

Product Data Sheet

BALUSTRADE FIXING POINT (BFP)

For balustrades on flat cold roofs or vertical elevations

The Balustrade Fixing Point allows a direct connection to the structure whilst maintaining integrity of the envelope waterproofing. It can be supplied with different flange materials to integrate with SBS (CSBS) and APP modified bitumen waterproofing membranes or with PVC (CPVC) single-ply membranes on flat cold roofs.

Key features

- Provides a direct connection to the building structure
- Patented seal technology
- Compatible with all roofing membranes and finishes
- Low profile and suitable for use in any plane
- Fully weatherproof, all fixings are below the membrane envelope
- Factory fitted flashing flange
- Reduces roof loads by avoiding requirement for ballast
- M10 threaded connection (supplied with 4 no. M10 bolts)

BFP for flat cold roof constructions

The BFP CPVC and CSBS is designed for use on cold, flat roofs or vertical elevations where fixed directly to the structure behind the waterproofing membrane, to provide a connection point for balustrade supports and also for any application where resistance to a turning moment is required.

The BFP for cold roofs comprises a 225 x 375mm fixing plate with two anchor points each with 2 no. M10 x 20 blind threaded connection points. The fixing plate has 8 no. holes through which the plate is bolted to the structure. Fixings for fixing plate not included.

To weather the fixing plate the BFP is factory fitted with an appropriate flange material to enable it to be weathered or sealed to the main roof area.

A mounting or weld plate can be supplied in 10mm mild steel or stainless steel for connecting the balustrade to the fitting.

Materials

304 stainless steel anchor point – machine finish

Mild steel fixing plate – polyester powder coat finish

Weathering flange – material to match main roof weathering system

Balustrade connection plate - mild steel or stainless steel

Dimensions

OA height 49mm

4 no. fixing points M10 x 20 (M10 bolts included)

Distance between fixing points 52mm

Distance between anchors 150mm

Fixing plate 225 mm x 375mm x 6mm

8 no. fixing holes 15mm Ø

Flange sizes:

425mm x 575mm PVC

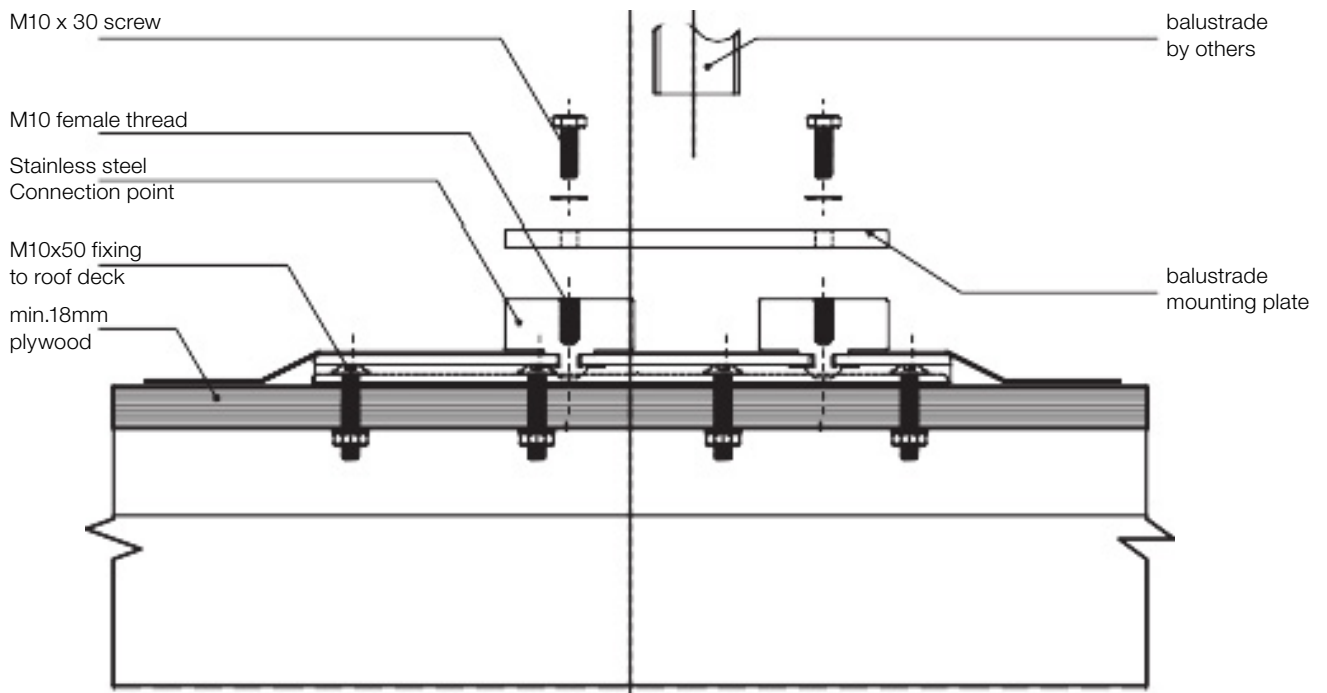
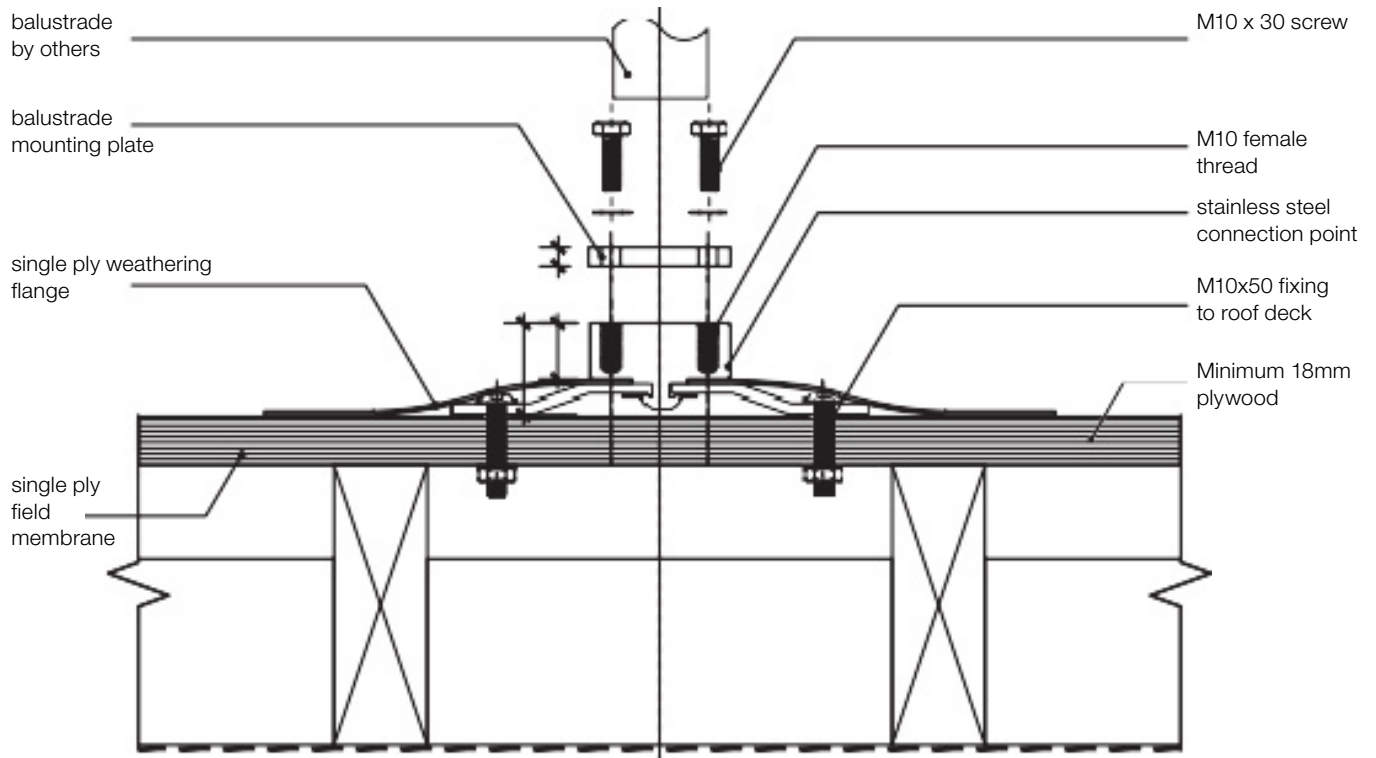
525mm x 675mm SBS and APP modified bitumen

Fixing options:

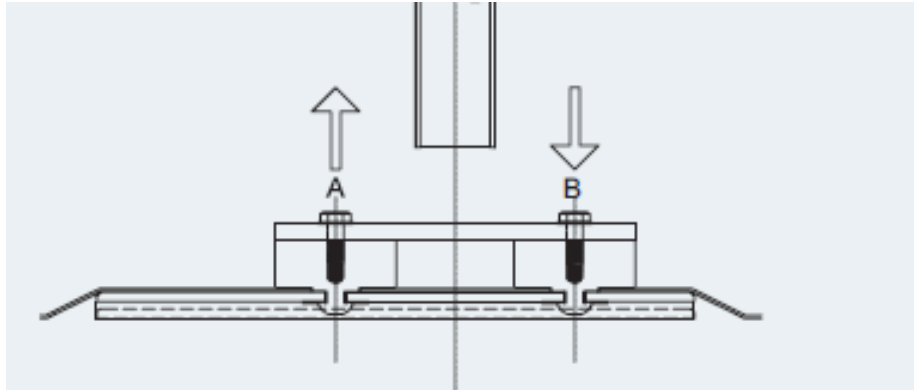
Bolted directly to the substrate – note that the CN Cap Nut or rounded head bolts should be used to avoid damage to the roofing membrane.



Cold/inverted roof



Load ratings for cold roofs



The following values assume that the supporting structure is of adequate stability to support the design values that will be imposed on the BFP CPVC / CSBS. All designs and calculations should take into account the supporting substrate and balustrade construction and should be compliant with current regulation requirements.

The BFP should always be positioned so that the two fixing points are perpendicular to the line of the balustrade.

Maximum applied axial loads to the BFP

At 'A'	25kN
At 'B'	25kN

Typical load values on plywood roof deck

Based on in-house test rig results with 18mm and 25mm plywood on 50 x 150 joists at 400mm ccs. A 1100mm high balustrade support had force applied until 25mm deflection was reached due to plywood deformation. This test produced transferred forces as follows:

18mm plywood

At 'A'	8.23kN
At 'B'	7.23kN

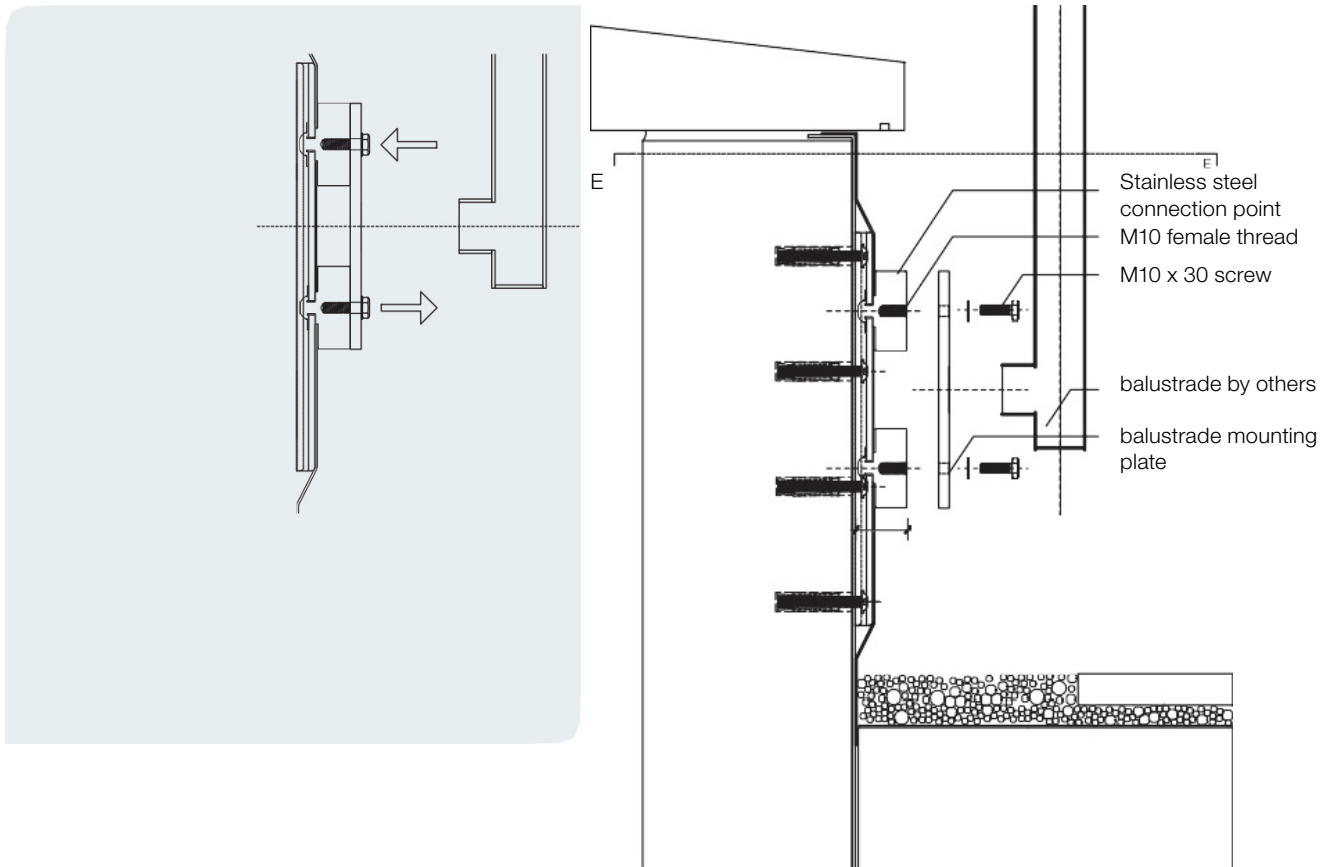
25mm plywood

At 'A'	11.20kN
At 'B'	10.20kN

It is essential that the use of the BFP in any design is approved by a competent structural engineer.

Balustrade Fixing Point (BFP CPVC / CSBS) for Vertical Surfaces

Load rating



The following values assume that the supporting structure is of adequate stability to support the design values that will be imposed on the BFP. All designs and calculations should take into consideration the supporting substrate and balustrade construction to be compliant with current regulation requirements.

The BFP should always be positioned so that the two fixing points are perpendicular to the line of the balustrade.

Maximum applied axial loads to the BFP

At 'A' 25kN

At 'B' 25kN

It is essential that the use of the BFP in any design is approved by a competent structural engineer.

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