MANUAL

MASONS ENVIRO
AAC ON 45mm CAVITY
[Timber Framing]

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AAC ENVIRO PANEL VENEER TECHNICAL INFORMATION

Scope and Limitations:

The ENVIRO AAC 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 3405.

General Description:

50mm Autoclaved Aerated Concrete (AAC) masonry panels with corrosion protected vertical & horizontal steel reinforcing suitable for exterior cladding of residential & light commercial buildings. AAC panels are coated with MASONS AAC reinforced plastering system to produce the clients finishing requirements once fixed in place. AAC ENVIRO Panels are a proven masonry material to be used with lightweight timber or steel framing. The panels come in a standard 2200mmx600mmx50mm size sheet.

AAC ENVIRO PANEL VENEER TECHNICAL INFORMATION CONTINUED

- Reference Document: CodeMark Assessment Brief # CMA-AM 130241 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 can not 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.

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 sillca. 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 were delivered on and kept covered and free of dampness untill required. Care should be taken when handling to limit damage to edges or corners.

AAC ENVIRO Panel Properties:

Dry Density:	525kg/m3
Intensity:	4.0Mpa
Dry Shrinkage Value:	0.8mm/m
Water Absorption (by volume):	up to 24 - 35%
Thermal Conductivity:	0.13w/mk
Sound Transmission Class (STC):	33 (50mm bare panel)
Fire Resistence:	1.5 hours

Performance:

AAC ENVIRO Panels fixed in accordance with the instructions & details in this manual will meet the requirements & relevant sections 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 fixed as per this manual are able to withstand all earthquake & wind loadings in all areas of New Zealand.

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 MASONS 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 this manual are adhered to.

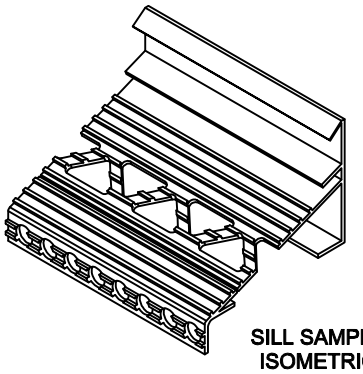
Mass:

AAC ENVIRO Panel is within the range of light to medium weight wall cladding as defined in NZS 3604:2011. The dry mass of AAC ENVIRO Panel is 25kg/m2 (33kg per 2200x600 panel) The coating system selected will determine if the cladding exceeds the light wall cladding and which weight range in relation to NZS 3604:2011 the cladding finishes within.

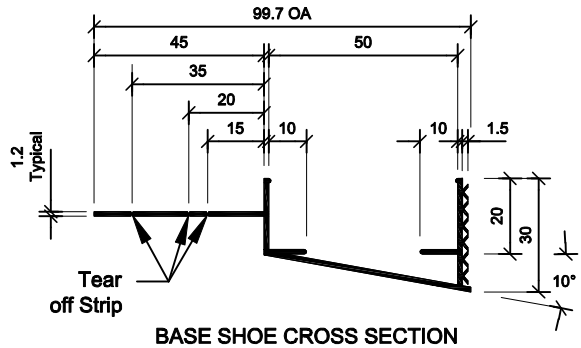
Insulation:

Insulation is installed as required by NZBC E3/AS1 Clause 1.1.1(a)

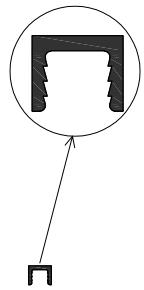
LIST OF COMPONENTS



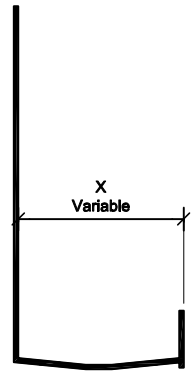
SILL SAMPLE ISOMETRIC



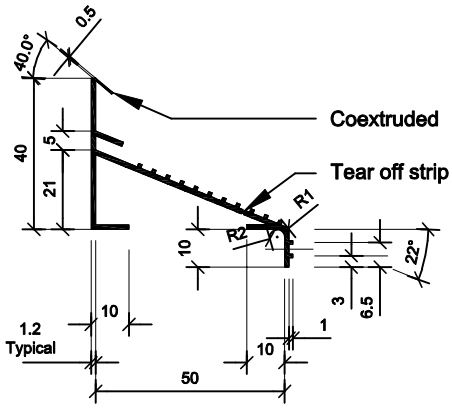
BASE SHOE CROSS SECTION



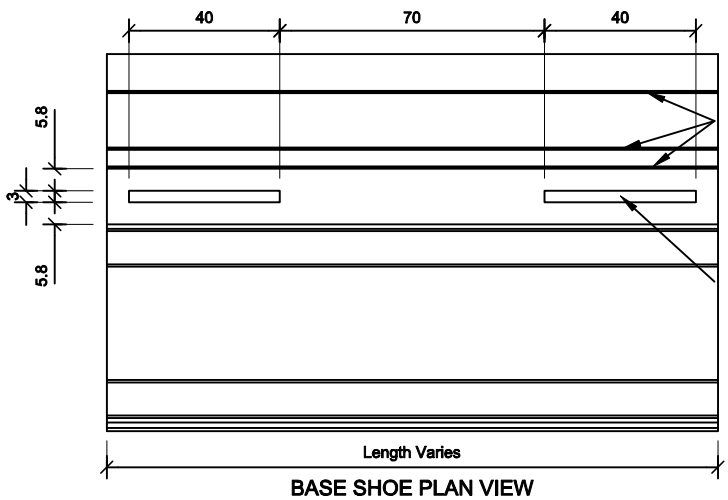
PLASTABRICK PVC REVEAL BEAD



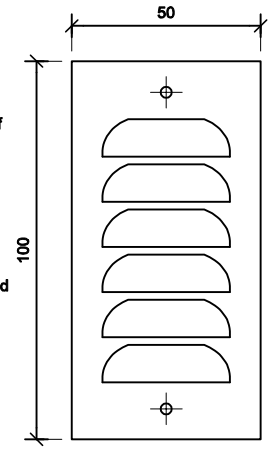
VENTED CAVITY CLOSURE



SILL ELEVATION END PROFILE



BASE SHOE PLAN VIEW



ALUMINIUM WEEPHOLE VENTS

PANELS:

2200mmx600mmx50mm size sheet. 50mm Autoclaved aerated concrete (AAC) panels. AAC ENVIRO Tie, 45x45 H3.2 timber batten cut to 200mm lengths, see detail 01.

PLASTER SYSTEM:

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

NAILS:

90mm galvanised ring shank nails are used to fix the ENVIRO ties to the framing. All nails shall comply with compliance document E2 / AS1 Table 20.

MORTAR GLUE:

ENVIRO jointing glue supplied by MASONS for use in jointing and stopping of ENVIRO Panels.

SCREWS:

14x75mm 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.

FLASHINGS & MOULDINGS:

MASONS PVC reveal bead flashing
MASONS PVC sill flashing
Powder coated aluminium head flashing
MASONS PVC base shoe and cavity closure
MASONS PVC vented cavity closure
MASONS PVC corner soaker

ADHESIVE:

All PVC flashing's and mouldings are glued to the ENVIRO panel using BOSTIK safe seal construction adhesive.

DAMP PROOF COURSING (DPC):

MASONS DRYFIX DPC supplied by MASONS.

TAPE:

EIFS tape or NZ Tape Specialists future seal tape MASONS Barricade Plus Window Tape.

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.

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.

VENTS:

50x100mm aluminium vents manufactured by MASONS.

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%) Steel Framing

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. Dwangs must be fitted flush with the stud.

For latest steel framing information refer to http://www.nash.asn.au/nash/

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 hung 50mm below the finished 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.

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 MASONS 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.

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.

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 weathertight-ness details developed by the designer are outside the scope of this Appraisal Certificate and are the responsi-bility of the designer.

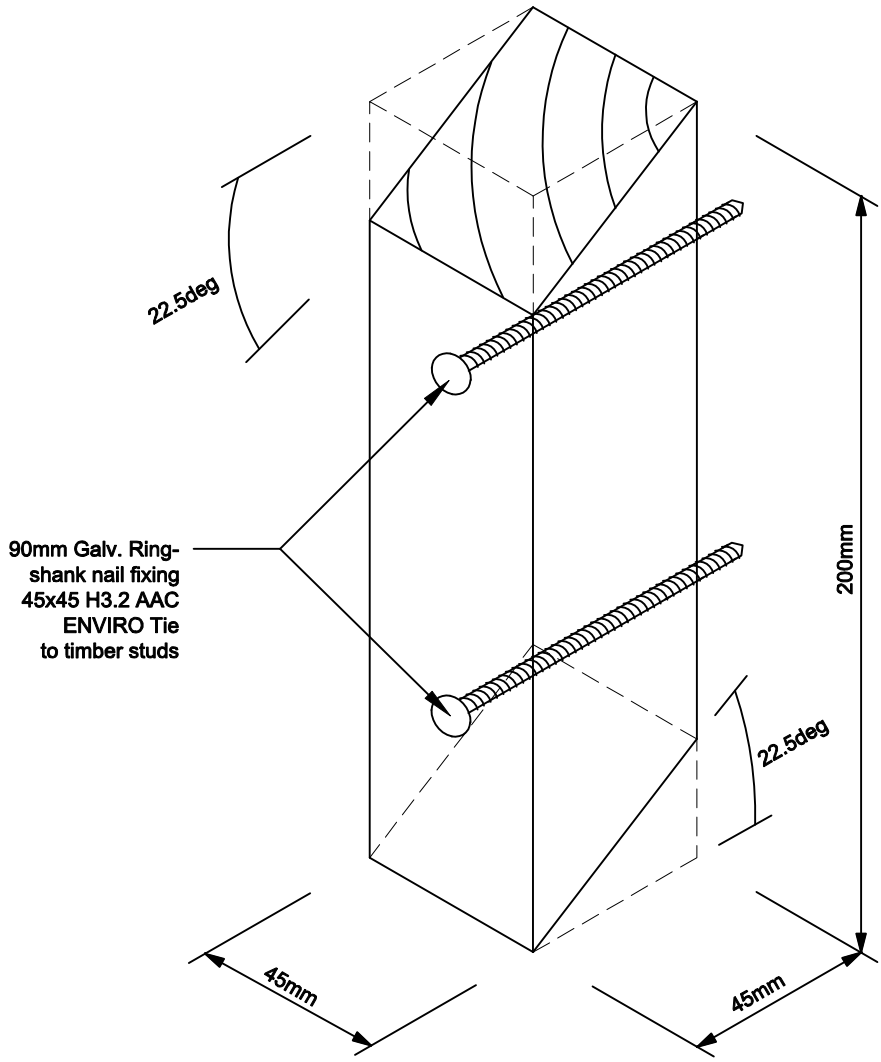
14.5 The presence of a drained cavity does not reduce the requirement to ensure the cladding wall and all the relevant junction, penetrations etc remain weather resistant in order to comply with Clause E2.3.6.

Water Vapour

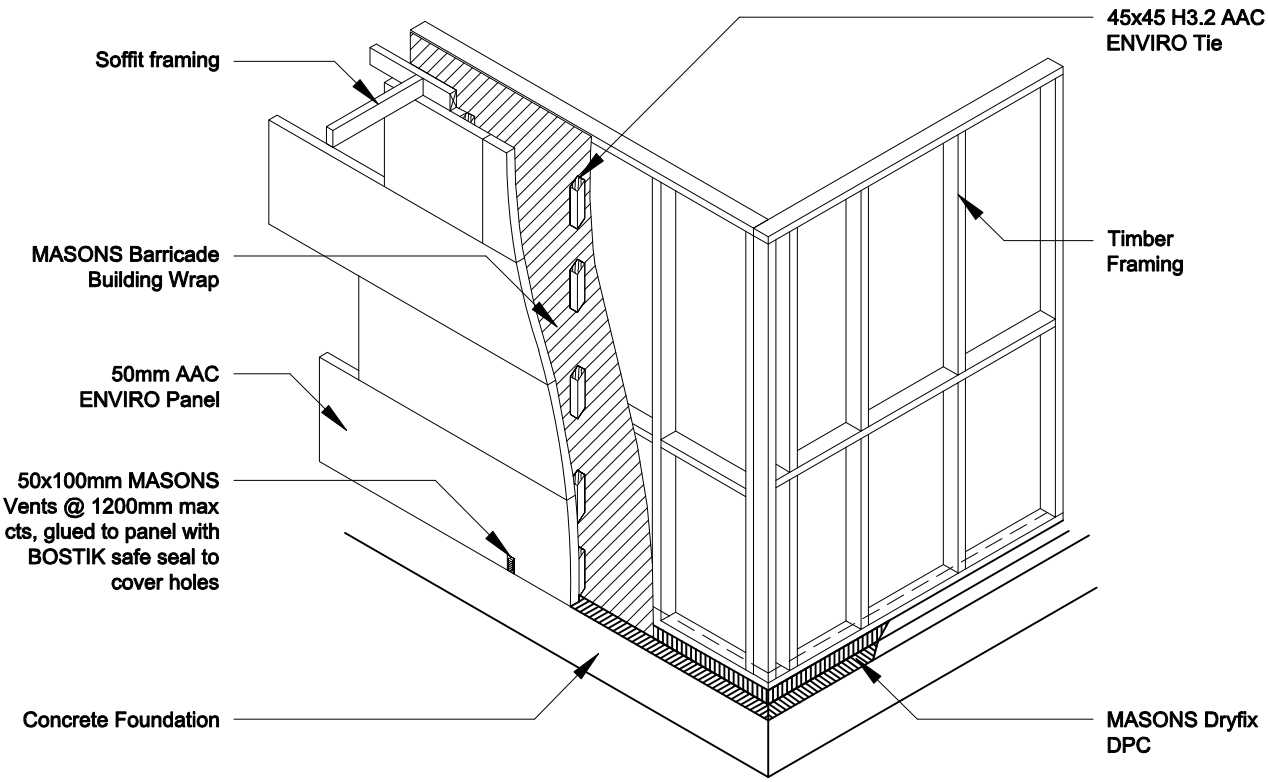
14.6 The ENVIRO® AAC Panel System is not imperme-able therefore allows the escape of water vapour.

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 overeach 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).

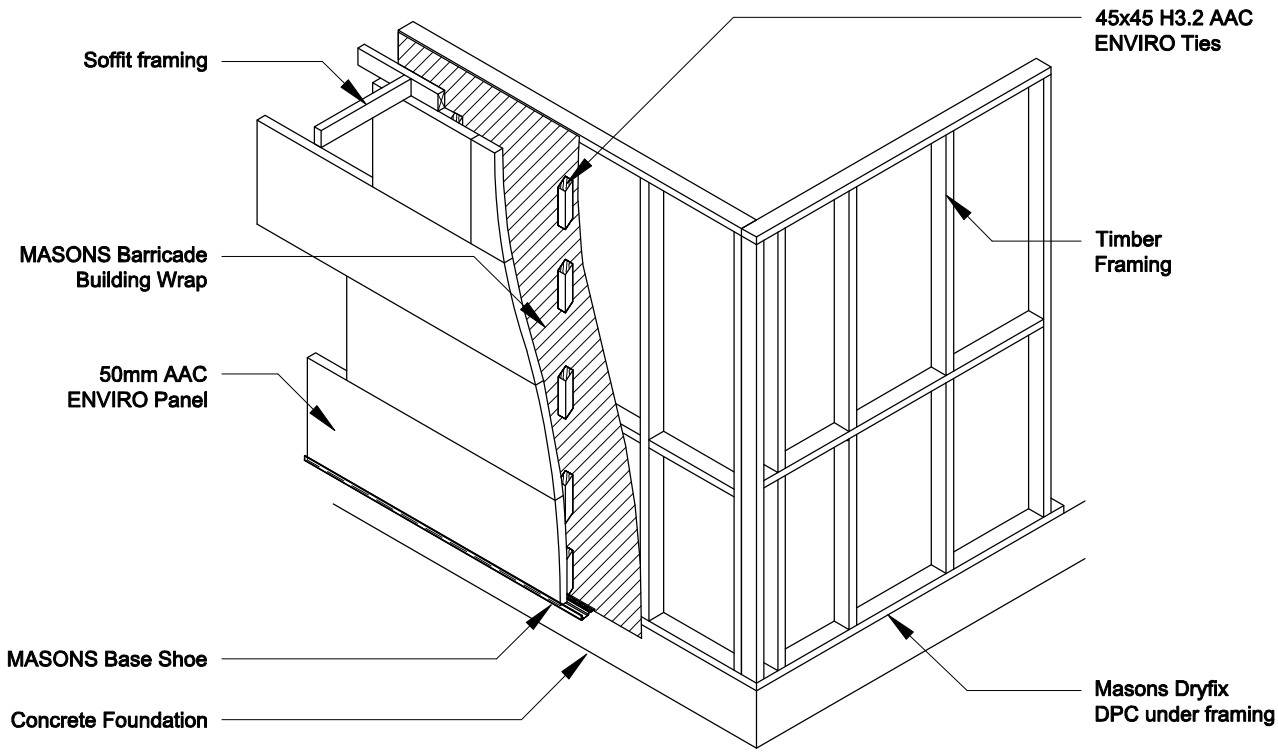


H3.2 AAC ENVIRO TIE Detail 01 NTS



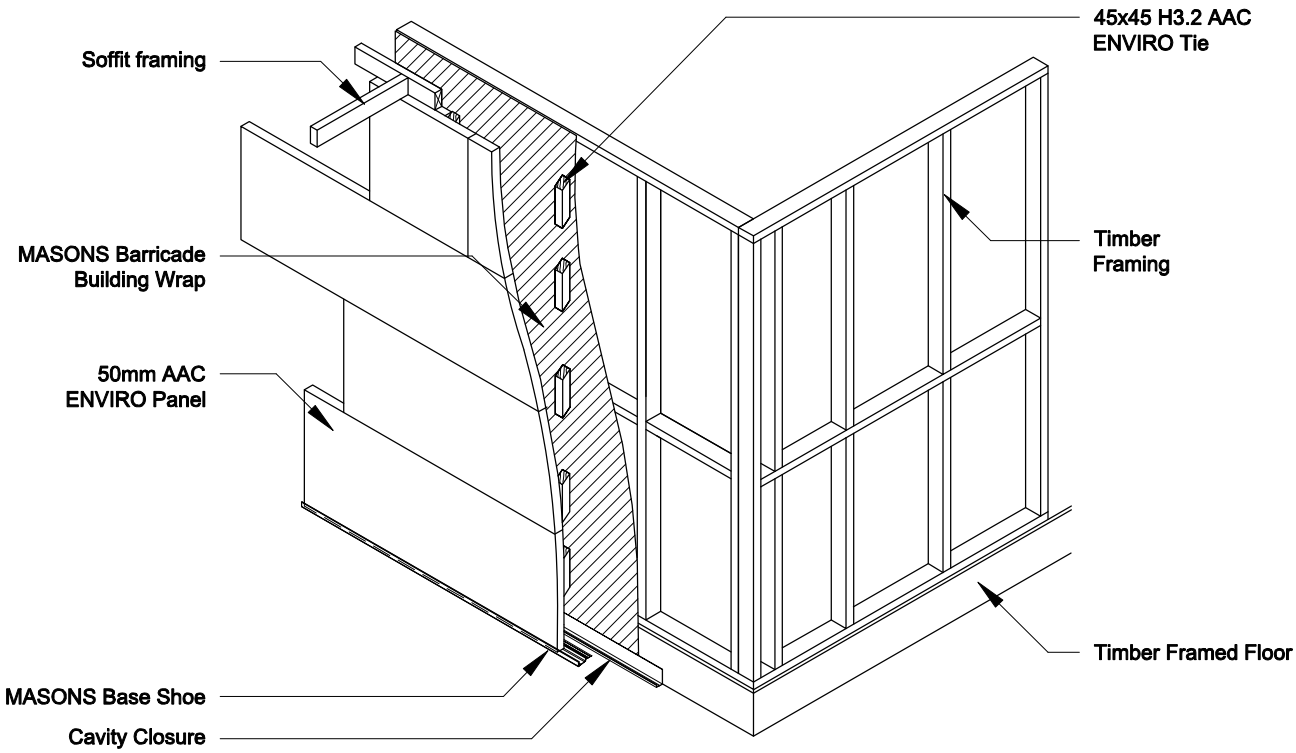
GENERAL LAYOUT Concrete Floor With Rebate

Detail 02 NTS



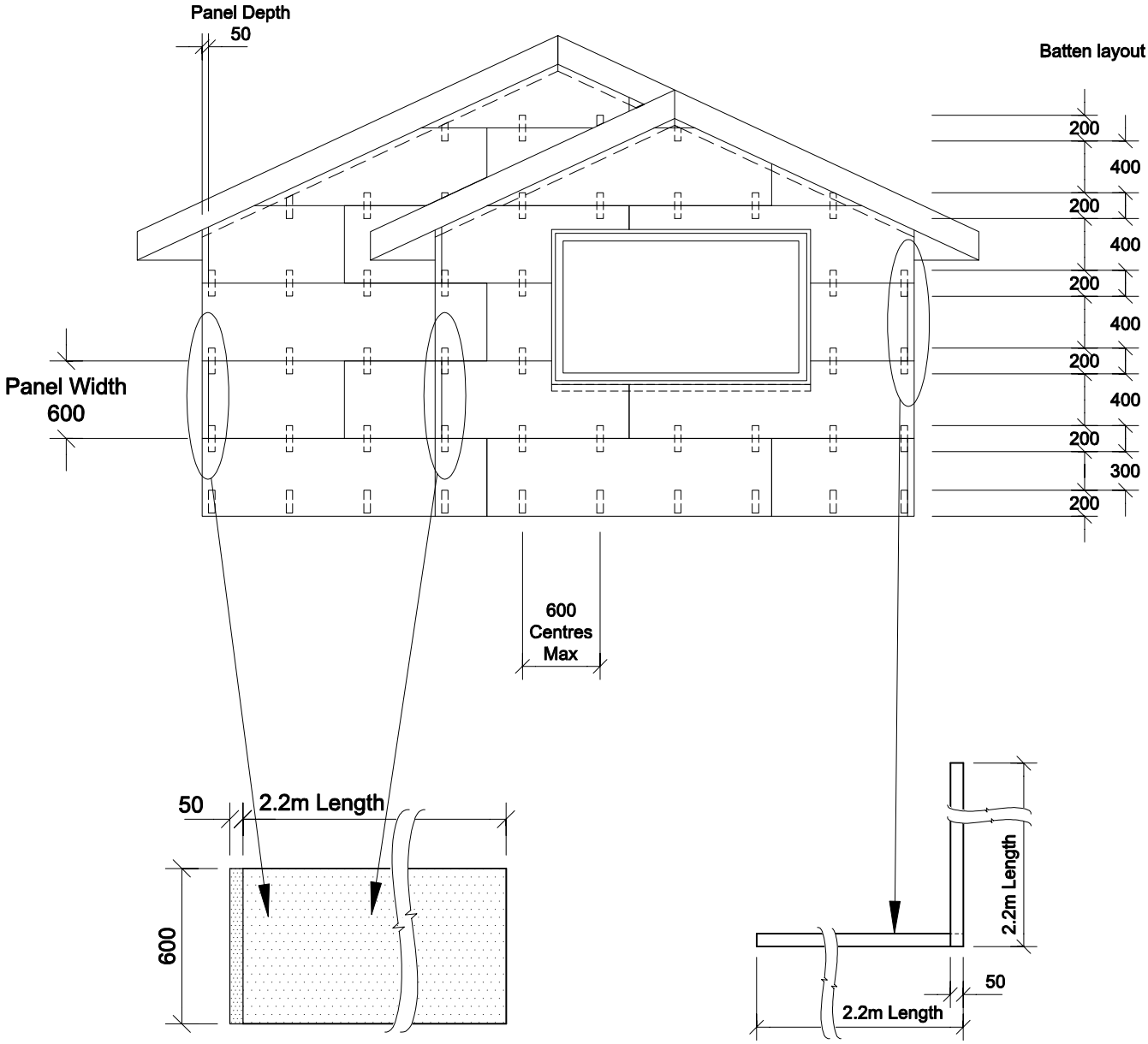
GENERAL LAYOUT Concrete Floor Without Rebate

Detail 03 NTS



GENERAL LAYOUT Timber Floor

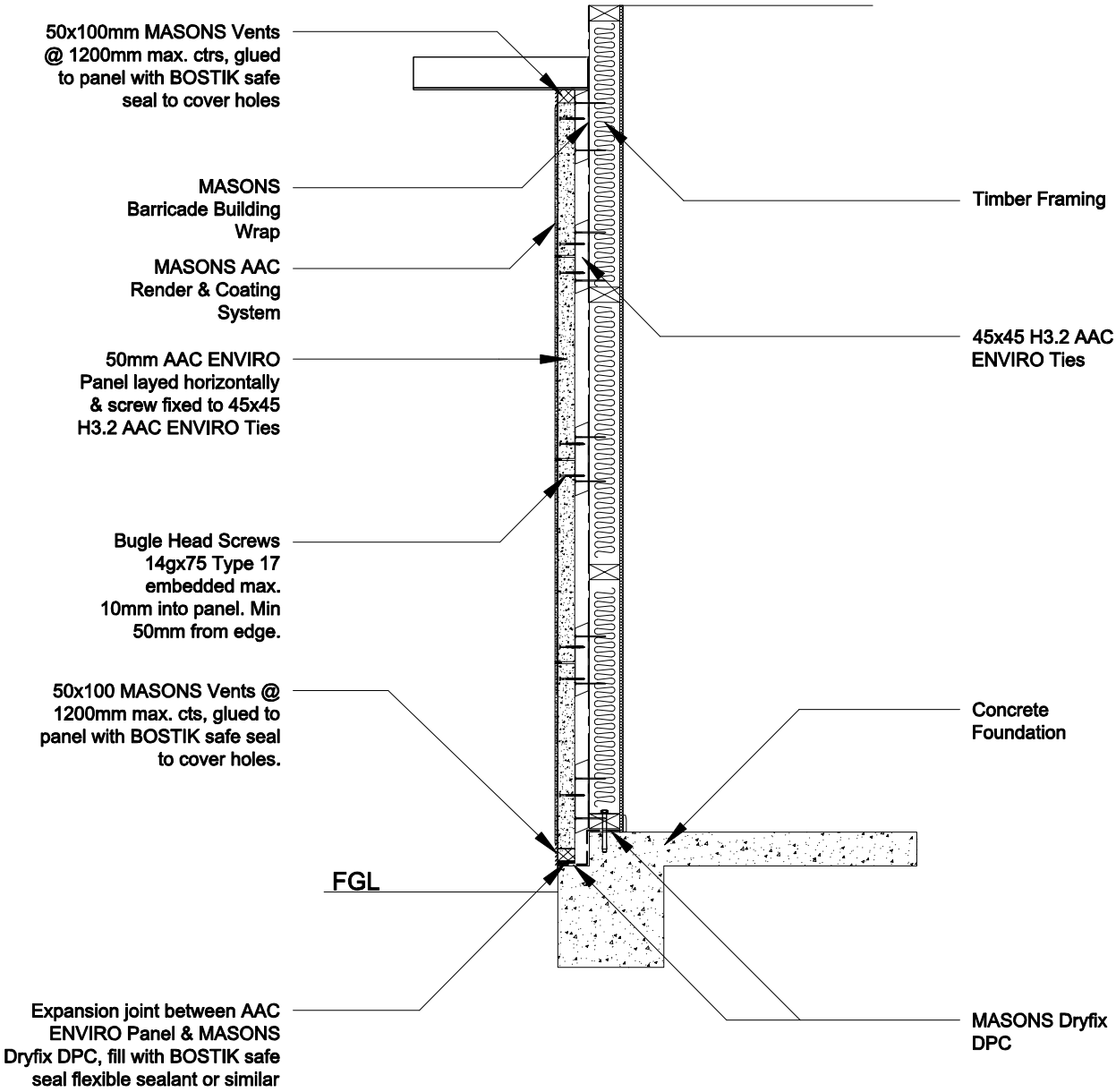
Detail 04 NTS



Panel Elevation **Panel Plan**

TYPICAL AAC ENVIRO TIE & PANEL LAYOUT

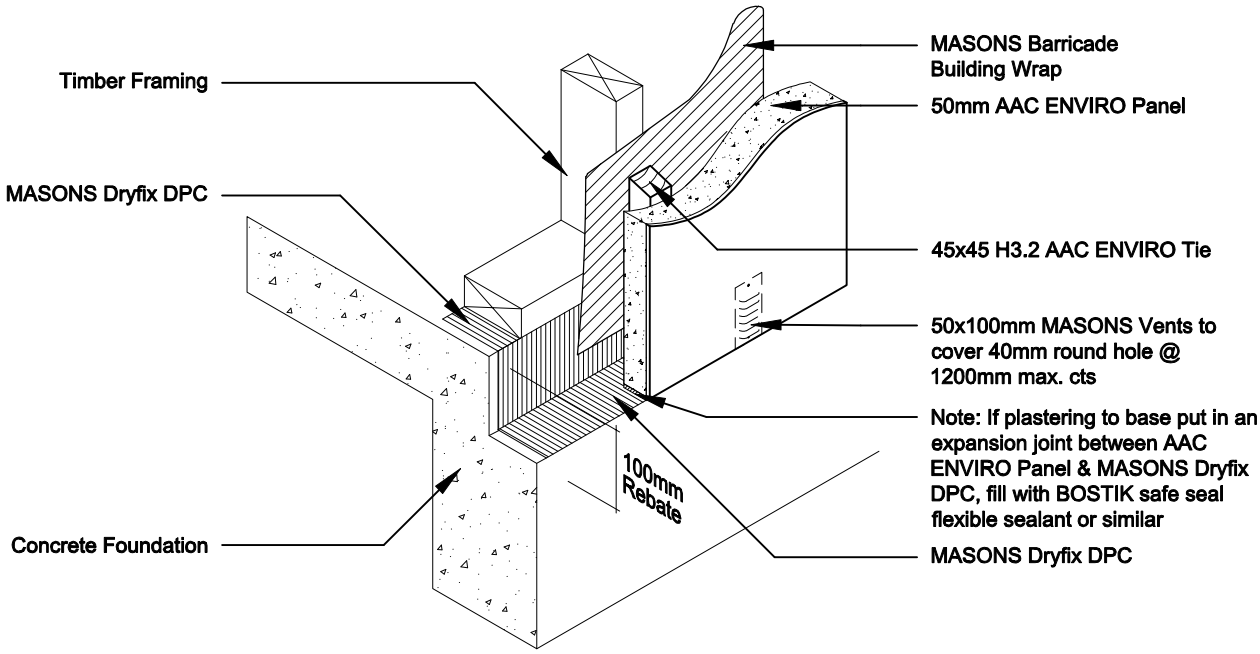
Detail 05 NTS



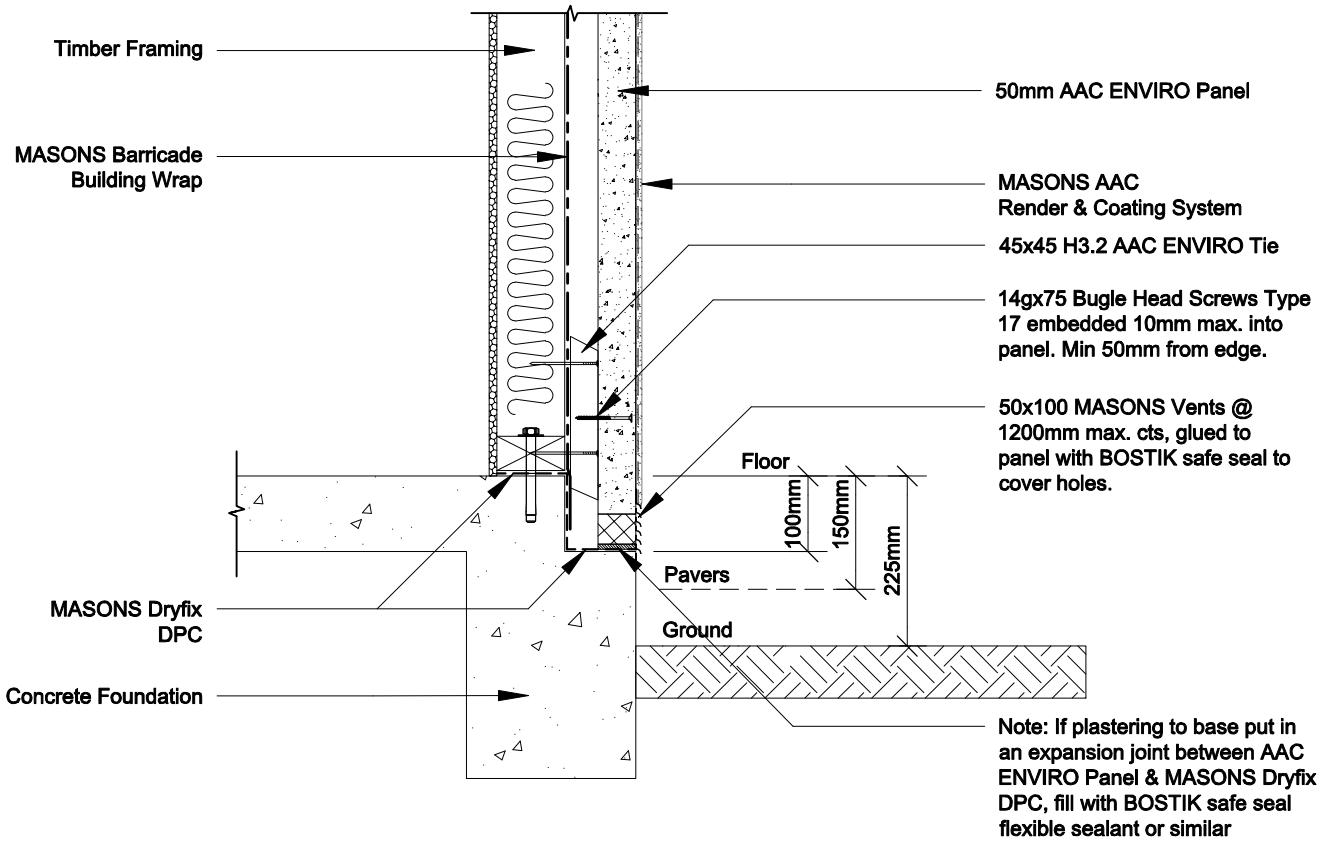
TYPICAL WALL CROSS SECTION

Detail 06 NTS

MASONS ENVIRO AAC ON 45mm CAVITY TIMBER FRAME

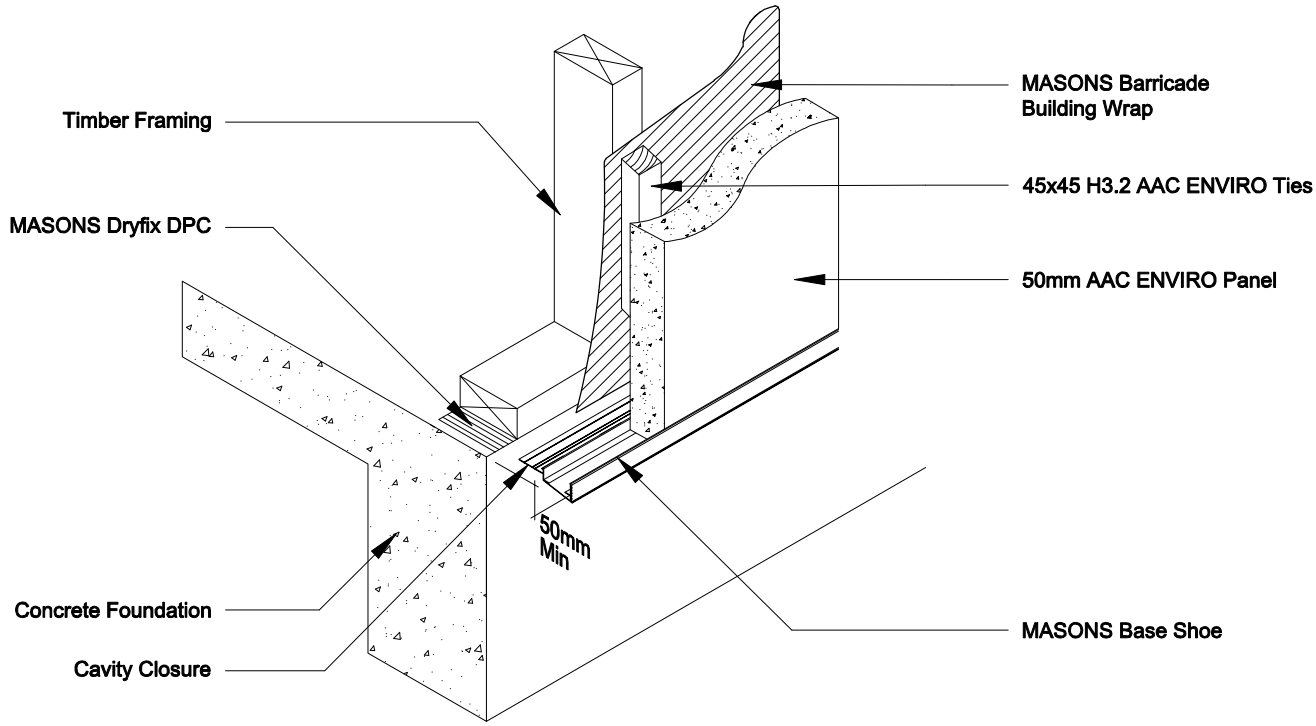


CONCRETE FOOTING With Rebate - 3D View Detail 07 NTS

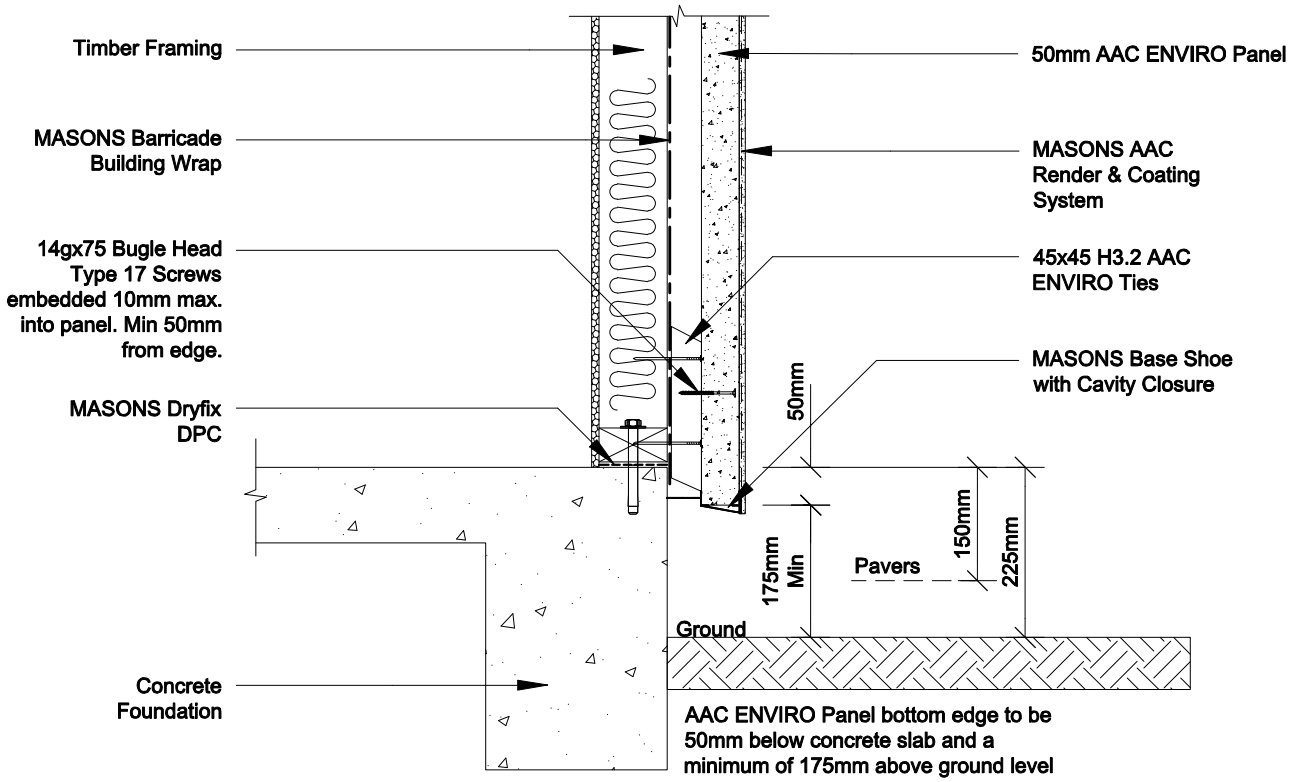


CONCRETE FOOTING With Rebate Detail 08 Scale 1:10

MASONS ENVIRO AAC ON 45mm CAVITY TIMBER FRAME

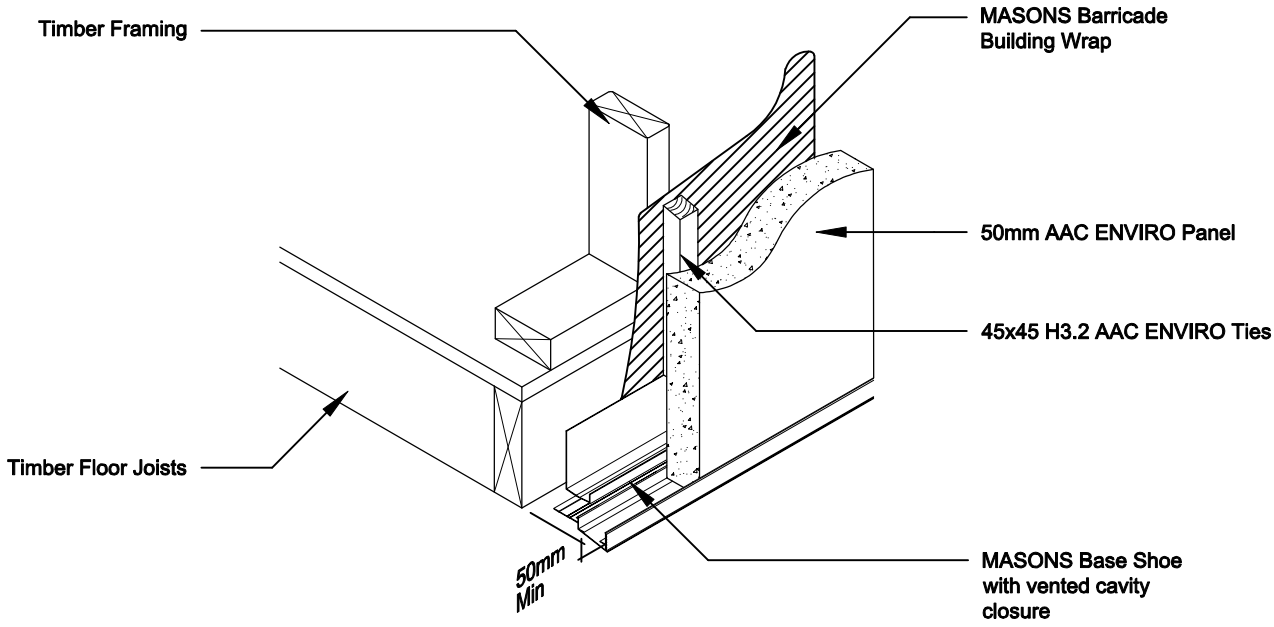


CONCRETE FOOTING Detail 09 NTS
Without Rebate - 3D View

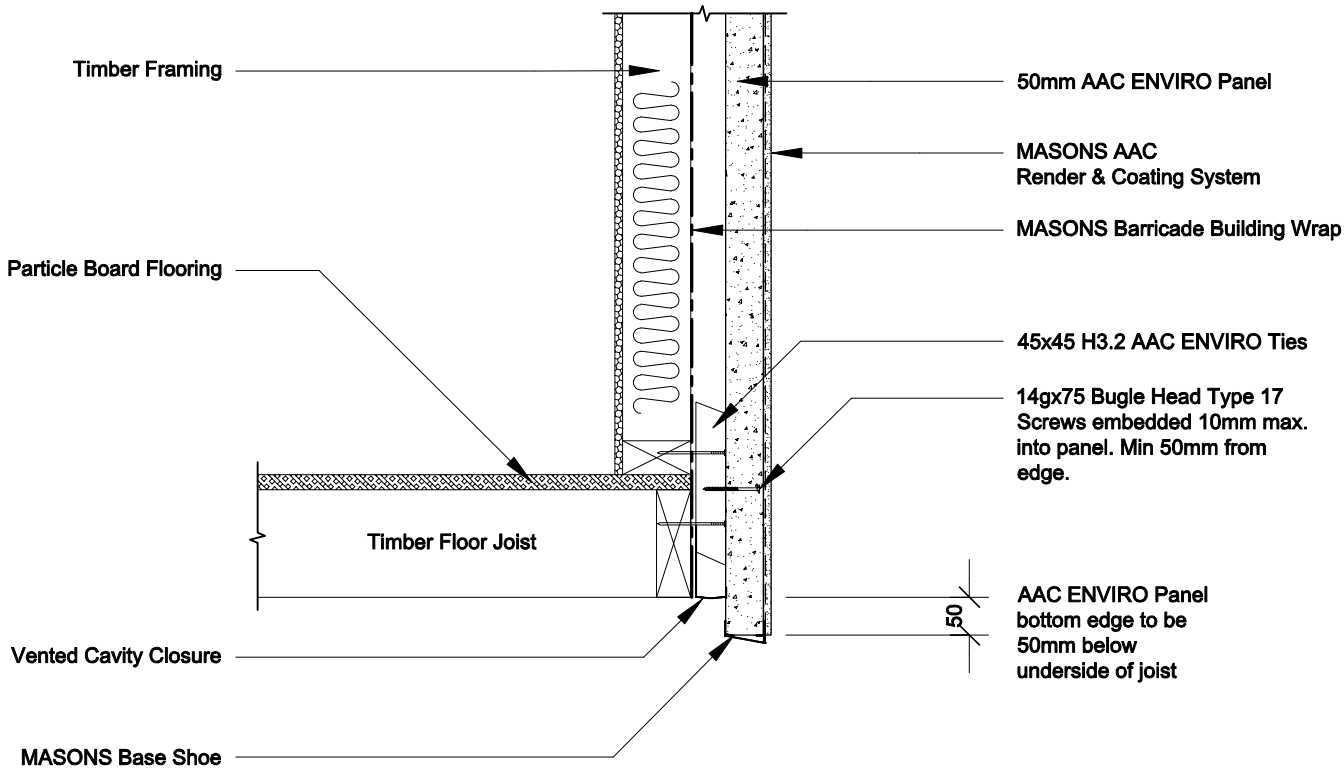


CONCRETE FOOTING Detail 10 Scale 1:10
Without Rebate

MASONS ENVIRO AAC ON 45mm CAVITY TIMBER FRAME

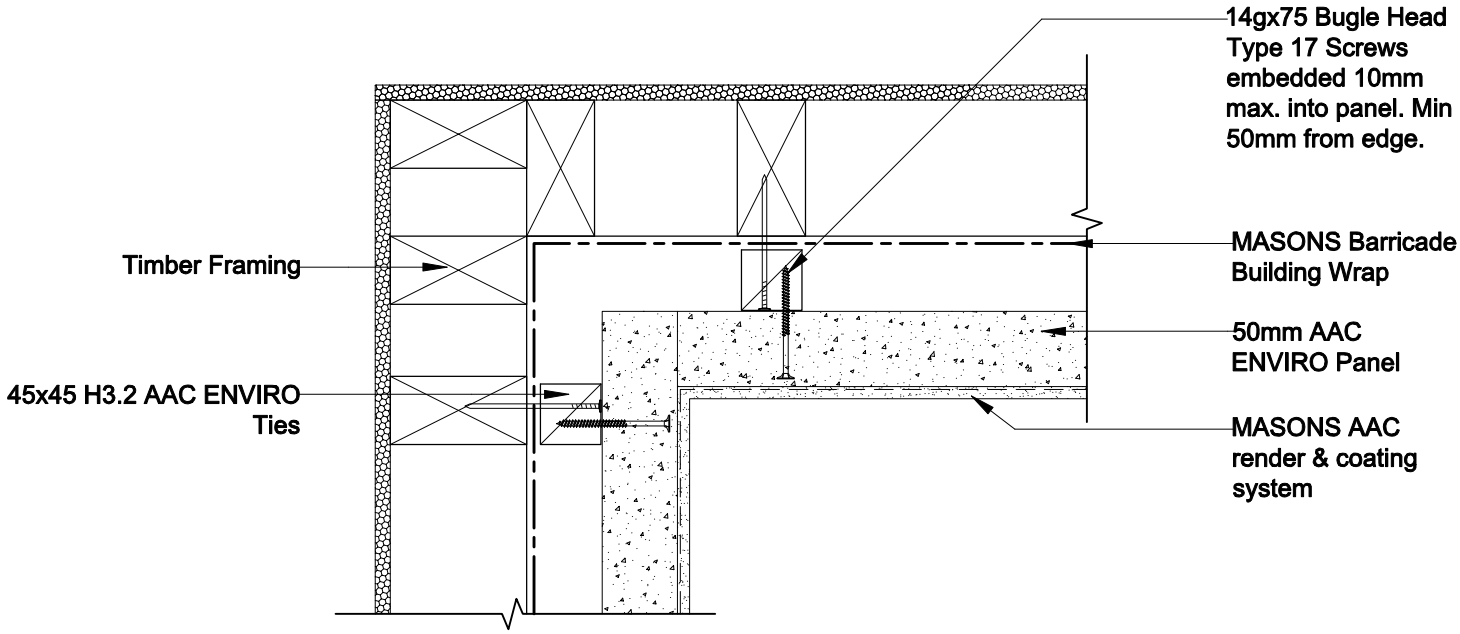


TIMBER FOOTING Detail 11 NTS
3D View

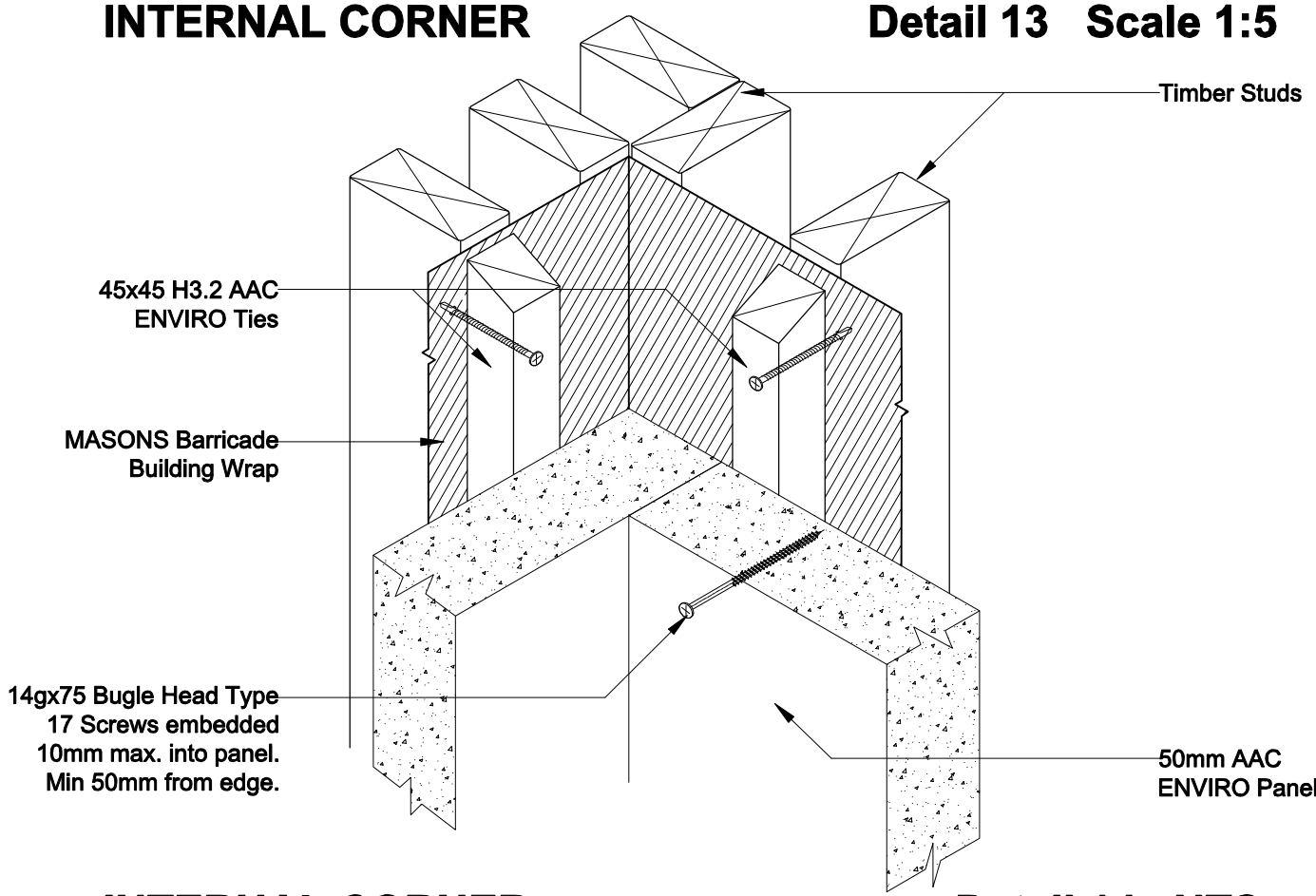


TIMBER FOOTING Detail 12 Scale 1:10

MASONS ENVIRO AAC ON 45mm CAVITY TIMBER FRAME

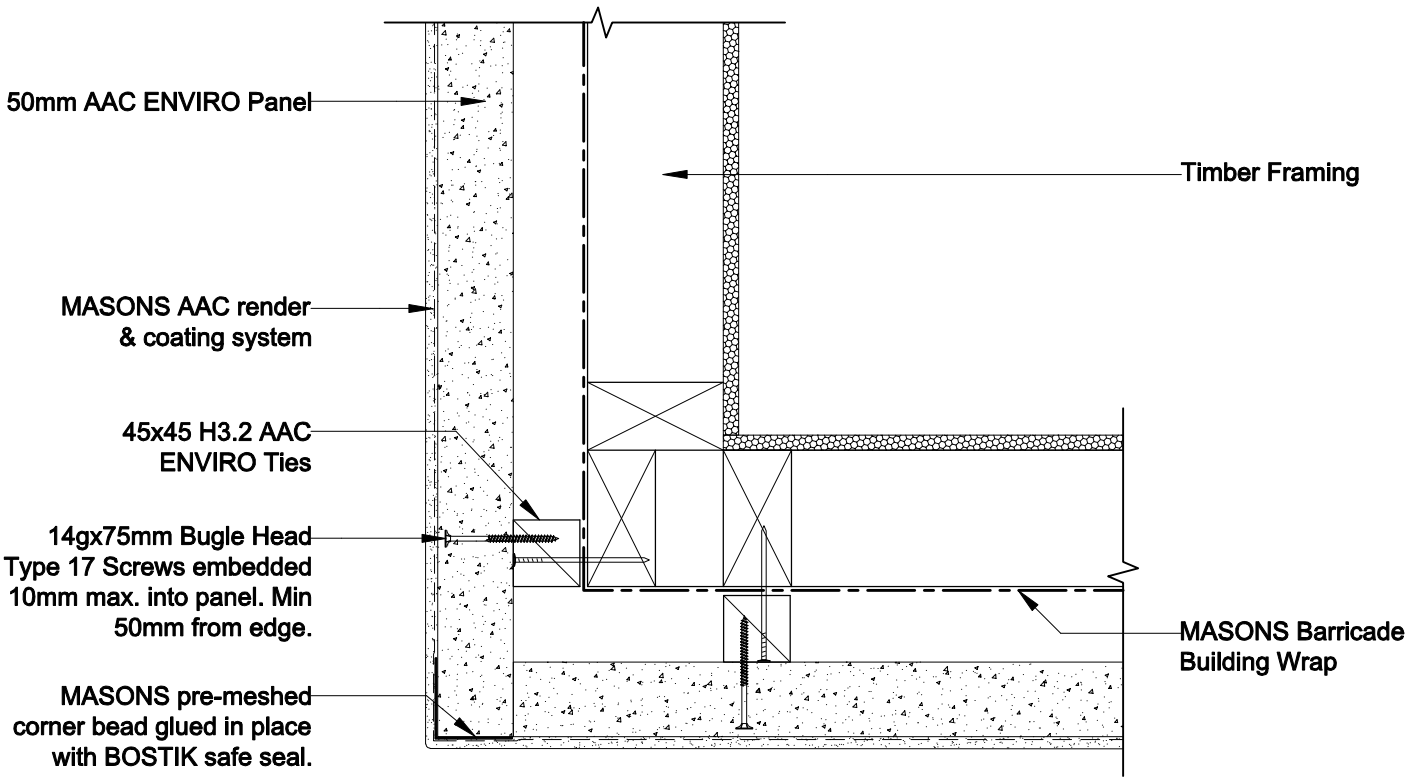


INTERNAL CORNER Detail 13 Scale 1:5

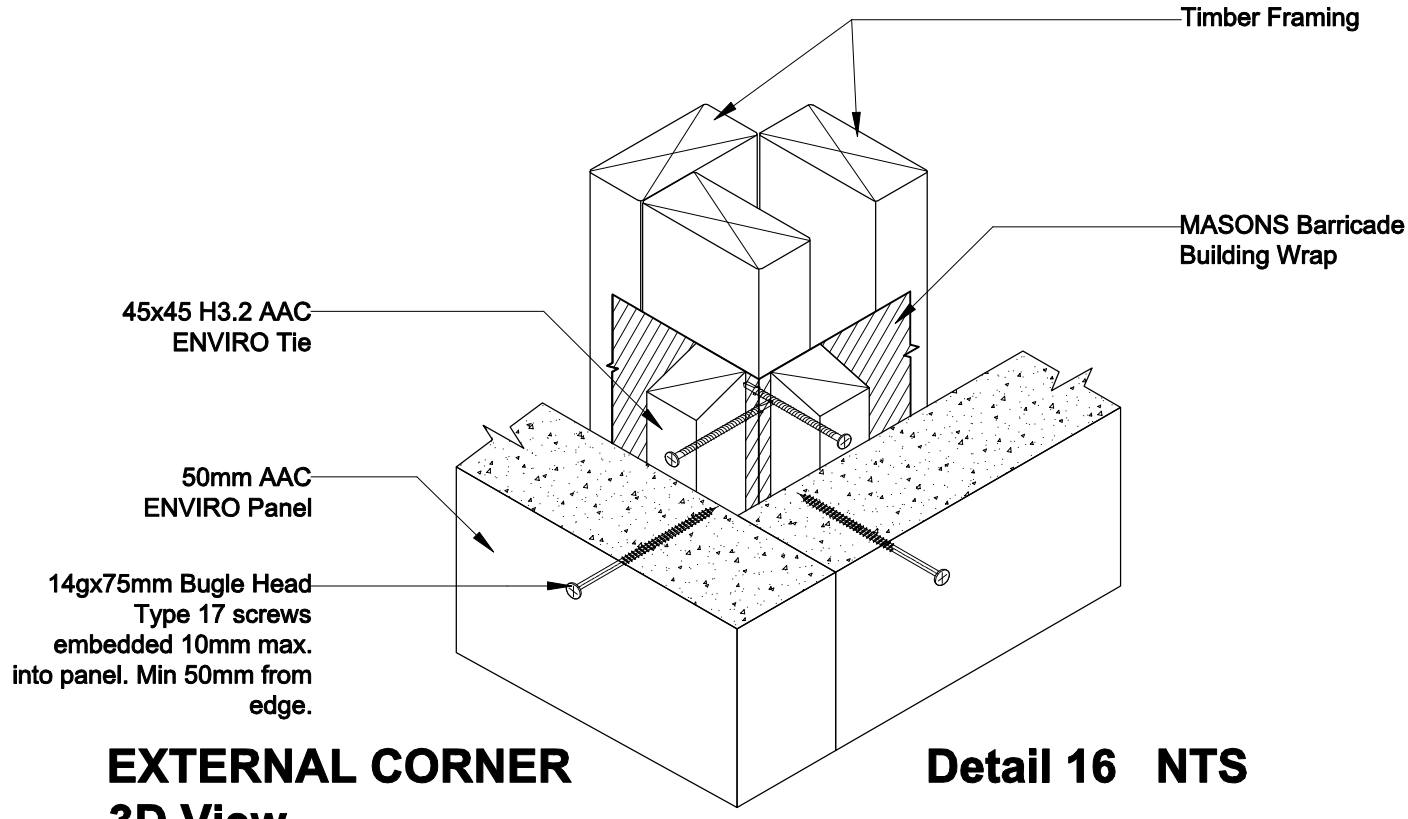


INTERNAL CORNER 3D View Detail 14 NTS

MASONS ENVIRO AAC ON 45mm CAVITY TIMBER FRAME

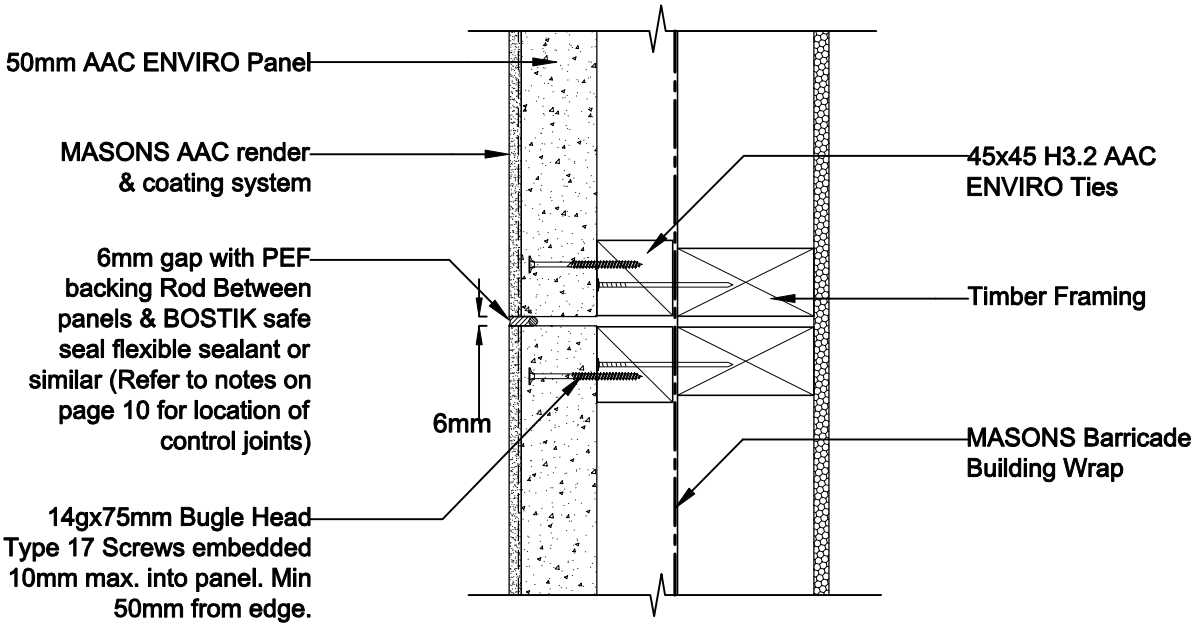


EXTERNAL CORNER Detail 15 Scale 1:5

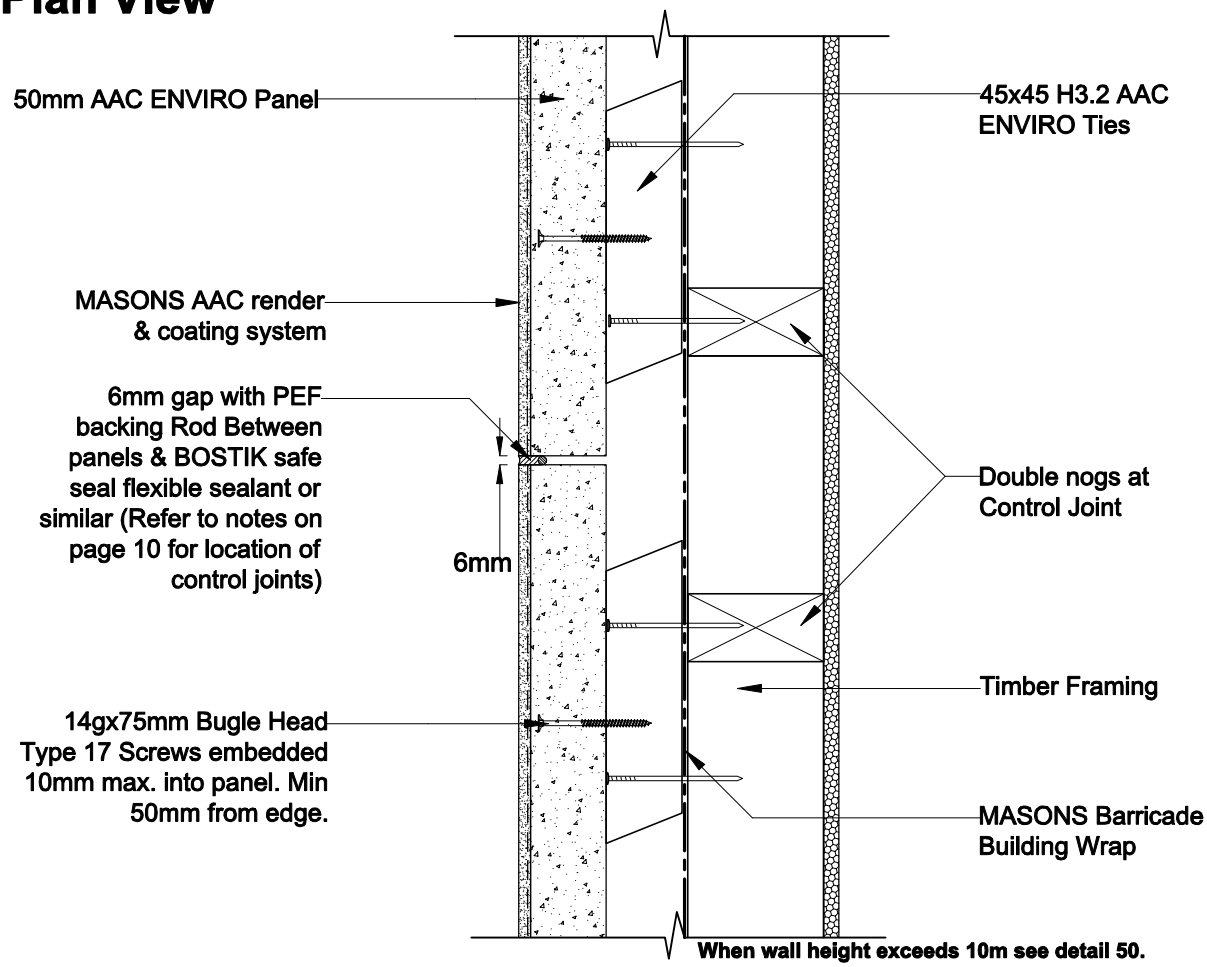


EXTERNAL CORNER 3D View Detail 16 NTS

MASONS ENVIRO AAC ON 45mm CAVITY TIMBER FRAME



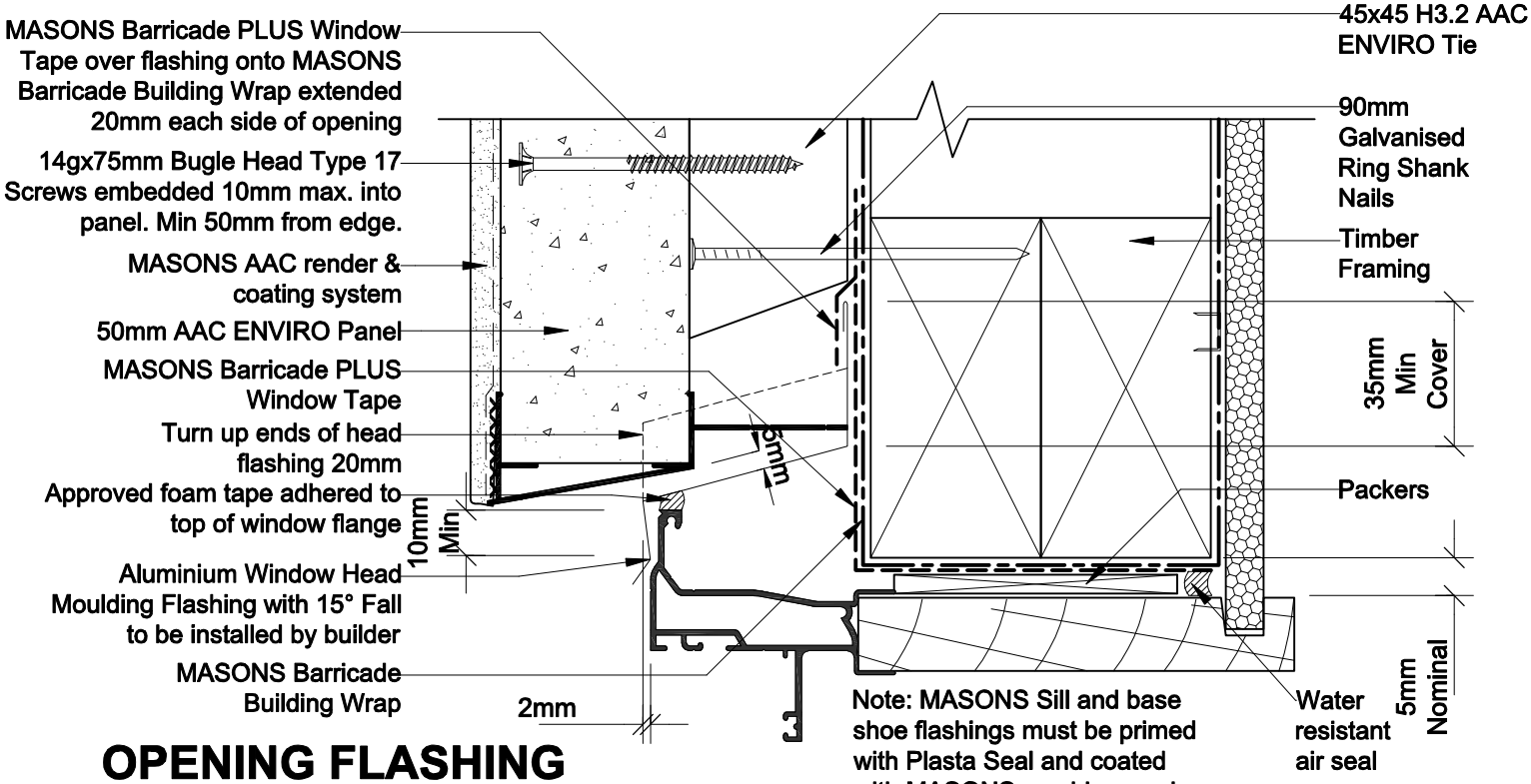
CONTROL JOINTS - VERTICAL Detail 17 Scale 1:5
Plan View



CONTROL JOINTS - HORIZONTAL Detail 18 Scale 1:5
Section View

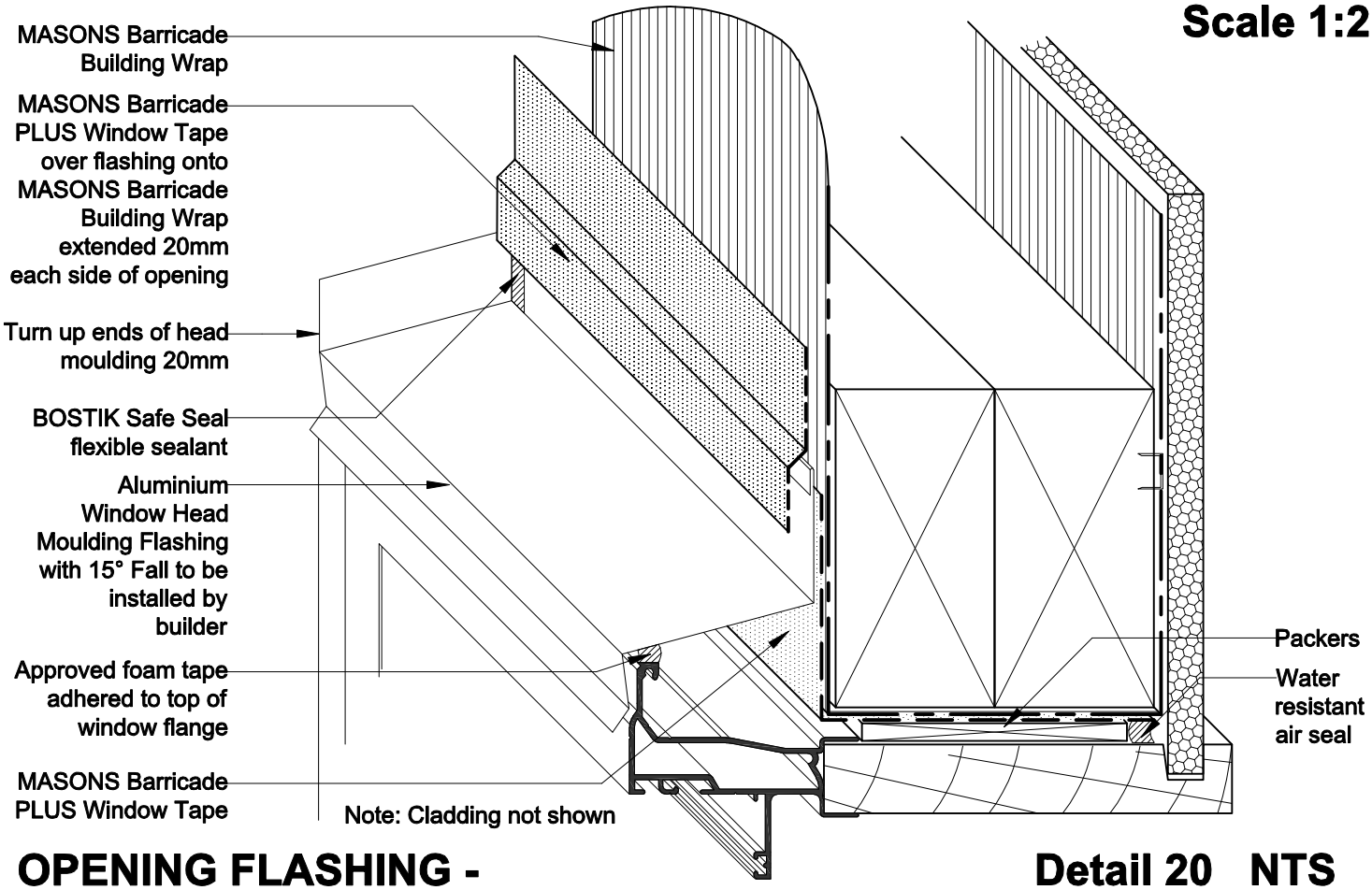
Note: Refer to page 10 Section Control Joints Re: For the placement of control joints.

MASONS ENVIRO AAC ON 45mm CAVITY TIMBER FRAME



OPENING FLASHING Window Head

Detail 19
Scale 1:2

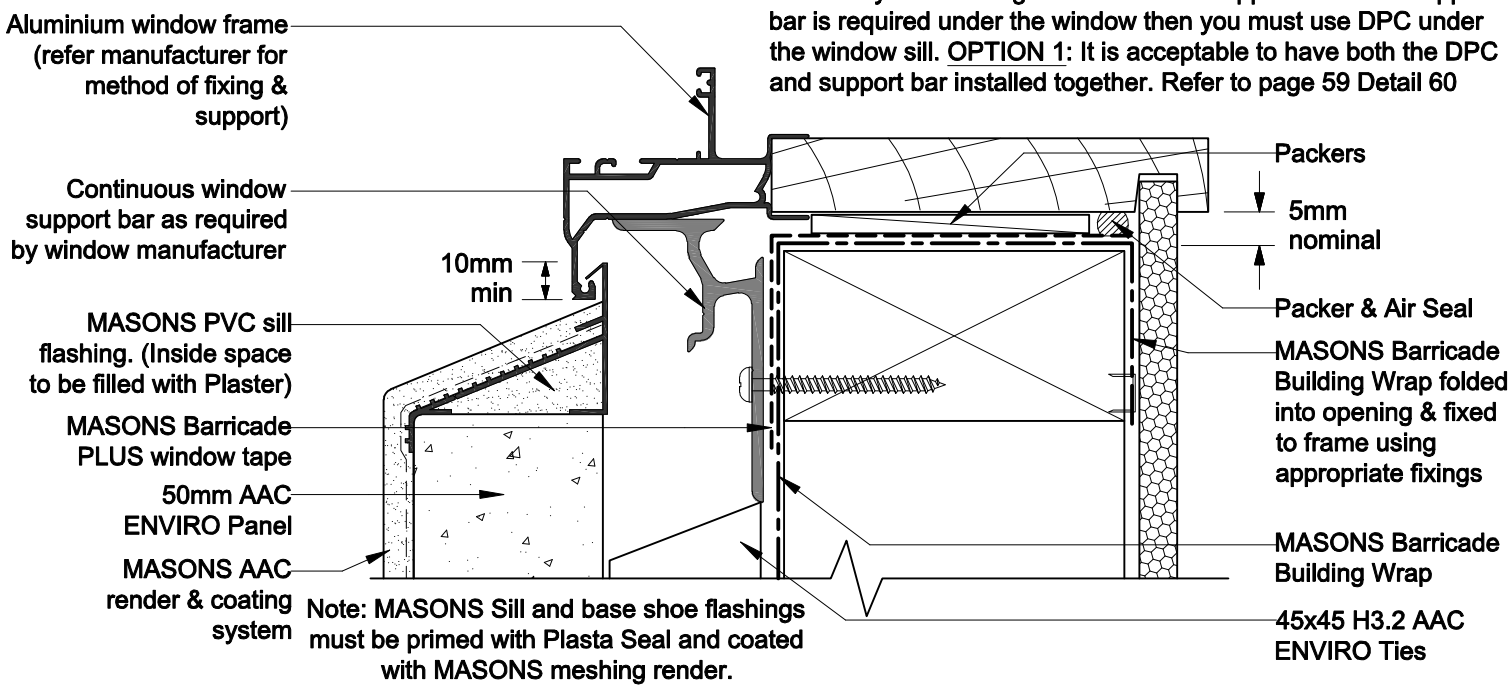


OPENING FLASHING - 3D View

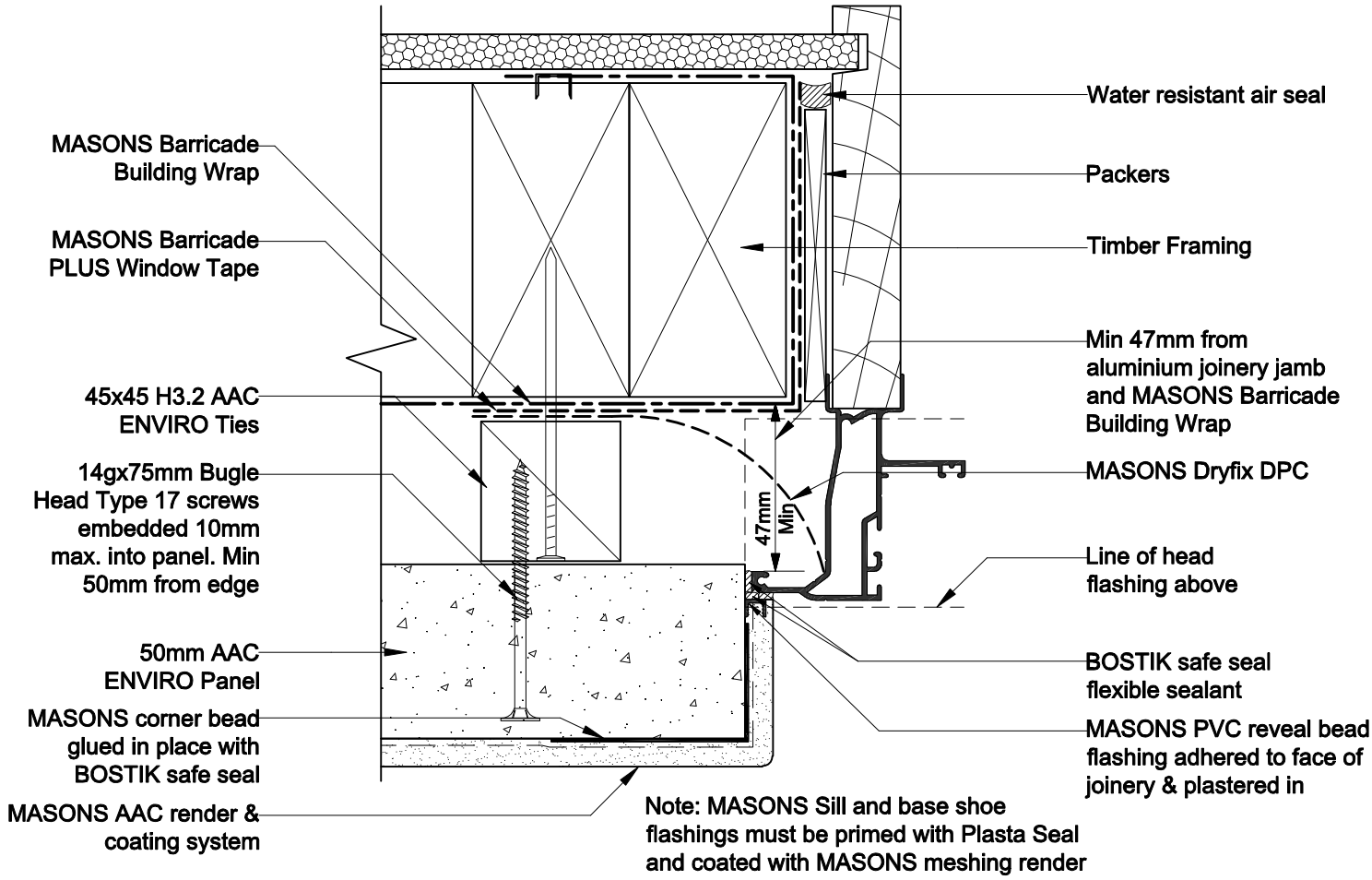
Detail 20 NTS

MASONS ENVIRO AAC ON 45mm CAVITY TIMBER 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. Refer to page 59 Detail 60

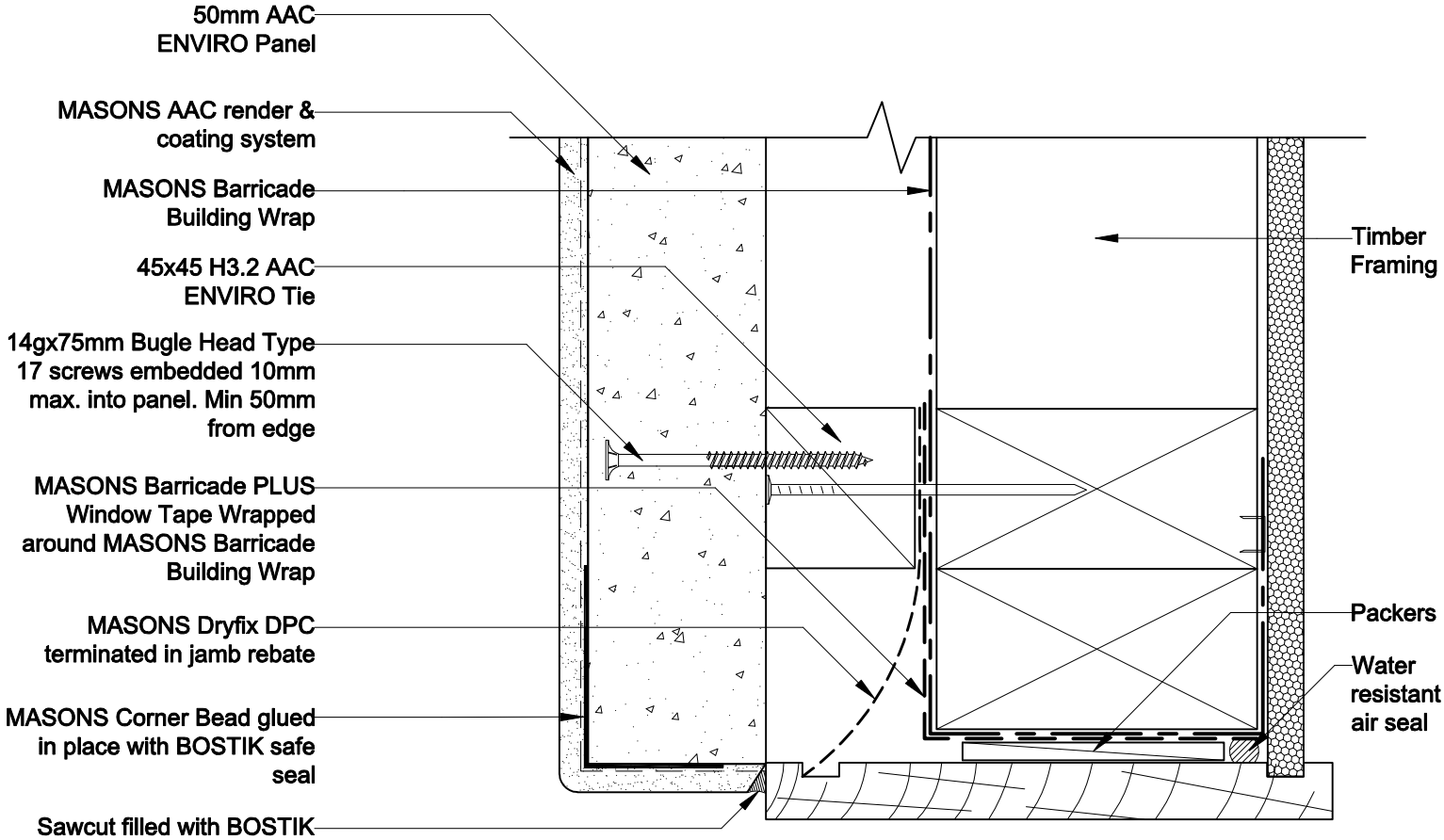


OPENING FLASHINGS - Window Sill Detail 21 Scale 1:2



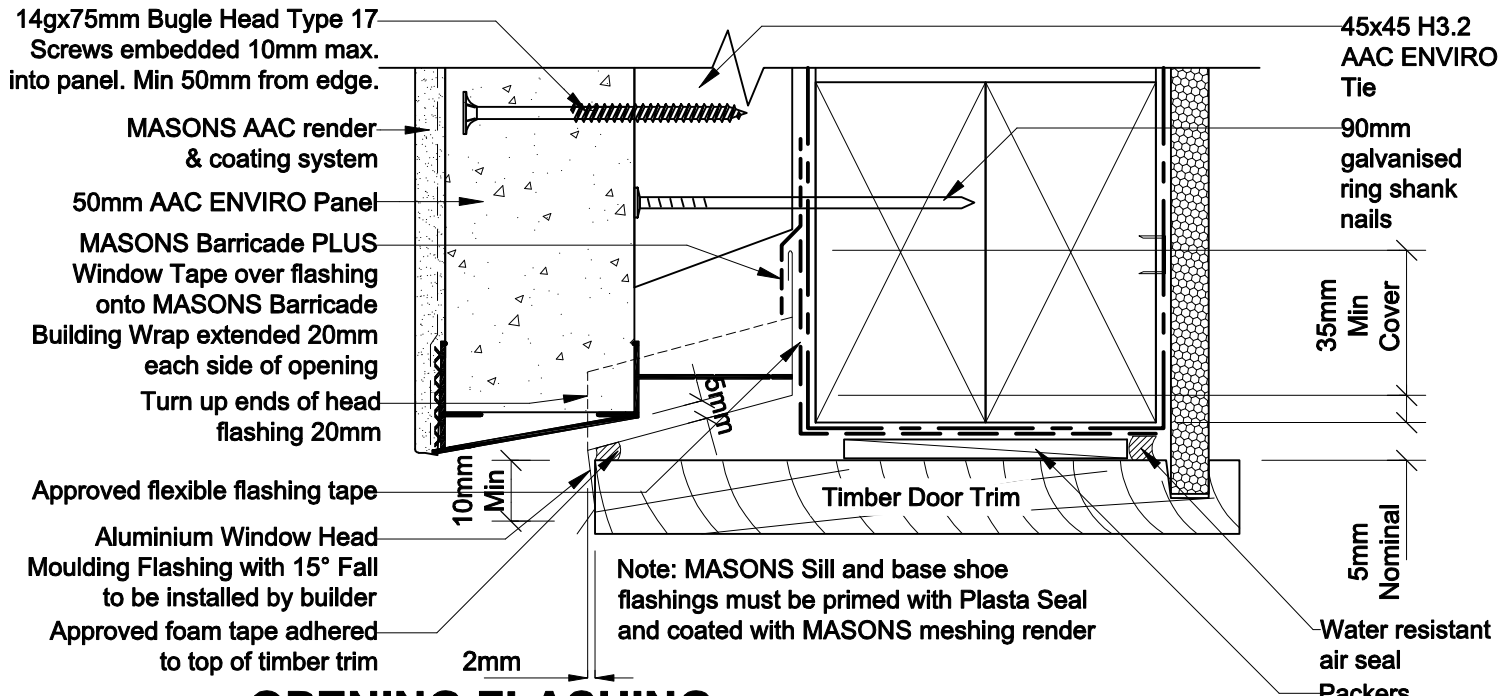
OPENING FLASHINGS - Window Jamb Detail 22 Scale 1:2

MASONS ENVIRO AAC ON 45mm CAVITY TIMBER FRAME



OPENING FLASHING GARAGE DOOR - Jamb

Detail 23 Scale 1:2

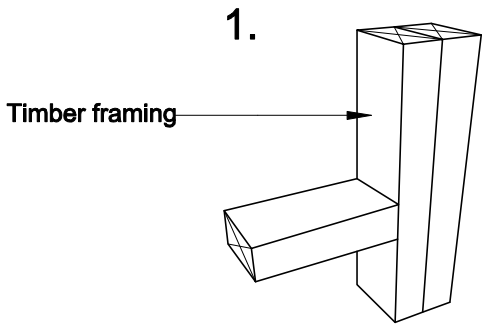


OPENING FLASHING GARAGE DOOR - Head

Detail 24 Scale 1:2

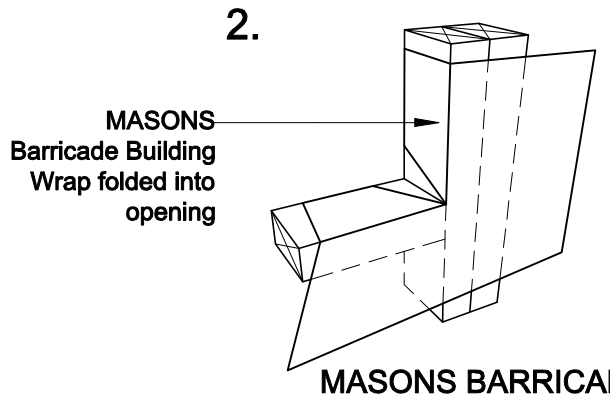
MASONS ENVIRO AAC ON 45mm CAVITY TIMBER FRAME

1.



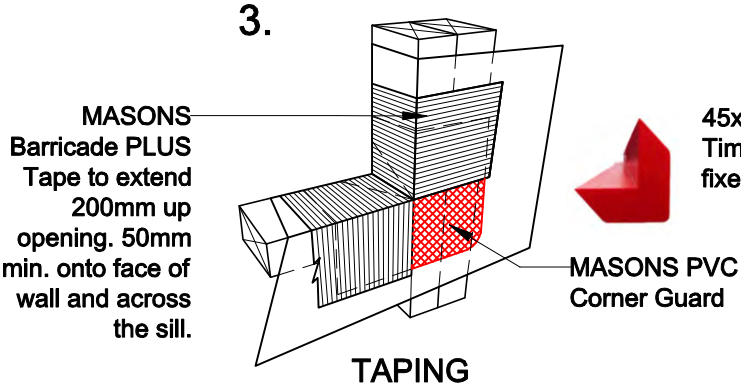
FRAMING

2.



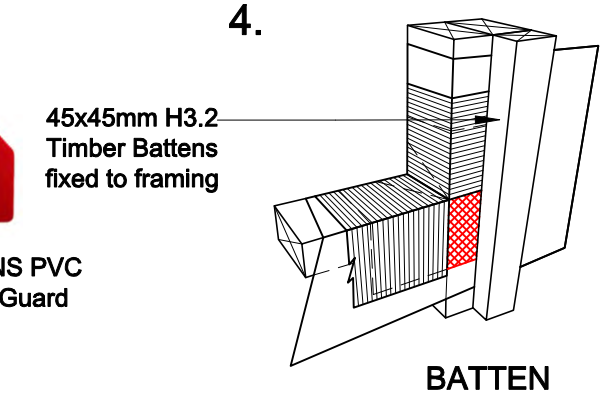
MASONS BARRICADE
BUILDING WRAP

3.



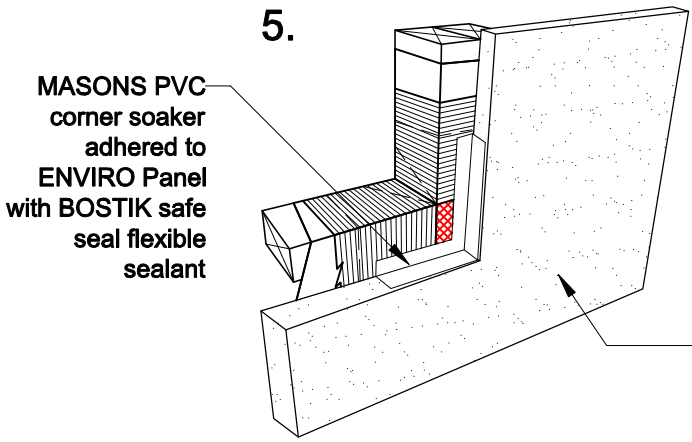
TAPING

4.



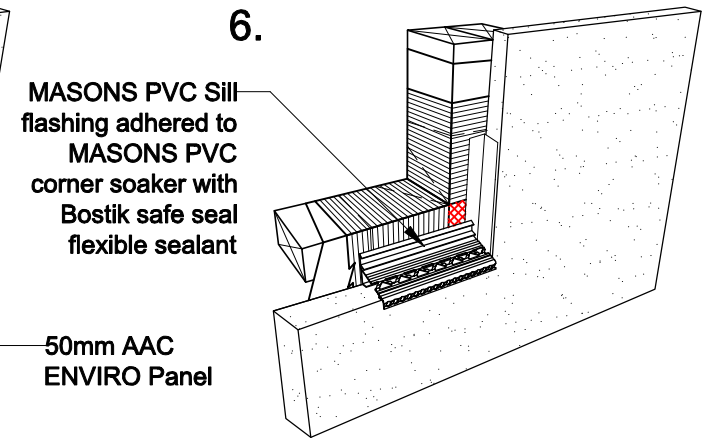
BATTEN
INSTALLATION

5.



PVC CORNER
SOAKER

6.

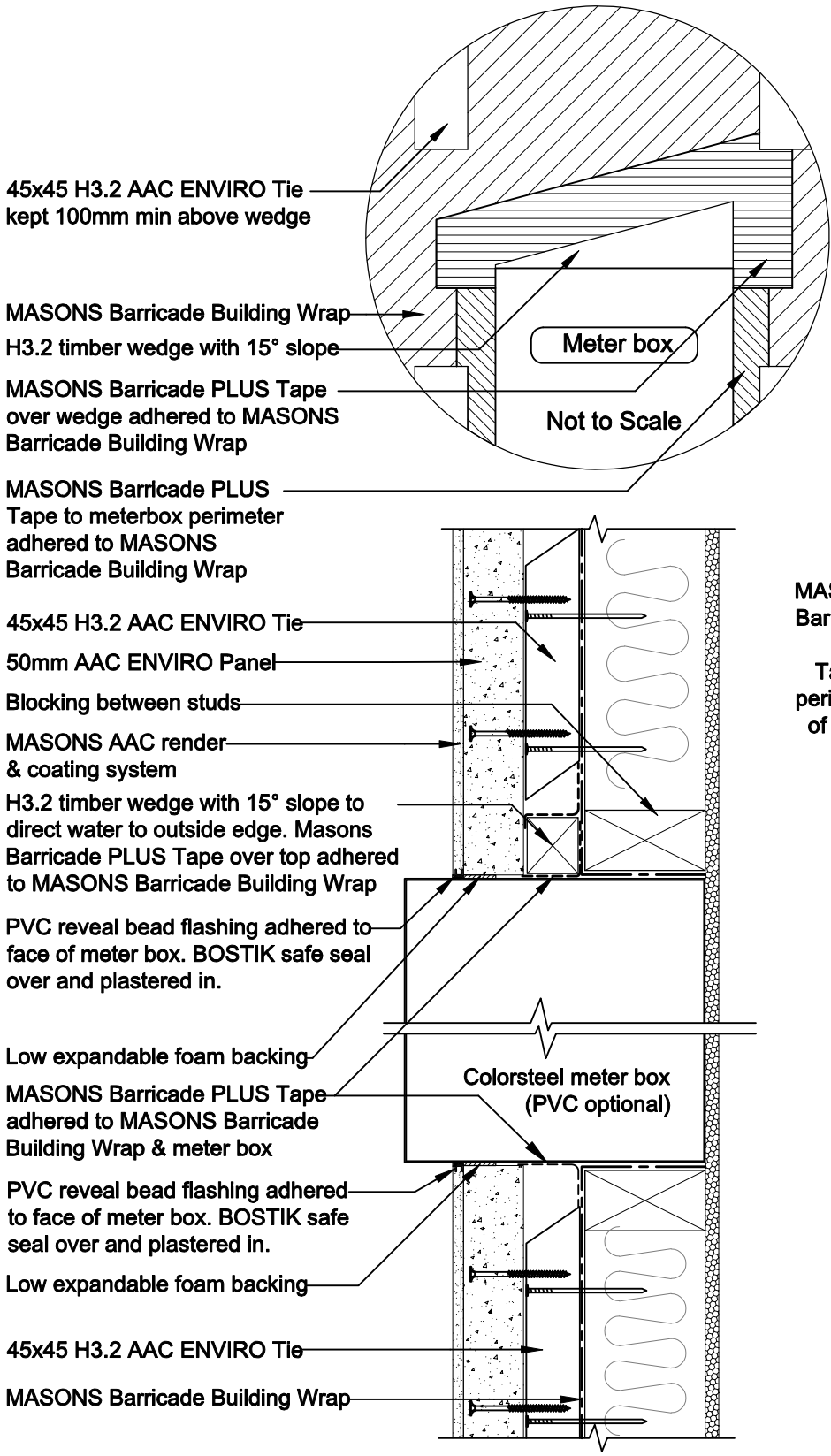


PVC SILL
FLASHING

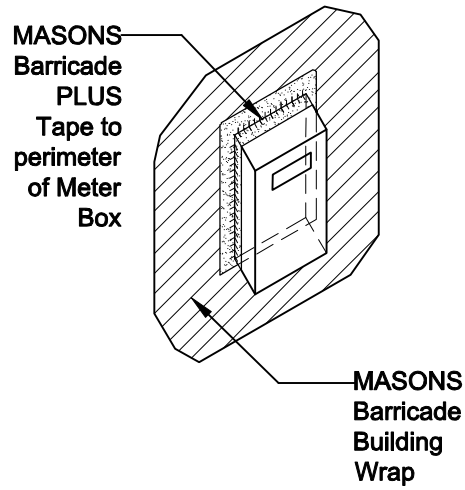
OPENING FLASHINGS PVC CORNER SOAKER & CORNER GUARD INSTALLATION

Detail 25 NTS

MASONS ENVIRO AAC ON 45mm CAVITY TIMBER FRAME

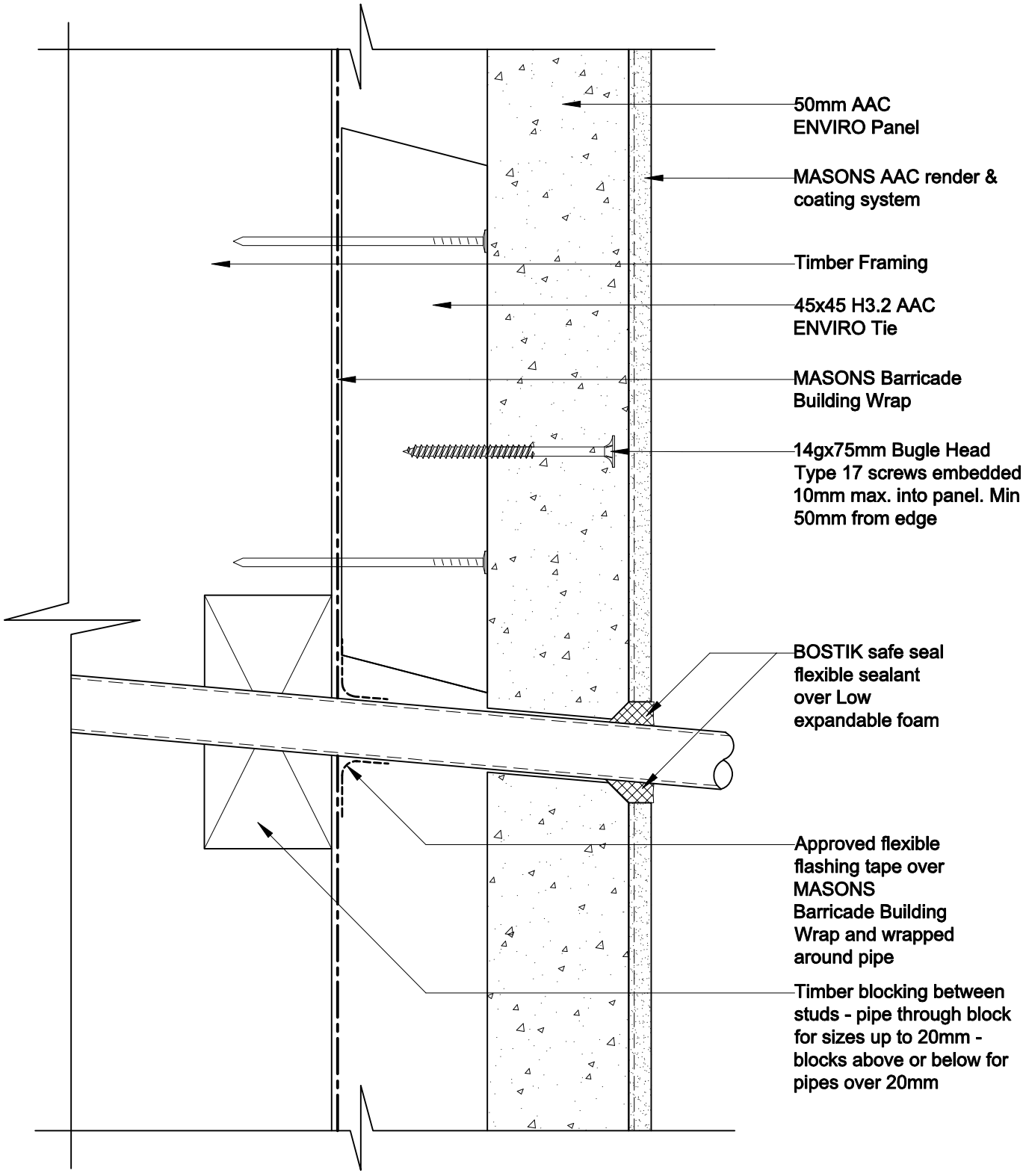


METER BOX Detail 26 Scale 1:5



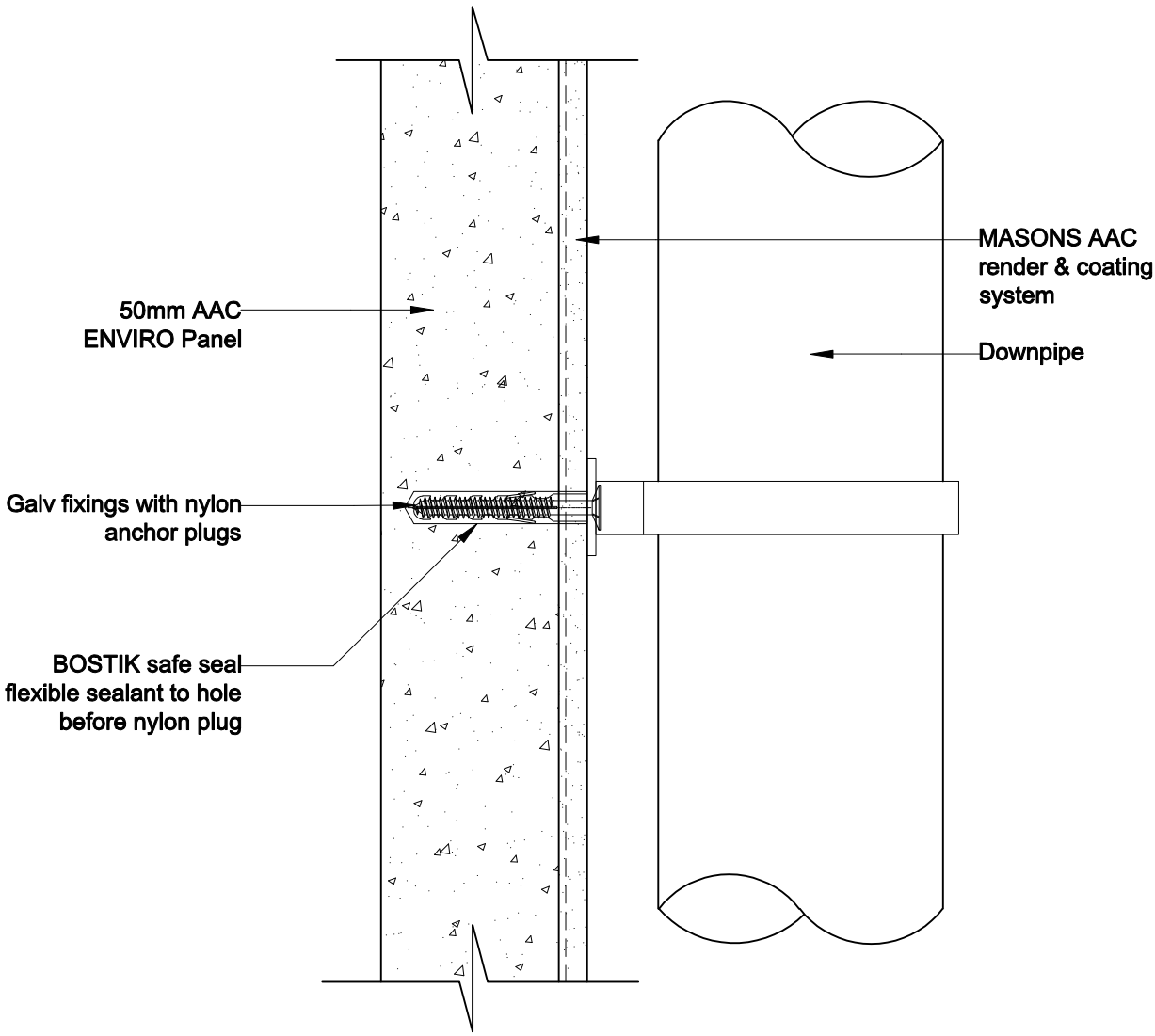
METER BOX Detail 27 NTS

MASONS ENVIRO AAC ON 45mm CAVITY TIMBER FRAME



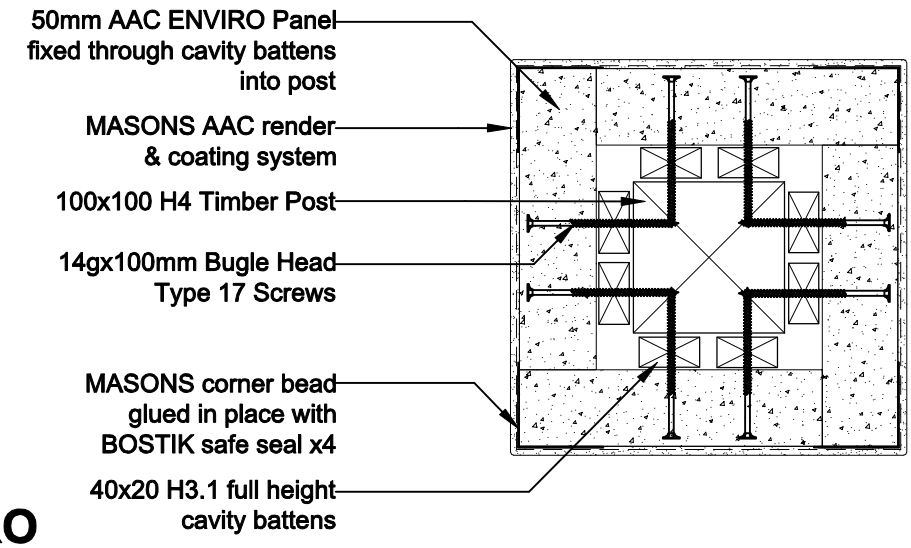
PIPE PENETRATION Detail 28 Scale 1:2

MASONS ENVIRO AAC ON 45mm CAVITY TIMBER FRAME



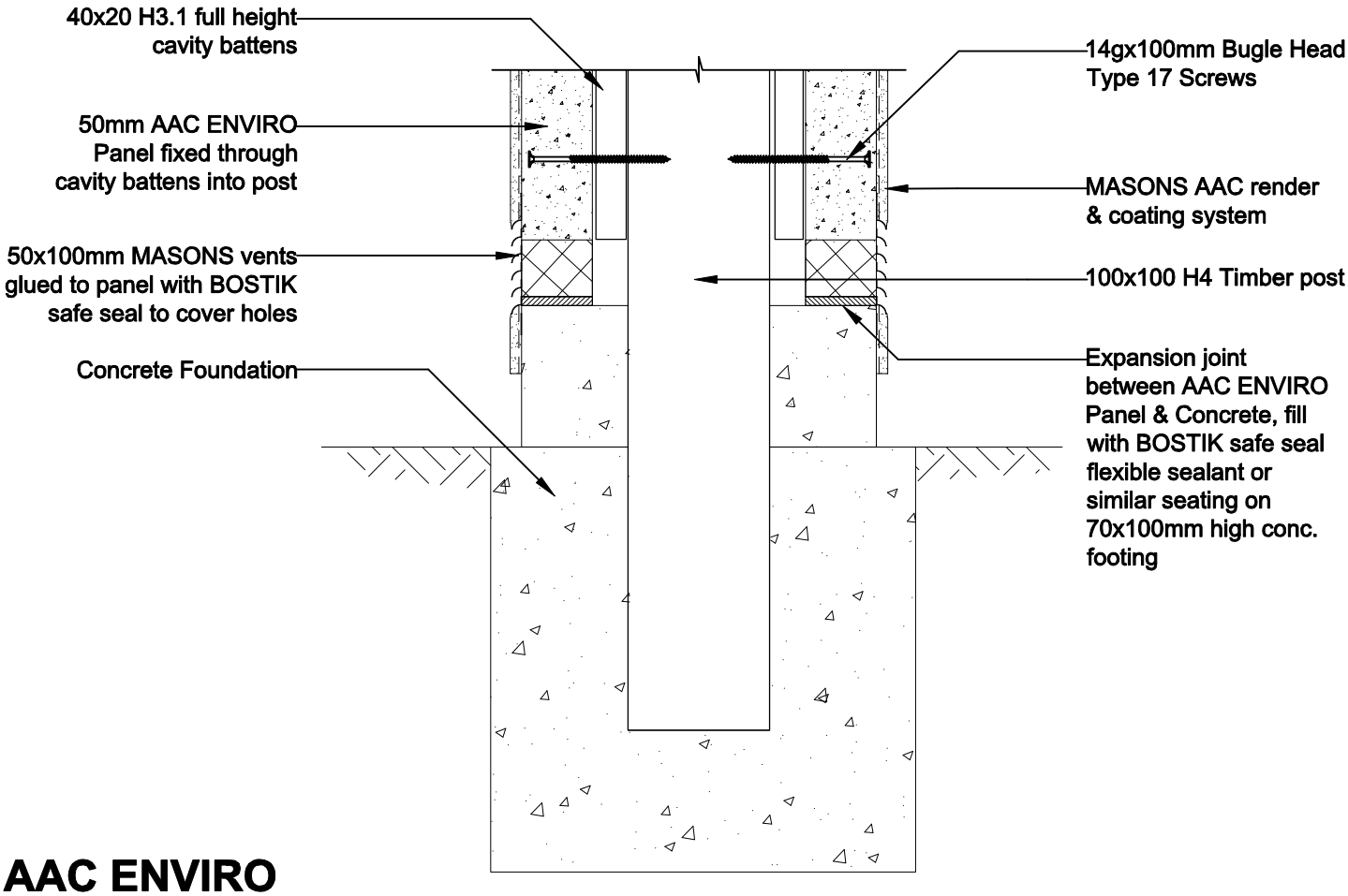
DOWNPIPE FIXING Detail 29 Scale 1:2

MASONS ENVIRO AAC ON 45mm CAVITY TIMBER FRAME



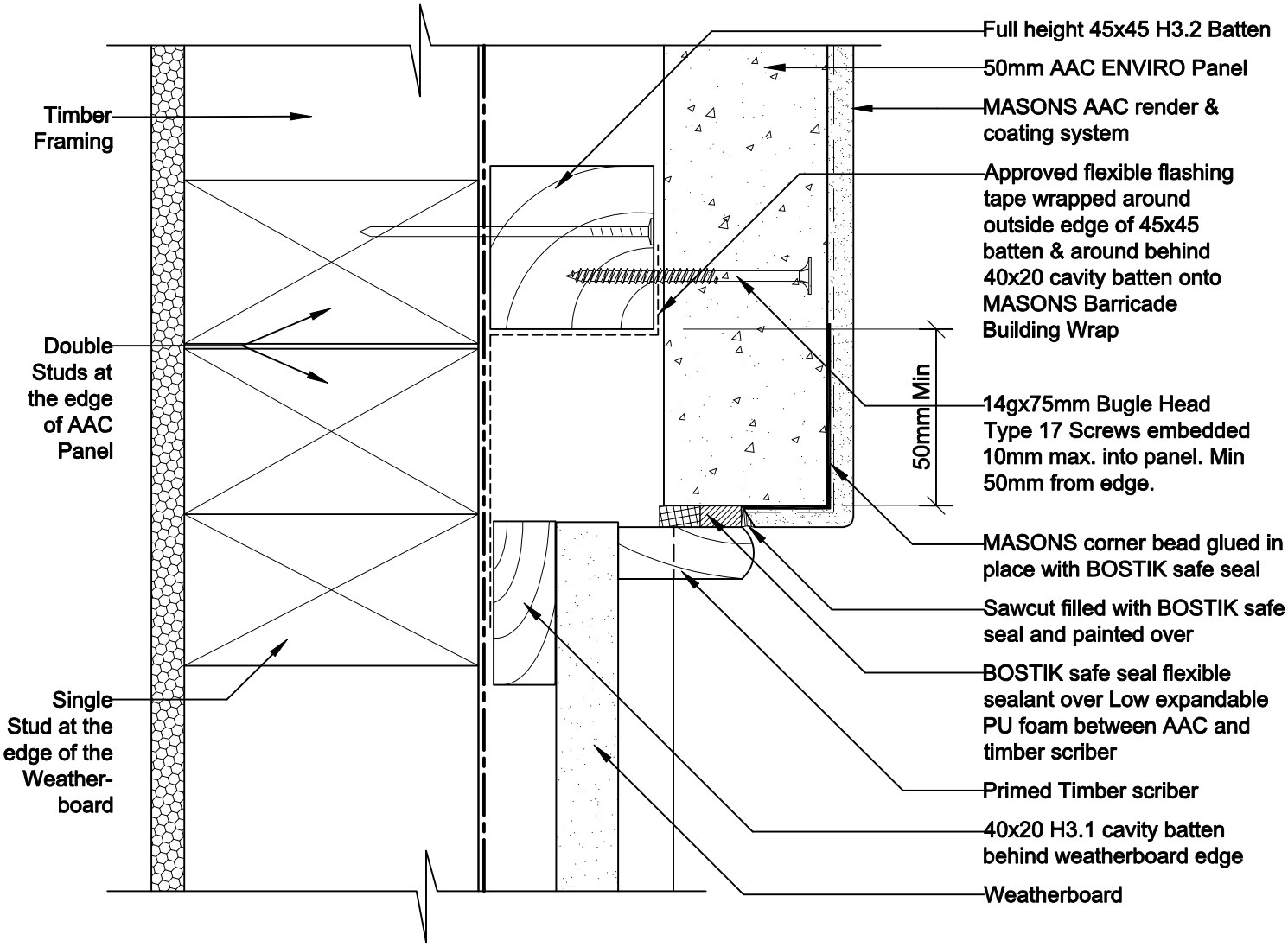
AAC ENVIRO COLUMN/POST - Plan View

Detail 30 Scale 1:5



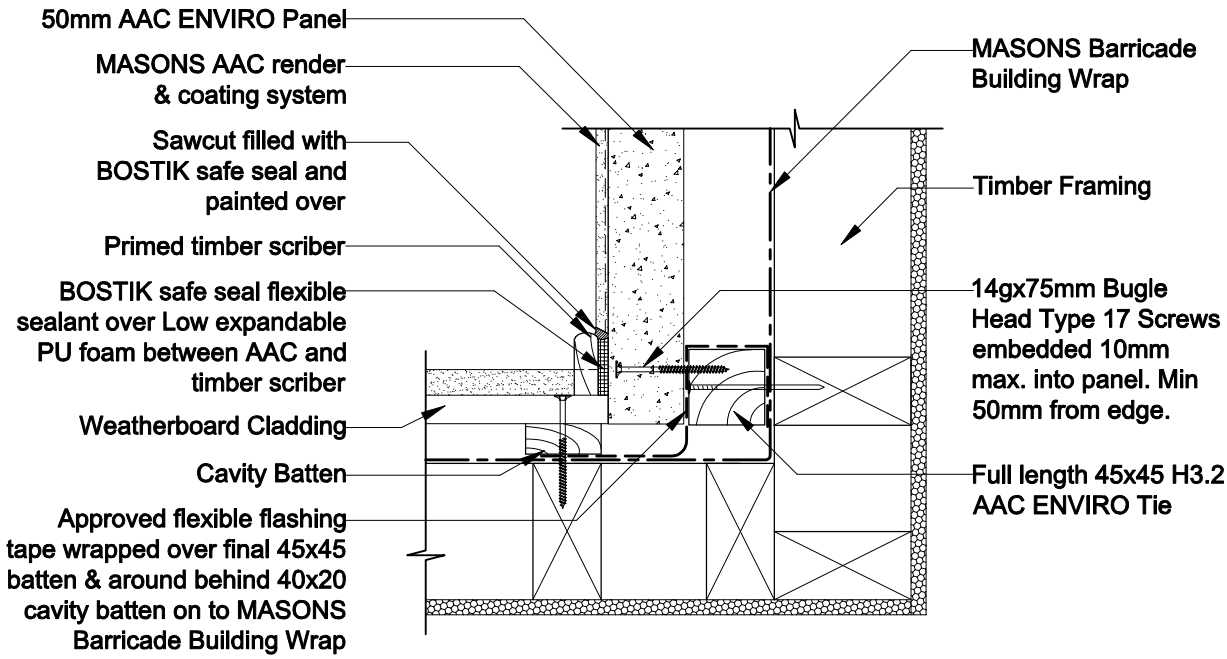
AAC ENVIRO COLUMN/POST - Section View

Detail 31 Scale 1:5

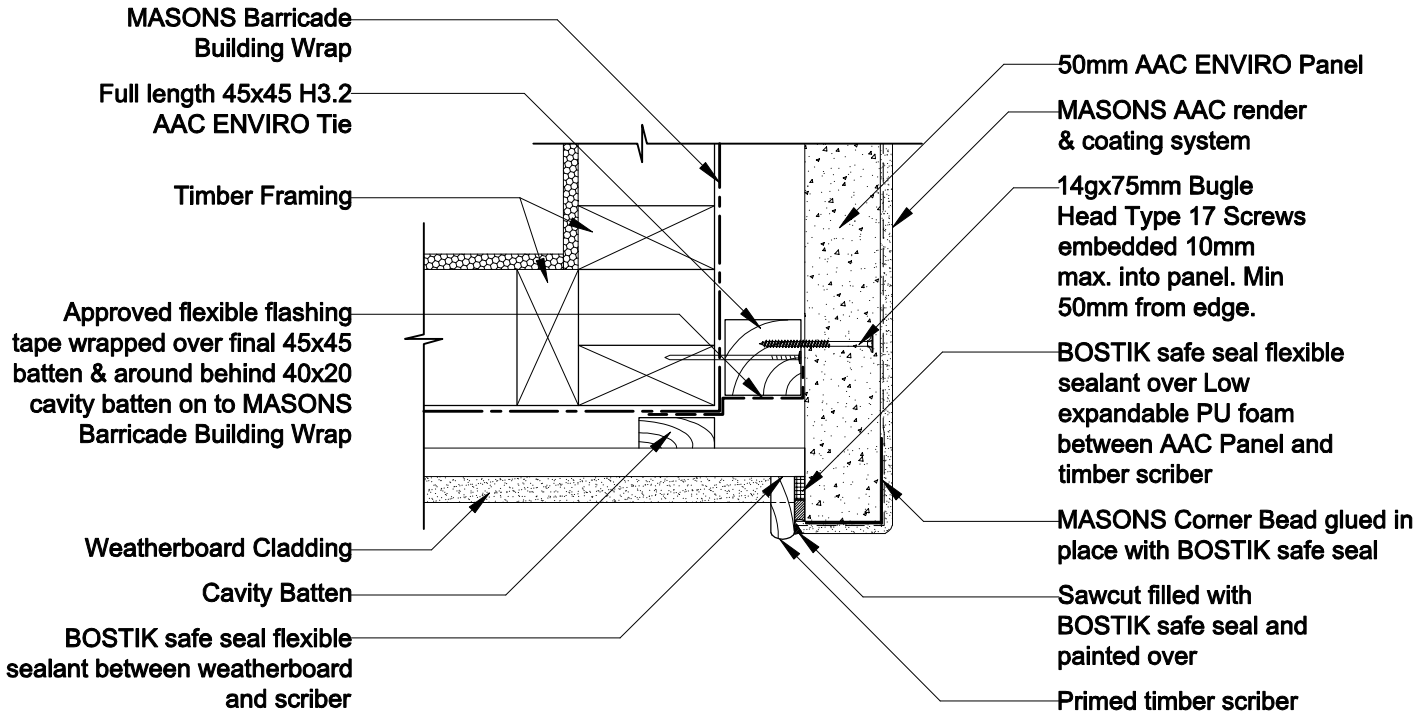


AAC ENVIRO PANEL / WEATHER BOARD VERTICAL JUNCTION
Plan View

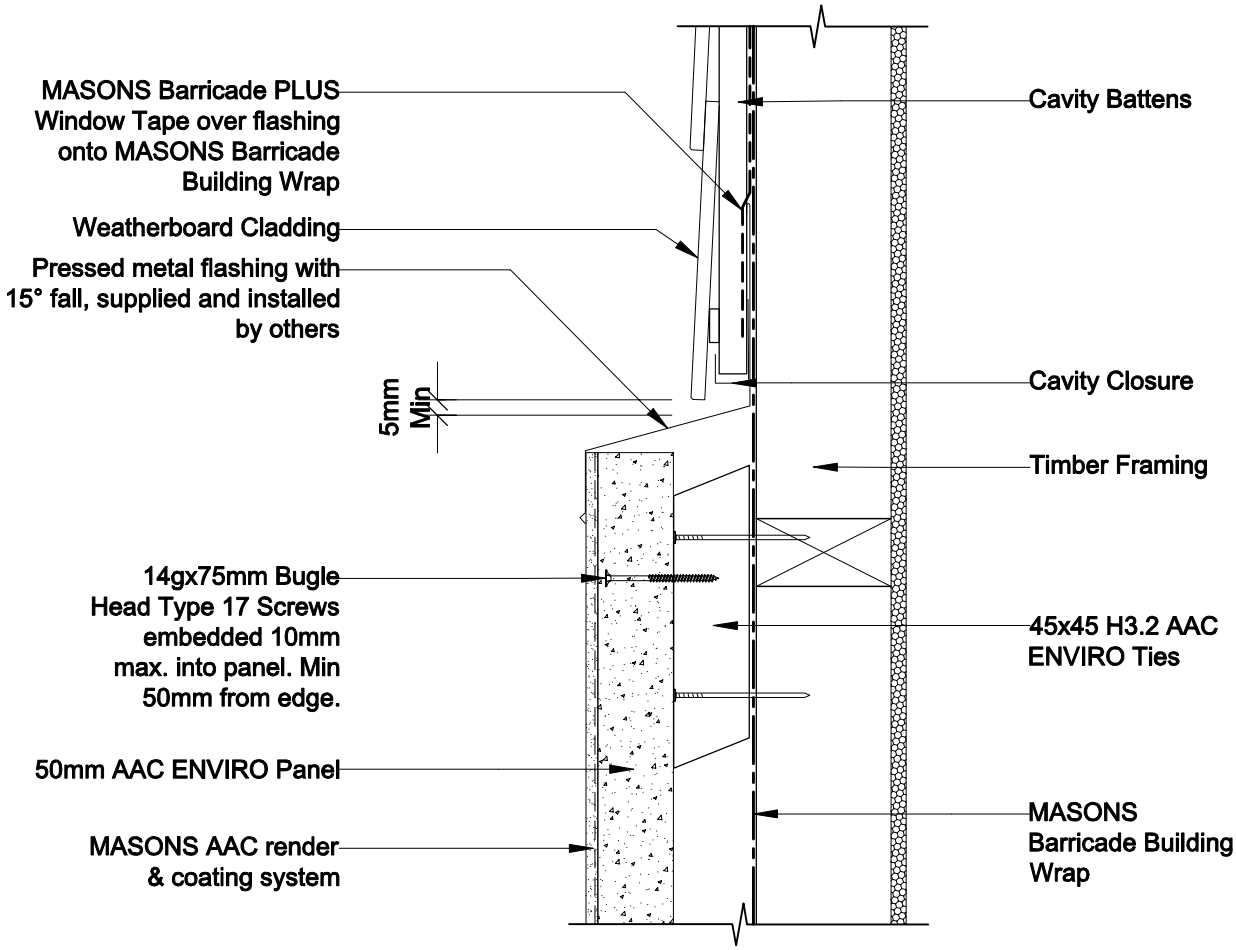
Detail 32 Scale 1:2



ENVIRO AAC PANEL / WEATHERBOARD Detail 33 Scale 1:5
Corner Junction Internal



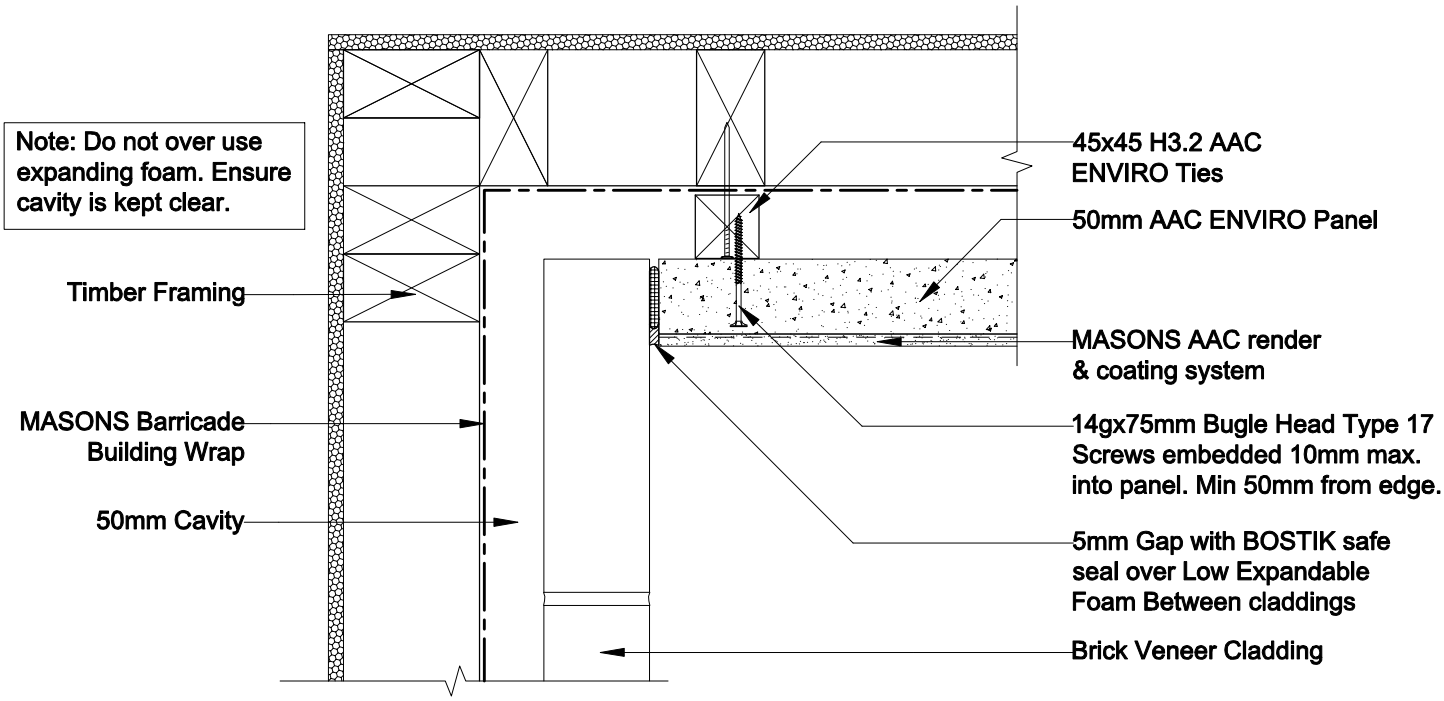
ENVIRO AAC PANEL / WEATHERBOARD Detail 34 Scale 1:5
Corner Junction External



AAC ENVIRO PANEL / WEATHER BOARD - Mid Floor Junction

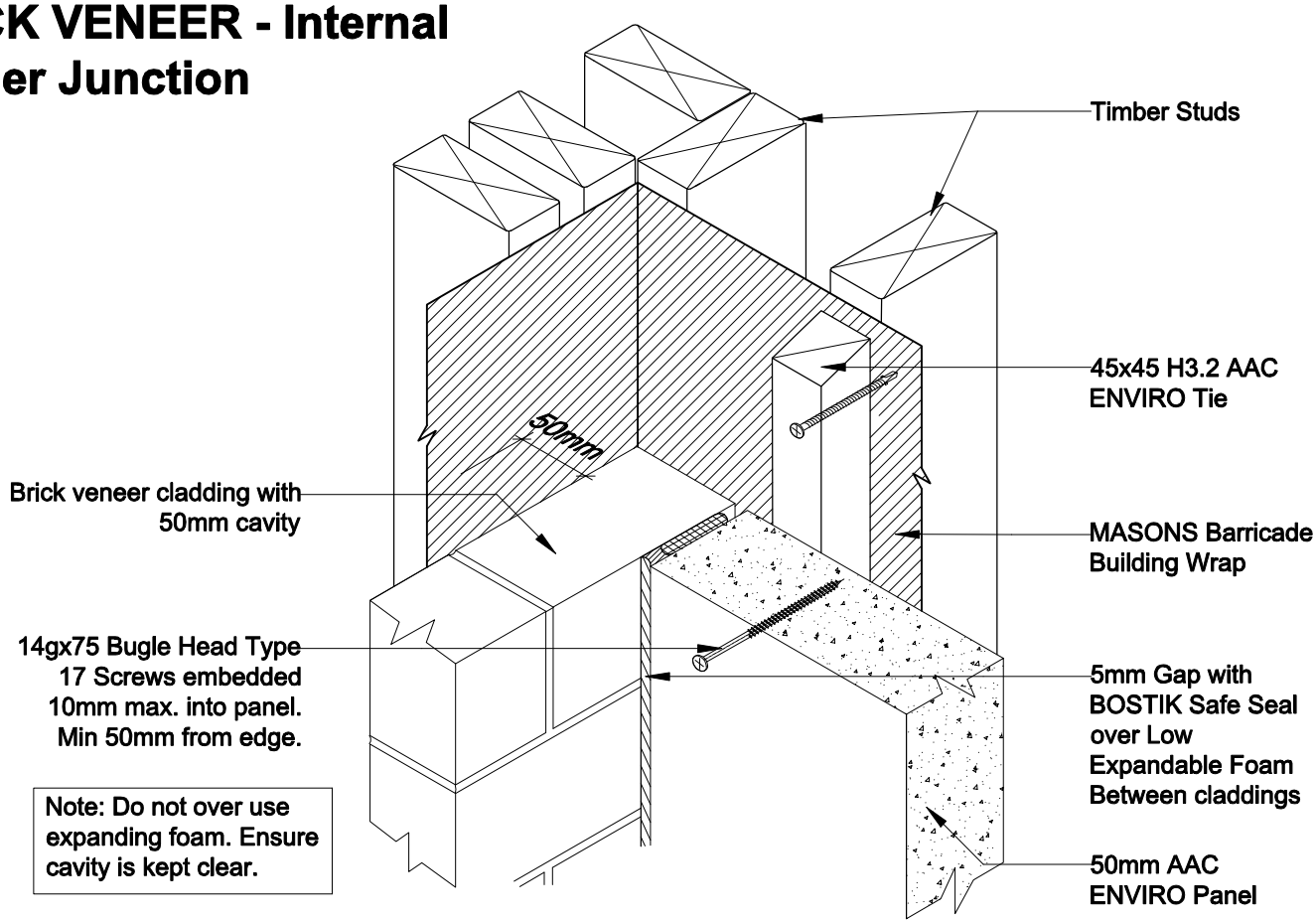
Detail 35 Scale 1:5

MASONS ENVIRO AAC ON 45mm CAVITY TIMBER FRAME



AAC ENVIRO PANEL / BRICK VENEER - Internal Corner Junction

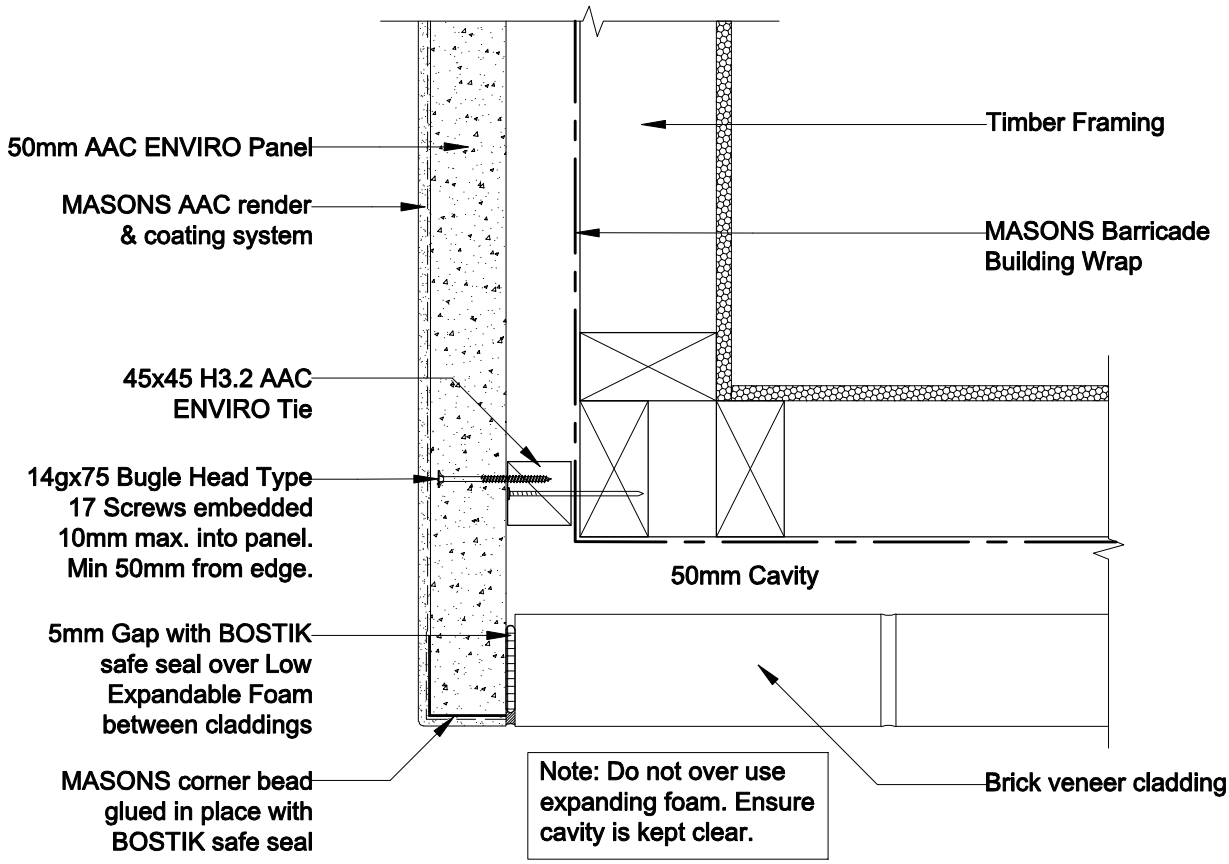
Detail 36 Scale 1:5



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

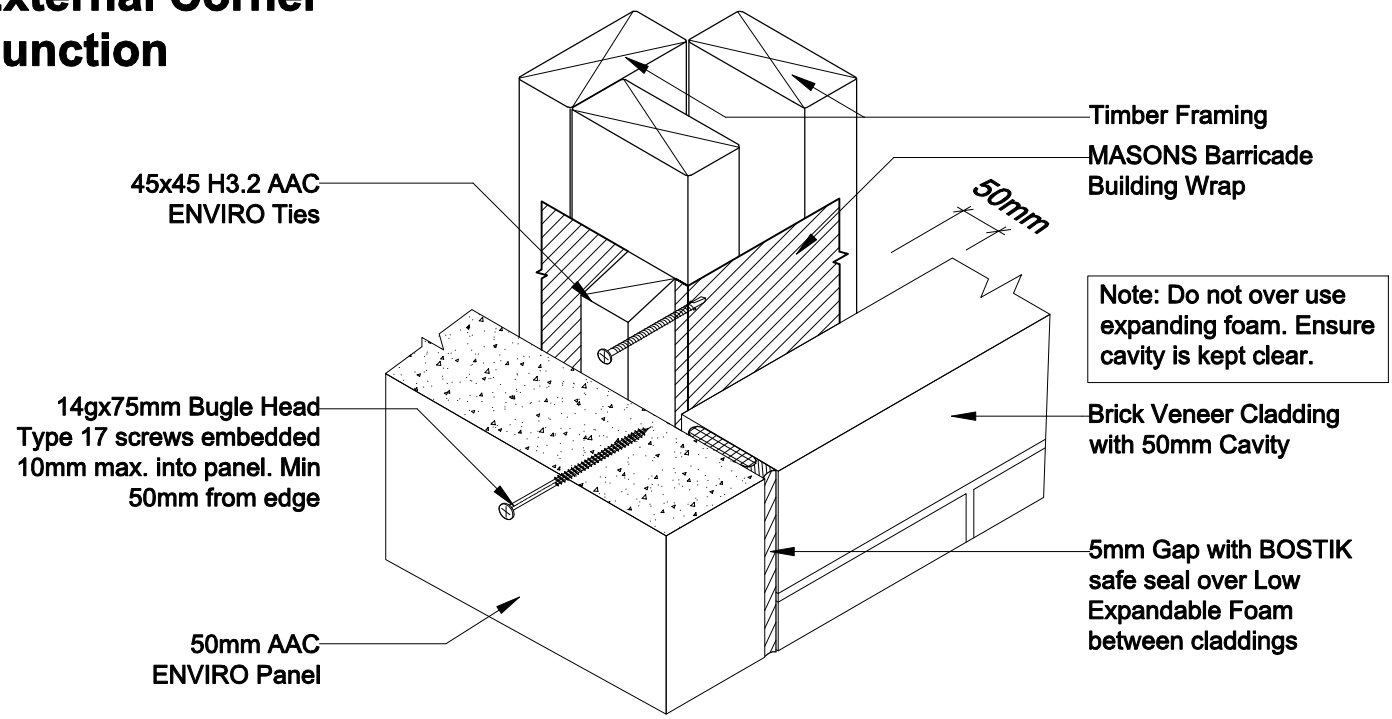
Detail 37 NTS

MASONS ENVIRO AAC ON 45mm CAVITY TIMBER FRAME



AAC ENVIRO PANEL / BRICK VENEER External Corner Junction

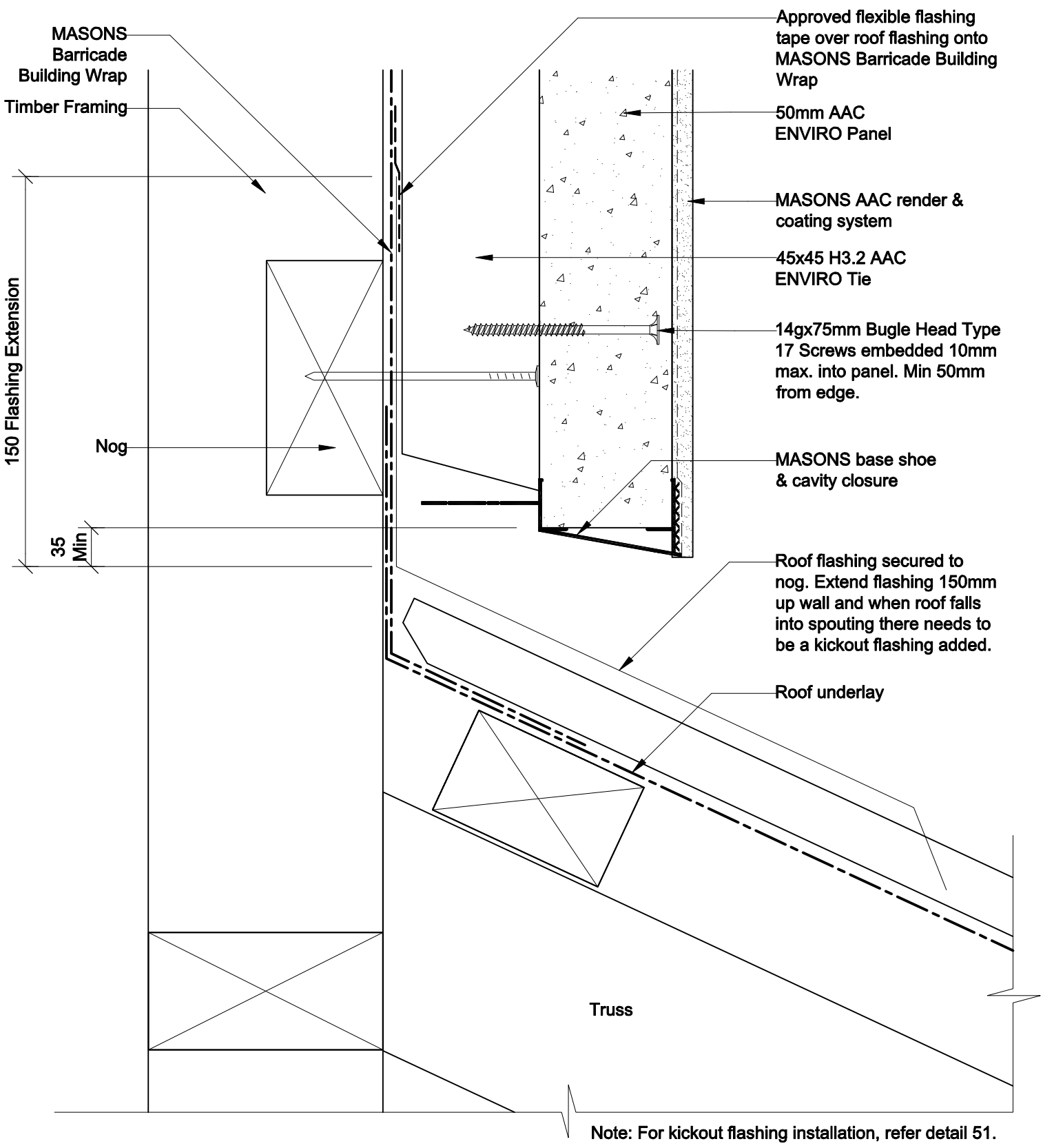
Detail 38 Scale 1:5



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

Detail 39 NTS

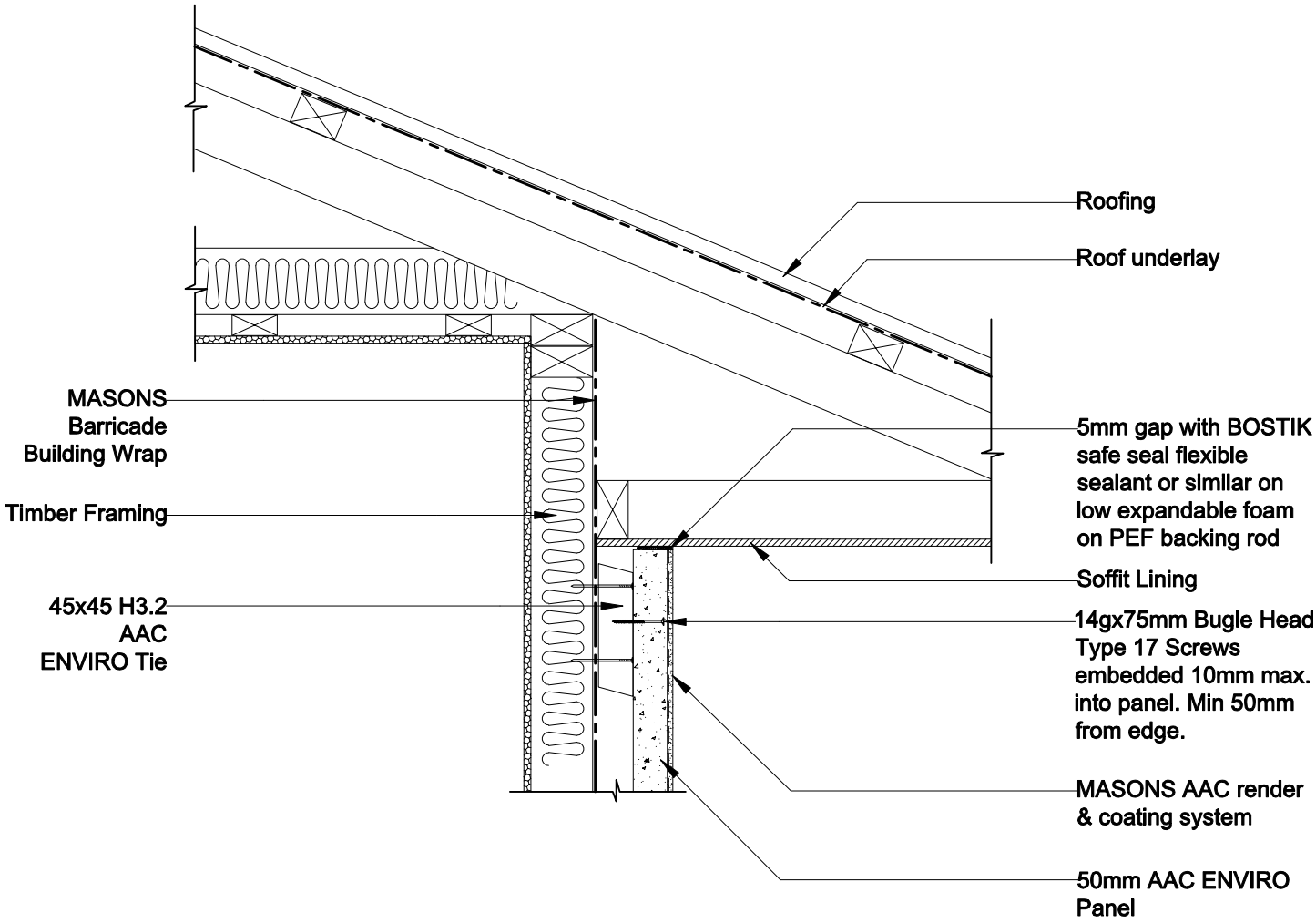
MASONS ENVIRO AAC ON 45mm CAVITY TIMBER FRAME



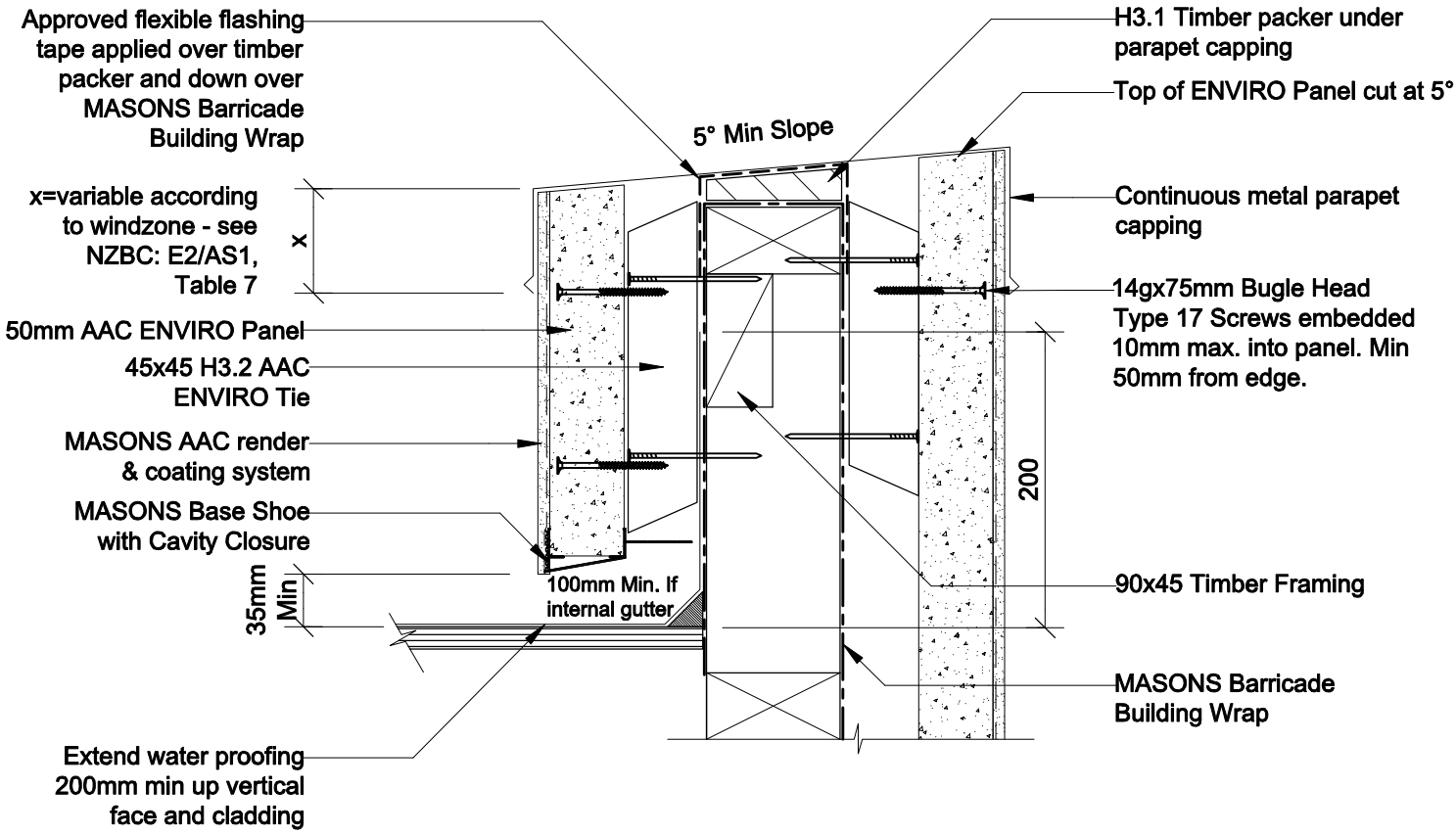
ROOF / WALL JUNCTION

Detail 40 Scale 1:2

MASONS ENVIRO AAC ON 45mm CAVITY TIMBER FRAME

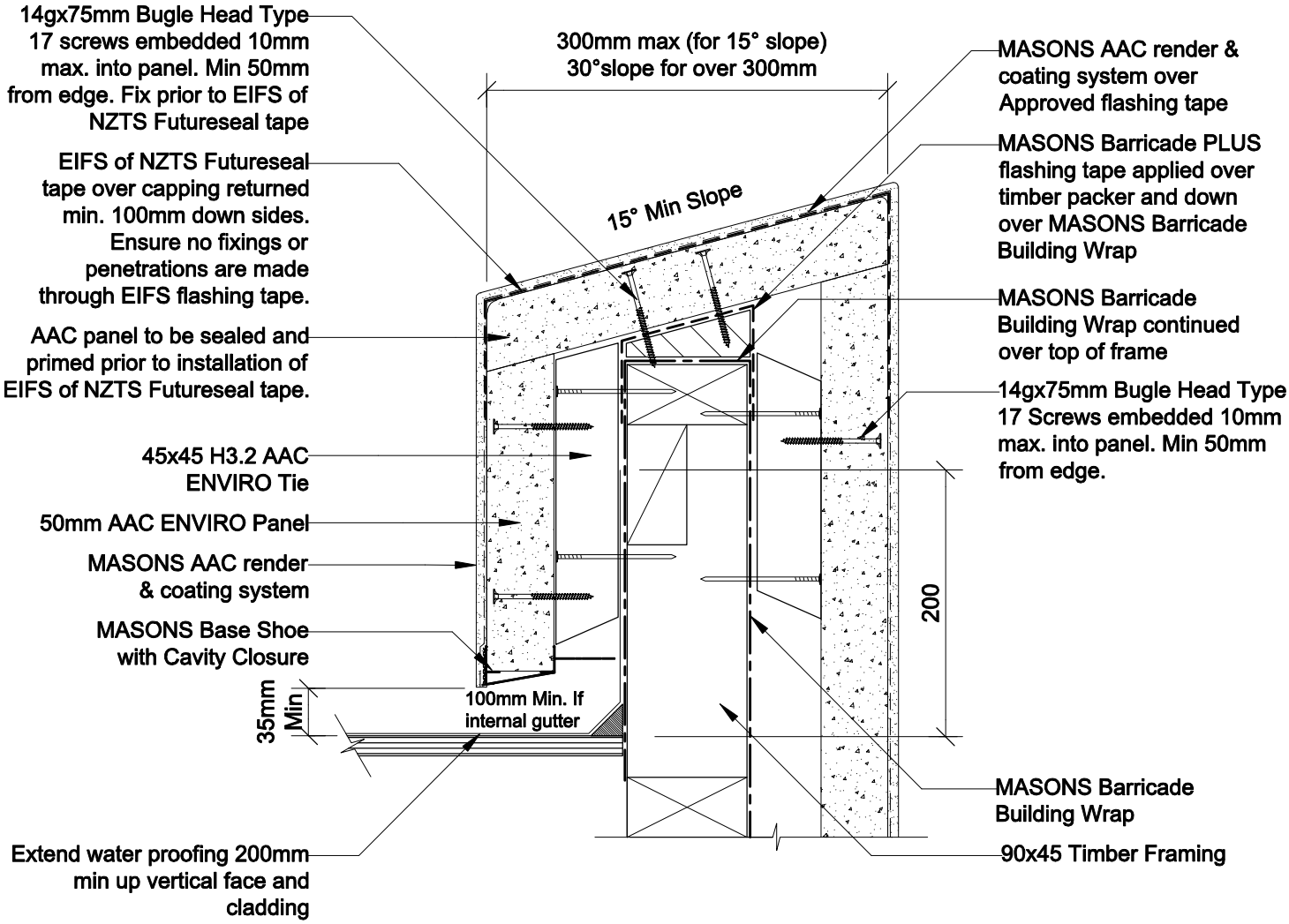


SOFFIT JUNCTION Detail 41 Scale 1:10



PARAPET CONSTRUCTION - Metal Capping

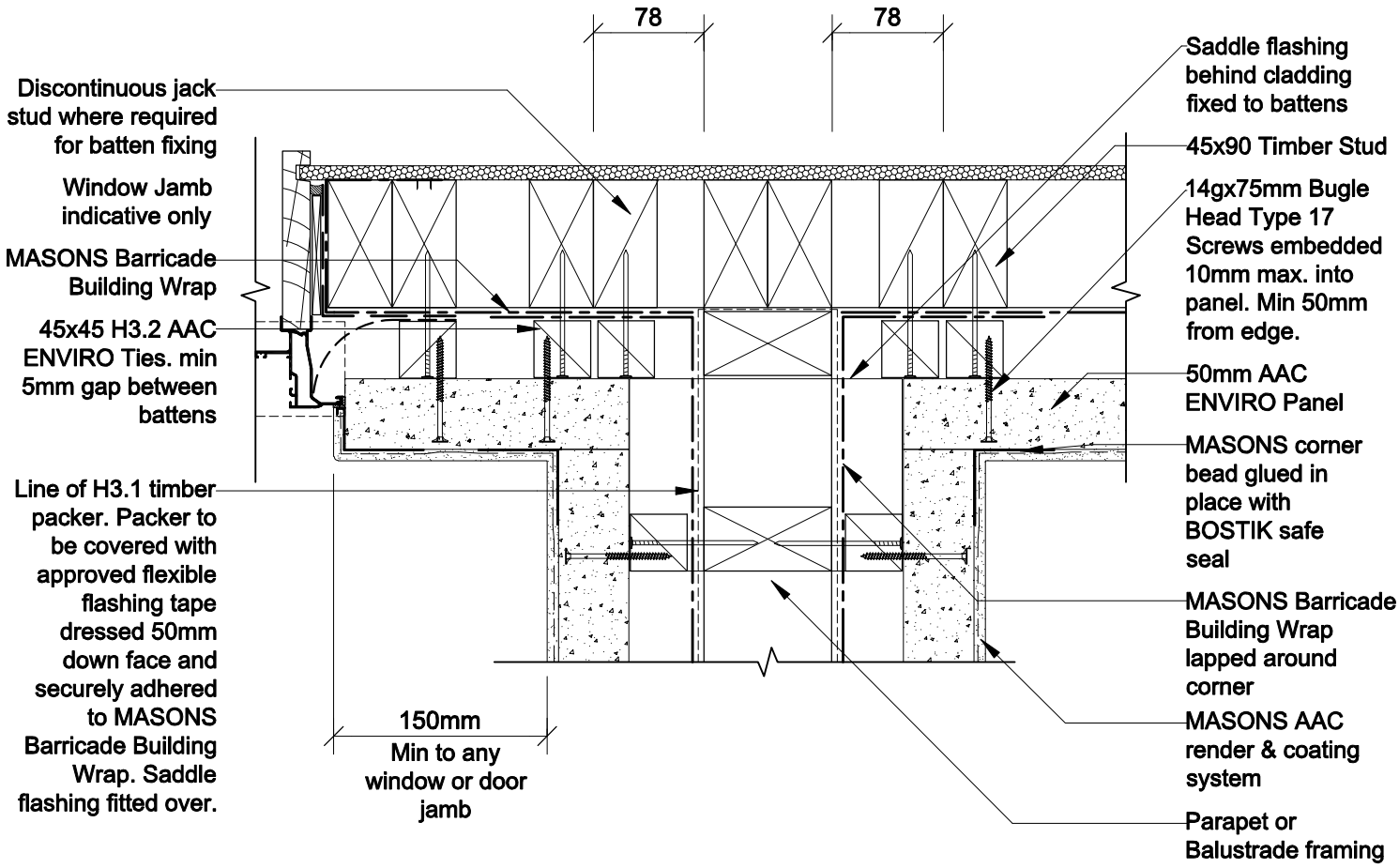
Detail 42 Scale 1:5



PARAPET CONSTRUCTION - Plastered Capping

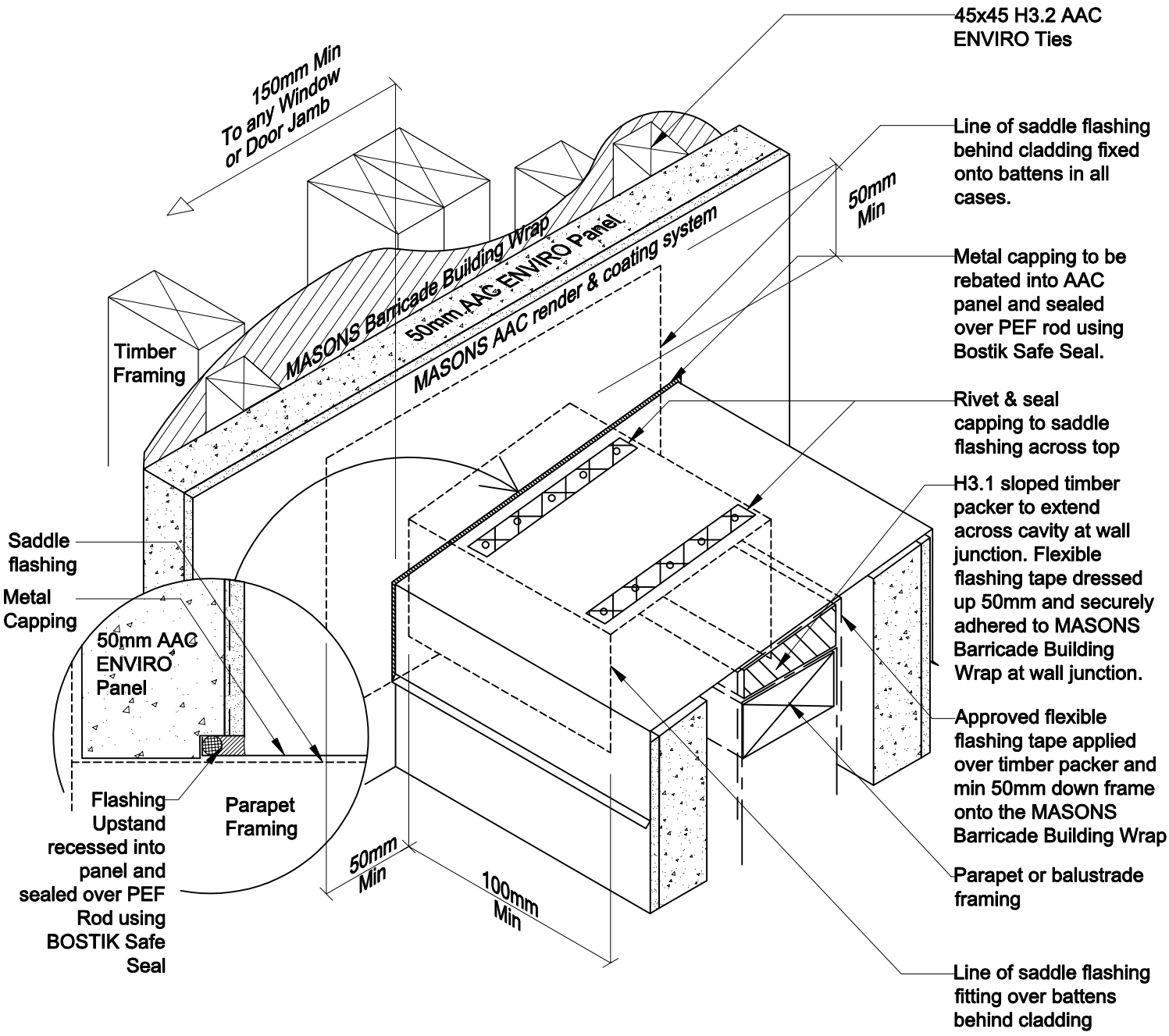
Detail 43 Scale 1:5

MASONS ENVIRO AAC ON 45mm CAVITY TIMBER FRAME



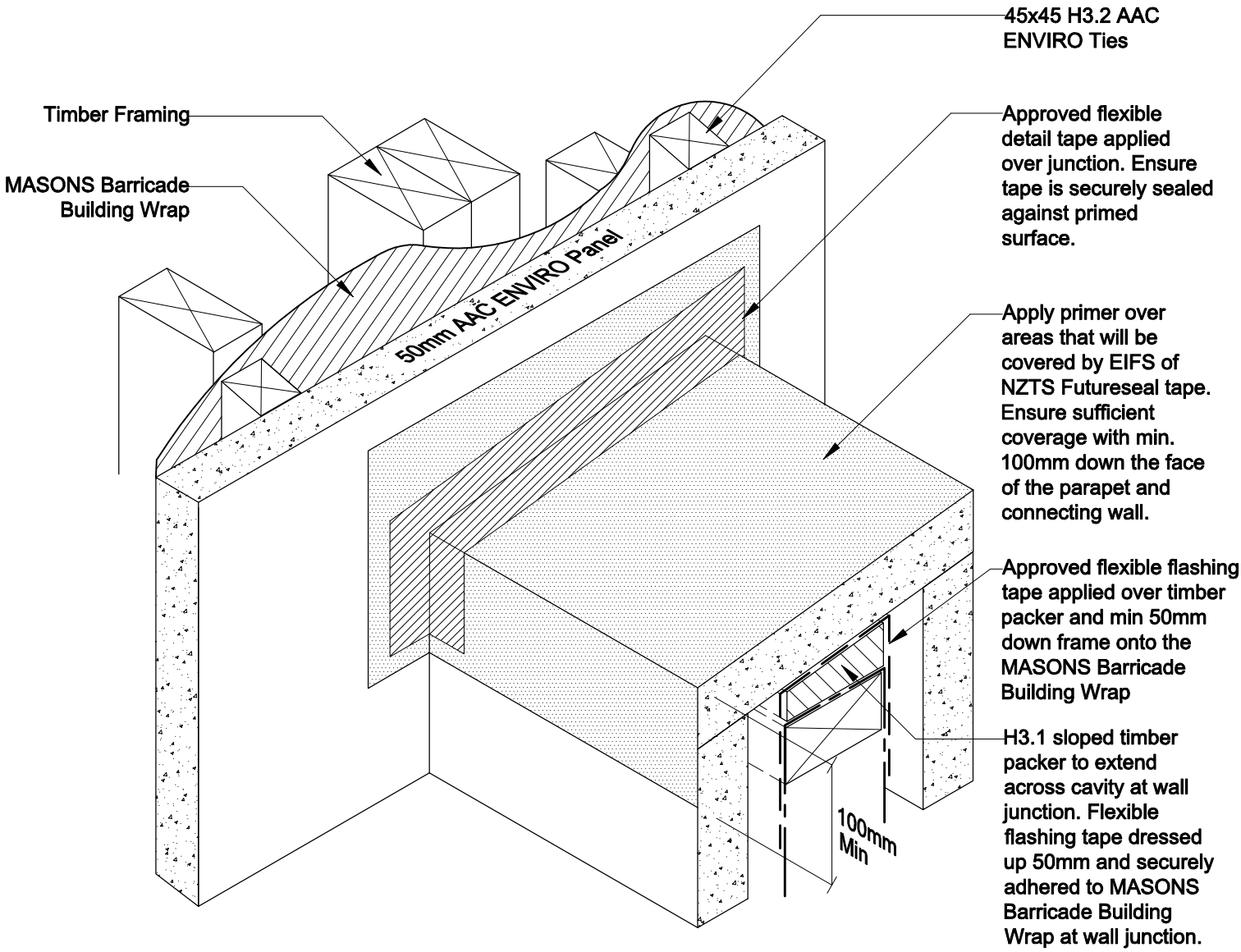
PARAPET / HANDRAIL TO WALL JUNCTION With Metal Capping

Detail 44 Scale 1:5



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

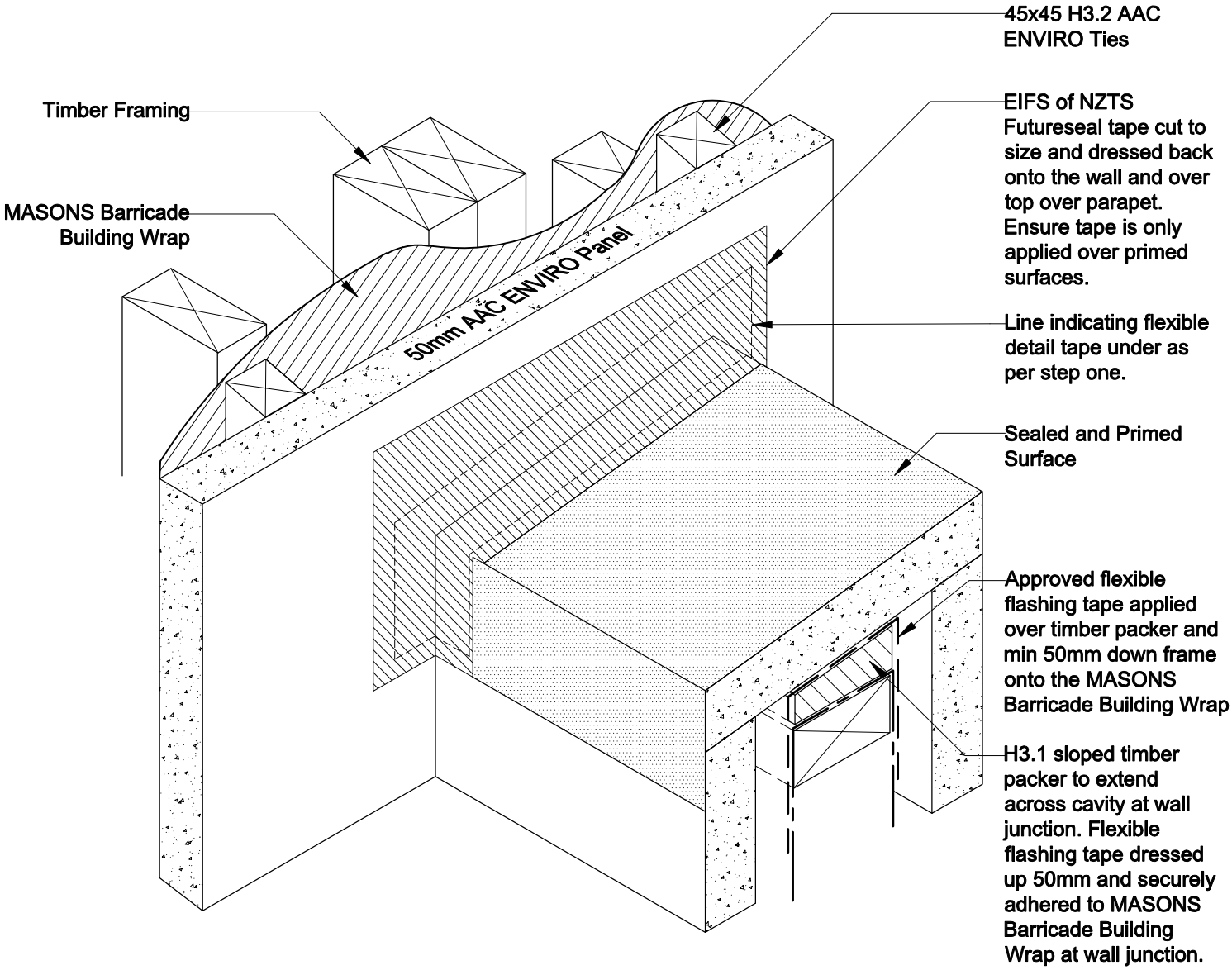
Detail 45 NTS



PARAPET / HANDRAIL TO WALL JUNCTION ENVIRO Panel Capping Step 1

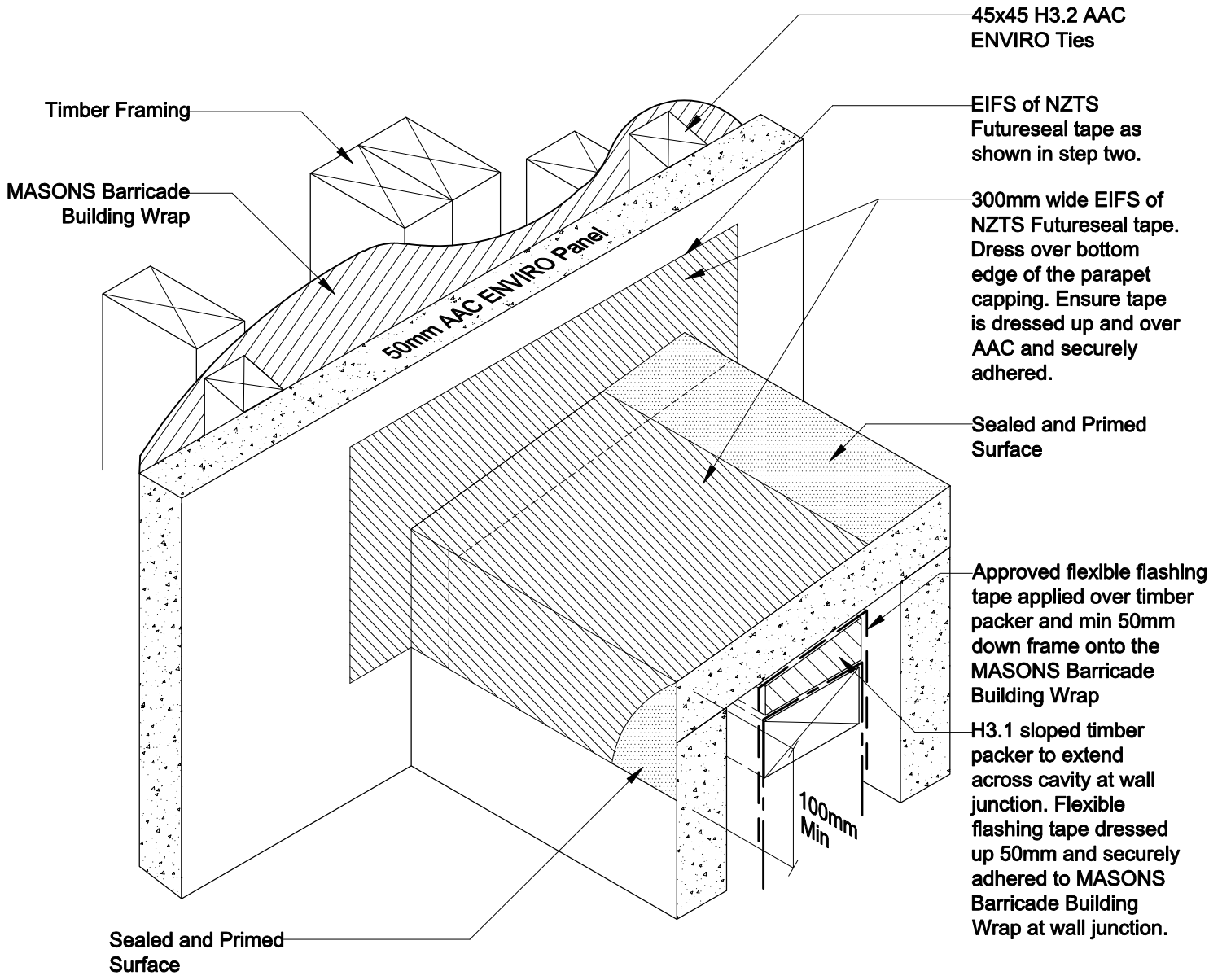
Detail 46 NTS

MASONS ENVIRO AAC ON 45mm CAVITY TIMBER FRAME



PARAPET / HANDRAIL TO WALL JUNCTION ENVIRO Panel Capping Step 2

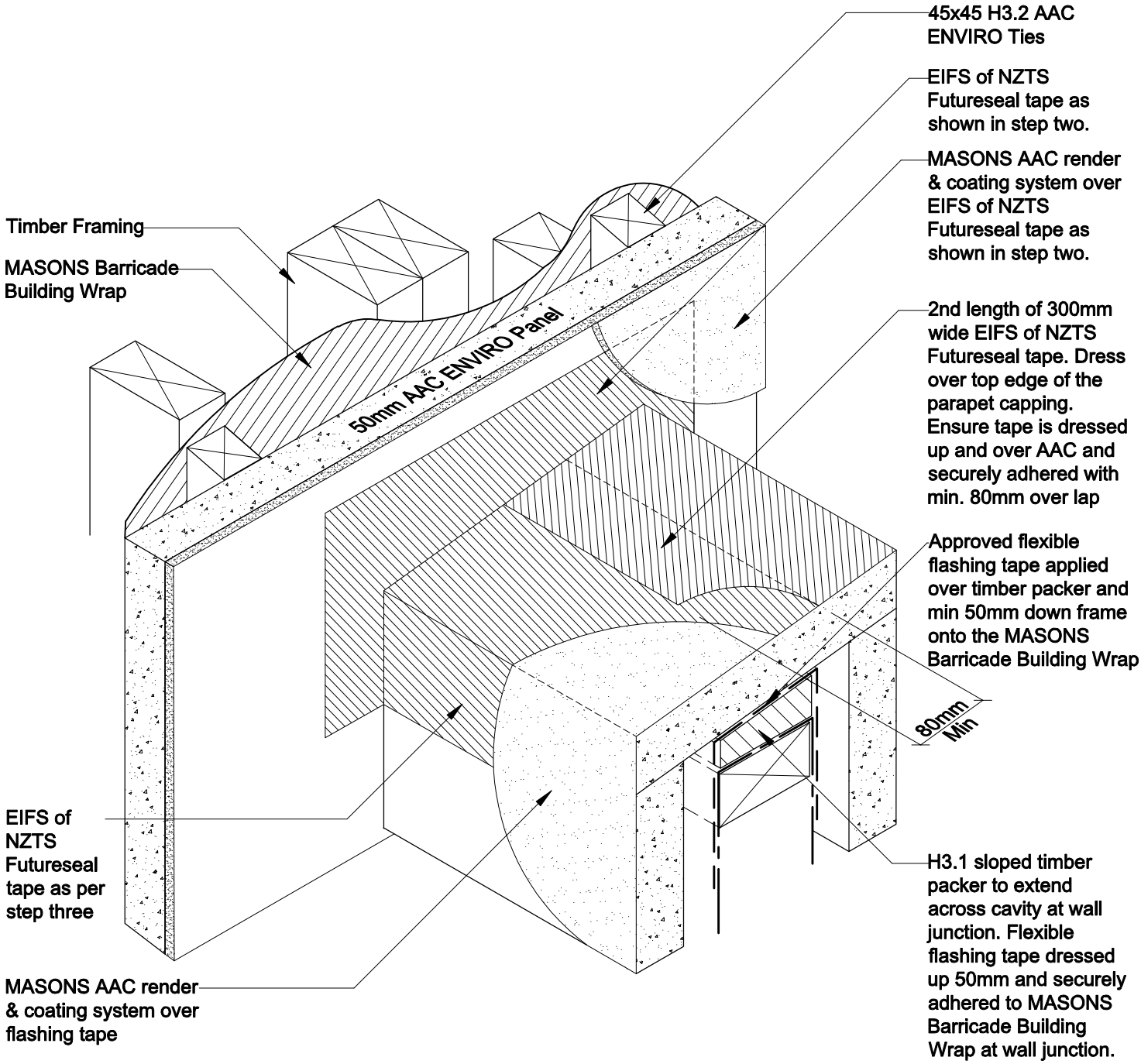
Detail 46A NTS



PARAPET / HANDRAIL TO WALL JUNCTION ENVIRO Panel Capping Step 3

Detail 46B NTS

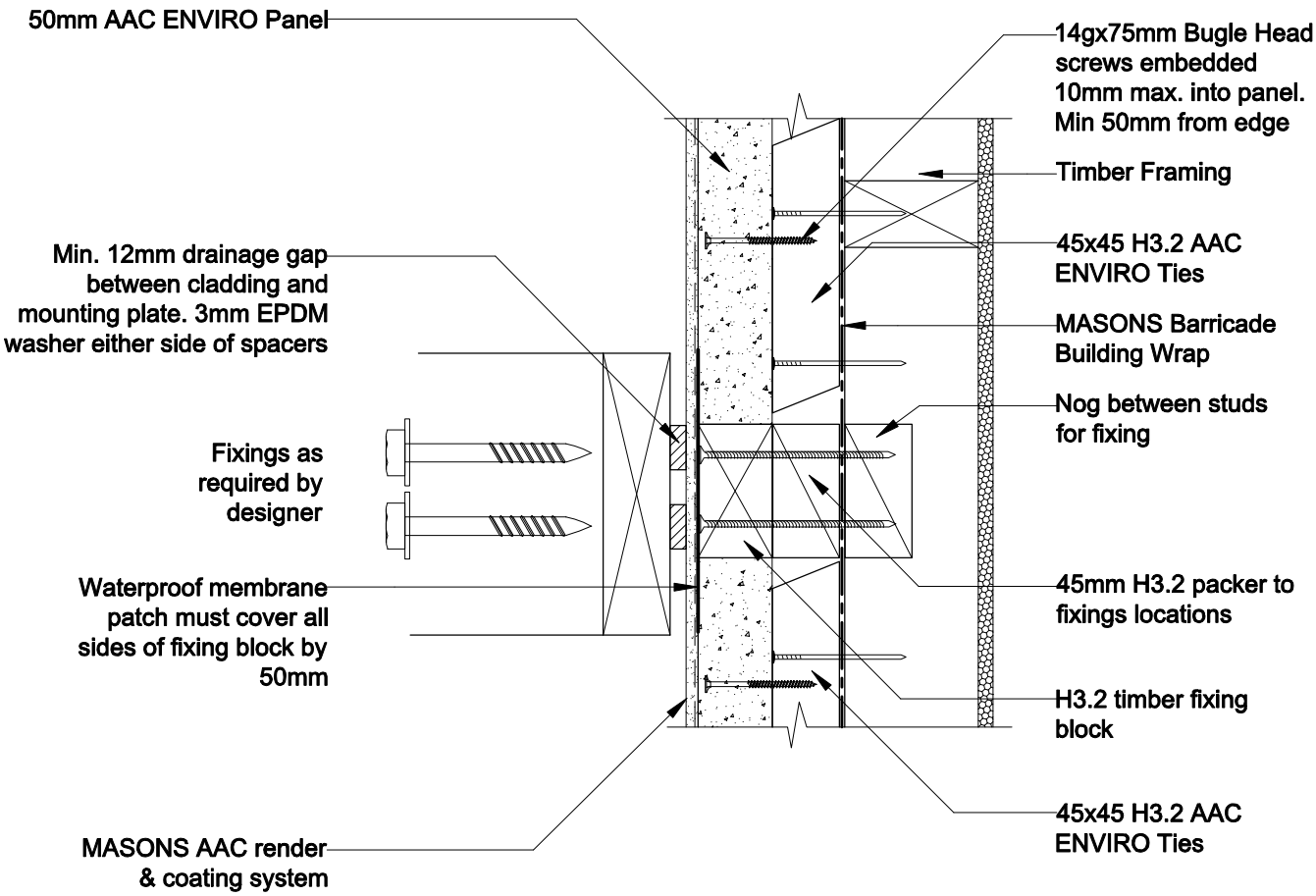
MASONS ENVIRO AAC ON 45mm CAVITY TIMBER FRAME



PARAPET / HANDRAIL TO WALL JUNCTION ENVIRO Panel Capping Step 4

Detail 46C NTS

MASONS ENVIRO AAC ON 45mm CAVITY TIMBER FRAME



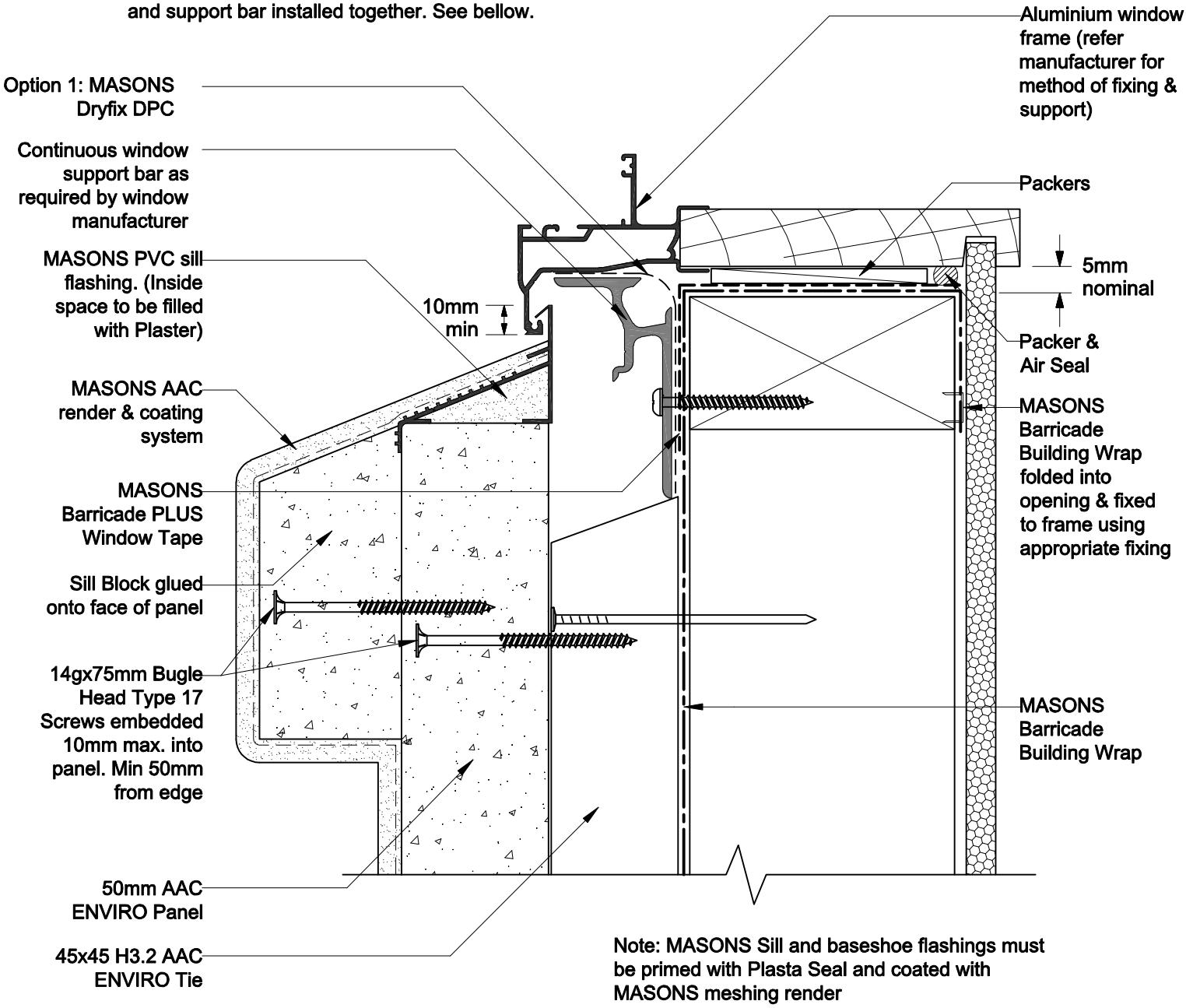
DECK / PERGOLA EXTERIOR Wall Fixing

Detail 47 Scale 1:5

Note: Detail to be drawn to specific design

MASONS ENVIRO AAC ON 45mm CAVITY TIMBER FRAME

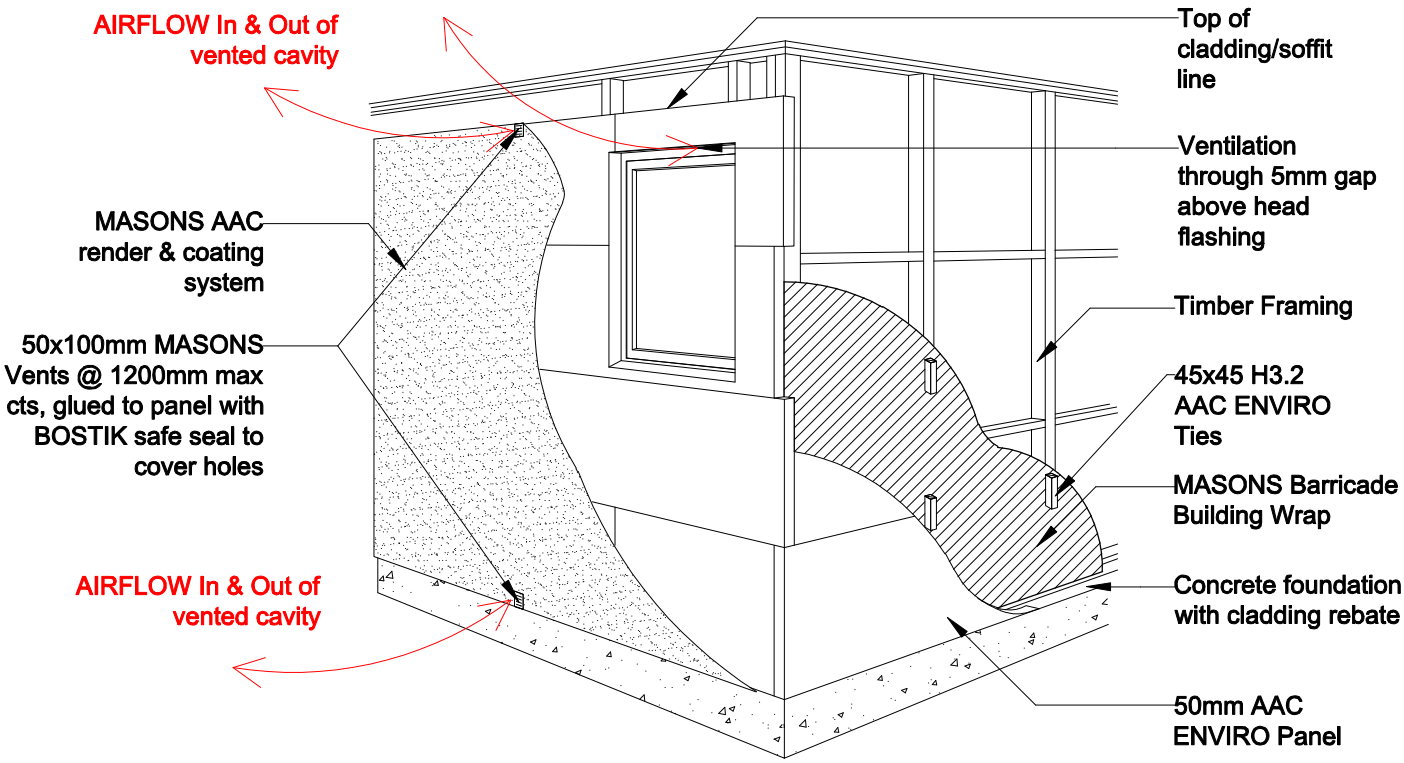
NOTE: If you are using a short window support bar or no support bar is required under the window then you must use DPC under the window sill. OPTION 1: It is acceptable to have both the DPC and support bar installed together. See bellow.



Note: MASONS Sill and baseshoe flashings must be primed with Plasta Seal and coated with MASONS meshing render

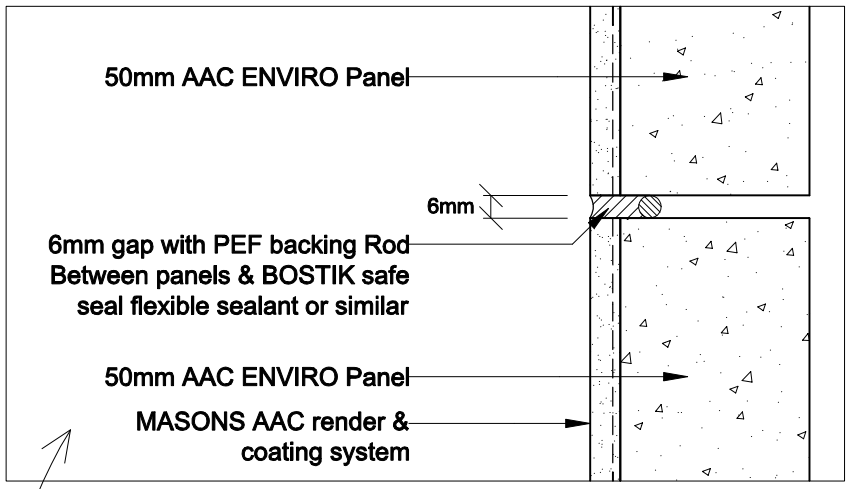
OPENING FLASHINGS
Alternative Window Sill

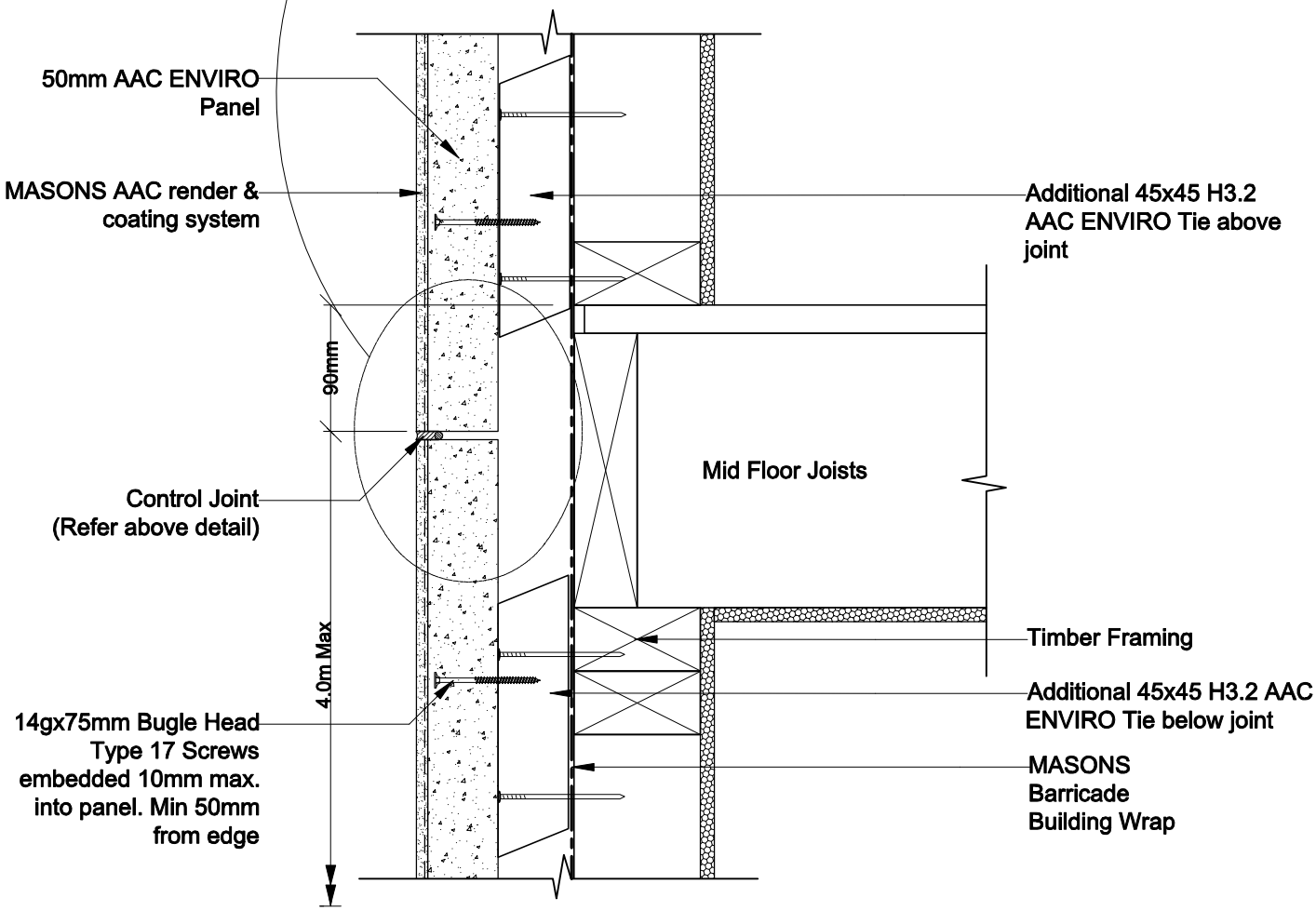
Detail 48 Scale 1:2



GENERAL LAYOUT AND AIRFLOW

Detail 49 NTS



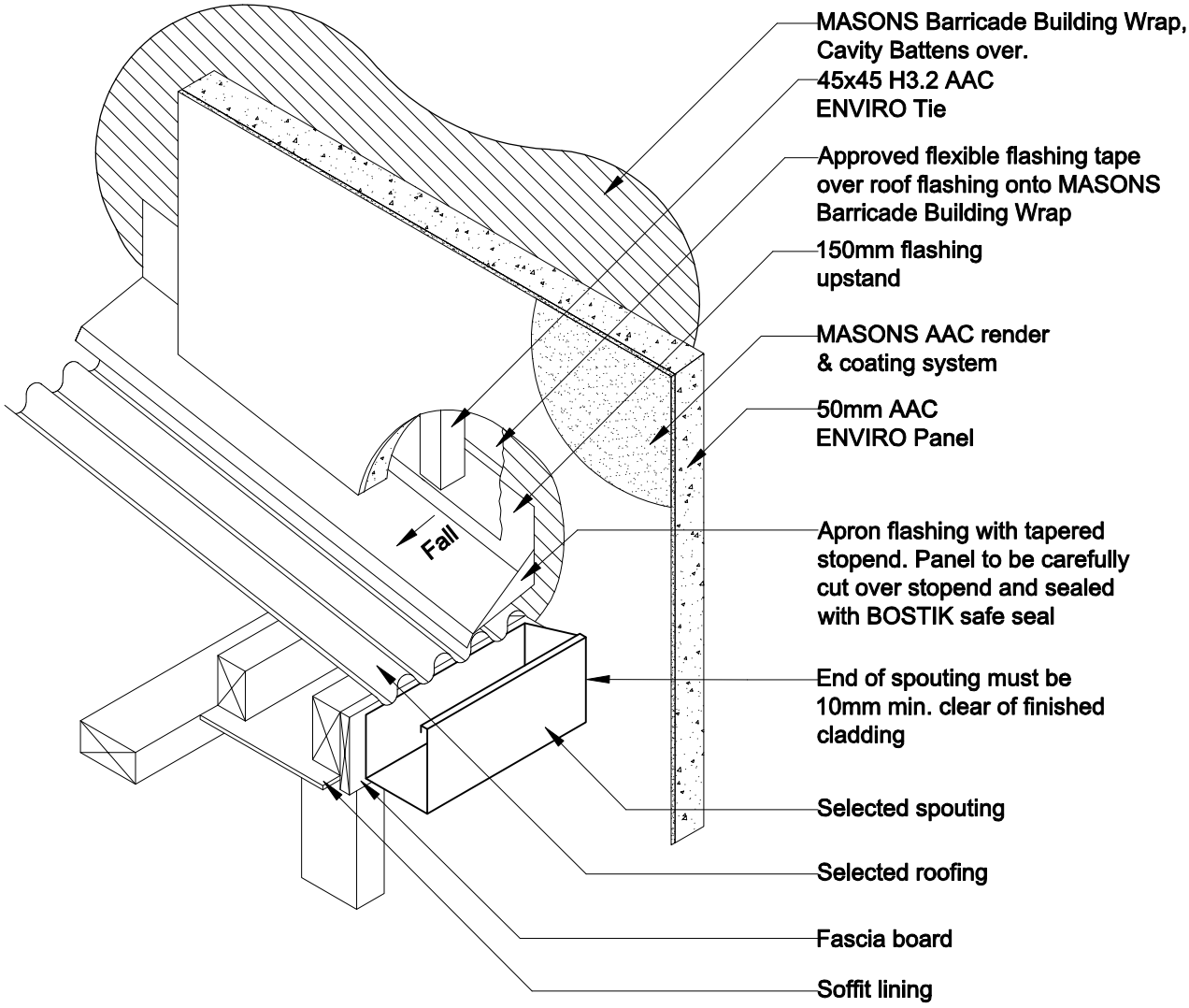


CONTROL JOINT Mid-Floor

Detail 50 Scale 1:5 & 1:2

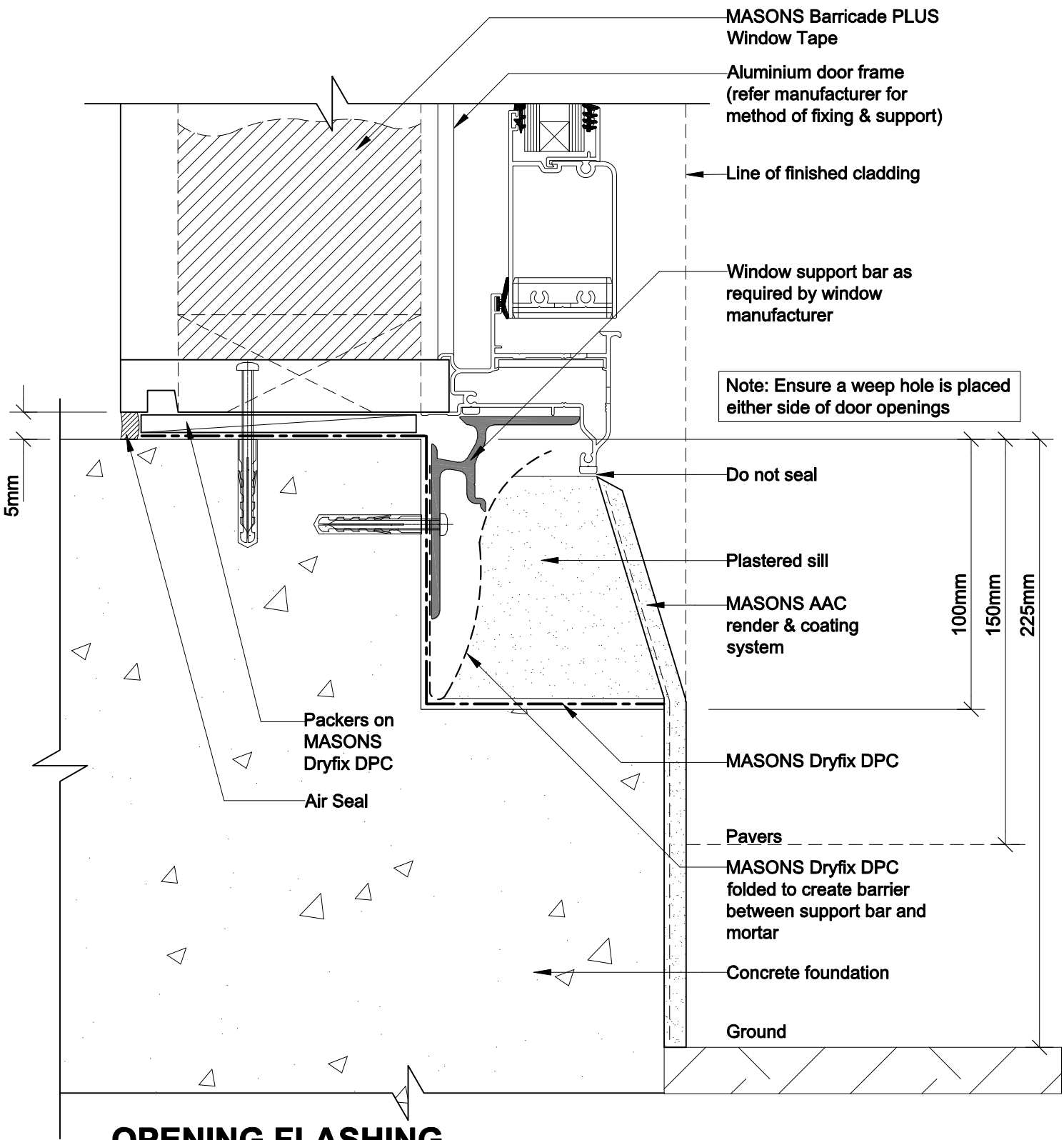
(Required where timber joists are not seasoned or wall height exceeds 10m)

MASONS ENVIRO AAC ON 45mm CAVITY TIMBER FRAME



ROOF/WALL JUNCTION - KICKOUT FLASHING

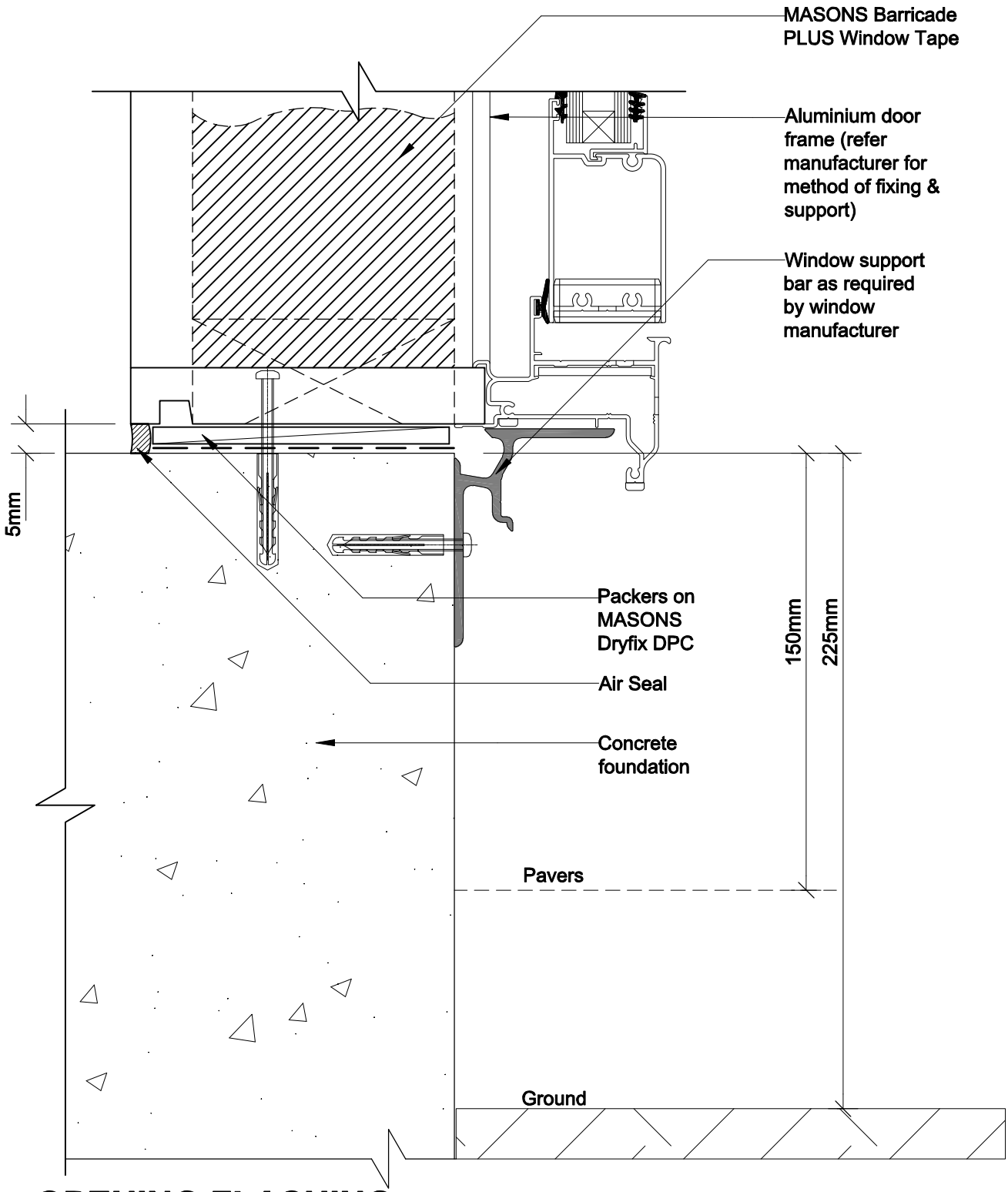
Detail 51 NTS



OPENING FLASHING - CONCRETE DOOR SILL With Rebate

Detail 52 Scale 1:2

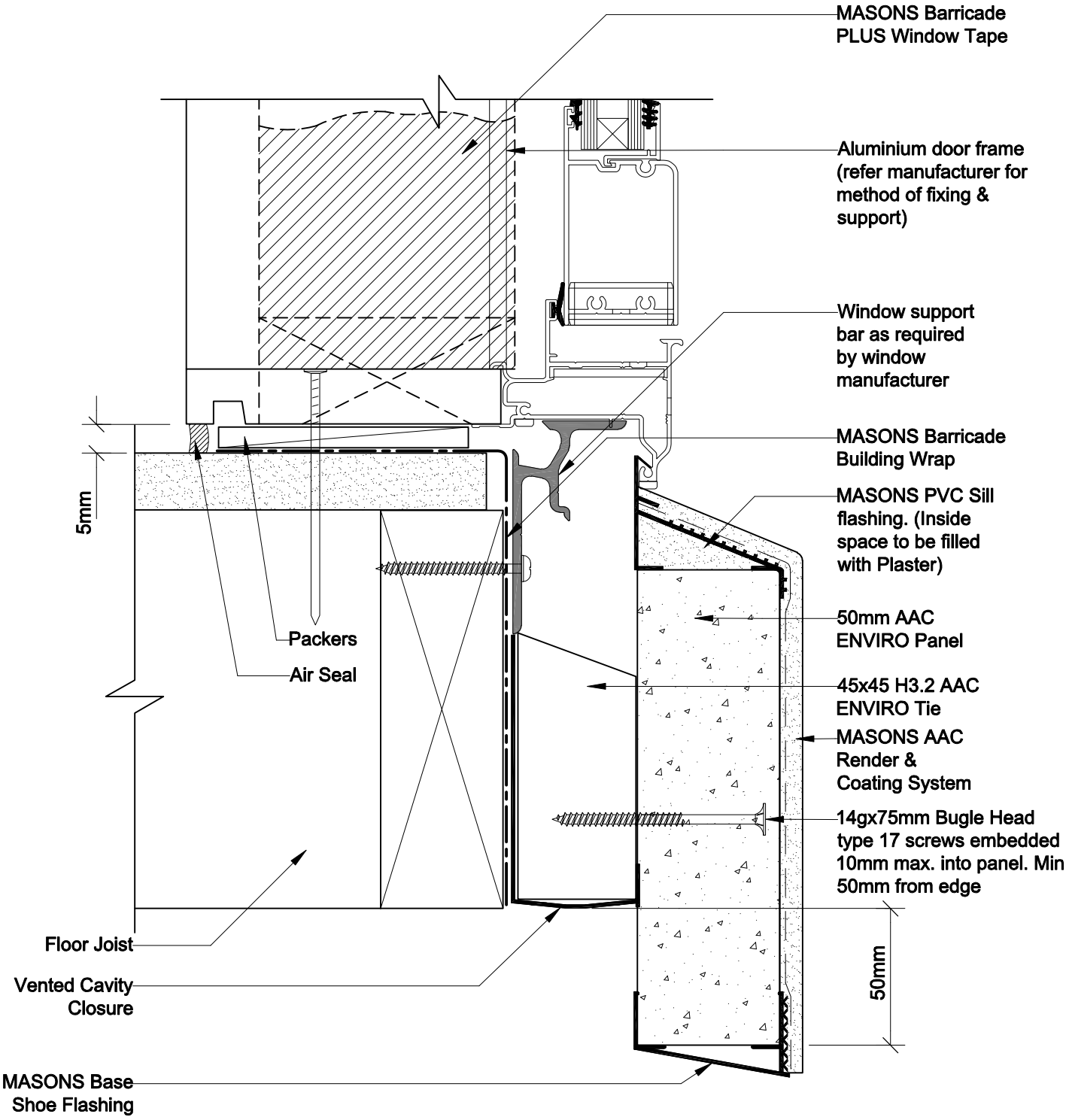
MASONS ENVIRO AAC ON 45mm CAVITY TIMBER FRAME



OPENING FLASHING - CONCRETE DOOR SILL Without Rebate

Detail 53 Scale 1:2

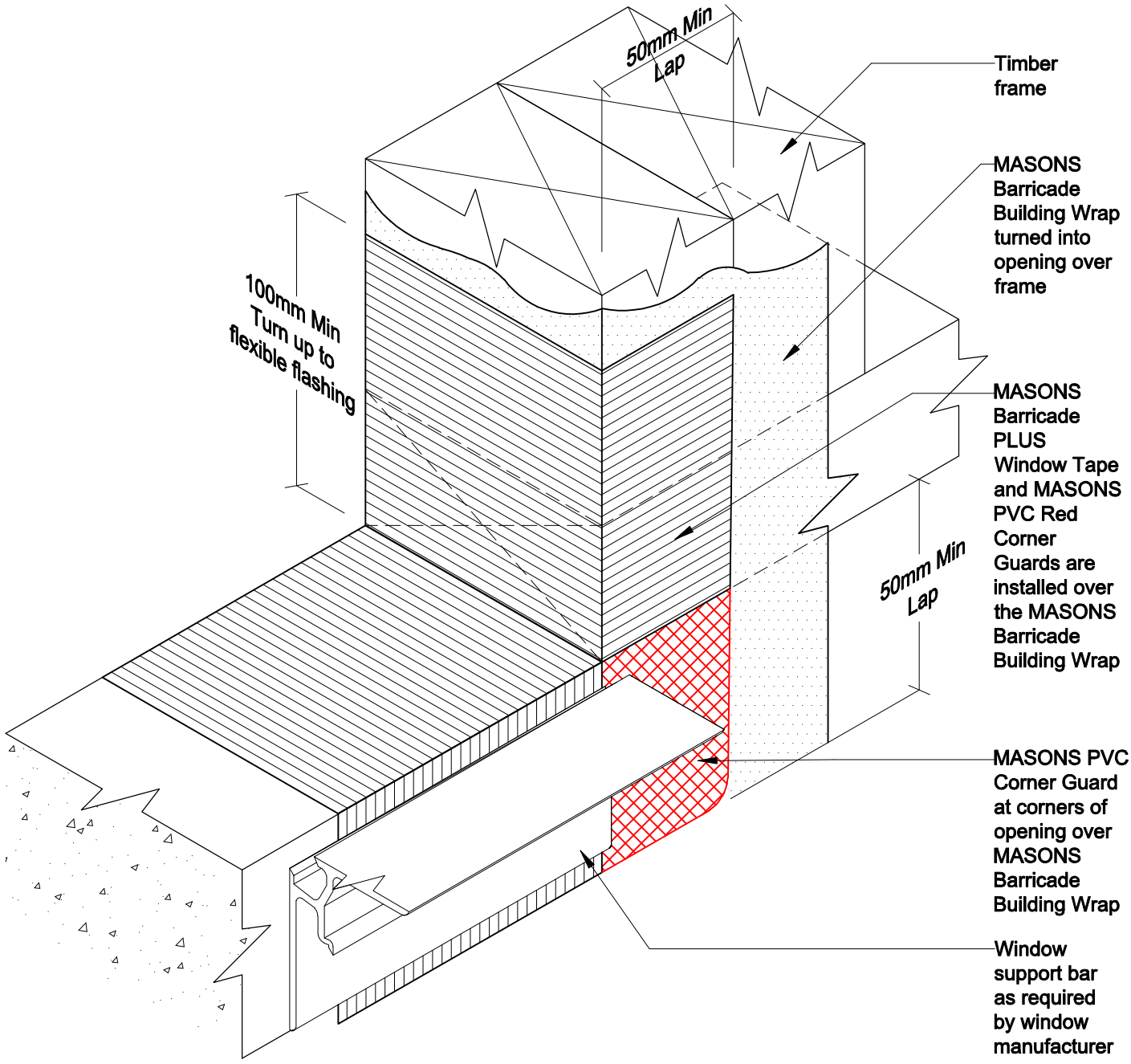
MASONS ENVIRO AAC ON 45mm CAVITY TIMBER FRAME



OPENING FLASHING - TIMBER DOOR - Sill

Detail 54 Scale 1:2

MASONS ENVIRO AAC ON 45mm CAVITY TIMBER FRAME

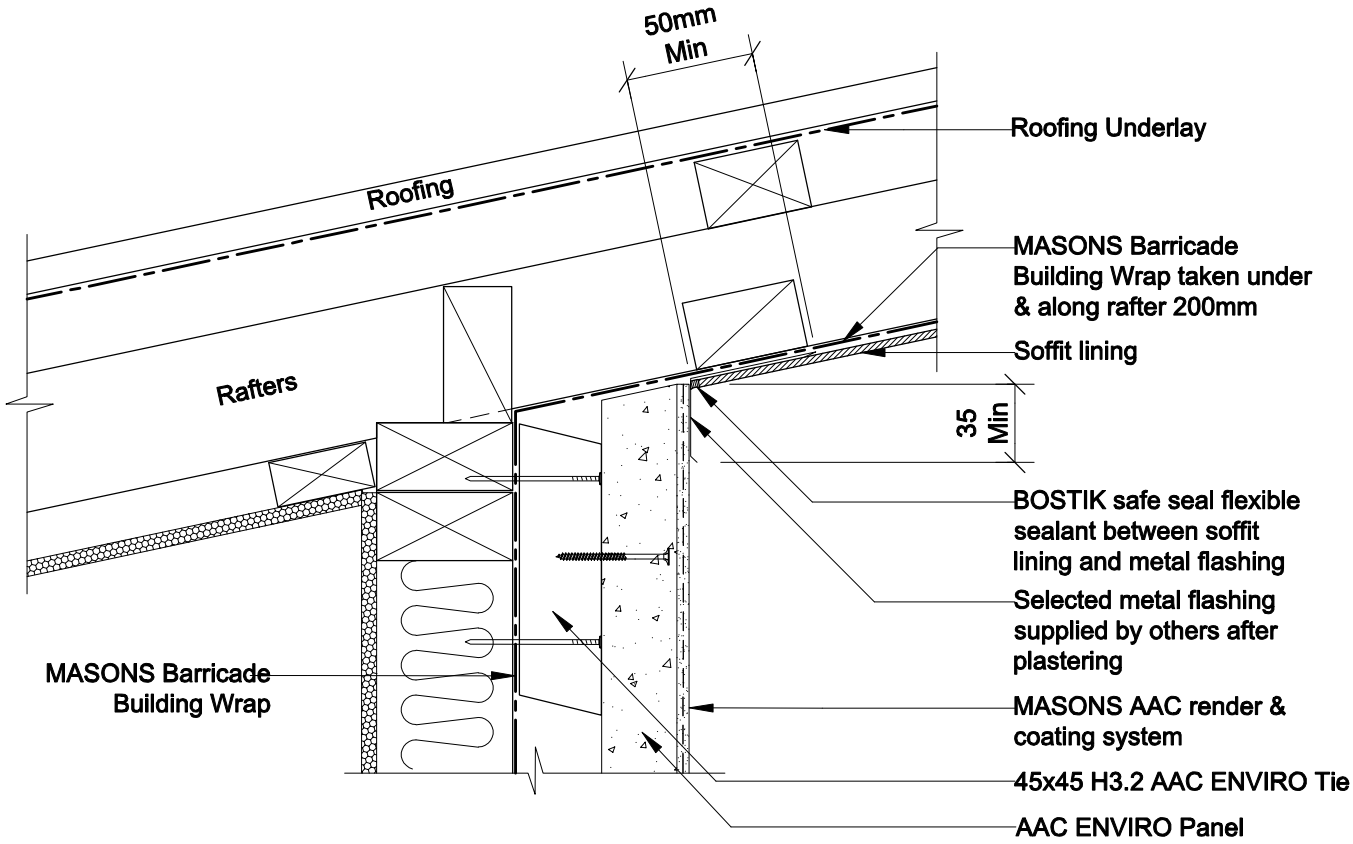


OPENING FLASHING
Door - Sill 3D

MASONS PVC Corner Guard

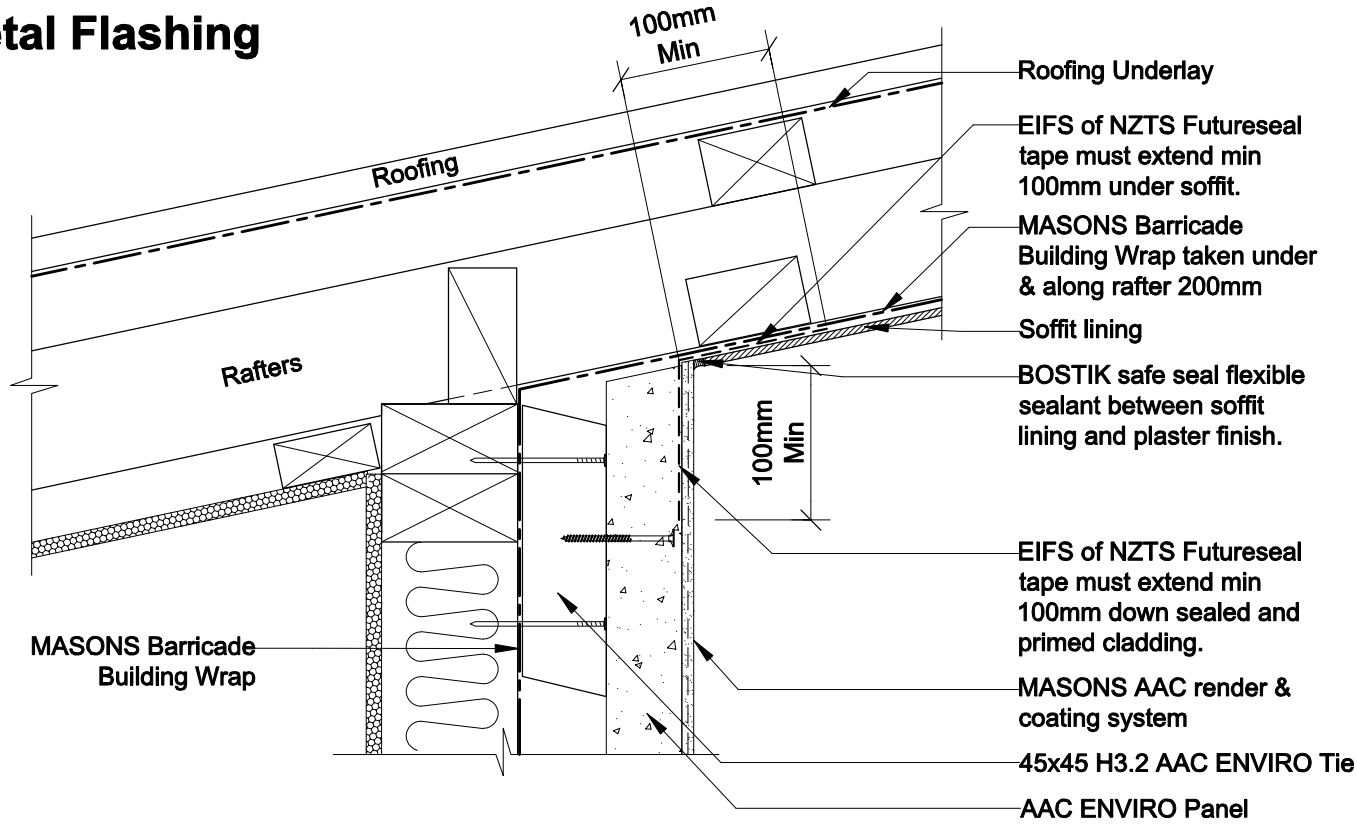
Detail 55 NTS

MASONS ENVIRO AAC ON 45mm CAVITY TIMBER FRAME



UPPER RAKING SOFFIT
Metal Flashing

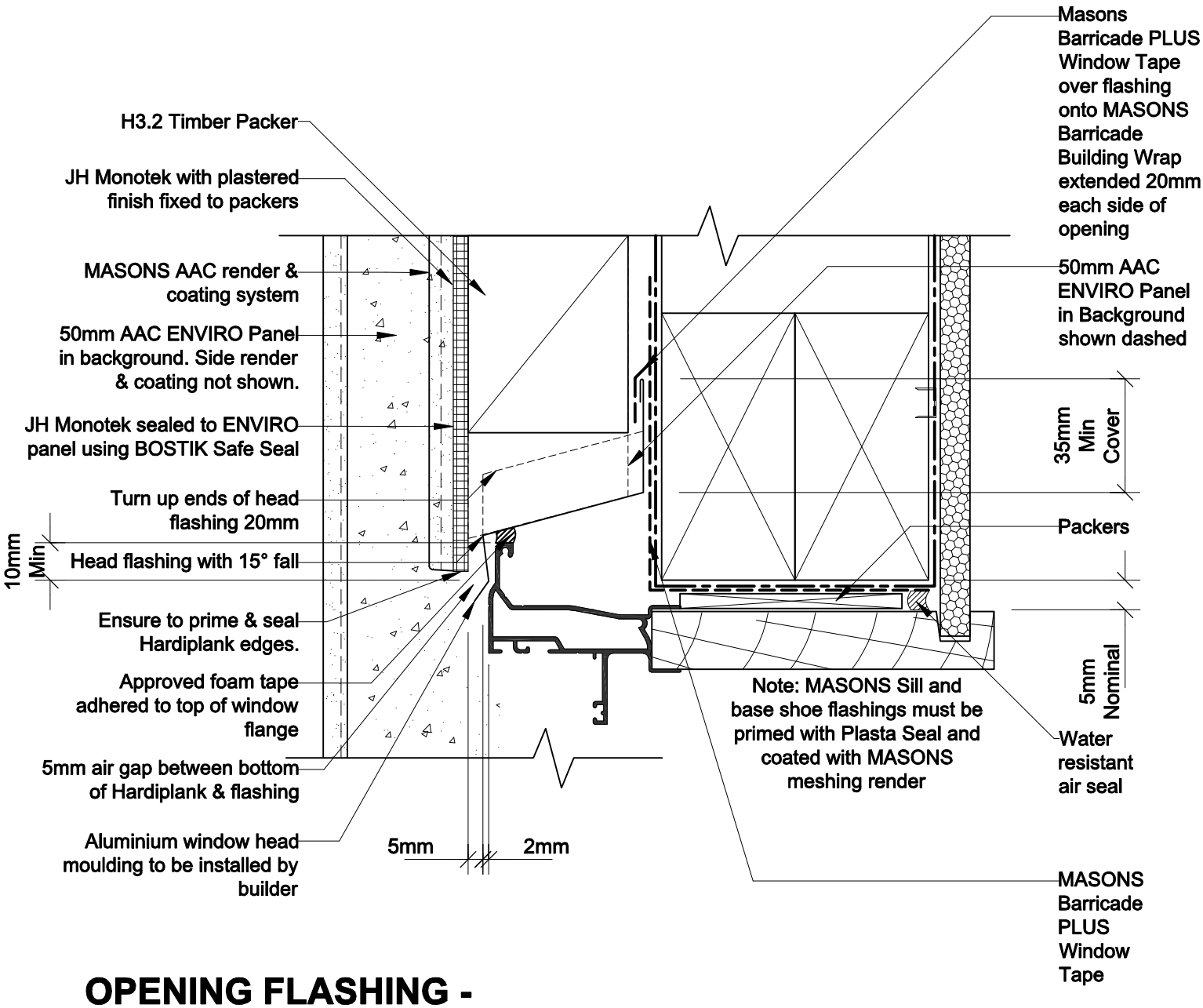
Detail 56 Scale 1:5



UPPER RAKING SOFFIT
Hidden Flashing

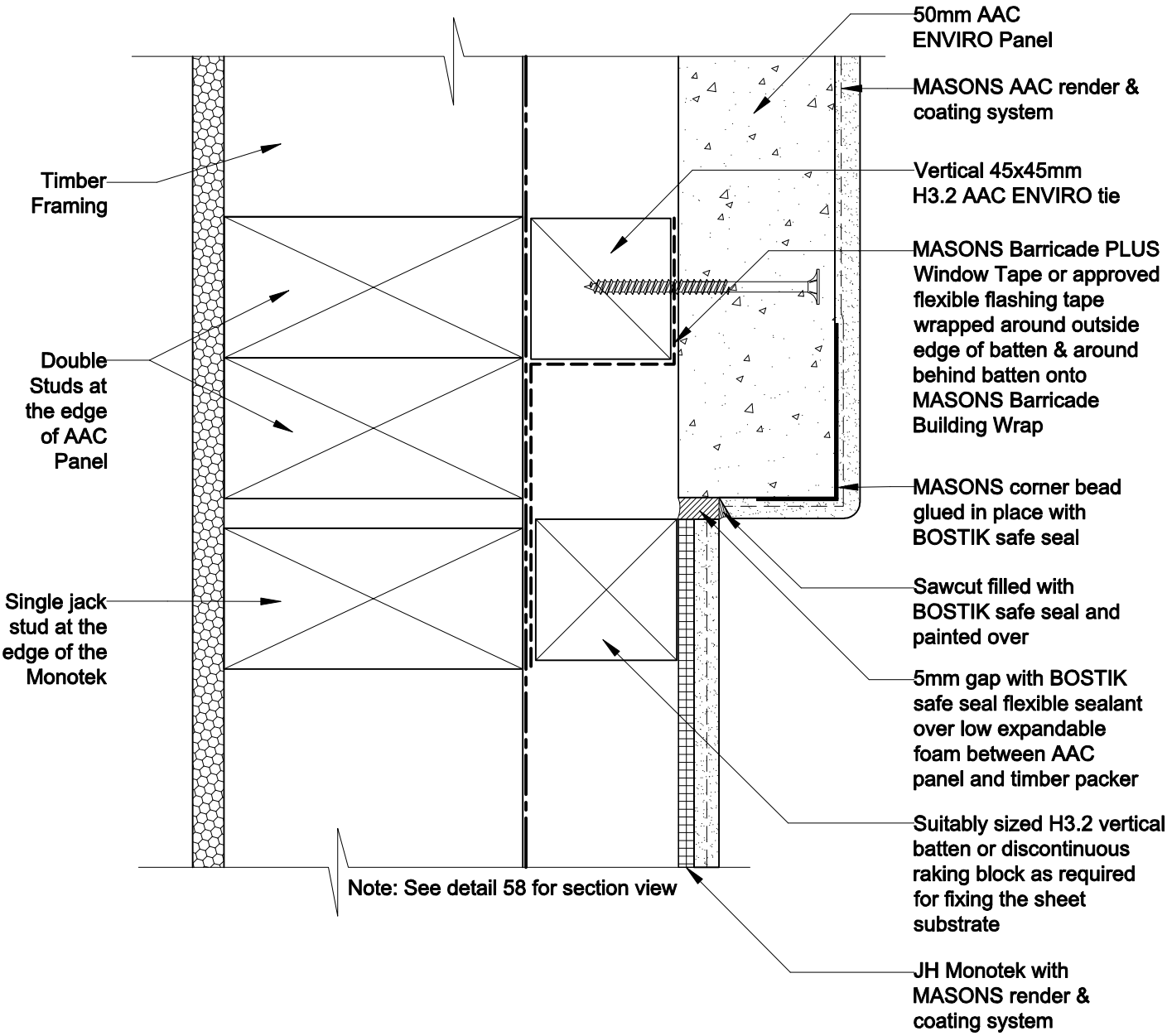
Detail 57 Scale 1:5

MASONS ENVIRO AAC ON 45mm CAVITY TIMBER FRAME



OPENING FLASHING - WINDOW HEAD - Monotek

Detail 58 Scale 1:2

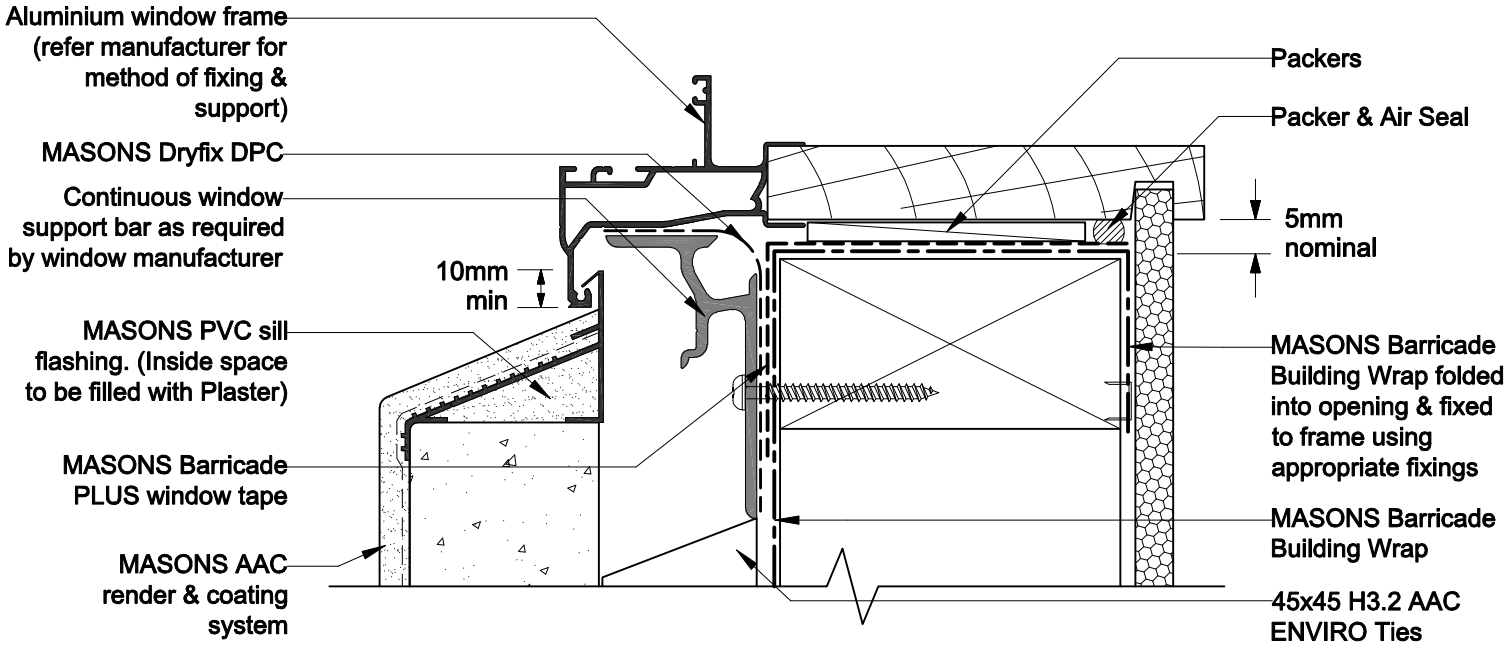


OPENING FLASHINGS
ENVIRO AAC PANEL / MONOTEK
Vertical Junction For Above Windows & Doors

Detail 59 Scale 1:2

MASONS ENVIRO AAC ON 45mm CAVITY TIMBER FRAME

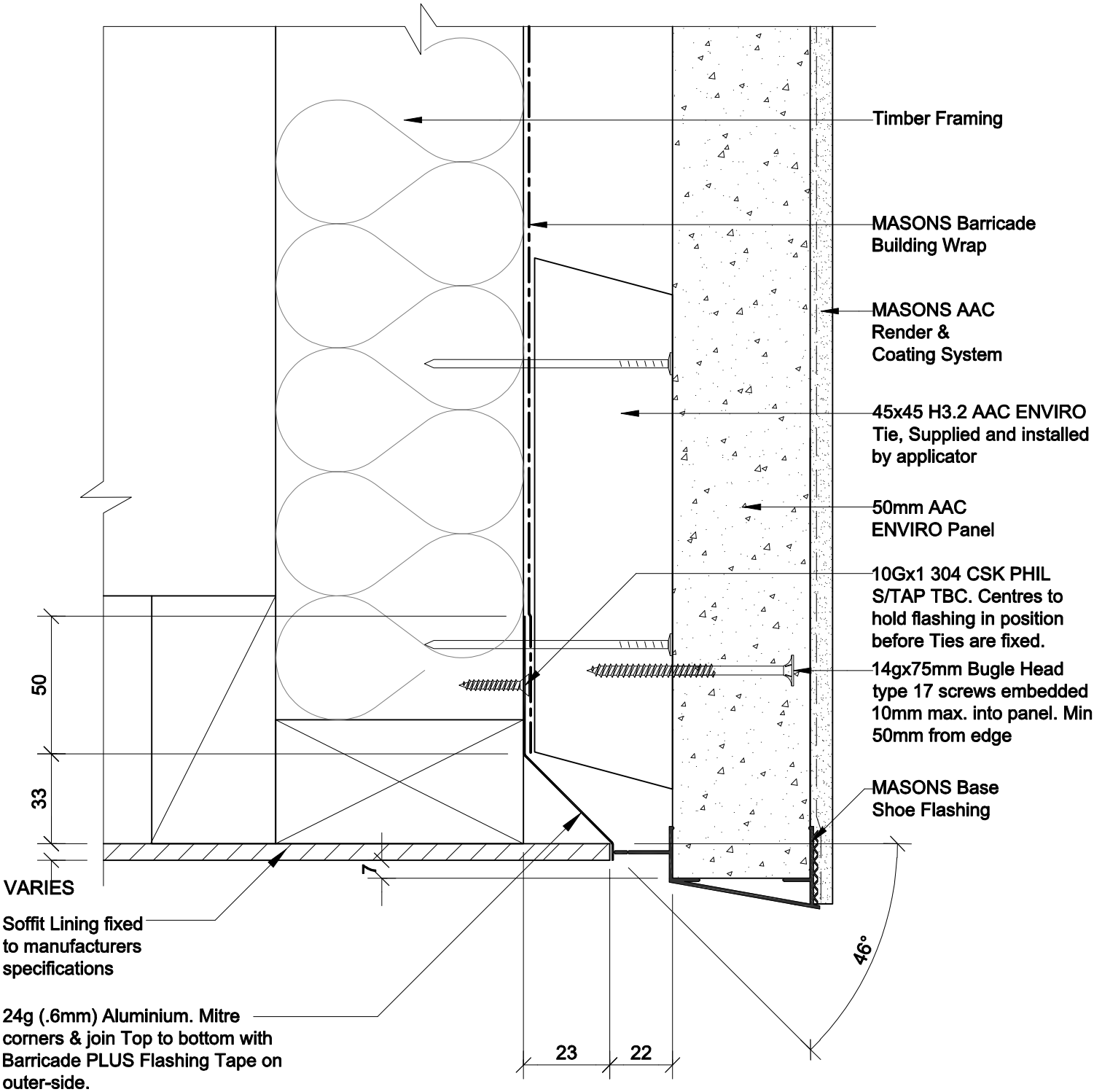
NOTE: If you are using a short window support bar or no support bar is required under the window then you must use DPC under the window sill. Option 1: It is acceptable to have both the DPC and support bar installed together.



Note: MASONS Sill and base shoe flashings must be primed with Plasta Seal and coated with MASONS meshing render.

OPENING FLASHINGS
Window Sill with DPC Flashing
OPTION 1

Detail 60 Scale 1:2



Soffit Edge

Detail 61 Scale 1:2

MASONS ENVIRO AAC ON 45mm CAVITY TIMBER 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"

☐ 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:

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Builder/Owner: _____ Signed: _____

PLEASE CONTACT LOCAL DISTRIBUTOR BEFORE JOINERY IS PRODUCED

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:

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ENVIRO Panel Installer: _____ Signed: _____

Approved by _____ Position: _____ Signed: _____

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:

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ENVIRO Panel Installer: _____ Signed: _____

Approved by _____ Position: _____ Signed: _____