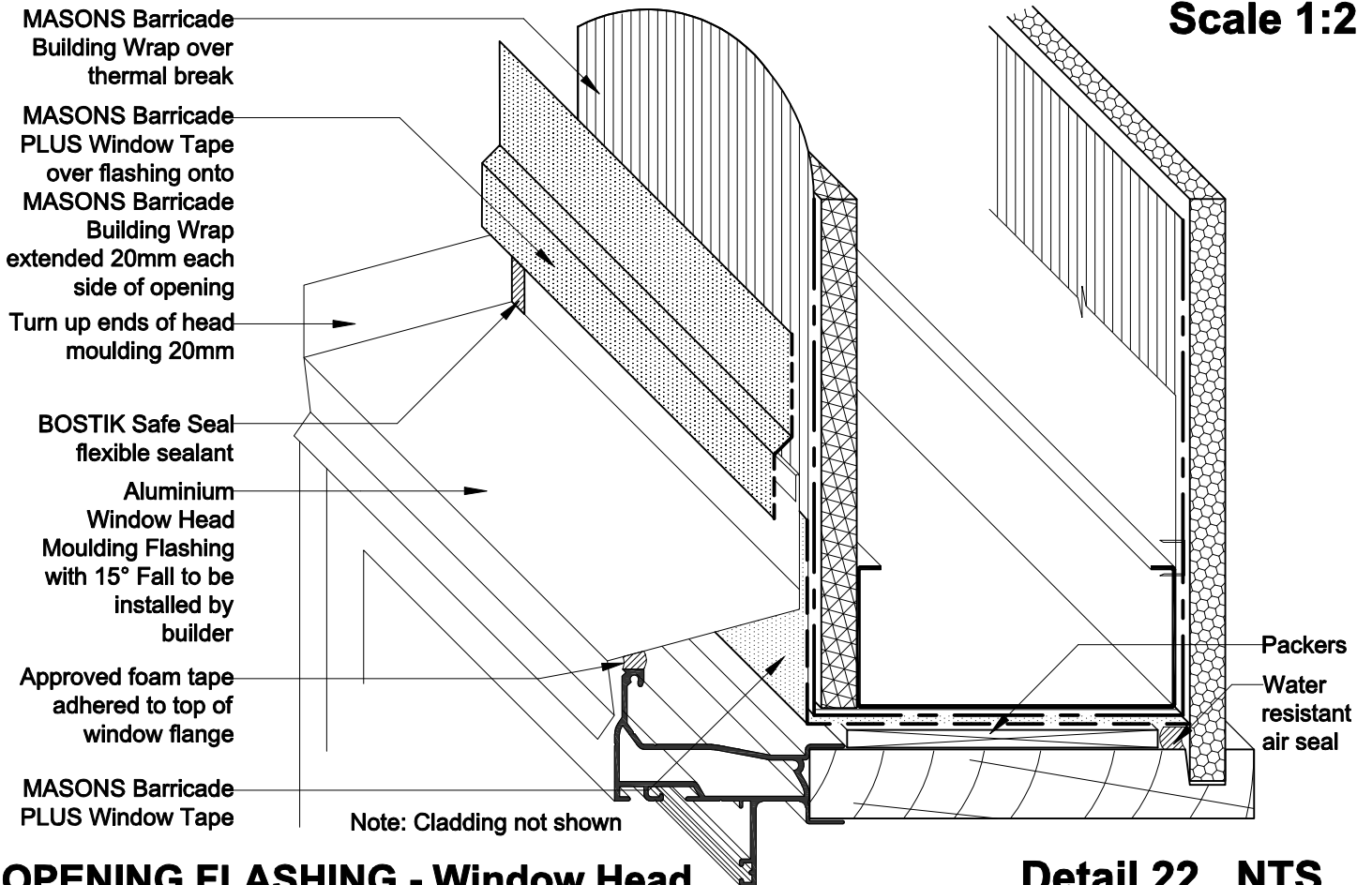
Detail 20 Scale 1:5 & 1:2

**MASONS ENVIRO AAC ON 45mm CAVITY
STEEL FRAME**



OPENING FLASHING Window Head

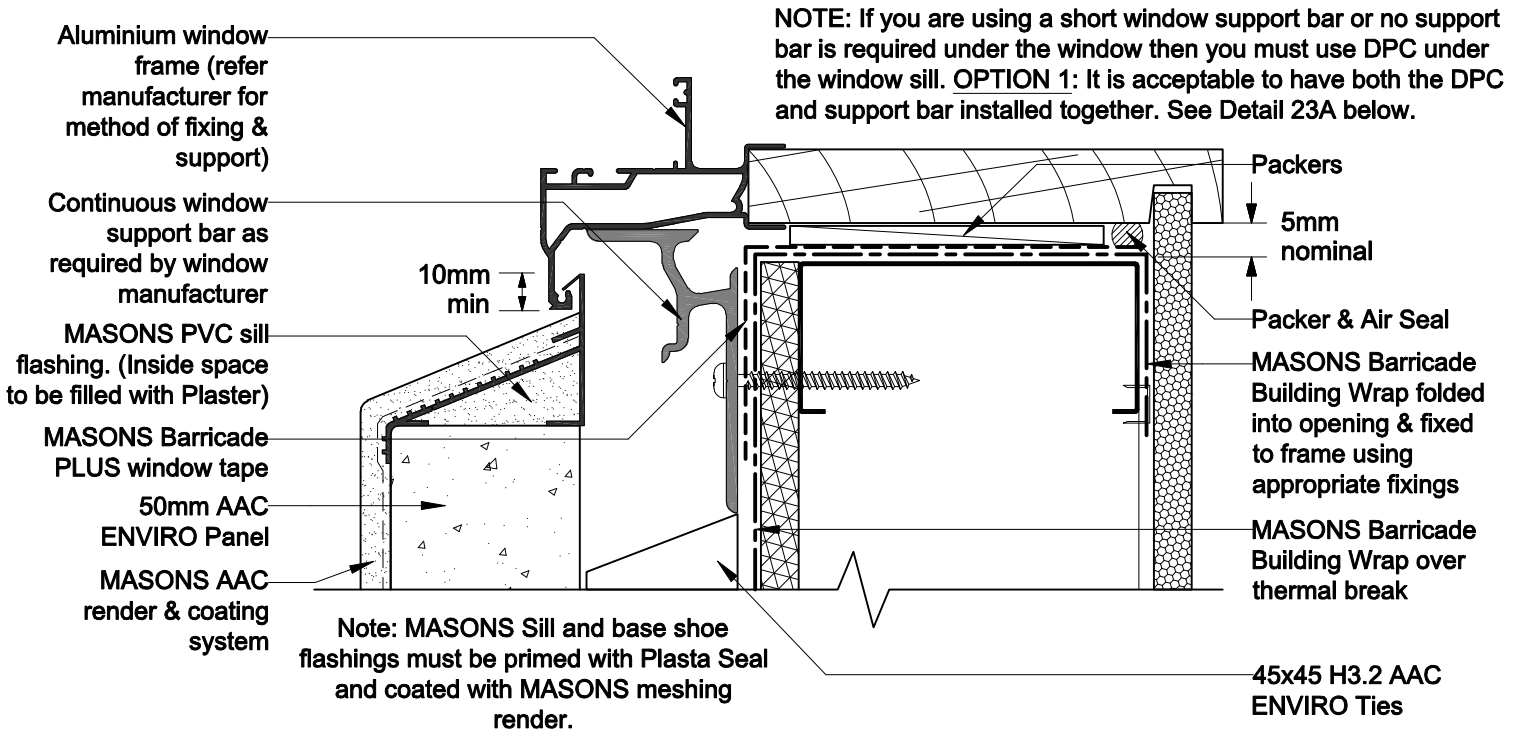
Detail 21
Scale 1:2



OPENING FLASHING - Window Head
3D View

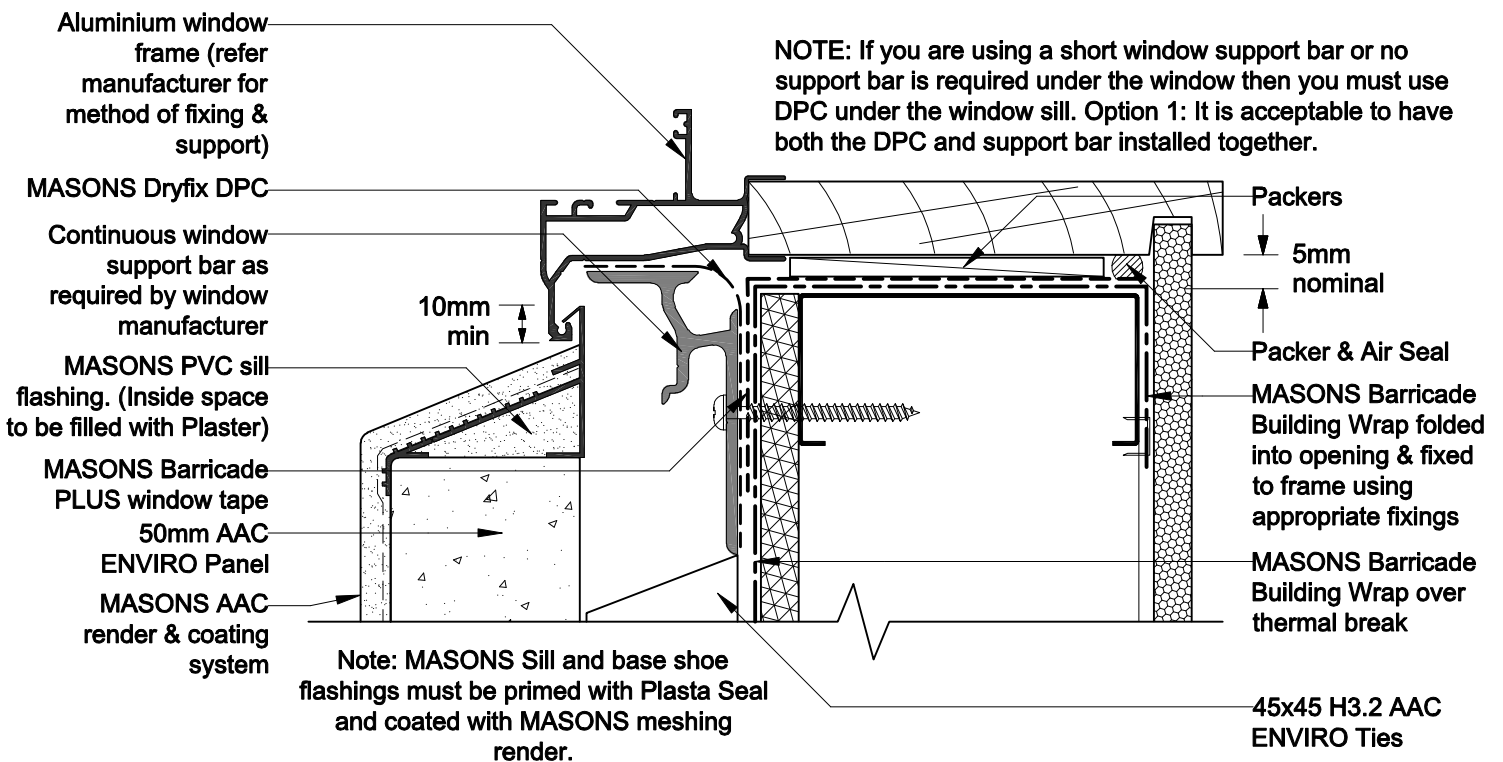
Detail 22 NTS

MASON'S ENVIRO AAC ON 45mm CAVITY
STEEL FRAME



OPENING FLASHINGS - Window Sill

Detail 23 Scale 1:2

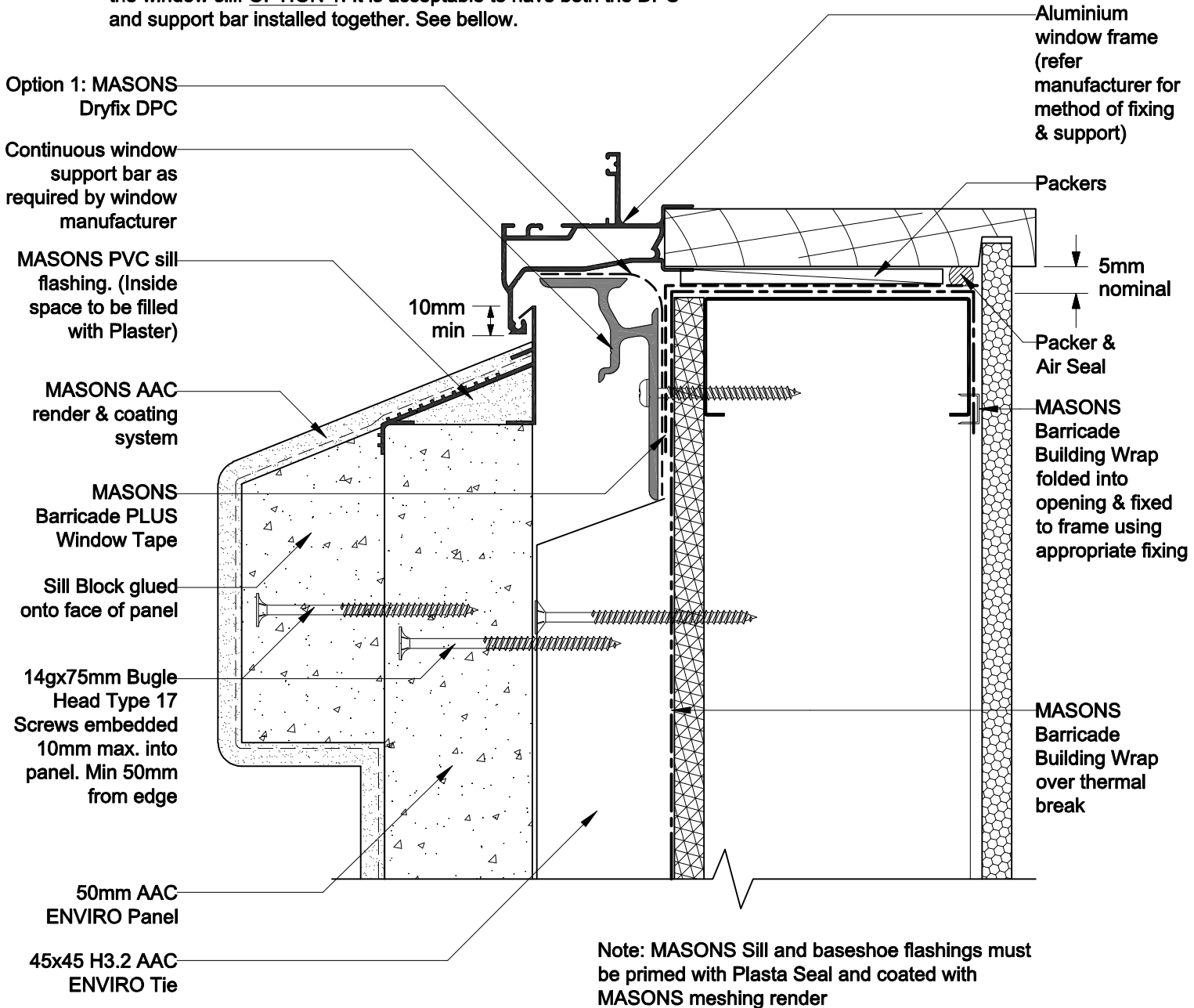


**OPENING FLASHINGS
Window Sill with DPC Flashing
OPTION 1**

Detail 23A Scale 1:2

**MASONS ENVIRO AAC ON 45mm CAVITY
STEEL FRAME**

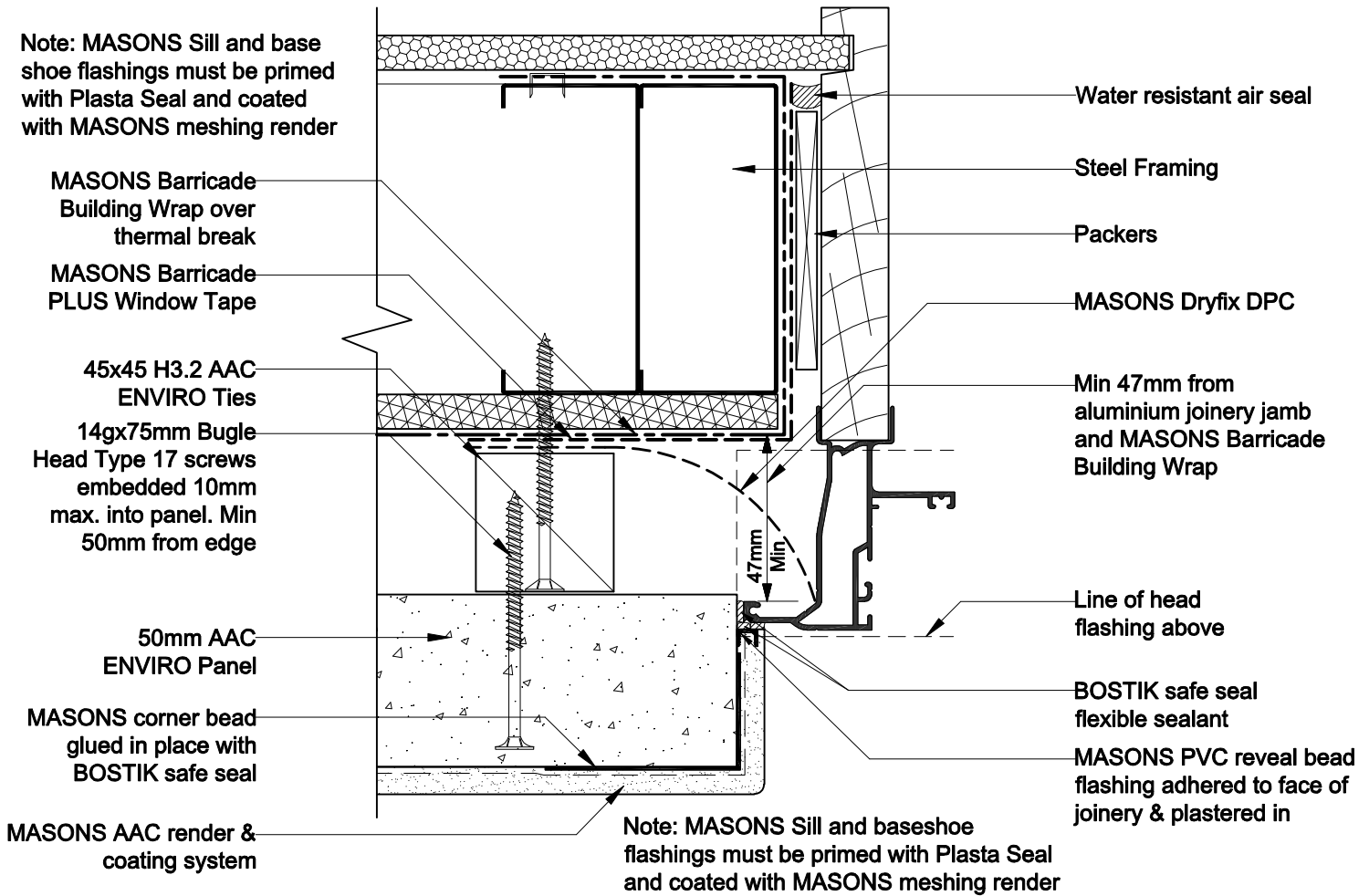
NOTE: If you are using a short window support bar or no support bar is required under the window then you must use DPC under the window sill. **OPTION 1:** It is acceptable to have both the DPC and support bar installed together. See below.



**OPENING FLASHINGS
Alternative Window Sill**

Detail 24 Scale 1:2

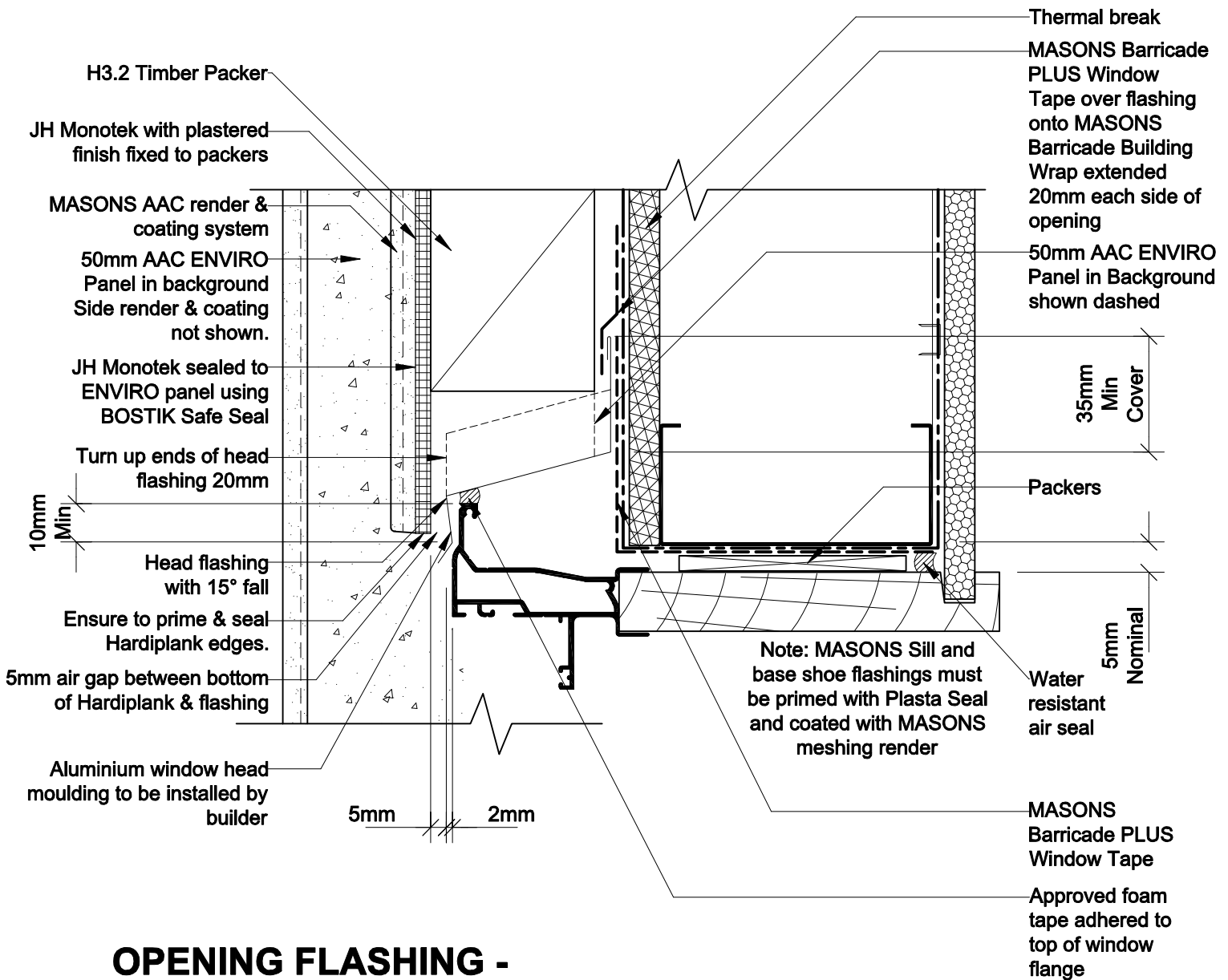
**MASONS ENVIRO AAC ON 45mm CAVITY
STEEL FRAME**



OPENING FLASHINGS - Window Jamb

Detail 25 Scale 1:2

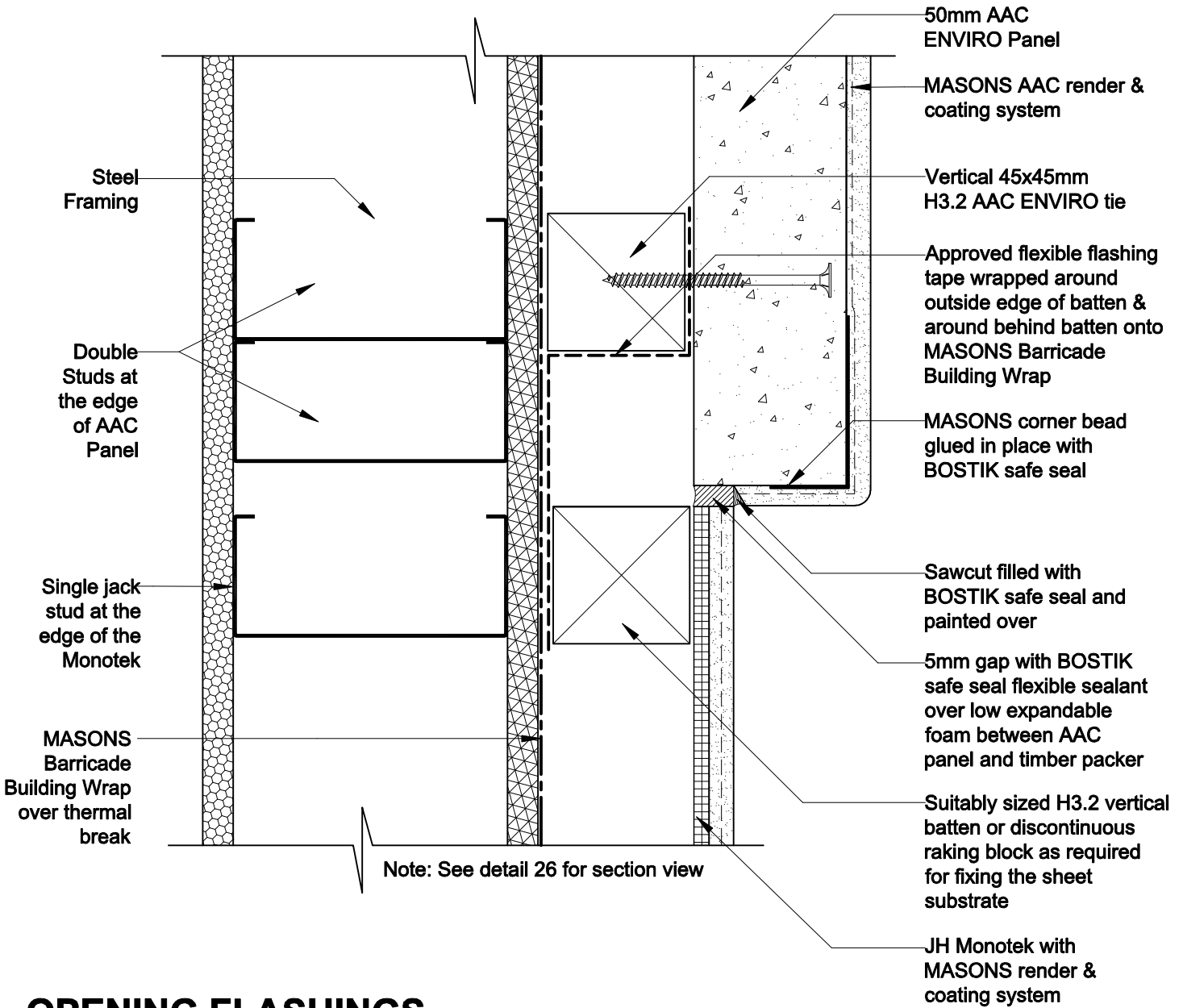
MASONS ENVIRO AAC ON 45mm CAVITY STEEL FRAME



**OPENING FLASHING -
WINDOW HEAD - Monotek**

Detail 26 Scale 1:2

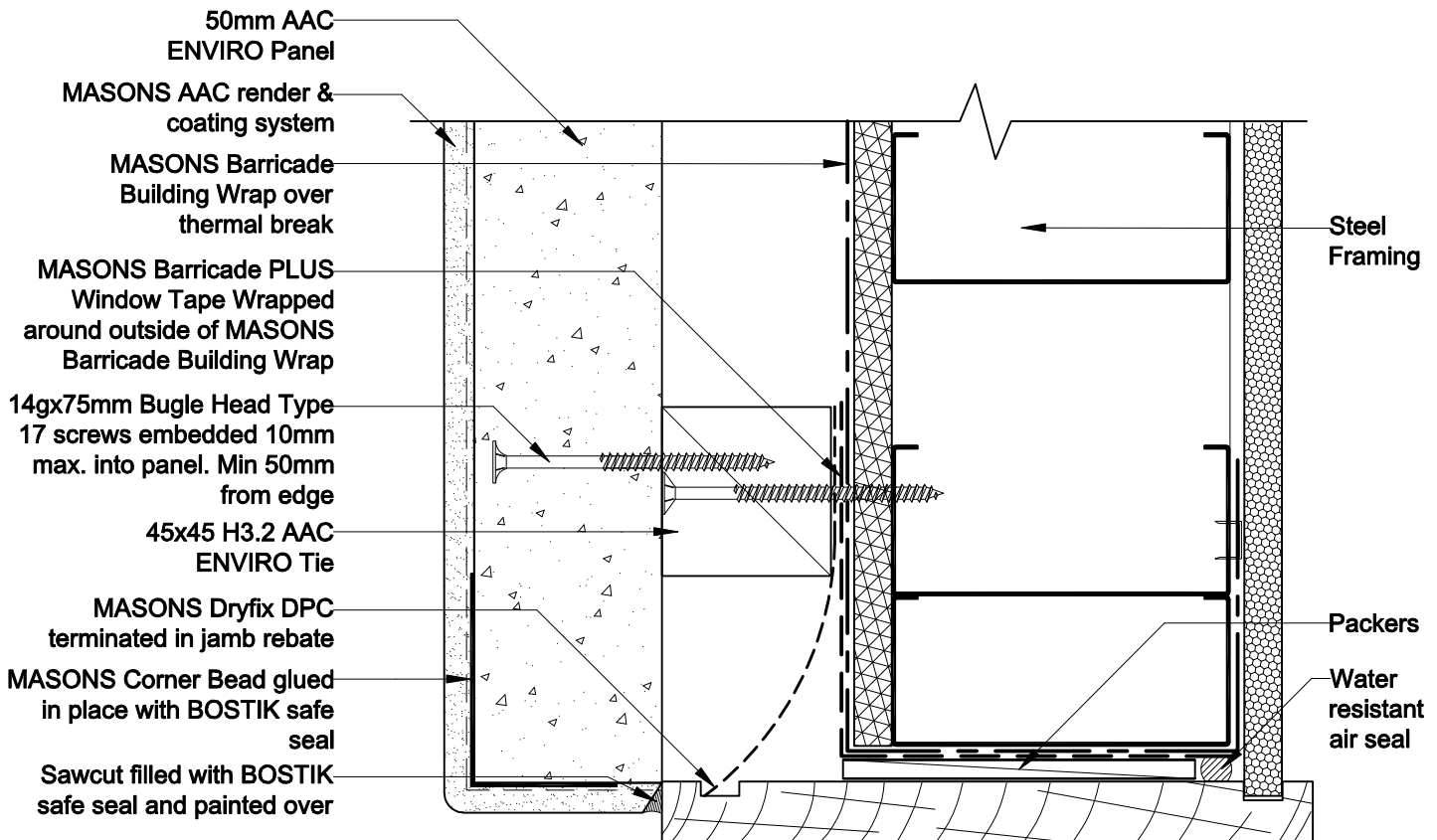
**MASONS ENVIRO AAC ON 45mm CAVITY
STEEL FRAME**



**OPENING FLASHINGS
ENVIRO AAC PANEL / MONOTEK
Vertical Junction for above Windows
& Doors**

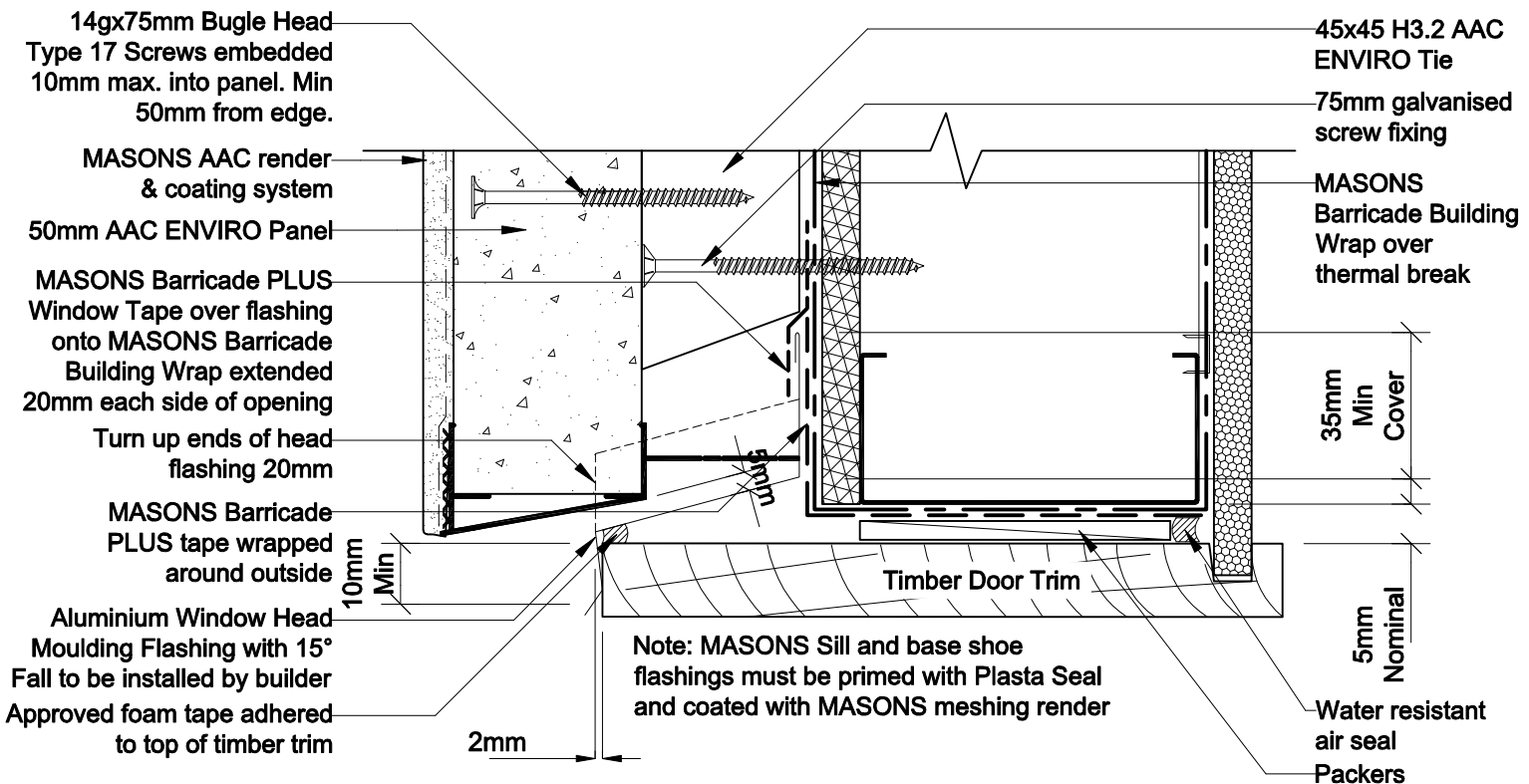
Detail 27 Scale 1:2

**MASONS ENVIRO AAC ON 45mm CAVITY
STEEL FRAME**



**OPENING FLASHING
GARAGE DOOR - Jamb**

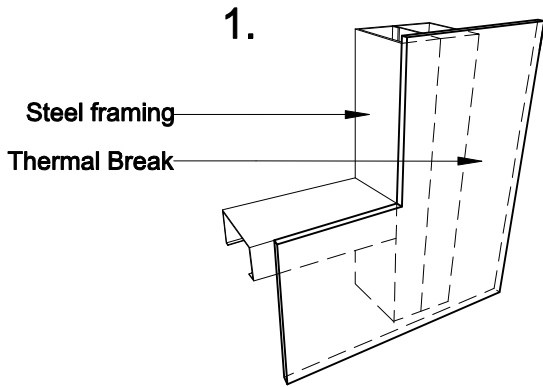
Detail 28 Scale 1:2



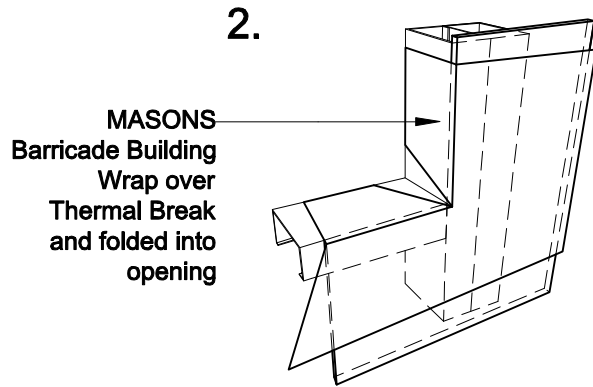
**OPENING FLASHING
GARAGE DOOR - Head**

Detail 29 Scale 1:2

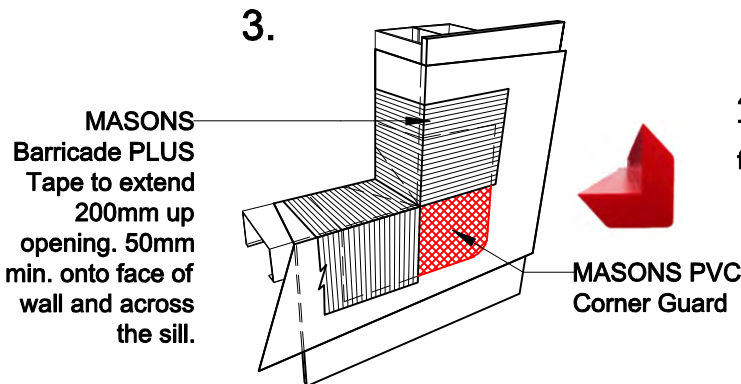
**MASONS ENVIRO AAC ON 45mm CAVITY
STEEL FRAME**



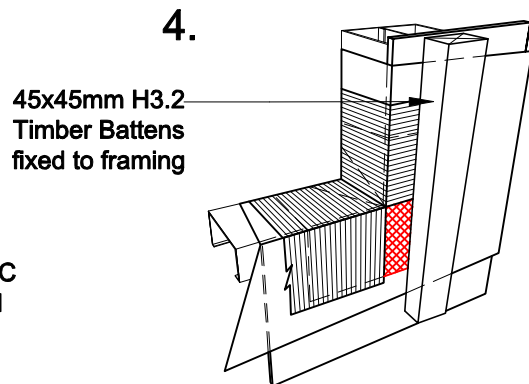
FRAMING



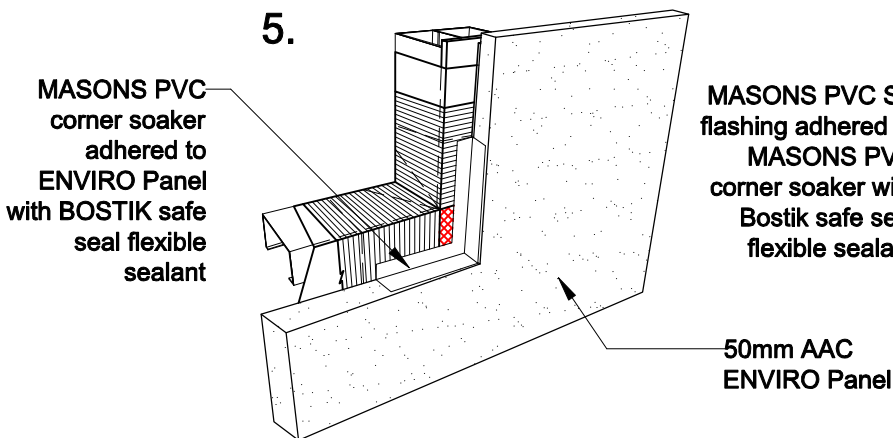
MASONS BARRICADE BUILDING WRAP



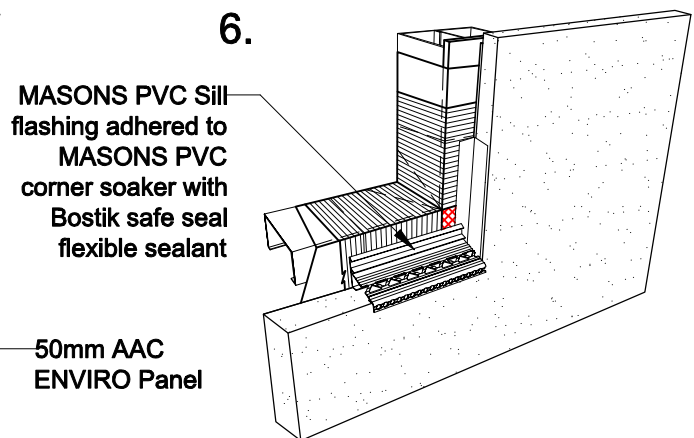
TAPING



BATTEN INSTALLATION



PVC CORNER SOAKER

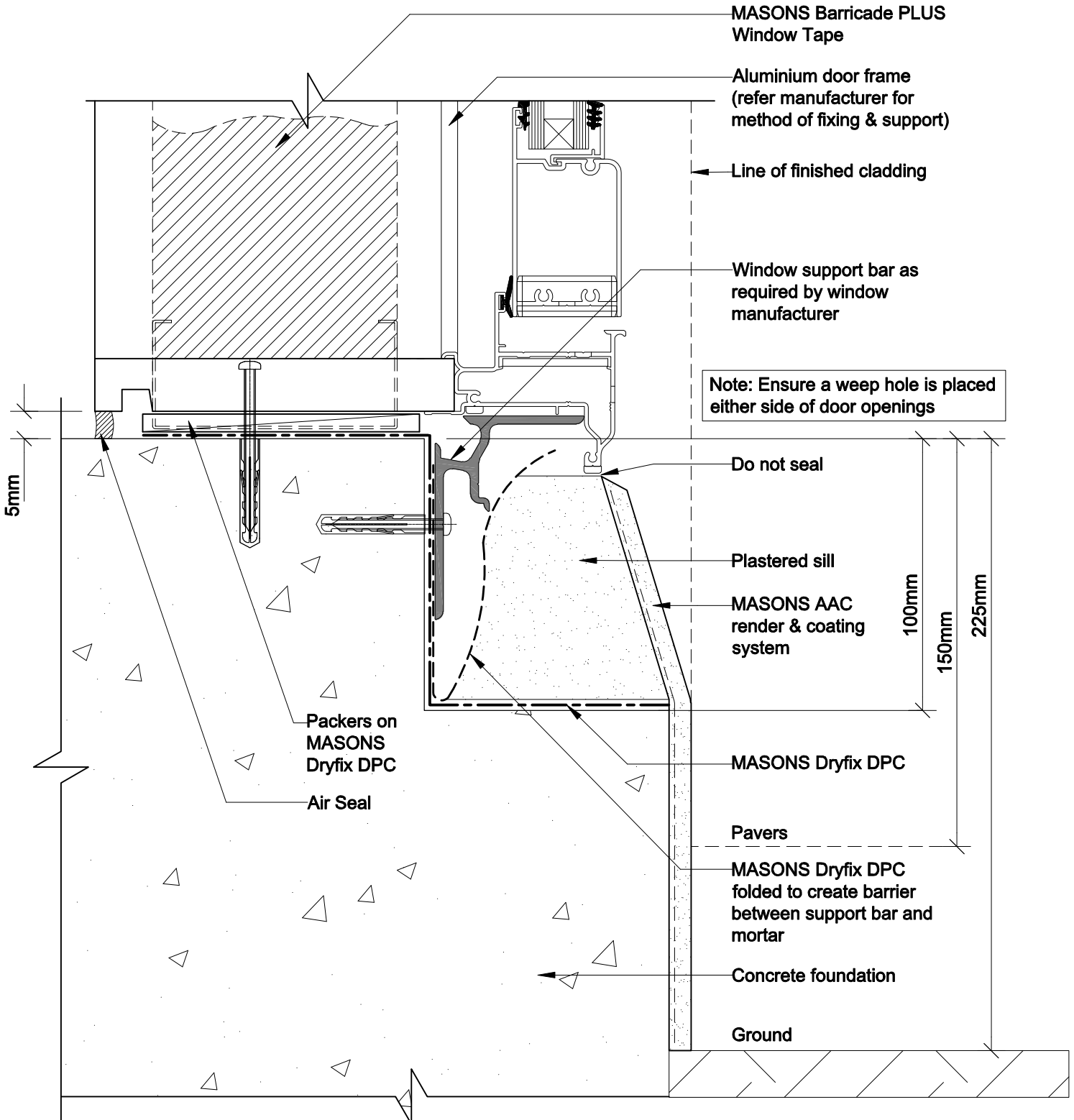


PVC SILL FLASHING

**OPENING FLASHINGS
PVC CORNER SOAKER &
CORNER GUARD INSTALLATION**

Detail 30 NTS

**MASONS ENVIRO AAC ON 45mm CAVITY
STEEL FRAME**



MASONS Barricade PLUS Window Tape

Aluminium door frame (refer manufacturer for method of fixing & support)

Line of finished cladding

Window support bar as required by window manufacturer

Note: Ensure a weep hole is placed either side of door openings

5mm

Do not seal

Plastered sill

MASONS AAC render & coating system

100mm

150mm

225mm

Packers on MASONS Dryfix DPC

Air Seal

MASONS Dryfix DPC

Pavers

MASONS Dryfix DPC folded to create barrier between support bar and mortar

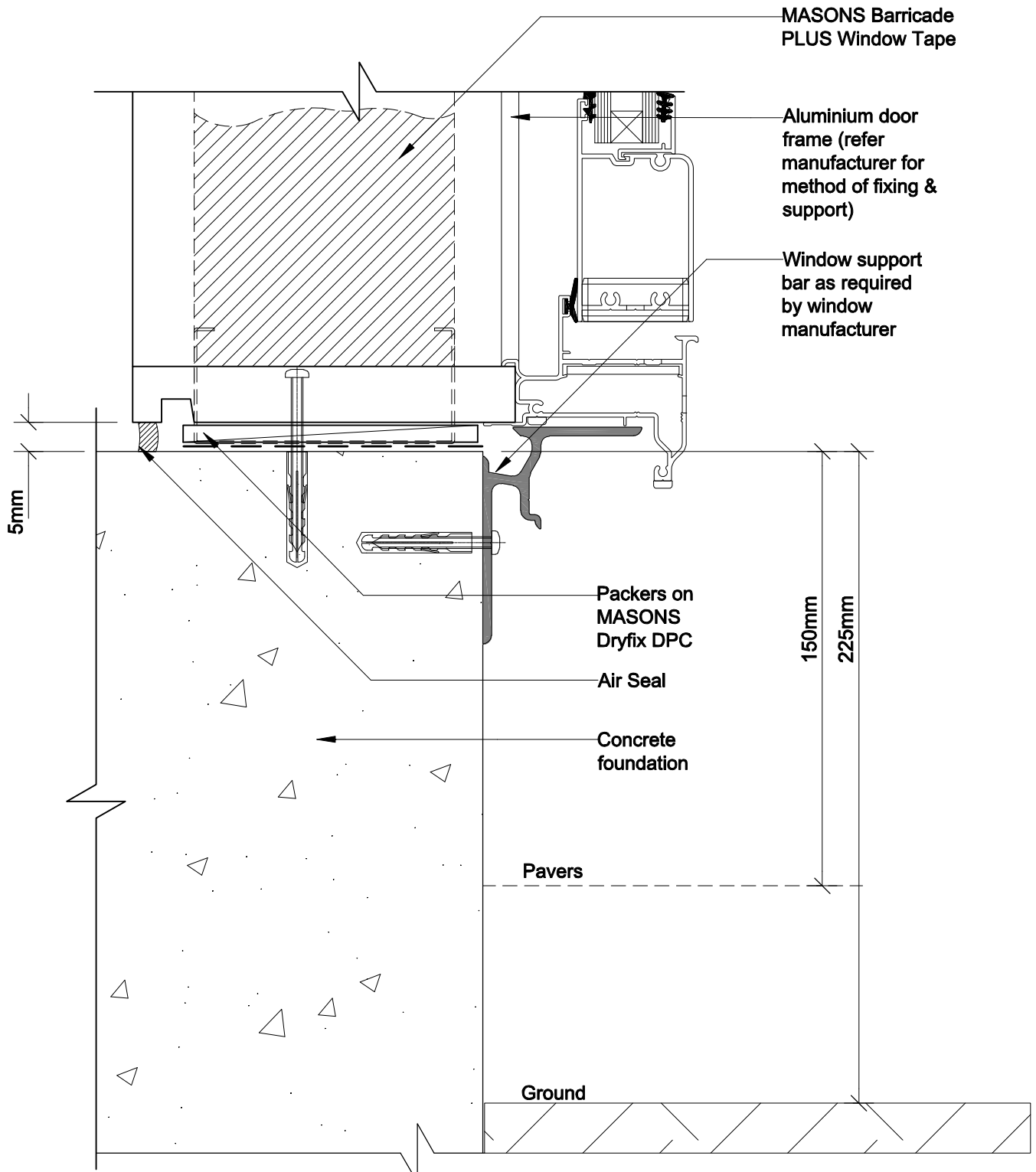
Concrete foundation

Ground

**OPENING FLASHING -
CONCRETE DOOR SILL
With Rebate**

Detail 31 Scale 1:2

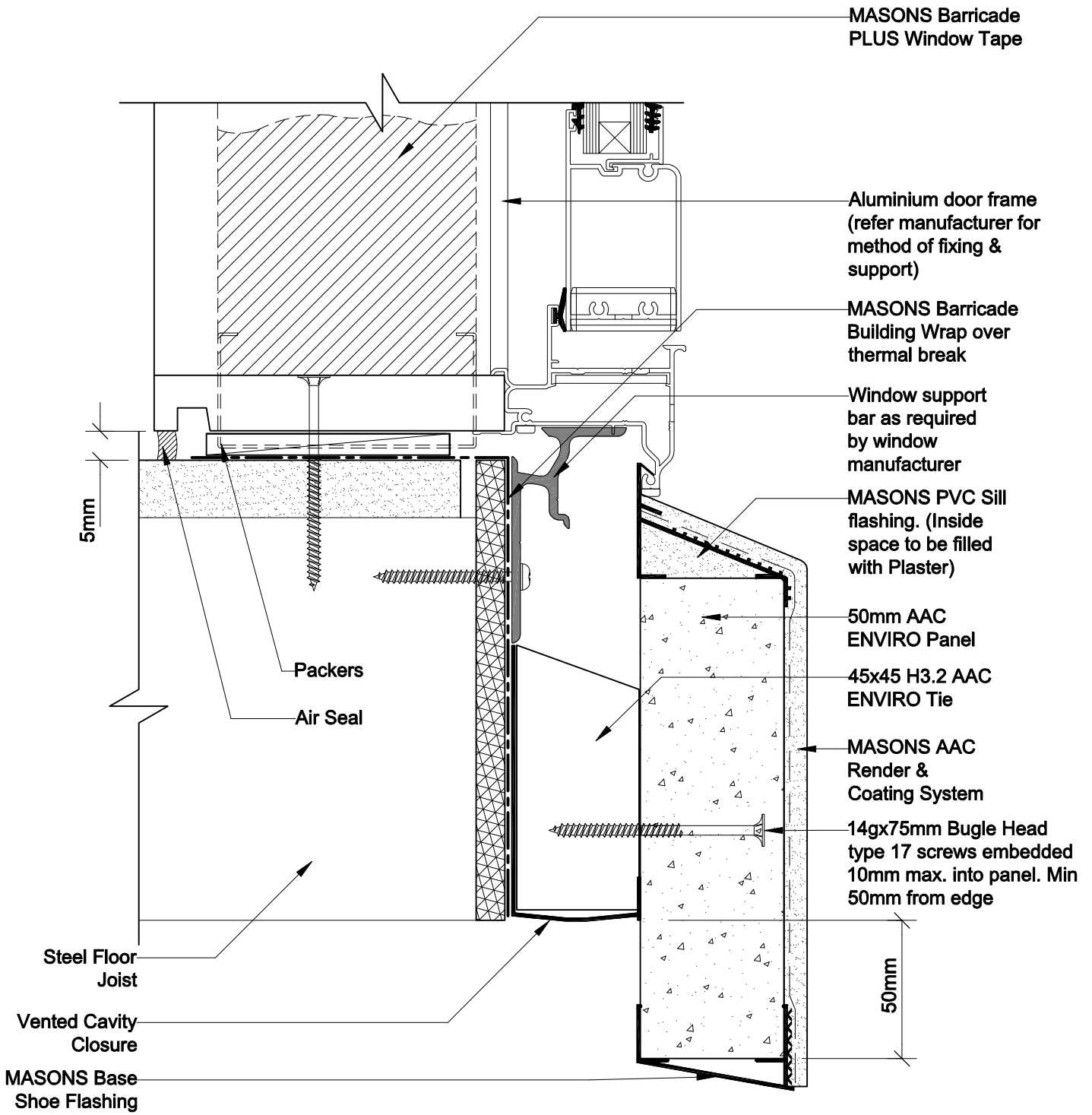
**MASONS ENVIRO AAC ON 45mm CAVITY
STEEL FRAME**



**OPENING FLASHING -
CONCRETE DOOR SILL
Without Rebate**

Detail 32 Scale 1:2

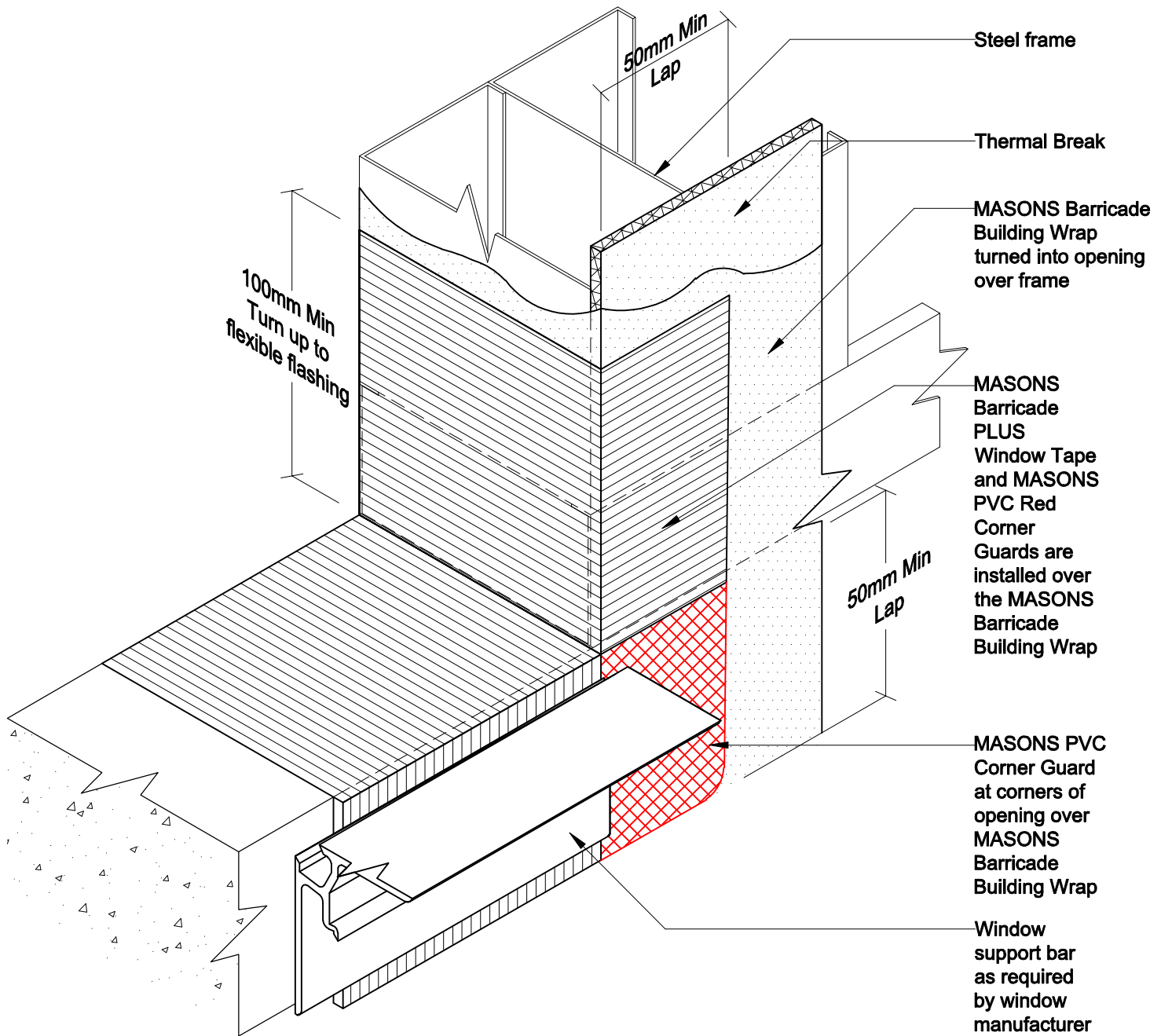
**MASONS ENVIRO AAC ON 45mm CAVITY
STEEL FRAME**



**OPENING FLASHING -
STEEL FLOOR DOOR
Sill**

Detail 33 Scale 1:2

**MASONS ENVIRO AAC ON 45mm CAVITY
STEEL FRAME**



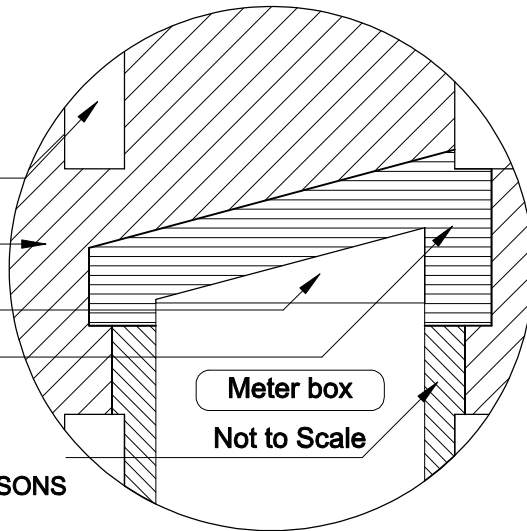
OPENING FLASHING
Door Sill - 3D

MASON'S PVC Corner Guard

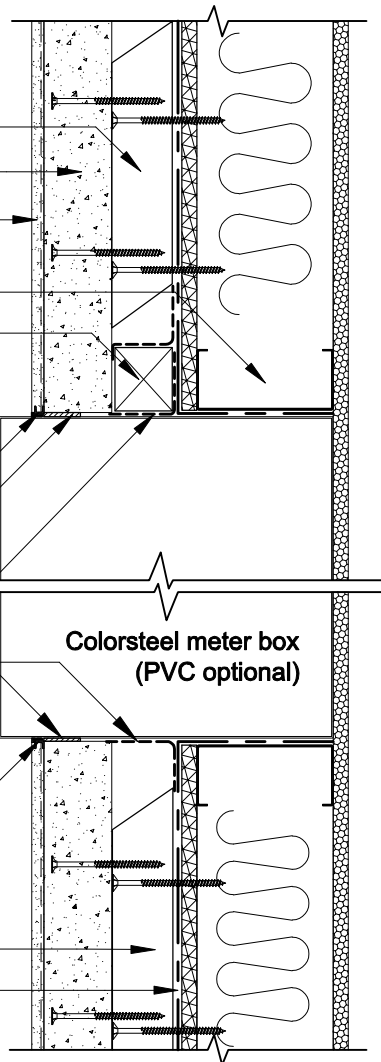
Detail 34 NTS

**MASONS ENVIRO AAC ON 45mm CAVITY
STEEL FRAME**

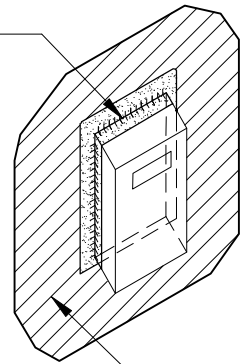
- 45x45 H3.2 AAC ENVIRO Tie
- kept 100mm min above wedge
- MASONS Barricade Building Wrap
- H3.2 timber wedge with 15° slope
- MASONS Barricade PLUS Tape over wedge adhered to MASONS Barricade Building Wrap
- MASONS Barricade PLUS Tape to meterbox perimeter adhered to MASONS Barricade Building Wrap



- 45x45 H3.2 AAC ENVIRO Tie
- 50mm AAC ENVIRO Panel
- MASONS AAC render & coating system
- Blocking between studs
- H3.2 timber wedge with 15° slope to direct water to outside edge. Masons Barricade PLUS Tape over top adhered to MASONS Barricade Building Wrap
- PVC reveal bead flashing adhered to face of meter box. BOSTIK safe seal over and plastered in.
- Low expandable foam backing
- MASONS Barricade PLUS Tape adhered to MASONS Barricade Building Wrap & meter box
- PVC reveal bead flashing adhered to face of meter box. BOSTIK safe seal over and plastered in.
- 45x45 H3.2 AAC ENVIRO Tie
- MASONS Barricade Building Wrap over thermal break



MASONS
Barricade
PLUS
Tape to
perimeter
of Meter
Box



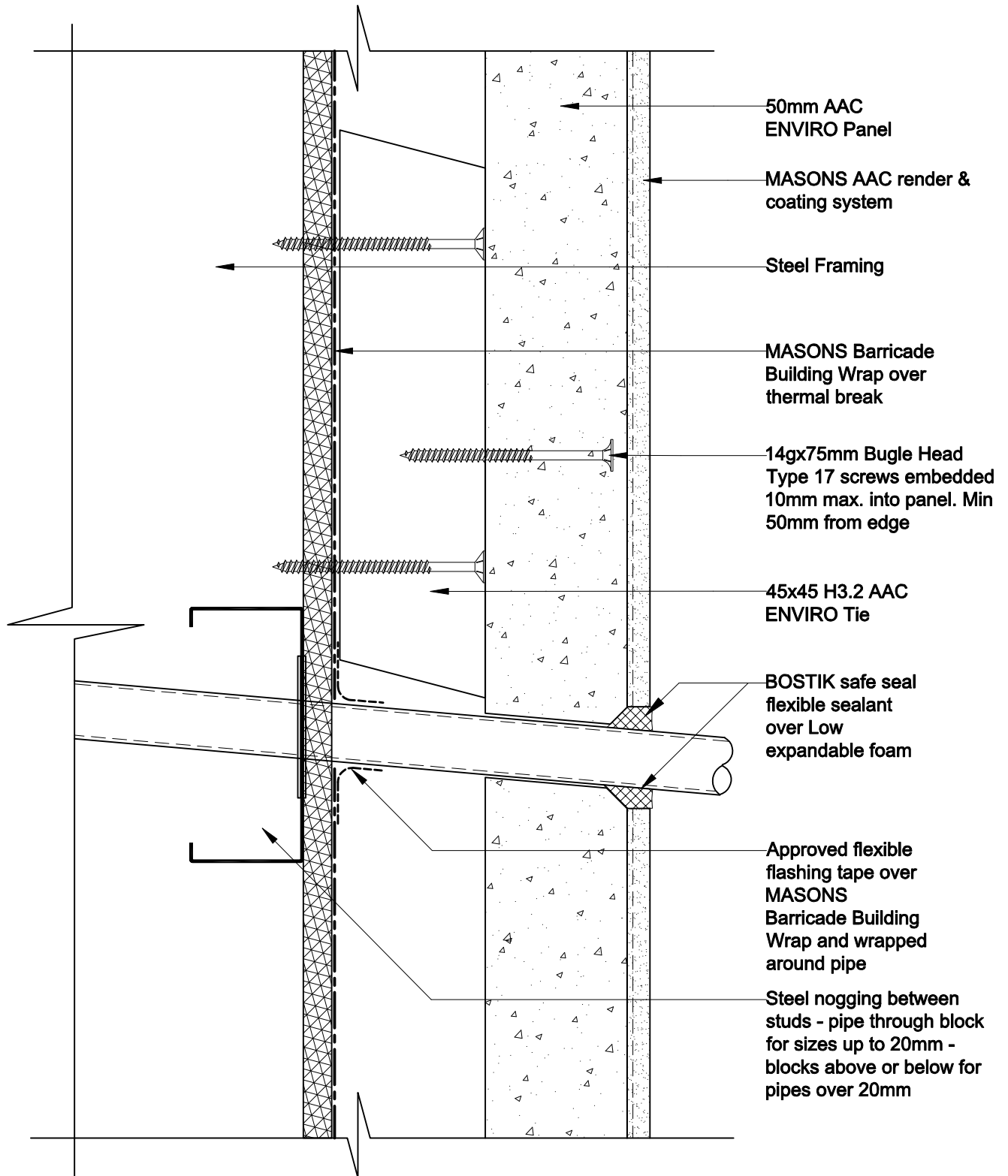
MASONS
Barricade
Building
Wrap

METER BOX Detail 36 NTS

METER BOX

Detail 35 Scale 1:5

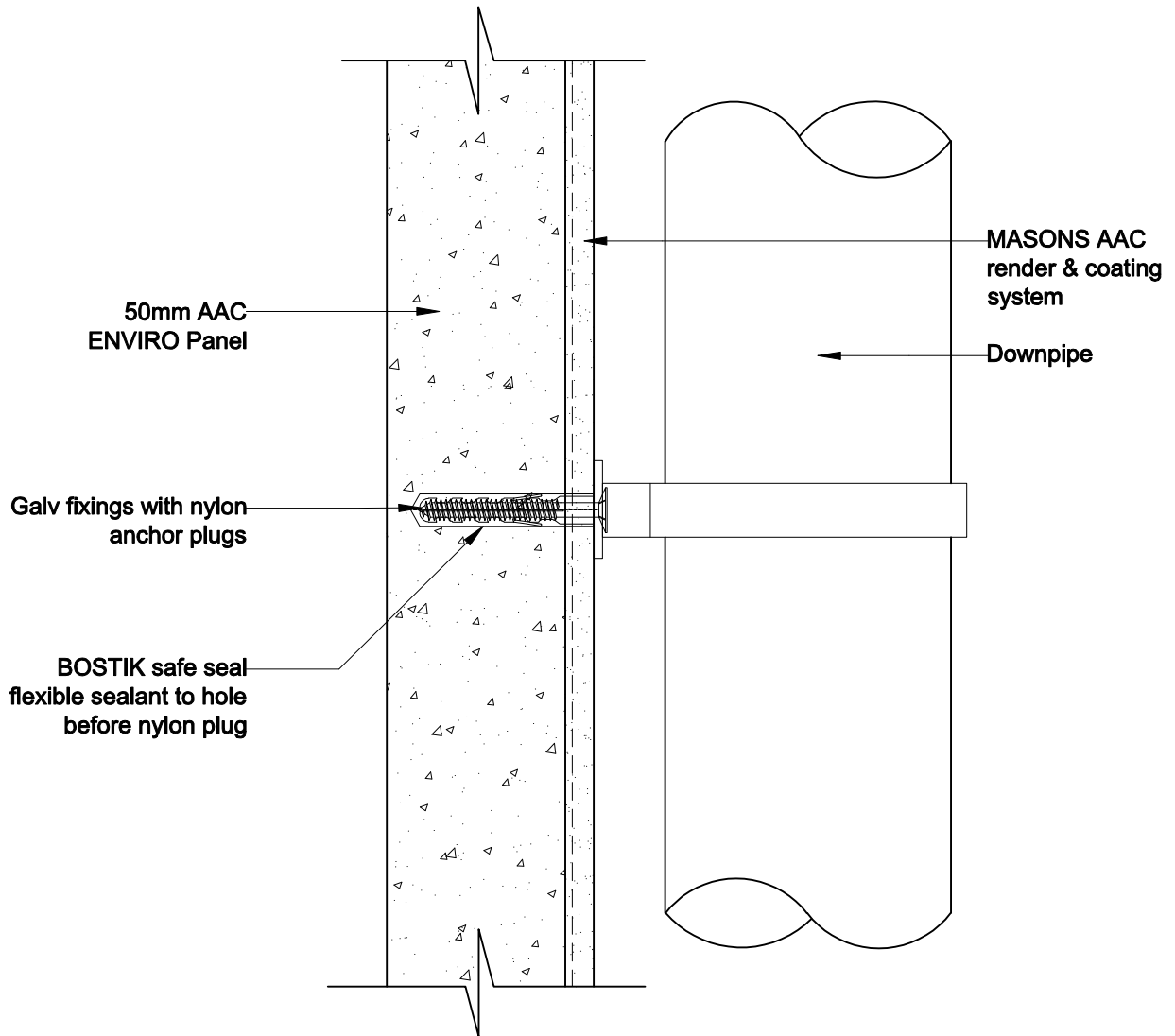
MASONS ENVIRO AAC ON 45mm CAVITY STEEL FRAME



PIPE PENETRATION

Detail 37 Scale 1:2

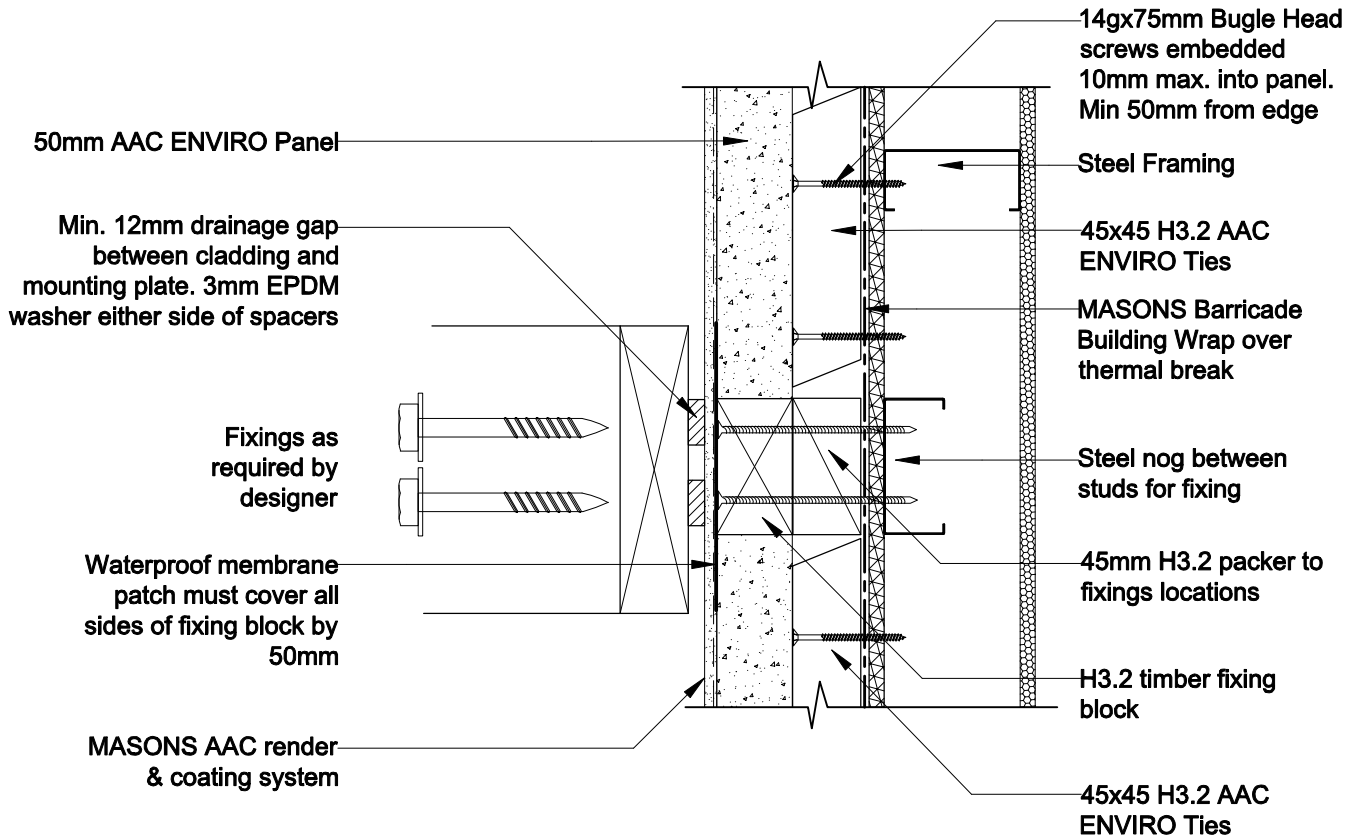
MASONS ENVIRO AAC ON 45mm CAVITY STEEL FRAME



DOWNPIPE FIXING

Detail 38 Scale 1:2

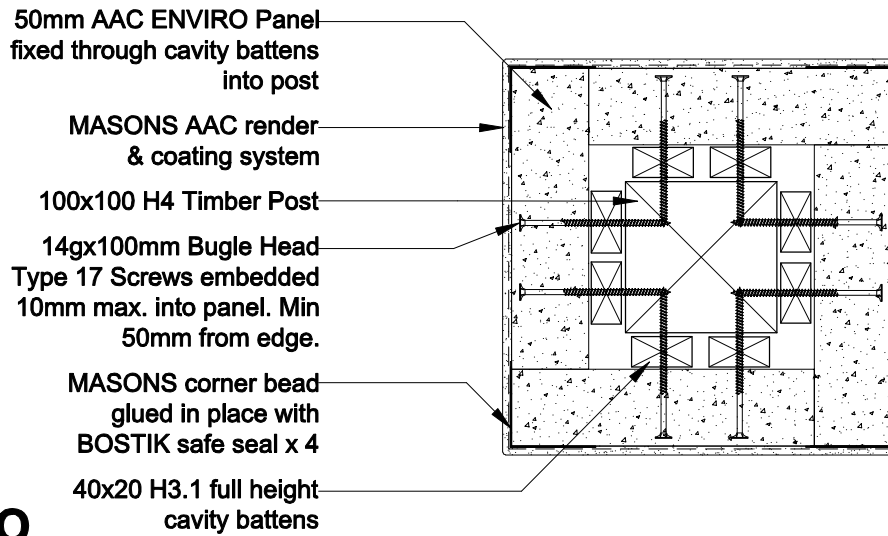
MASONS ENVIRO AAC ON 45mm CAVITY STEEL FRAME



**DECK / PERGOLA
EXTERIOR Wall Fixing**

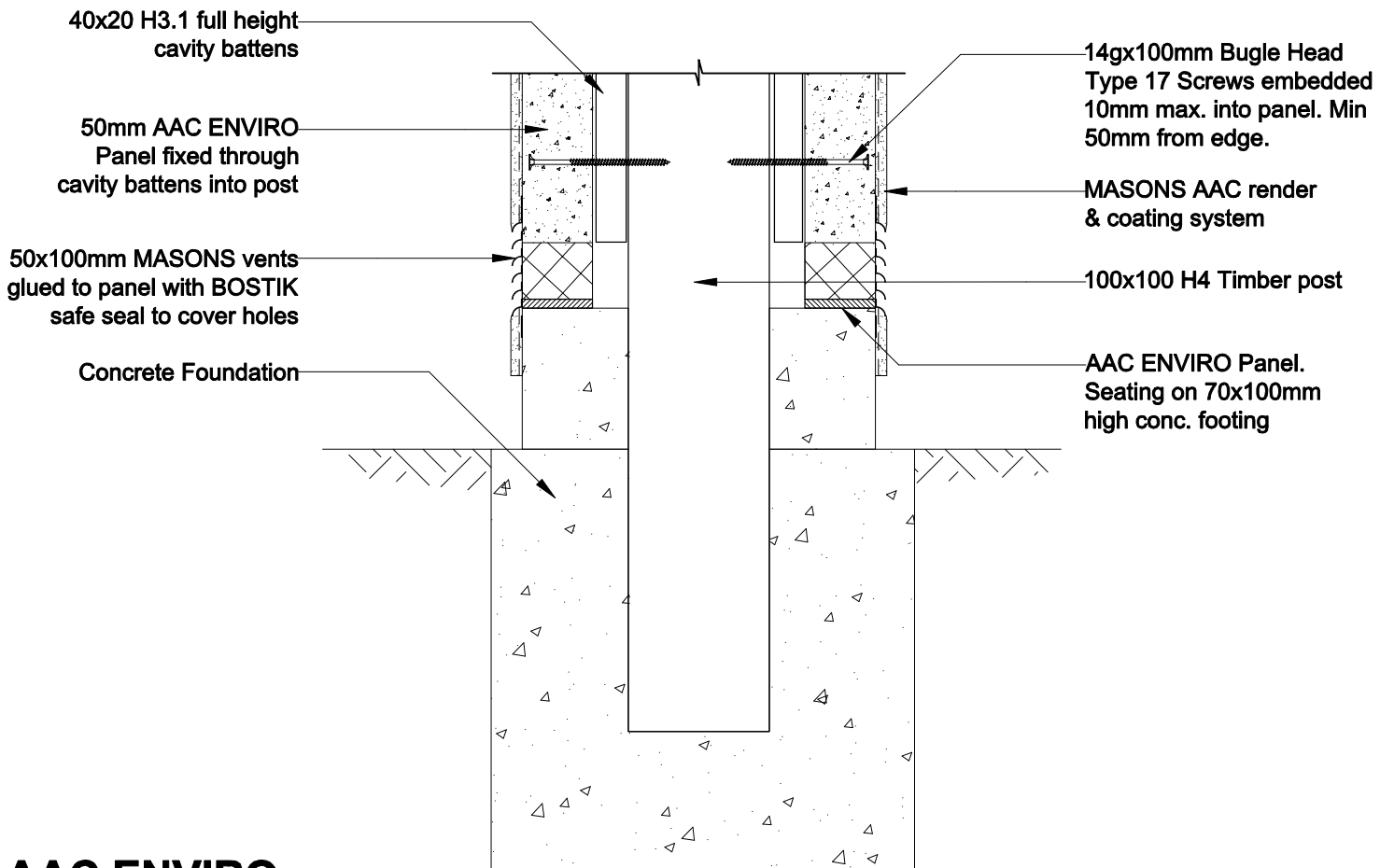
Detail 39 Scale 1:5
Note: Detail to be drawn to specific design

**MASONS ENVIRO AAC ON 45mm CAVITY
STEEL FRAME**



AAC ENVIRO COLUMN/POST - Plan View

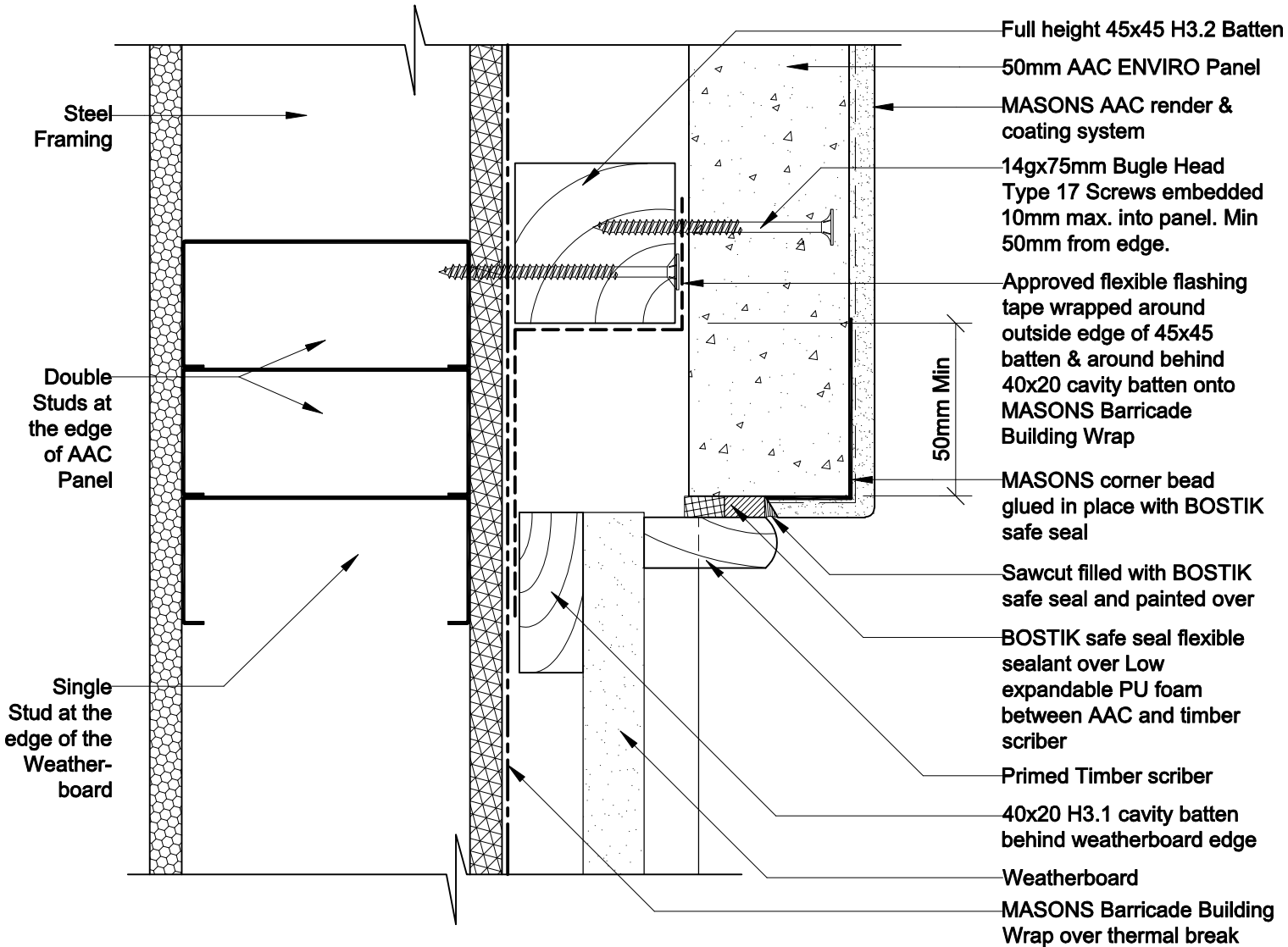
Detail 40 Scale 1:5



AAC ENVIRO COLUMN/POST - Section View

Detail 41 Scale 1:5

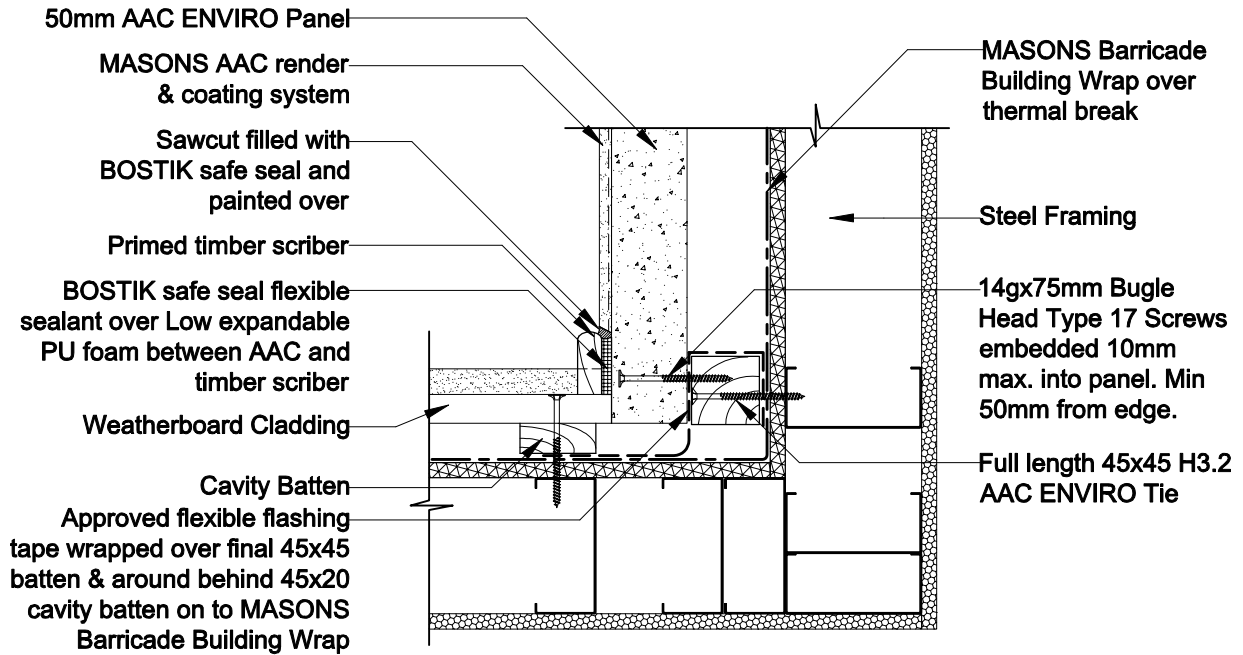
MASONS ENVIRO AAC ON 45mm CAVITY STEEL FRAME



**AAC ENVIRO PANEL / WEATHER BOARD
VERTICAL JUNCTION
Plan View**

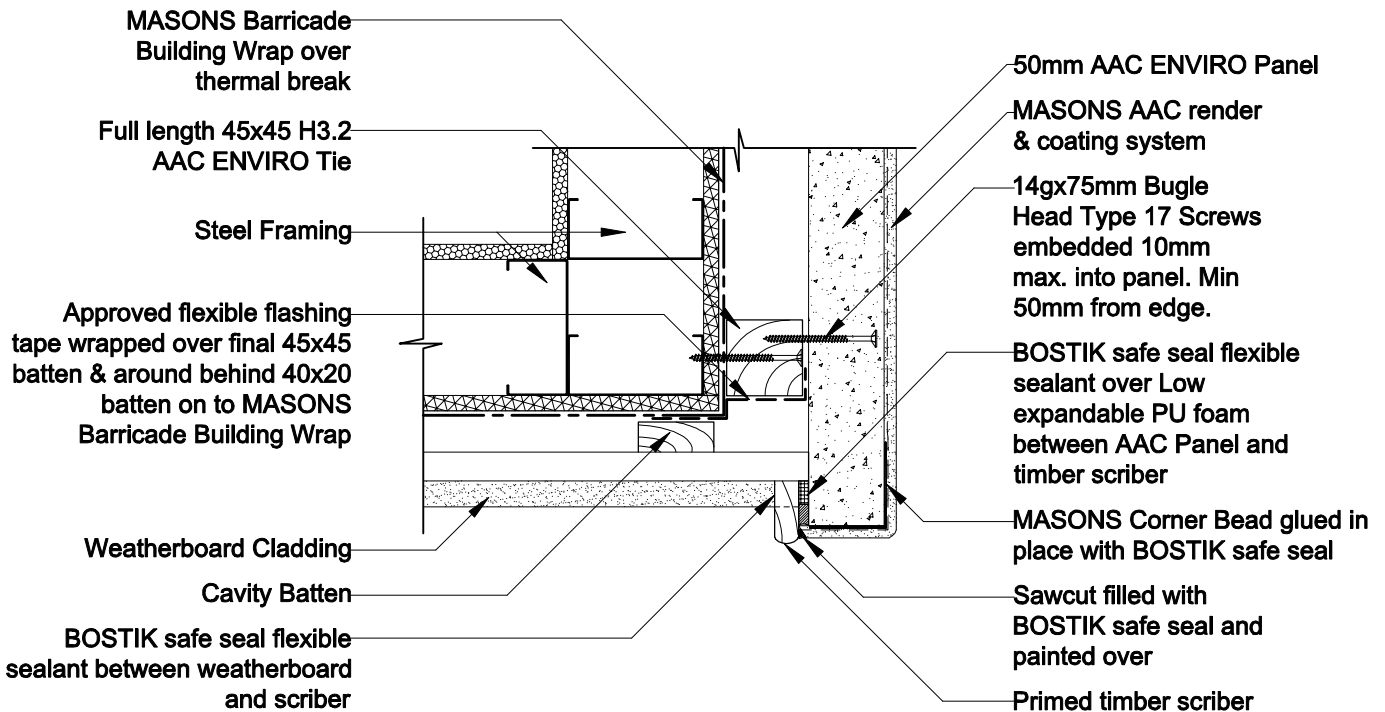
Detail 42 Scale 1:2

**MASONS ENVIRO AAC ON 45mm CAVITY
STEEL FRAME**



**ENVIRO AAC PANEL / WEATHERBOARD
Corner Junction Internal**

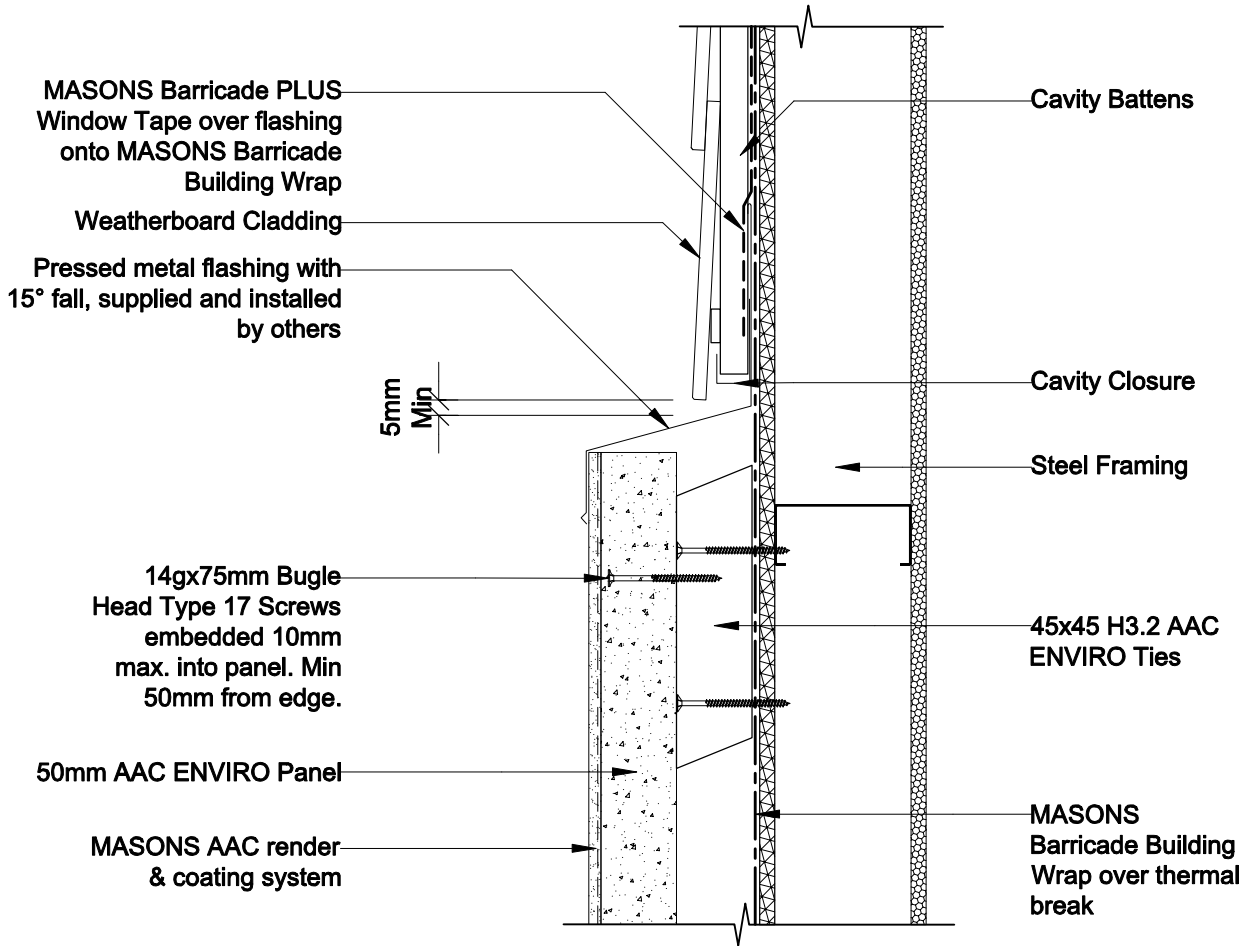
Detail 43 Scale 1:5



**ENVIRO AAC PANEL / WEATHERBOARD
Corner Junction External**

Detail 44 Scale 1:5

**MASONS ENVIRO AAC ON 45mm CAVITY
STEEL FRAME**

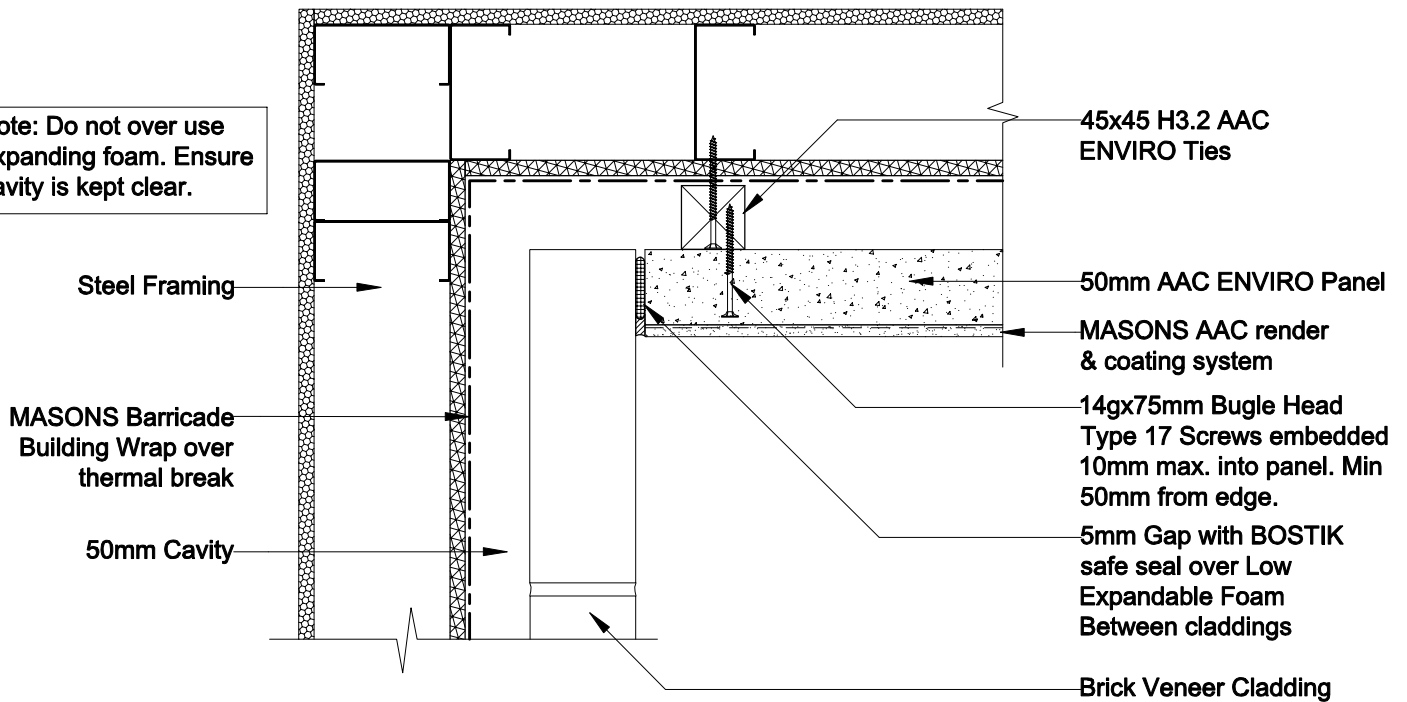


AAC ENVIRO PANEL / WEATHER BOARD - Mid Floor Junction

Detail 45 Scale 1:5

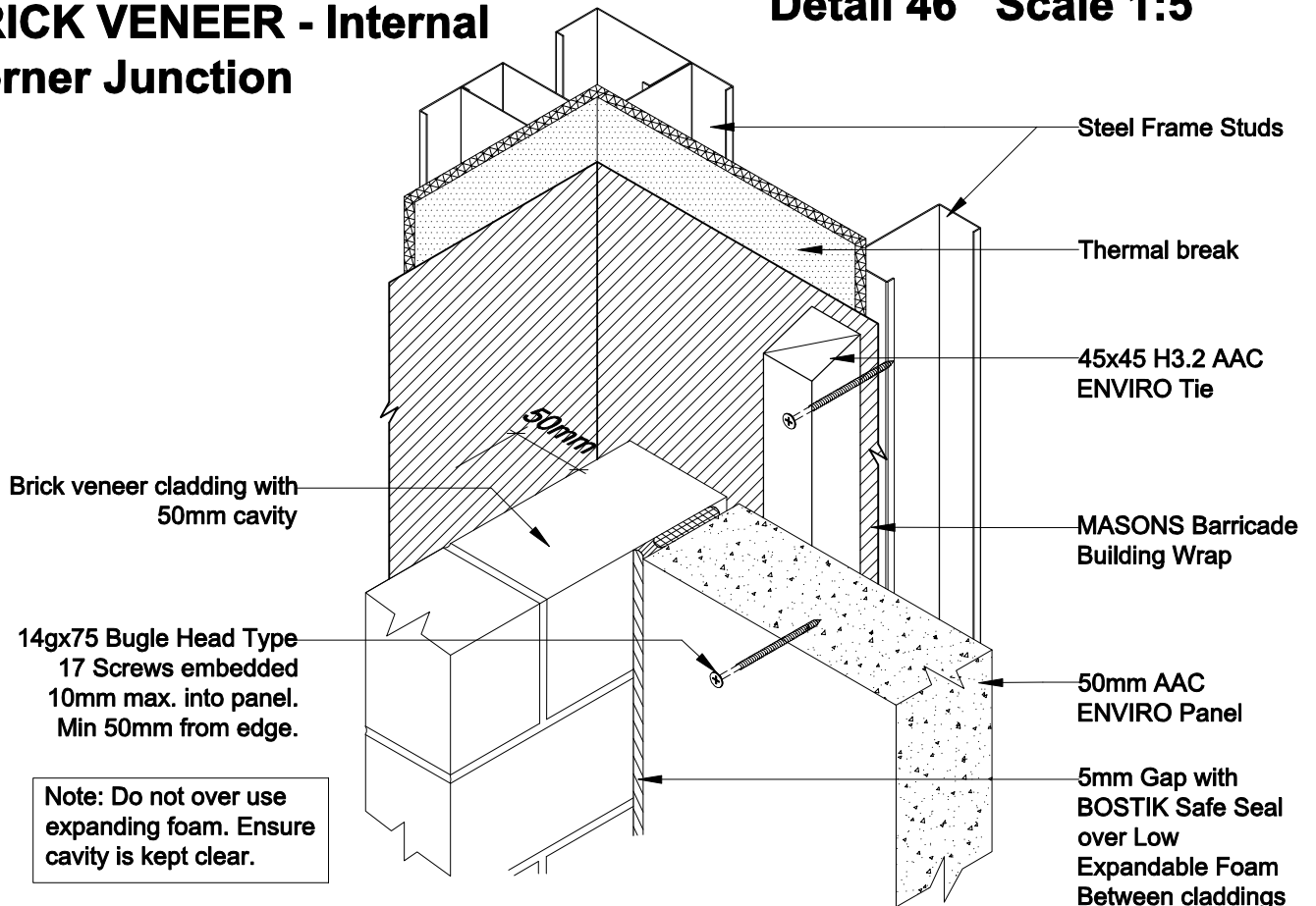
MASONS ENVIRO AAC ON 45mm CAVITY STEEL FRAME

Note: Do not over use expanding foam. Ensure cavity is kept clear.



**AAC ENVIRO PANEL /
 BRICK VENEER - Internal
 Corner Junction**

Detail 46 Scale 1:5

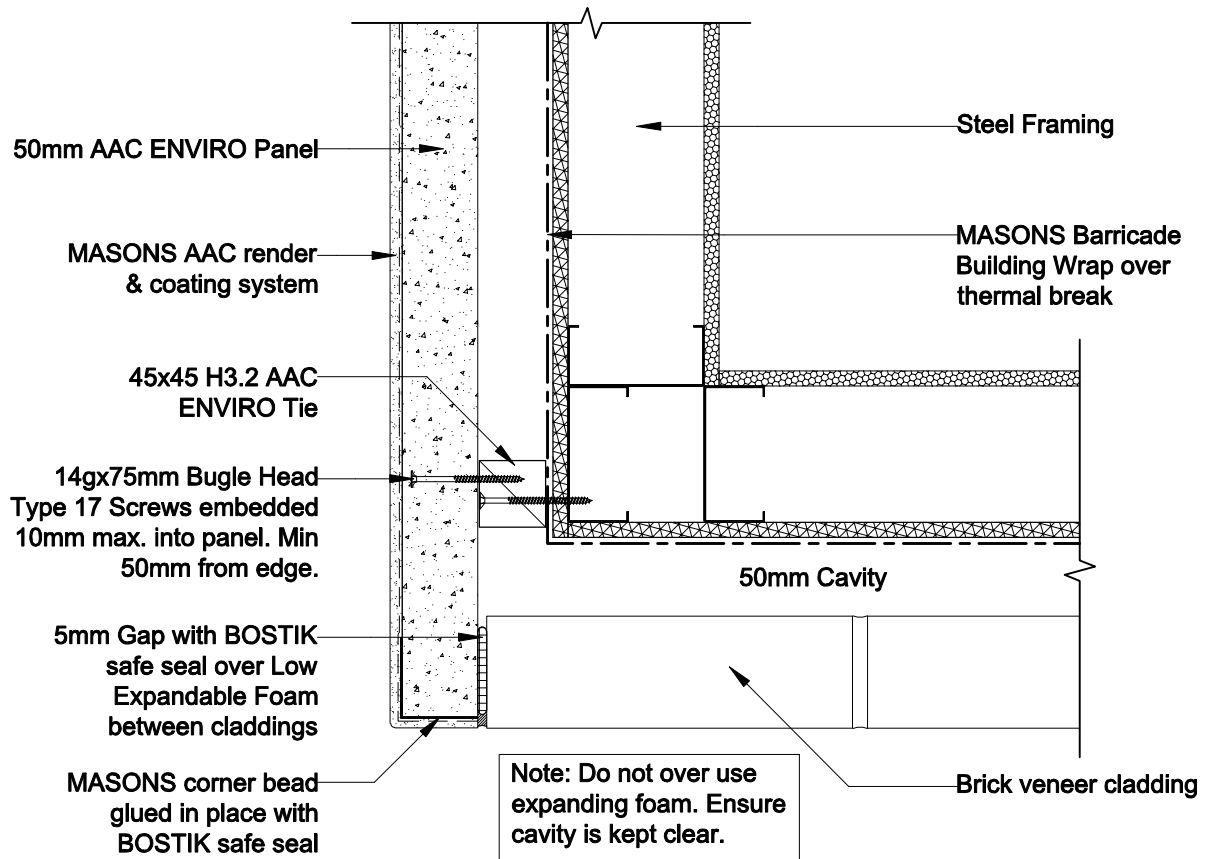


Note: Do not over use expanding foam. Ensure cavity is kept clear.

**AAC ENVIRO PANEL / BRICK VENEER
 Internal Corner Junction - 3D View**

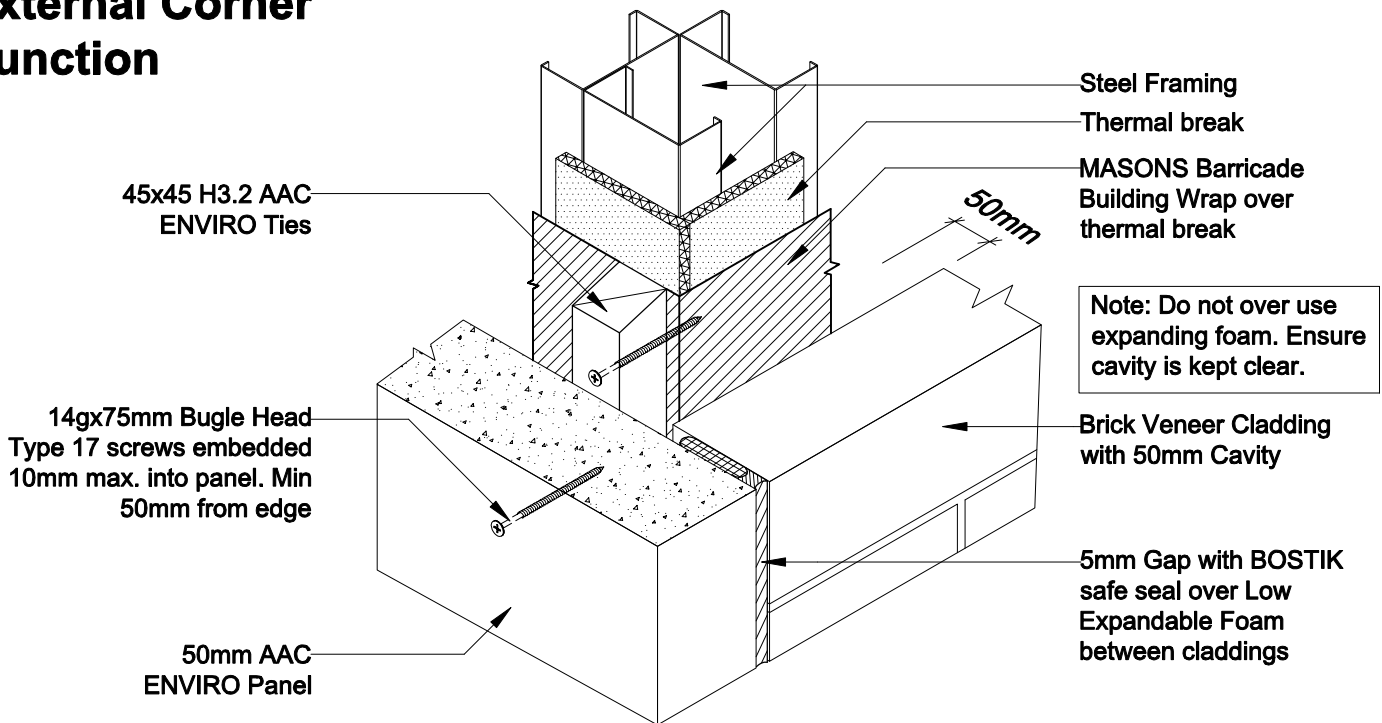
Detail 47 NTS

**MASONS ENVIRO AAC ON 45mm CAVITY
 STEEL FRAME**



**AAC ENVIRO PANEL / BRICK VENEER
External Corner
Junction**

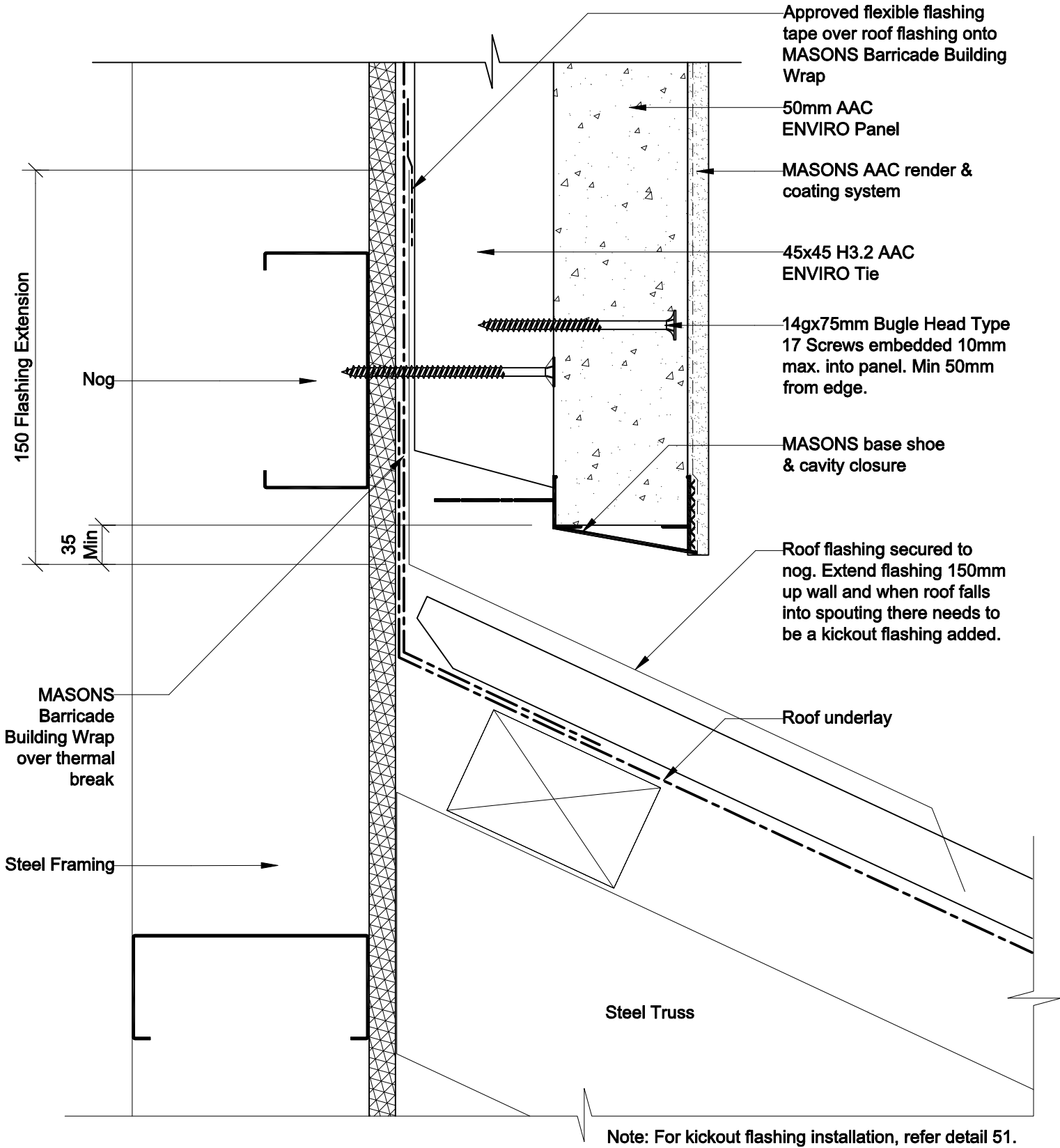
Detail 48 Scale 1:5



**AAC ENVIRO PANEL / BRICK VENEER
External Corner Junction - 3D View**

Detail 49 NTS

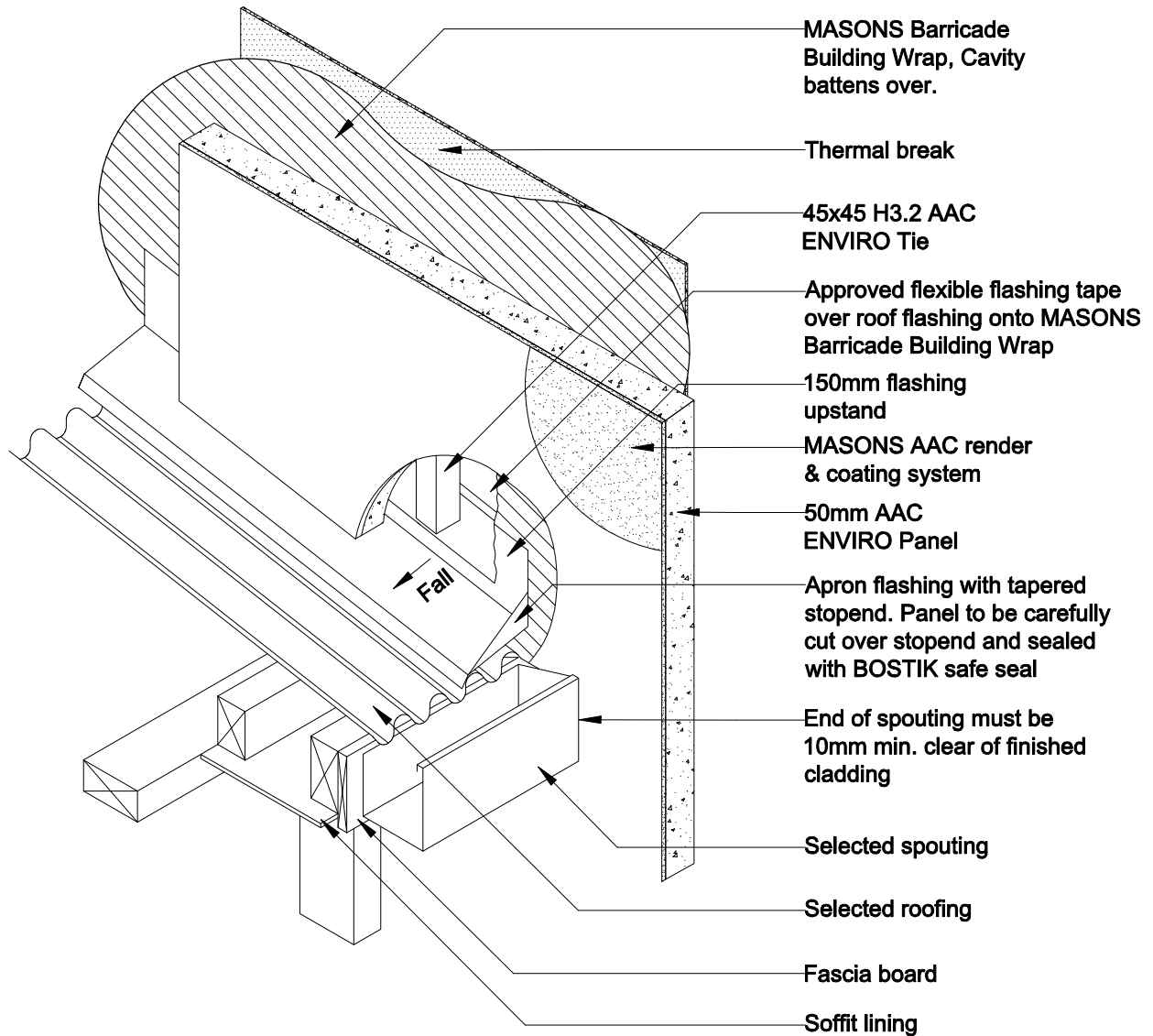
**MASONS ENVIRO AAC ON 45mm CAVITY
STEEL FRAME**



ROOF / WALL JUNCTION

Detail 50 Scale 1:2

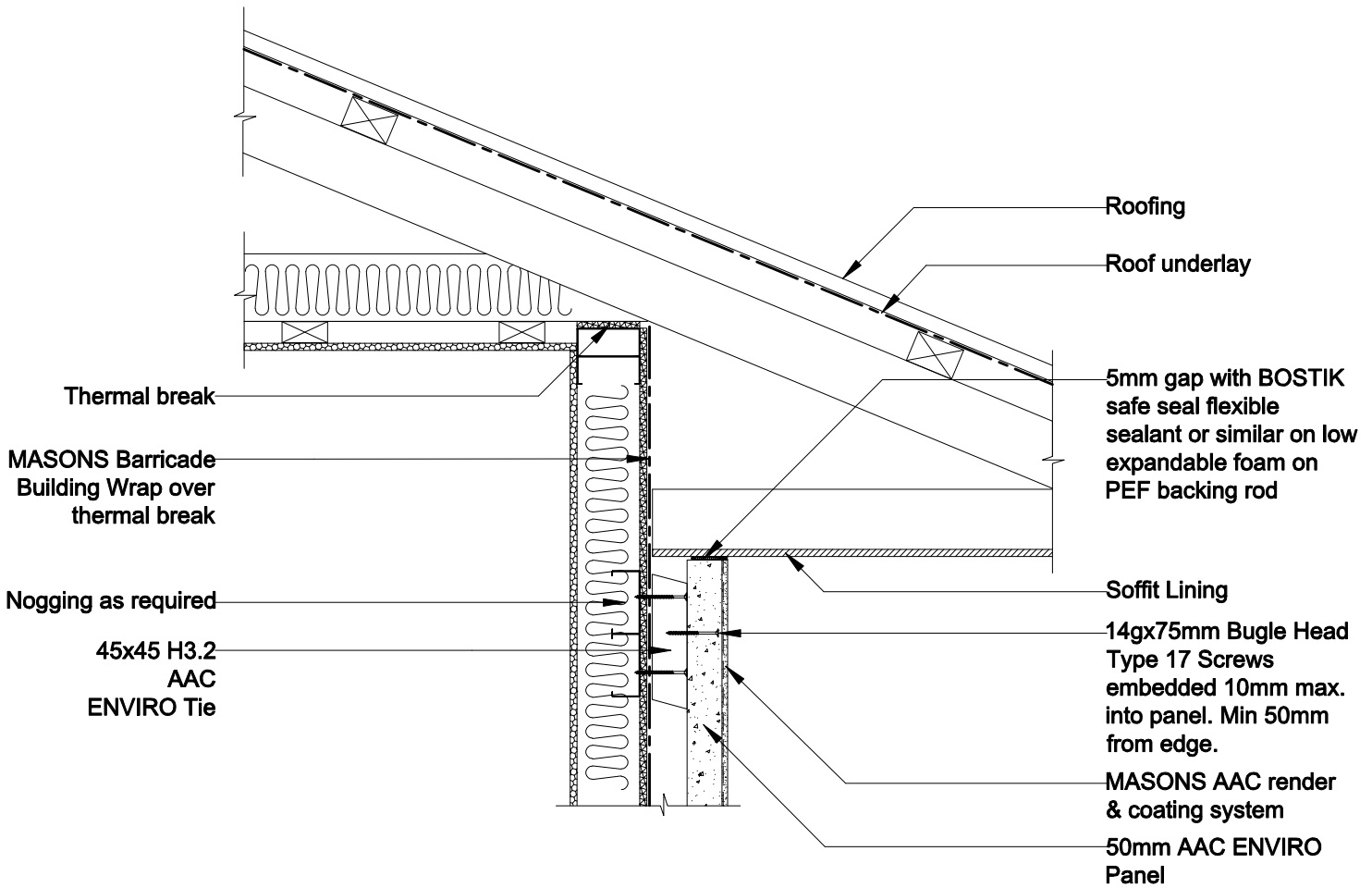
MASONS ENVIRO AAC ON 45mm CAVITY STEEL FRAME



**ROOF/WALL JUNCTION -
KICKOUT FLASHING**

Detail 51 NTS

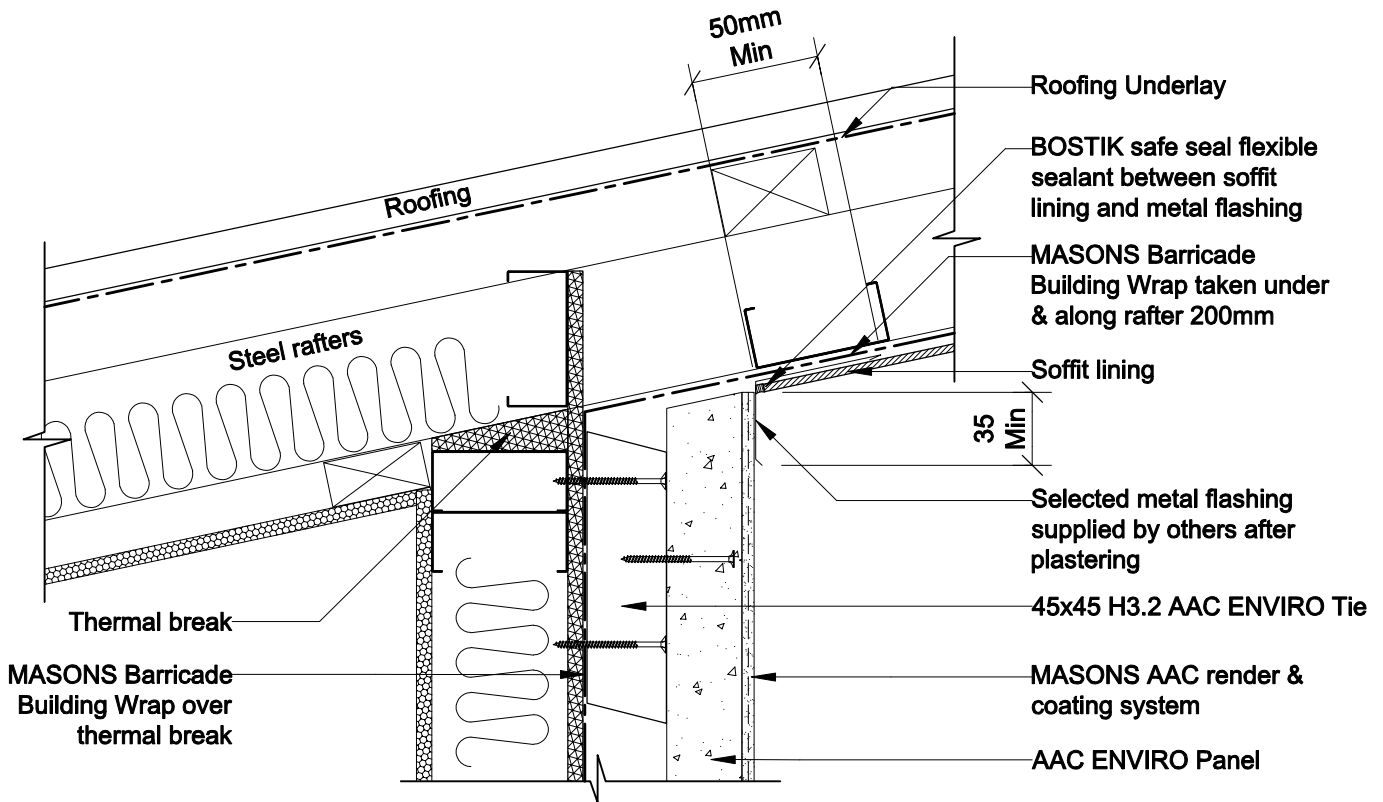
**MASONS ENVIRO AAC ON 45mm CAVITY
STEEL FRAME**



SOFFIT JUNCTION

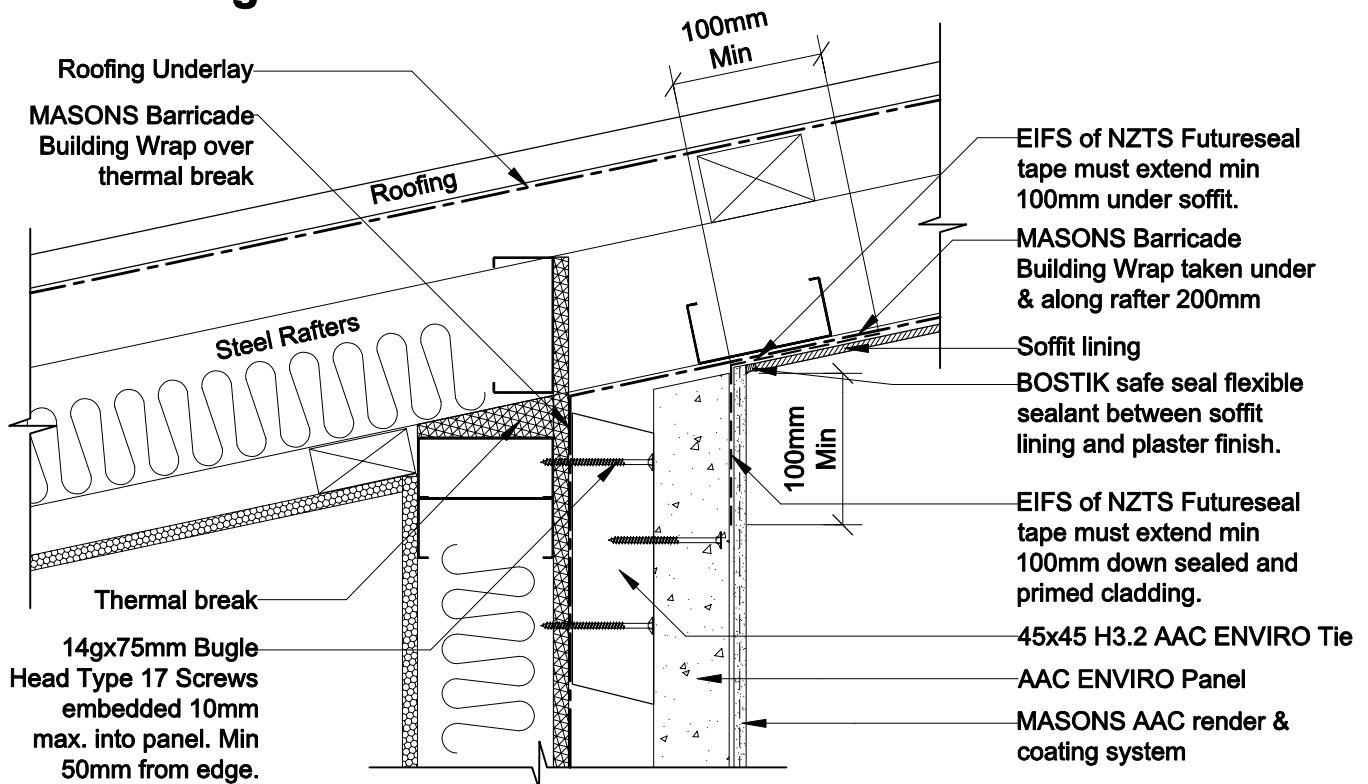
Detail 52 Scale 1:10

MASONS ENVIRO AAC ON 45mm CAVITY STEEL FRAME



**UPPER RAKING SOFFIT
Metal Flashing**

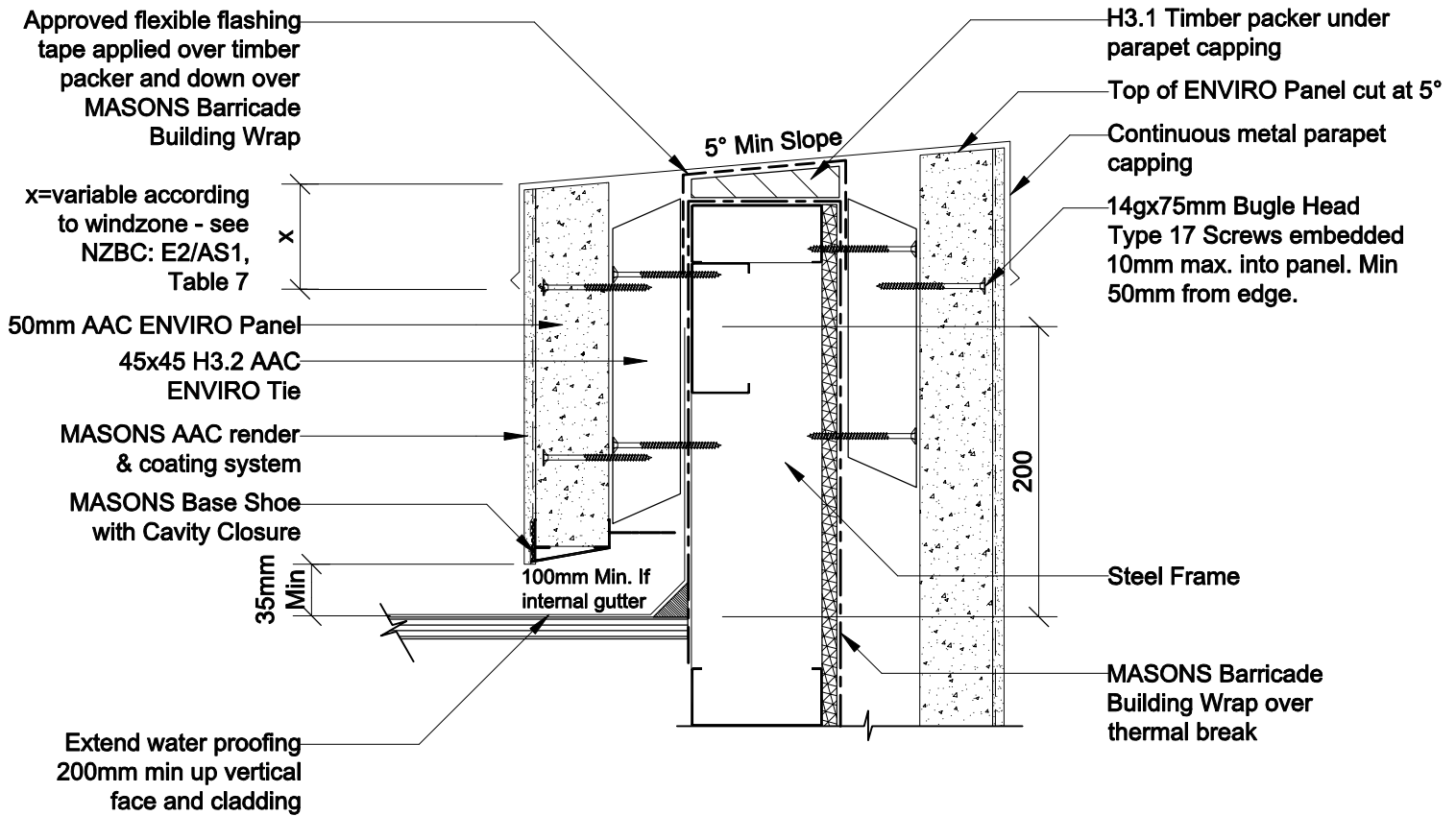
Detail 53 Scale 1:5



**UPPER RAKING SOFFIT
Hidden Flashing**

Detail 54 Scale 1:5

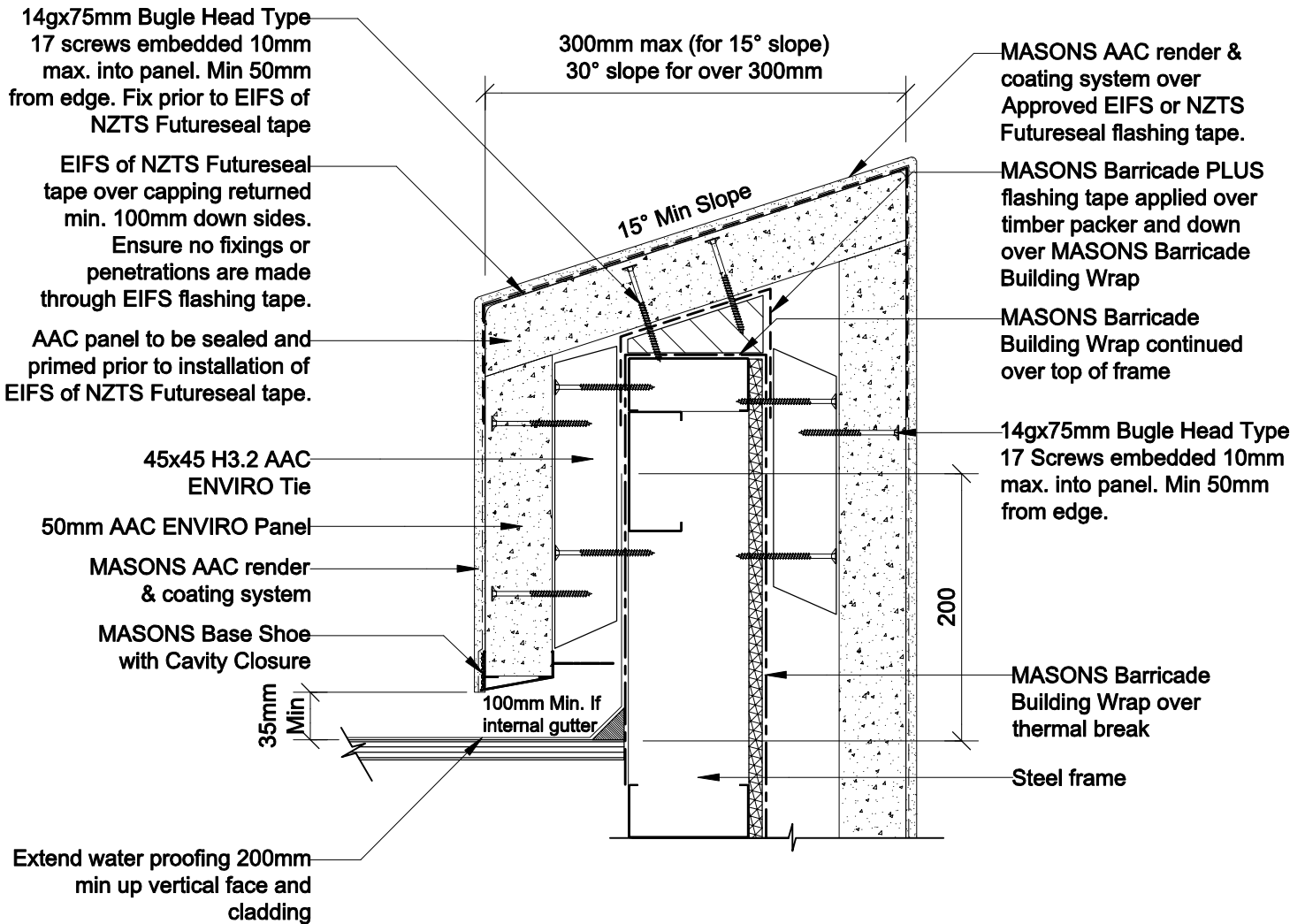
**MASONS ENVIRO AAC ON 45mm CAVITY
STEEL FRAME**



**PARAPET
CONSTRUCTION -
Metal Capping**

Detail 55 Scale 1:5

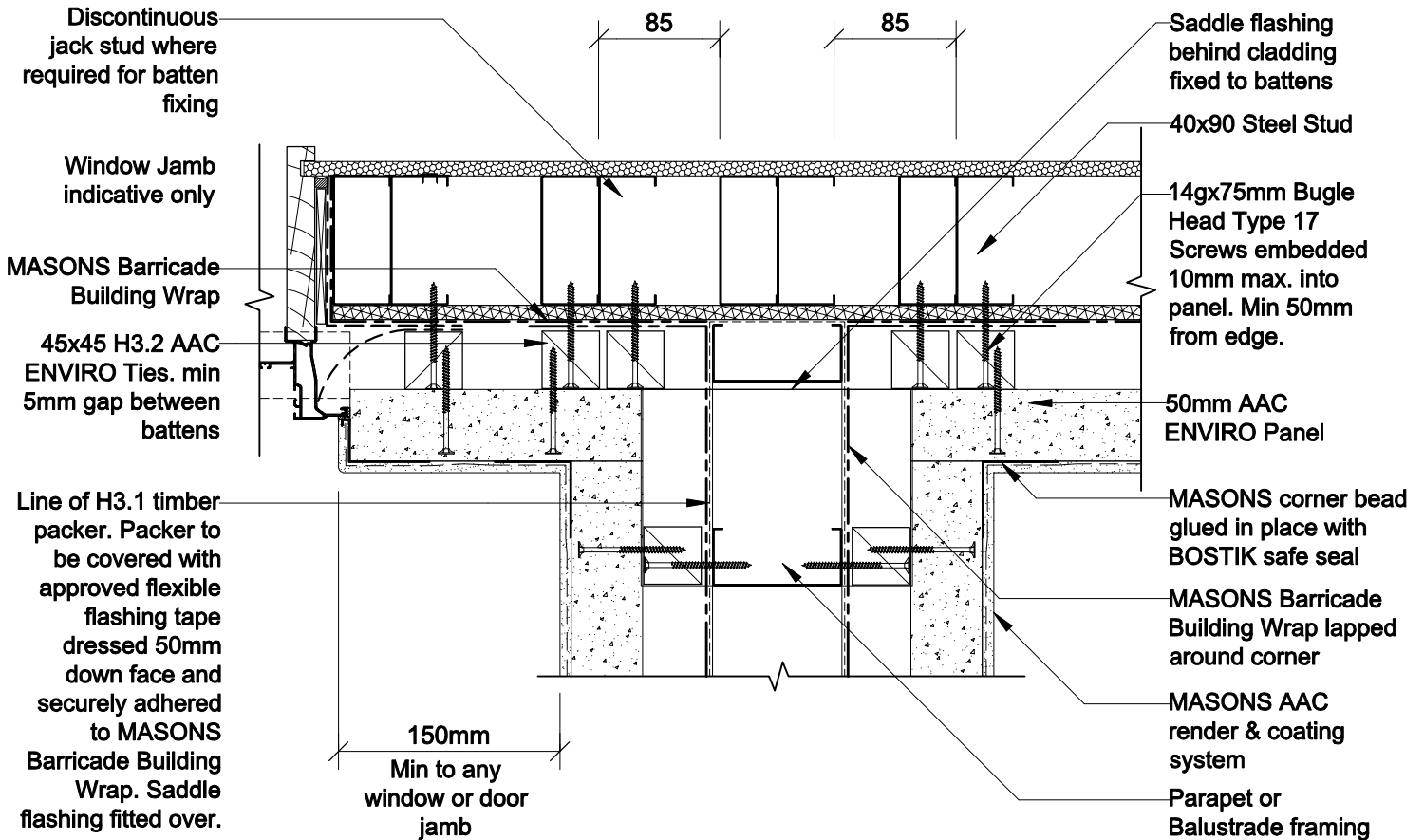
**MASONS ENVIRO AAC ON 45mm CAVITY
STEEL FRAME**



**PARAPET
CONSTRUCTION -
Plastered Capping**

Detail 56 Scale 1:5

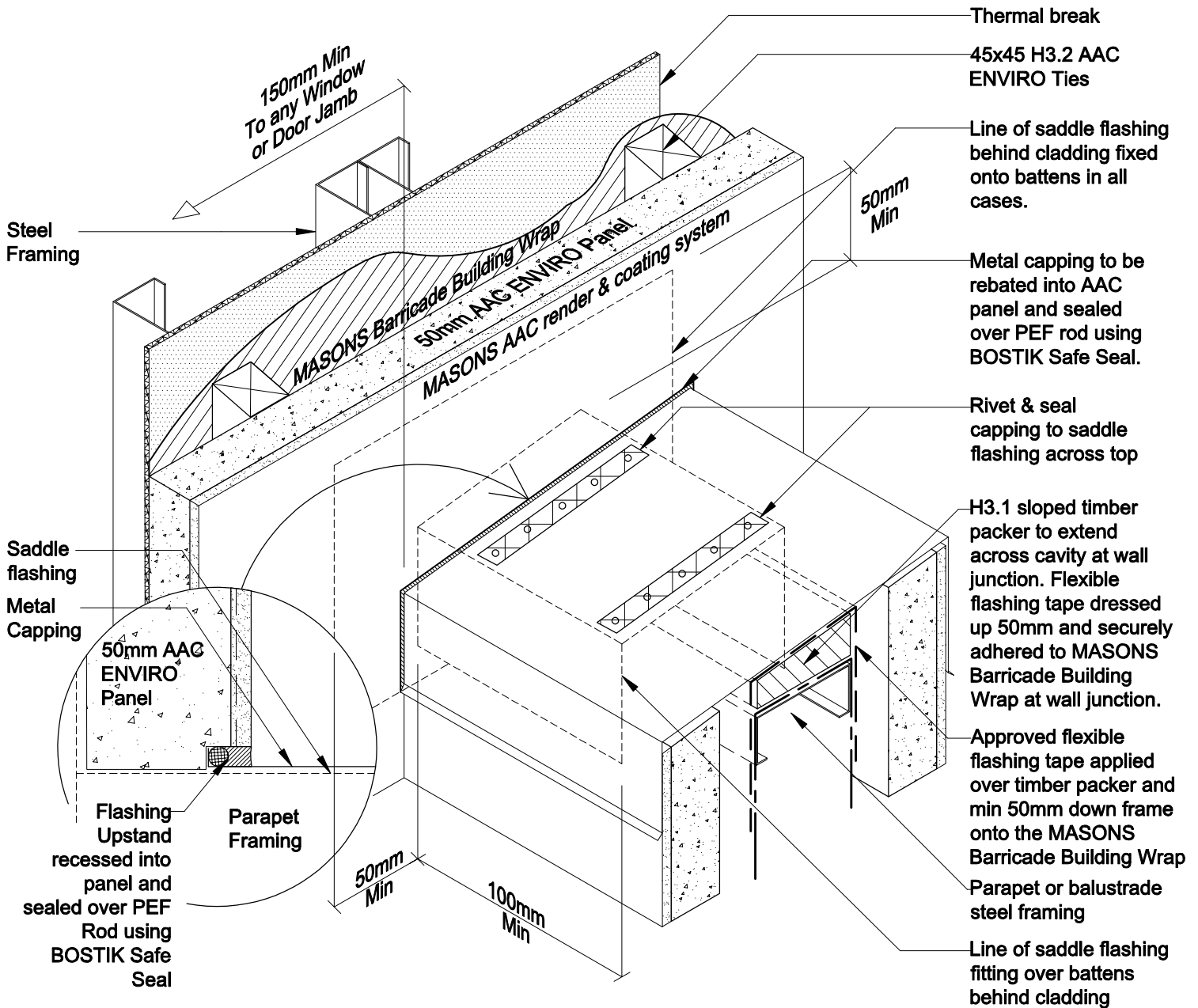
**MASONS ENVIRO AAC ON 45mm CAVITY
STEEL FRAME**



**PARAPET / HANDRAIL
TO WALL JUNCTION
With Metal Capping**

Detail 57 Scale 1:5

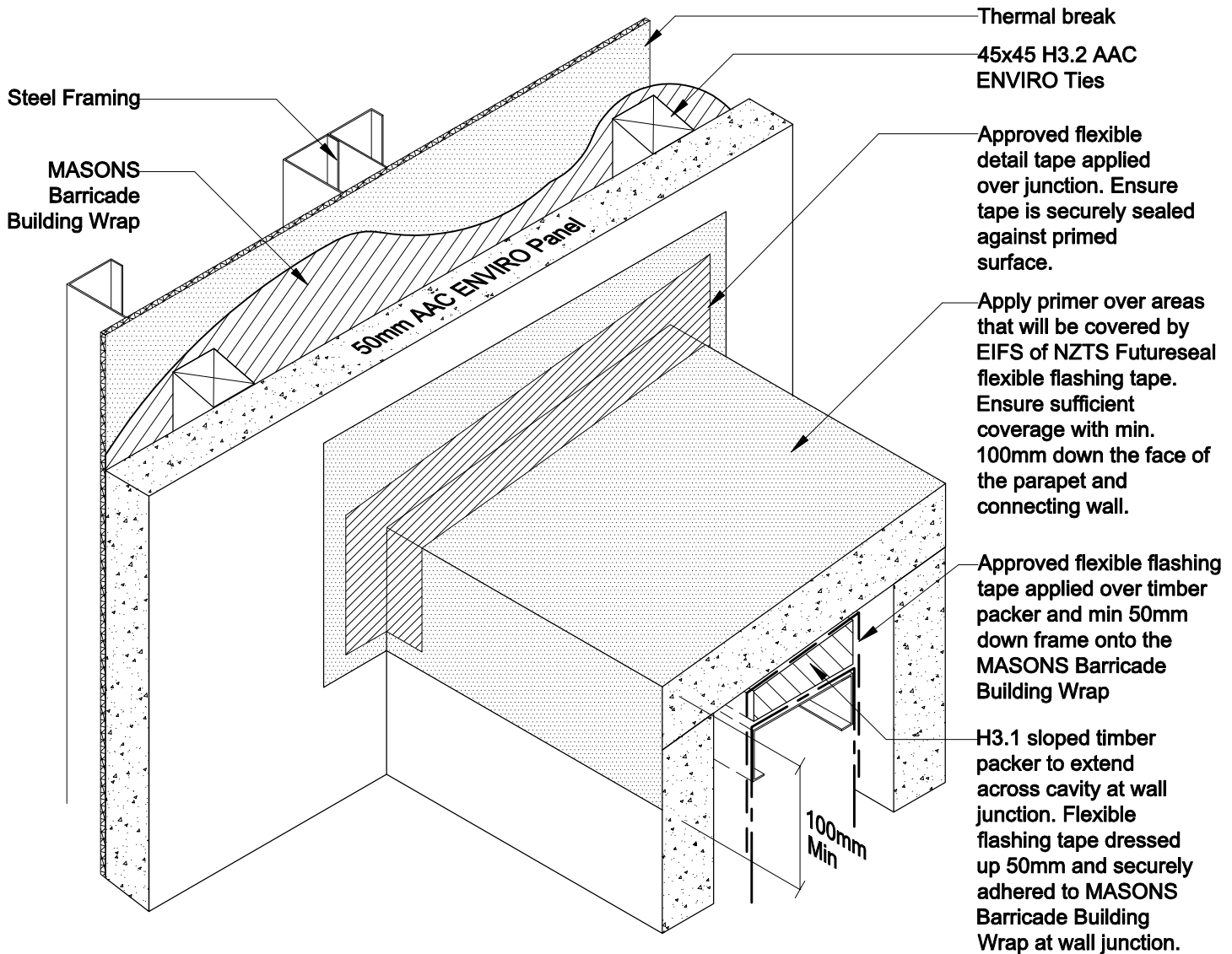
**MASONS ENVIRO AAC ON 45mm CAVITY
STEEL FRAME**



**PARAPET / HANDRAIL TO WALL JUNCTION
With Metal Capping -
3D View**

Detail 58 NTS

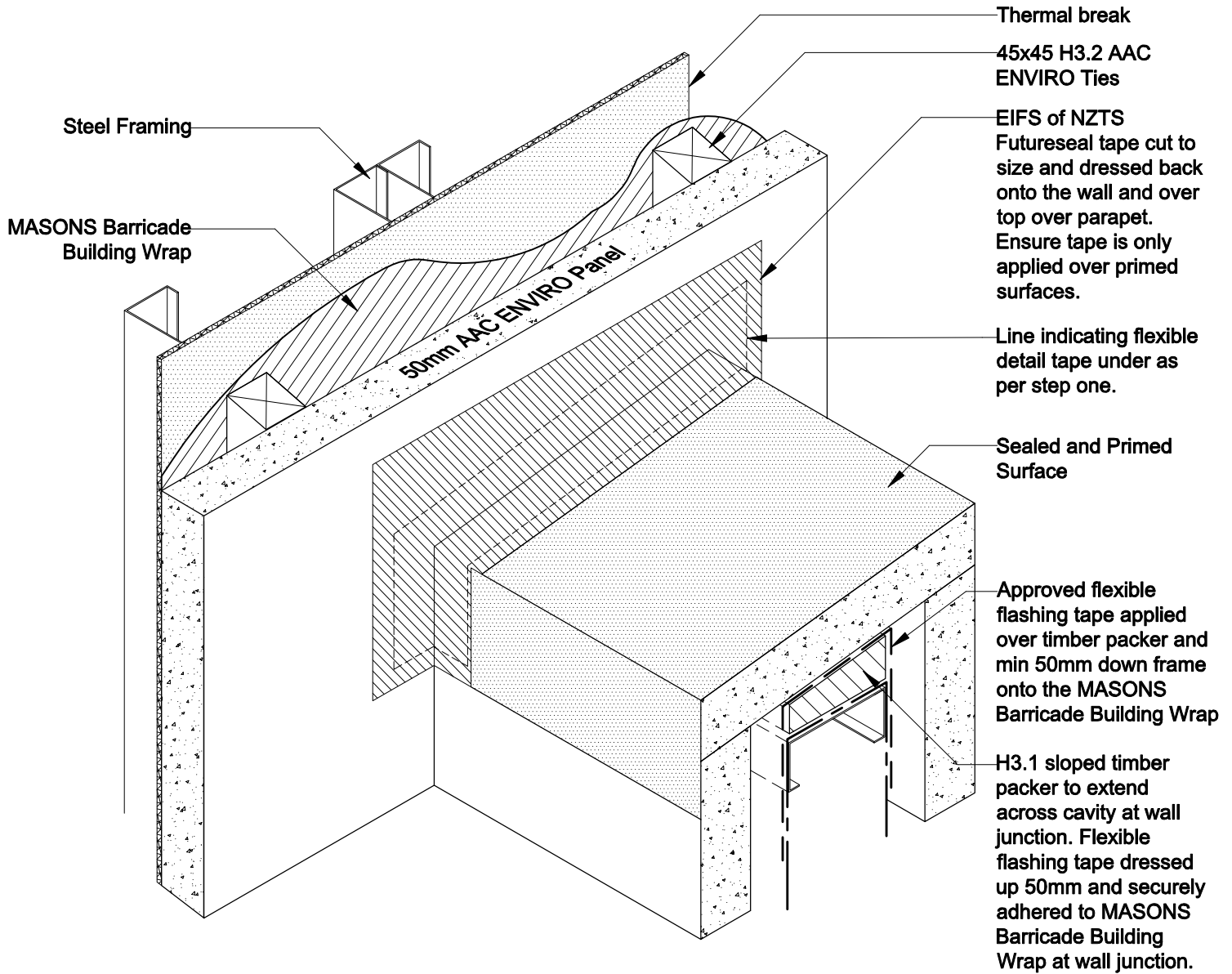
**MASONS ENVIRO AAC ON 45mm CAVITY
STEEL FRAME**



**PARAPET / HANDRAIL
 TO WALL JUNCTION
 ENVIRO Panel Capping
 Step 1**

Detail 59 NTS

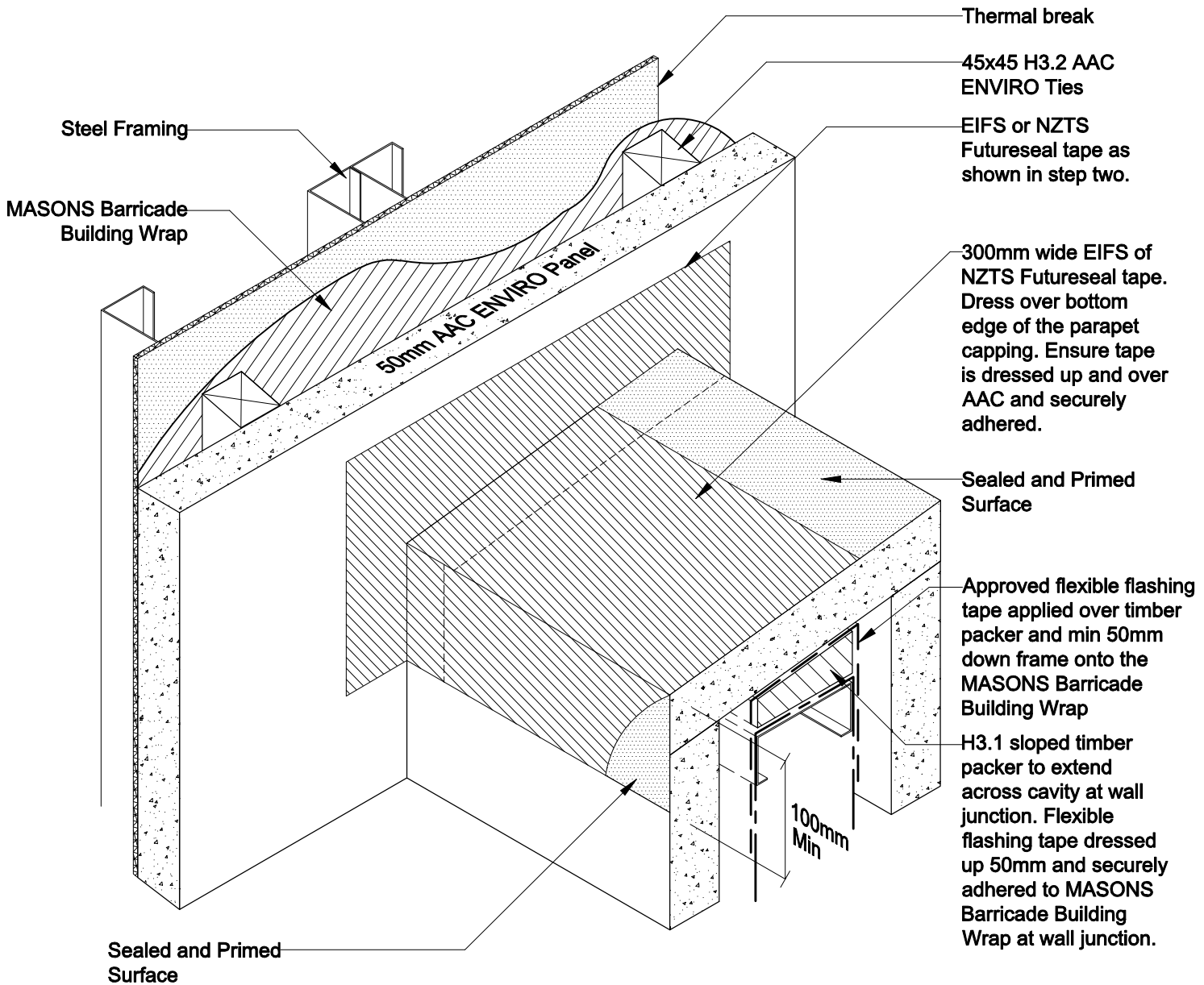
**MASONS ENVIRO AAC ON 45mm CAVITY
 STEEL FRAME**



**PARAPET / HANDRAIL
TO WALL JUNCTION
ENVIRO Panel Capping
Step 2**

Detail 59A NTS

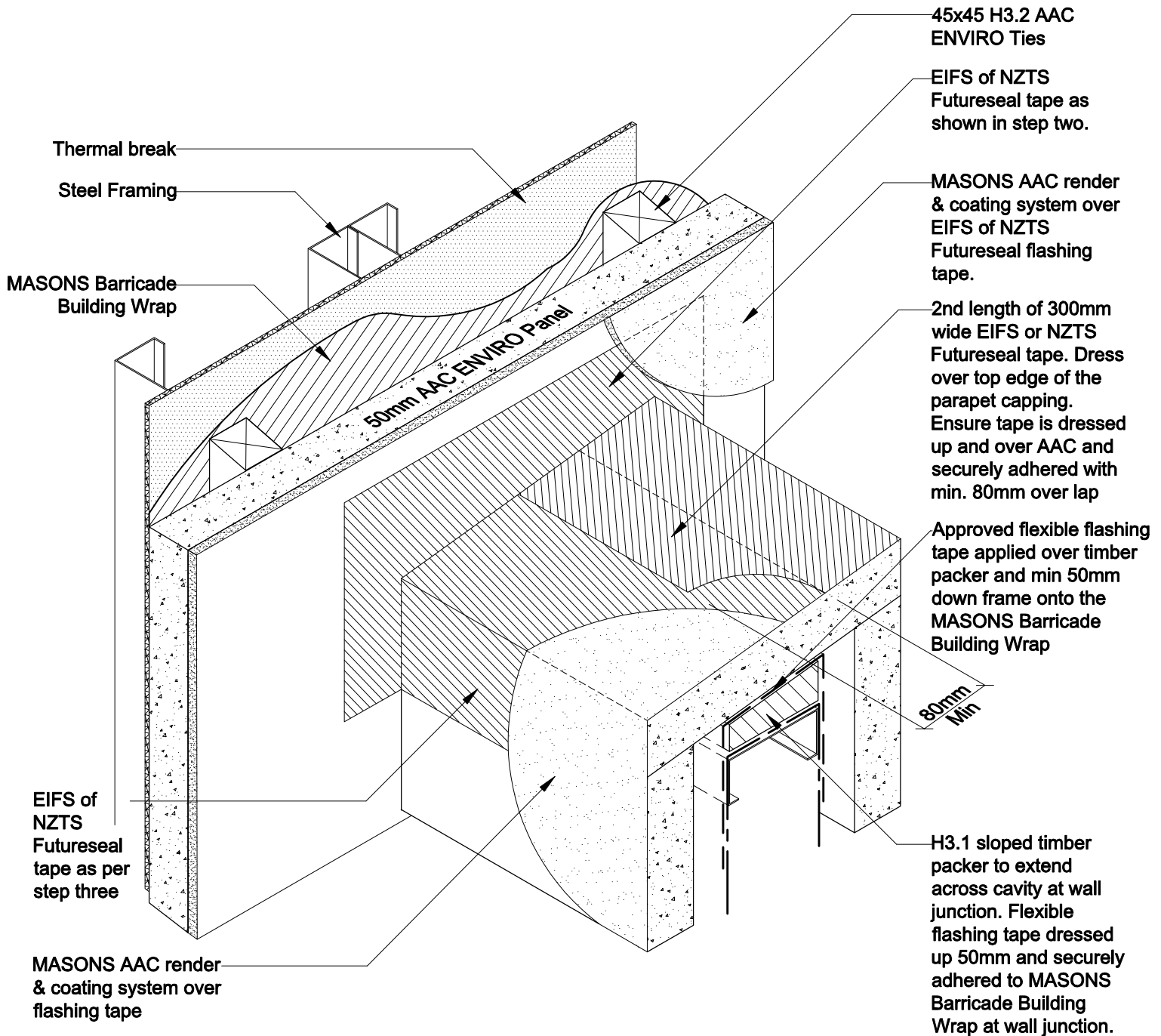
**MASONS ENVIRO AAC ON 45mm CAVITY
STEEL FRAME**



**PARAPET / HANDRAIL
TO WALL JUNCTION
ENVIRO Panel Capping
Step 3**

Detail 59B NTS

**MASONS ENVIRO AAC ON 45mm CAVITY
STEEL FRAME**



**PARAPET / HANDRAIL
TO WALL JUNCTION
ENVIRO Panel Capping
Step 4**

Detail 59C NTS

**MASONS ENVIRO AAC ON 45mm CAVITY
STEEL FRAME**

PRE-CLADDING CHECKLIST

For builders, trained installers and building inspectors

Consent No _____

Start Date _____

Client Name _____ Phone _____

Builder _____ Phone _____

Architect _____ Phone _____

Owner/ Builder must have the framing and other components of the building correctly installed to enable the installation of the ENVIRO AAC Panel system.
 Refer to page 4, Scope and Limitations

Tick
 Box

- Special Attention should be made for:**
- Floor Slab Layout**
 - Ensure distance from outside of framing to outside of concrete footing is exactly 95mm on all sides of building. If slightly under it is okay on single storey only. This allows 45mm for the cavity and 50mm for the ENVIRO Panels. 38mm batten ties will be used where 7mm brace ply is required.
 - Ensure ground level is 250mm below floor level, min. 300mm out around base to allow for plastering.
- Rebate**
 - Install MASONS Dryfix DPC as per manufacturers specifications
 - Smooth and level
- Framing - All Straight and level**
 - Studs straightened for wall lining before ENVIRO Panels are installed
 - Internal corners – supply and install 1 stud or full length H3.2 45x45mm ENVIRO Tie, 200mm from internal corner
- Wall Wrap is MASONS Barricade Building Wrap**
 - Exterior timber framed walls must be wrapped with MASONS Barricade Building Wrap which complies with compliance document E2/AS1 table 23. MASONS Barricade Building Wrap must be fixed to the exterior wall framing prior to installation of AAC ENVIRO Ties.
 - Ensure MASONS Barricade Building Wrap is continuous around corners and installed horizontally.
 - Ensure that all penetrations such as waste water pipes and the like have been flashed to the building wrap using "approved flexible flashing tape"

MASONS ENVIRO AAC ON 45mm CAVITY STEEL FRAME

Head Flashing's

- Cut aluminium powder coated z-flashings 20mm either side of outside flange of windows. These will need to be cut and turned up to form stop ends and sealed with BOSTIK safe seal.
- MASONS Barricade Tape has been dressed over z-flashing and onto MASONS Barricade Building Wrap.
- Need to ensure the application of 3mm wide by 3mm thick Inseal-3259 single sided foam tape to the top edge of the window and door joinery before installation of head flashing.

 Windows

- Window distance from framing – minimum 47mm from outside of framing to inside flange of window
- The manual states throughout that continuous support bars are to be used on all windows, however if for any reason there is a requirement to use short support bars then Masons Dry fix DPC must be placed underneath the bottom of the windows

 Joinery

- All joinery must be set into openings minimum 47mm from outside of framing to inside flange of window. This allows 10mm of the joinery bearing over the ENVIRO Panel.
- The builder is also responsible for the application of approved flexible flashing tape around openings prior to the installation of any joinery.

 If Two Storey

- Check with Builder that all waterproofing details including roof junctions, flashing's and diverters have been done
- All protective sheeting is on roof
- Scaffolding

All Plumbing including Gas lines, need to be pressure tested prior to installation of internal linings. MASONS Plastabrick will not be responsible for replacement of internal linings if this is not done.

Variables / Concerns / Comments:

Builder/Owner: _____ **Signed:** _____

PLEASE CONTACT LOCAL DISTRIBUTOR BEFORE JOINERY IS PRODUCED

**MASONS ENVIRO AAC ON 45mm CAVITY
STEEL FRAME**

PRE-COATING CHECKLIST

For trained installers, plasterers and building inspectors

Consent No _____

Start Date _____

Client Name _____ Phone _____

Builder _____ Phone _____

Architect _____ Phone _____

Tick Box

MASONS Plastabrick recommends an inspection by Building Inspector prior to plastering

- Panels must be flat and straight with min. 6 screws per sheet, countersunk 10mm max and no closer than 50mm from edge of panel.
- Ensure all exposed steel ends are treated with CRC zinc anti corrosion paint.
- All external and internal Brick Veneer to AAC Panel corners are filled with expandable foam.
- Vents - 40mm round holes are drilled into the bottom of the panel at max. 1200 centres for aluminium vents. These are then placed in after plastering, before painting.
- Ensure that sill flashing's are in place and sealed with BOSTIK safe seal at corners.
- Ensure window head flashing is fixed in place, level and straight.
- MASONS base shoe / cavity closer should be adhered with BOSTIK safe seal and fixed in a straight line to bottom edge of panel where required
- Sill and base shoe flashing's primed with Plasta Seal and coated with MASONS meshing render
- Ensure roof flashing's are in place and checked by Builder and Building Inspector prior to plastering where relevant.
- All pipe work/ penetrations through cladding are filled with Low expandable foam and sealed with BOSTIK safe seal sealant.

Note: PVC Reveal Bead Flashing is installed by plasterers when masking windows

Variables / Concerns / Comments:

ENVIRO Panel Installer: _____ Signed: _____

Approved by _____ Position: _____ Signed: _____

MASONS ENVIRO AAC ON 45mm CAVITY STEEL FRAME

FINAL CHECKLIST

For trained installers, plasterers and building inspectors

Consent No _____

Start Date _____
Client Name _____ Phone _____
Builder _____ Phone _____
Architect _____ Phone _____

Tick
Box



- Specified number of render coats have been applied. Finish to manufacturer's specifications
- MASONS Corner beads have been used
- Specified review of coating system has been applied and finished to manufacturer's standard

Variables / Concerns / Comments:

ENVIRO Panel Installer: _____ Signed: _____
Approved by _____ Position: _____ Signed: _____

MASONS ENVIRO AAC ON 45mm CAVITY STEEL FRAME