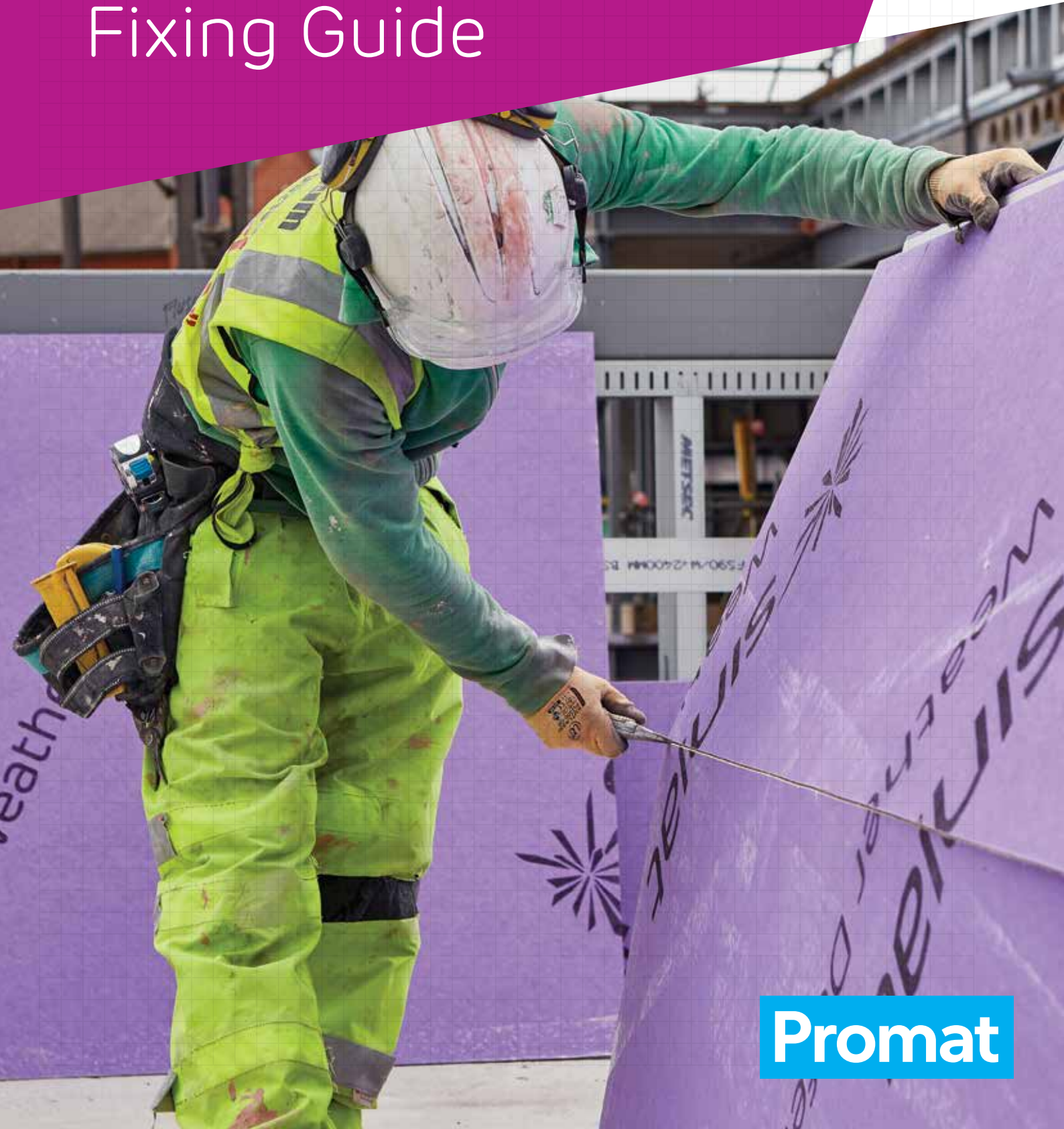


# weather defence™ AU

## Fixing Guide



# STAGE 1: FIXING BOARD TO FRAME

weather defence™ board must be fixed to studs at maximum 300mm centres, using weather defence™ Wet Area Self Drilling Screws for steel studs up to 1.5mm thick, or 3mm total for boxed studs. For steel studs with over 1.5mm thickness, appropriate screws (by others, having the same properties as weather defence™ Wet Area Drywall screws and approved by Siniat) may be used.

Stud centres must be at a maximum of 600mm. It may be acceptable to fix to the stud frame directly through an intermediate material, e.g. a membrane, batten or cavity rail.

Accommodation of structural/frame movement must be considered in fixing the board to frame/structure. Wind loadings may require fixings at closer centres than 300mm and/or studs at closer centres than 600mm, see Table 1.

Figure 1 Typical horizontal board fixing with weather defence™ Wet Area Self Drilling screws

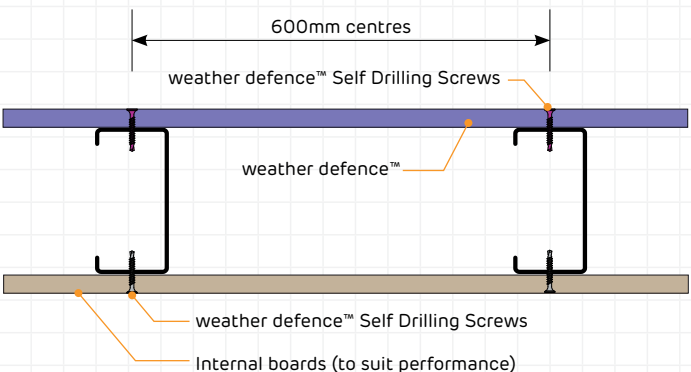


Table 1: Serviceability wind load resistance - 13mm sheeting

STUD CENTRES (MM)	SCREW CENTRES (MM)	SERVICEABILITY WIND LOAD (kPa) SPAN 1/300
600	300	1.22
400	300	2.42
400	250	2.90
400	200	3.63
400	150	4.12

**Fixing screws should be located at least 13mm, and no more than 20mm from board edges and penetrate at least 10mm beyond the substrate, see Fig 2. Below.**

weather defence™ approved Selleys Fireblock XT Sealant should be used in between board joints if fire resistance is required.

Figure 2 Edge distance for board fixing

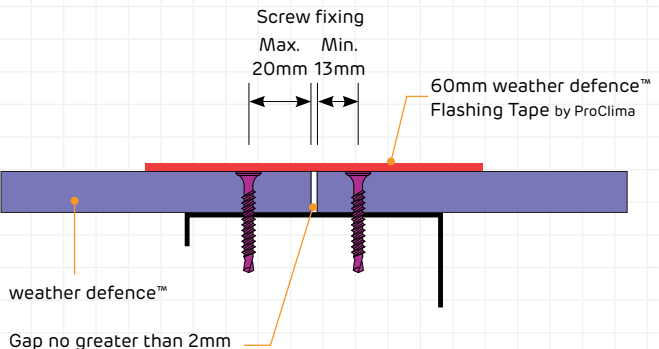


Figure 3 Board fixing centres

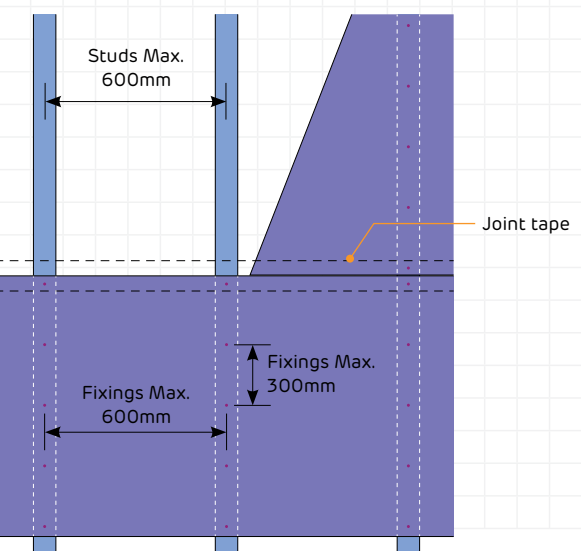


Figure 4 Typical joint detail

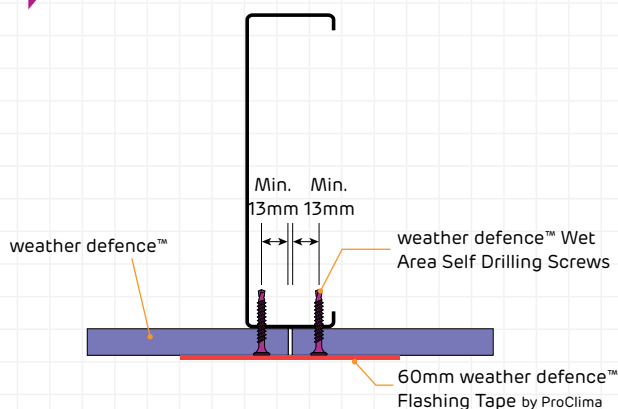


Figure 5 Horizontal control joint detail

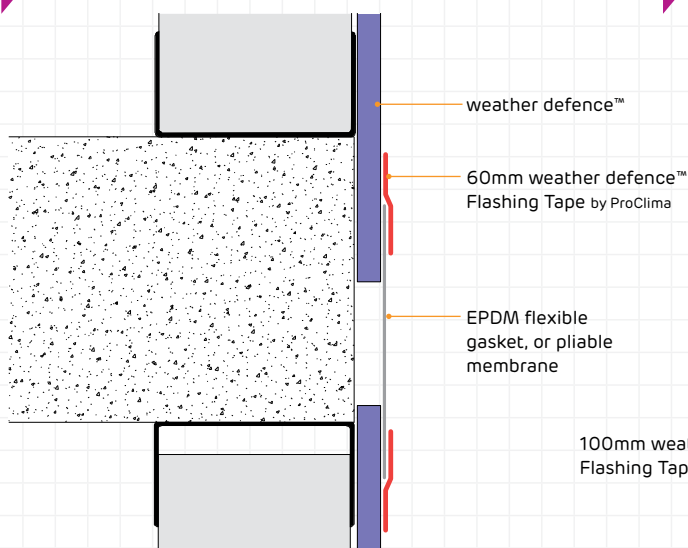


Figure 6 Vertical control joint detail

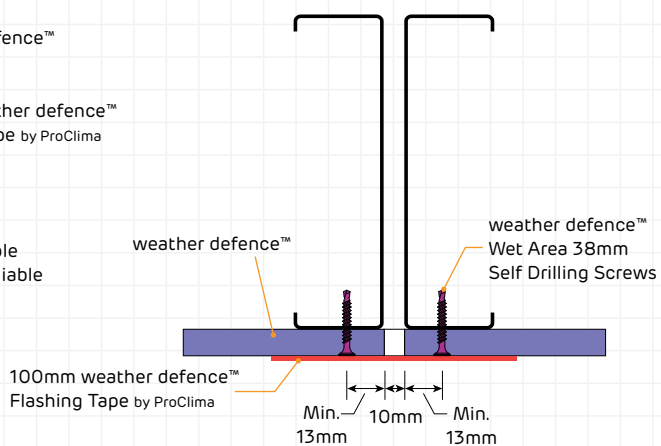


Figure 7 Internal corner detail

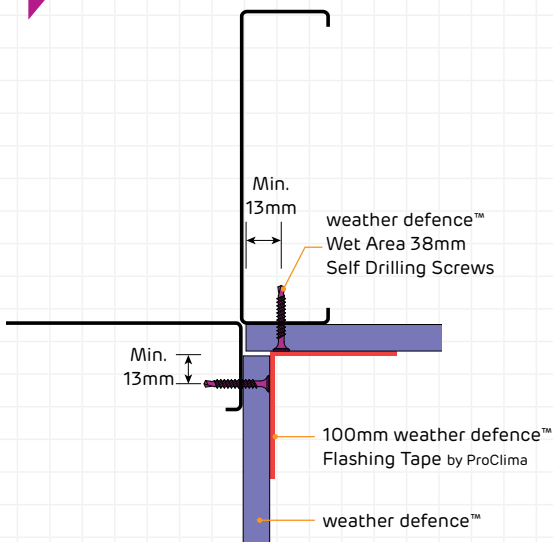


Figure 8 External corner detail

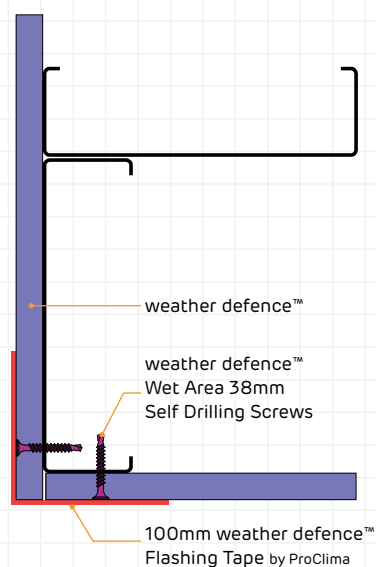


Figure 9

Isometric view of window/meter box opening - Tape application

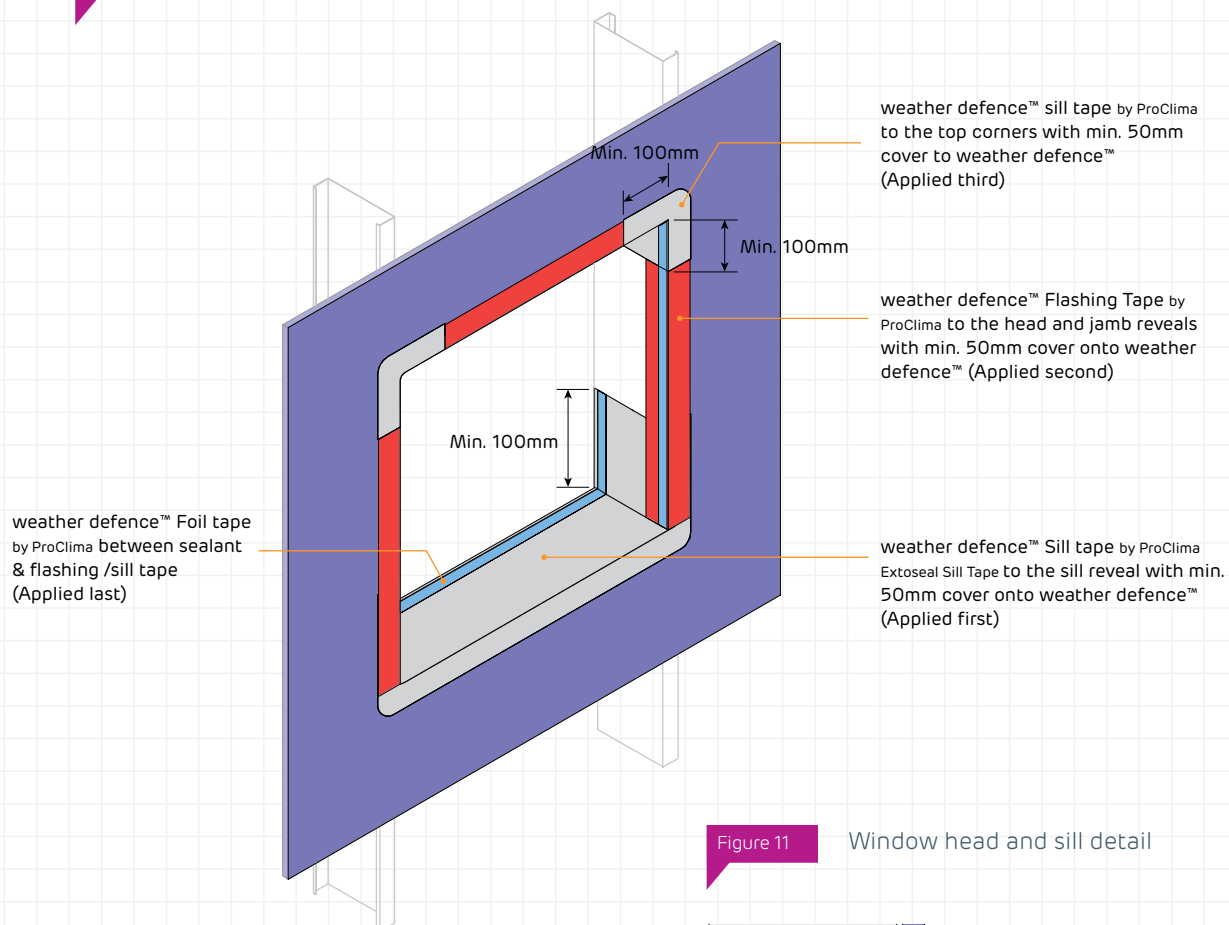


Figure 10

Window jamb detail

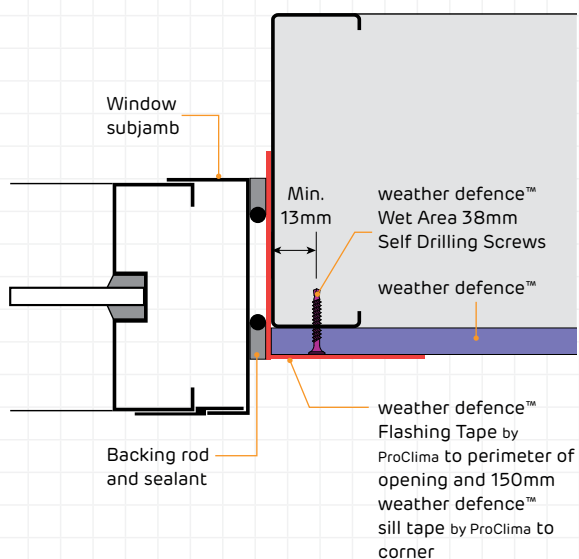


Figure 11

Window head and sill detail

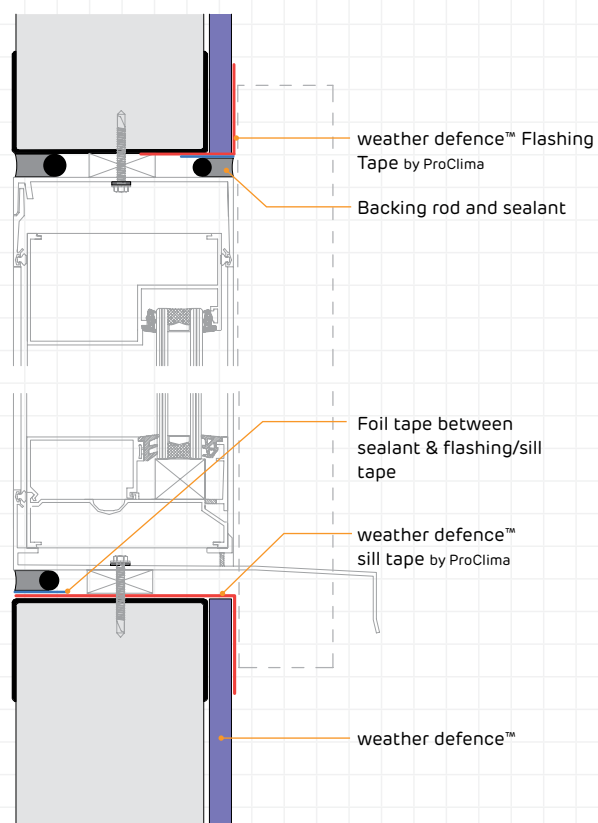


Figure 12 Wall base detail 1

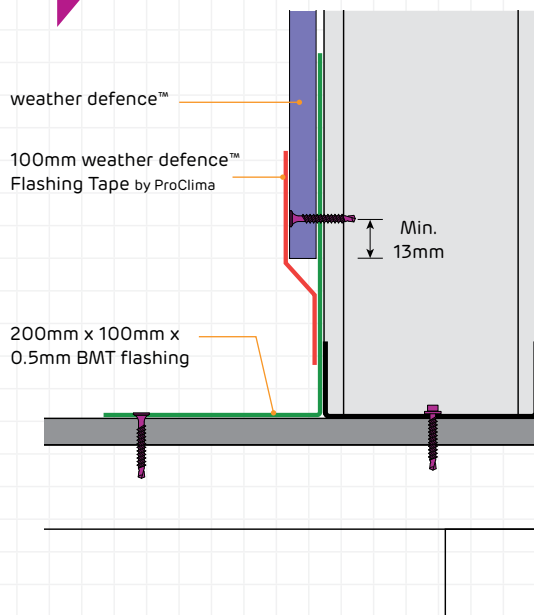


Figure 13 Wall base detail 2

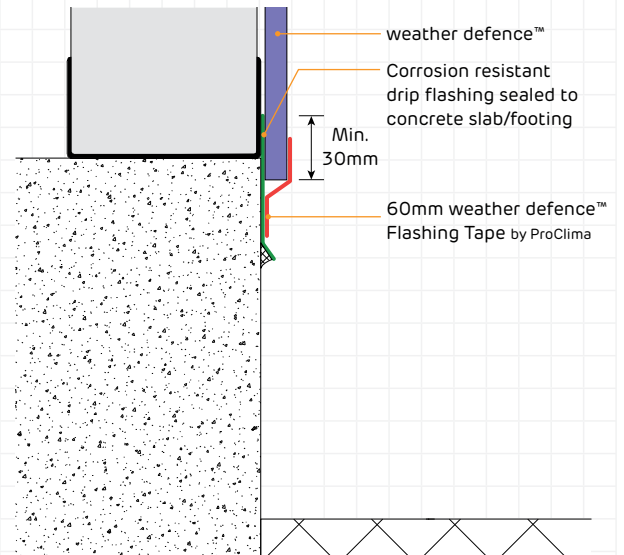


Figure 14 Wall base detail - Covered area

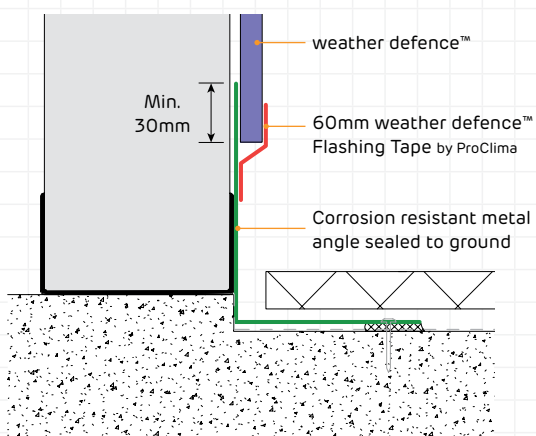


Figure 16 Exposed slab junction detail

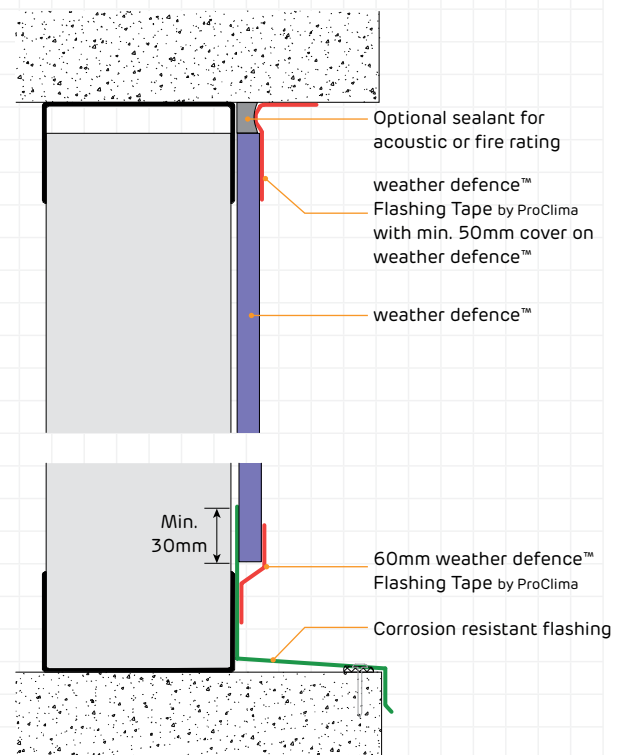


Figure 15 Wall base detail - Balcony

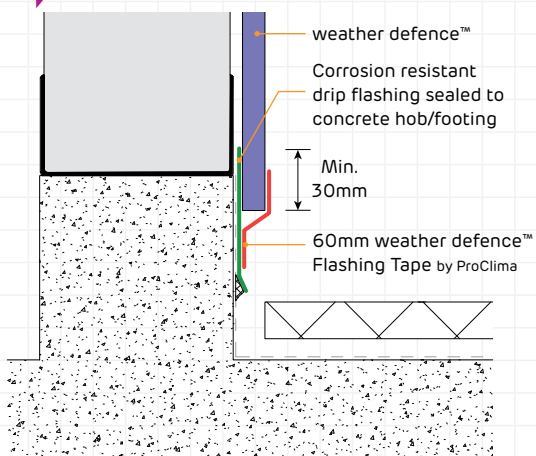


Figure 17 Soffit junction detail

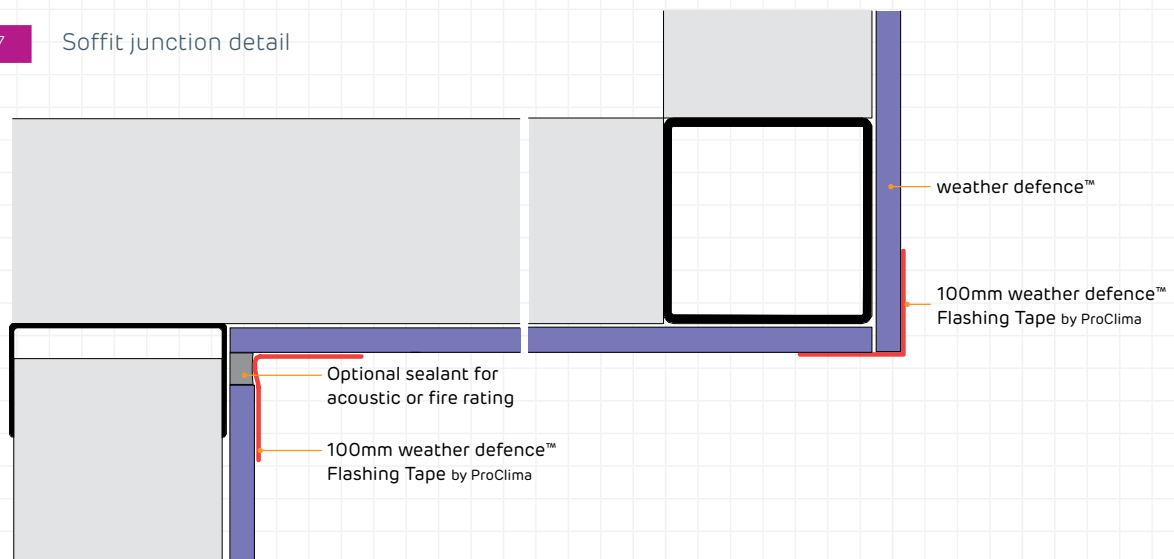


Figure 18 Parapet detail

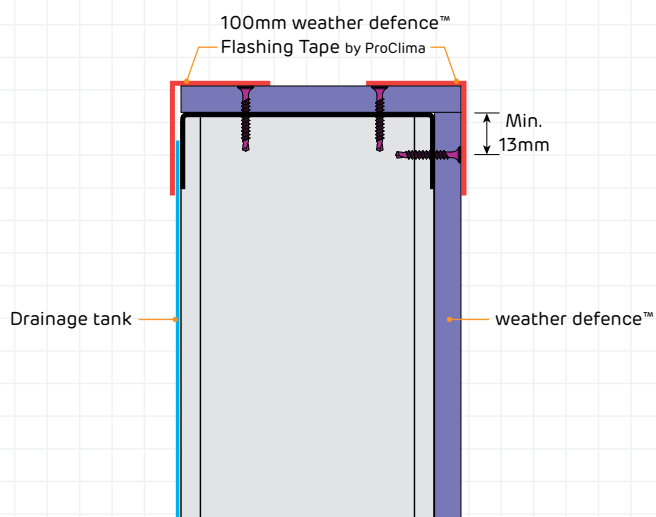


Figure 19 Parapet wall base detail

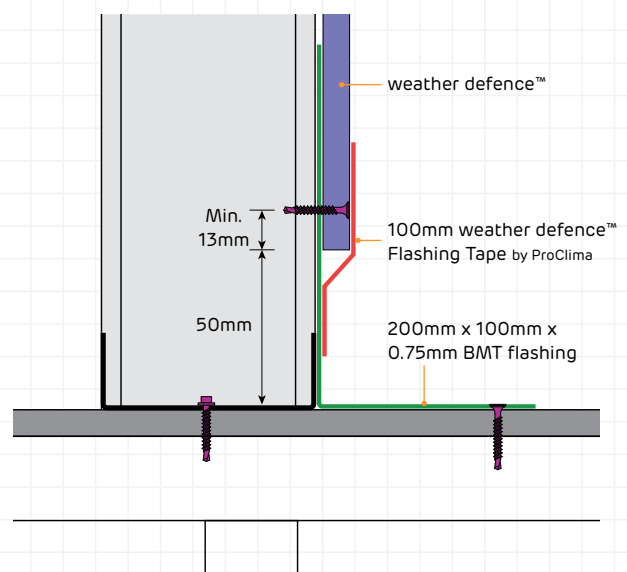
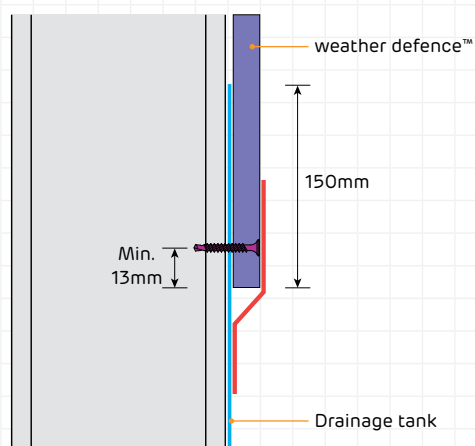


Figure 20 Drainage tank wall detail







Curved weather defence™ boards

## STAGE 1B: CURVING weather defence™

- Steel stud centres up to maximum 400mm centres for a curve radius no tighter than 4m.
- Fix flat plate or noggin to studs corresponding with all horizontal board joints.
- Fit weather defence™ board horizontally across studs and install in a 'brick bond' pattern.
- Fix using weather defence™ Wet Area Self Drilling screws at maximum 300mm centres.
- Apply weather defence™ Joint Tape, with weather defence™ approved Selleys Fireblock XT Sealant if fire rating required used to seal joints, see next section.

## STAGE 2: TAPE INSTALLATION AND BOARD PREPARATION

Tape system is limited to an exposure period of no longer than 6 months.

Tape may be applied at any time within the twelve months exposure period following installation providing that limited water penetration through unsealed joints is acceptable.

- The weather defence™ board surface should be generally clean, dry and free of oil, dust and other particles or chemicals that could cause poor adhesion – significant contamination may impair adhesion.
- No gap is required between boards when sealing with tape, lightly butting the boards will usually create a 0–0.5mm gaps which is more than enough to allow expansion.
- Peel backing paper from the tape as the operation progresses.
- Apply with joint running along the centre of the tape – this will usually cover screw fixings.
- Apply without wrinkles or excessive tension in the tape. Firmly press, and smooth against weather defence™ board. Running over the tape with the applicator paddle to ensure adhesion.
- Minimise the number of pieces of tape used to reduce risk of gaps. Overlap tapes by minimum of 50mm where multiple pieces have to be used. Ensure overlaps are pressed firmly against board and fully sealed.
- Seal horizontal joints first and run tapes for vertical joints over the top of the horizontal band of tape. Corners both internal and external, interfaces and slab joints require the use of 100mm split back tape. Ensure vertical tapes are run with upper layer joint on top of the previous to prevent water ingress when running down the face.
- Patch tapes with additional 150mm pieces perpendicular to the original tape, rather than removing strips from the weather defence™ board and risking damage to the substrate.
- Tape may be applied between 5°C and 40°C. Installation may proceed at temperatures as low as -10°C and damp conditions if grab/tack is sufficient. Primers may be required to increase adhesion in severe conditions, contact Technical Services for more information.



weather defence™ Joint Tape being applied



Insulation on weather defence™



## STAGE 3: BOARD INSPECTION

We advise you to inspect the weather defence™ boards for any damage prior to closing off the sheathing layer (e.g. with insulation or other cladding) and after extreme weather.

### Pay attention to:

- Any facer delamination/ removal greater than 5mm.
- Any degradation of the board core greater than 2mm deep, which may occur in the lower portion of the board if it has inadvertently been immersed in water.
- Any significant dents, scrapes or tears which have occurred during construction.
- Holes through the board caused by repeated attempts to screw fix, all holes must be sealed (see previous section – Sealing).

### How to deal with damage:

- Small areas of damage, up to 15mm x 15mm and maximum 3mm deep, may be patched using Siniat Fire Rated Sealant or weather defence™ Joint Tape by ProClima.
- Minor damage to the external surface of a sheet can be repaired with the application of suitably sized pieces of 100mm or 60mm weather defence™ Tape.
- More extensive damage may require the replacement of the damaged section with a patch of weather defence™ board cut to size and weather defence™ Tape applied to all horizontal and vertical joints to form a patch.
- An area larger or if the board has been perforated by damage must be replaced. Additional metal noggins or straps may be required to support the board.



## STAGE 4: CAVITY FRAMING AND CLADDING

### Cladding and Rainscreen Fixing:

All cladding loads must be directly supported by the structural frame and not carried by the Siniat weather defence™ Board. weather defence™ may act as an intermediate layer provided the cladding fixings are attached to the frame through the board.

Bearing pressure on weather defence™ from brackets must not exceed 2.5N/mm<sup>2</sup>. Spreader plates will be required in rare instances where this pressure is exceeded.

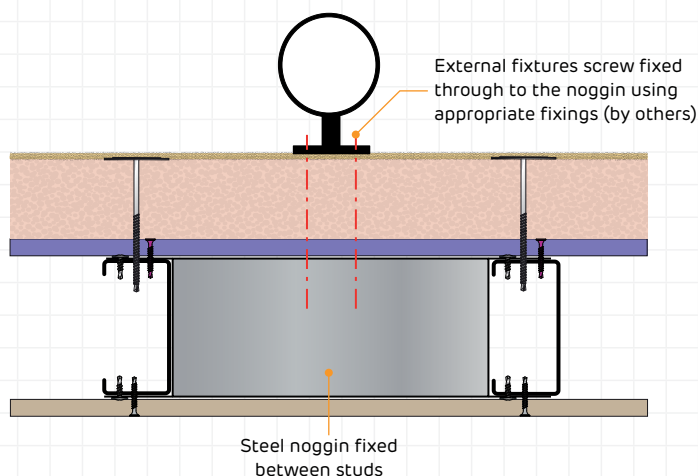
### Fixtures:

Where possible, all fixtures should be fixed back to the frame studs.

Suitable pattresses may be installed into the frame in specific locations to provide fixing capability, e.g. for external lighting or downpipes. Ideally additional metal studs or noggins should be provided for this purpose.

Lightweight fixtures may be fixed directly to Siniat weather defence™ without pattresses using specialist cavity anchors. Generic pull-out data is available from [PAPL.mail@etexgroup.com](mailto:PAPL.mail@etexgroup.com) or from fixing suppliers who will conduct testing and fixing selection specific to the site.

Figure 21 Lightweight Fixtures attached to weather defence™





To see how weather defence™ can benefit your next project, call our Technical Services team on **1800 PROMAT (776 628)**.

### **Promat Australia Pty Ltd**

#### **South Australia office**

1 Scotland Road

Mile End South, SA 5031

☎ 1800 PROMAT (776 628)

📠 +61 (8) 8352 1014

#### **New South Wales office**

Unit 1, 175 Briens Road

Northmead, NSW 2152

☎ 1800 PROMAT (776 628)

📠 +61 (2) 9630 0258

#### **Victoria office**

Suite 205, 198 Harbour Esplanade

Docklands, VIC 3008

☎ 1800 PROMAT (776 628)

📠 1800 334 598

#### **Queensland office**

☎ 1800 011 376

📠 1800 334 598

✉ [PAPL.mail@etexgroup.com](mailto:PAPL.mail@etexgroup.com)

🌐 [www.promat.com.au](http://www.promat.com.au)

## **Promat**

Promat companies are subsidiaries of Etex, a Belgian industrial group, that specialises in manufacturing and marketing high quality building materials and systems.

Founded more than 110 years ago, Etex currently operates more than 110 sites including plants, quarries and offices in 42 countries with over 11,000 employees globally.