

# Installation Guide

## Phoenix Smoke Barrier

### Step 1 | Top Fix

Cut the barrier to the required length allowing for any penetration management and 100 mm fixing overlap at both the top and bottom end.

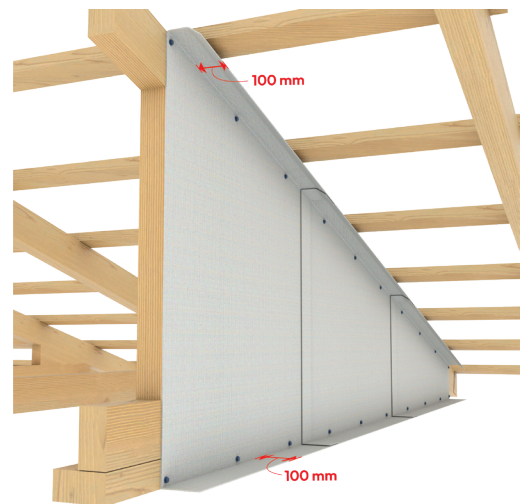
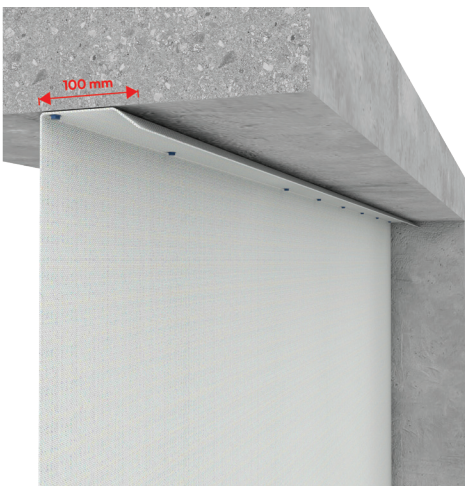
a) For concrete structures

Raise the barrier and temporarily fix it against the soffit using appropriate fixings to suit the soffit material, eg. nails, screws.

b) For wooden truss structures

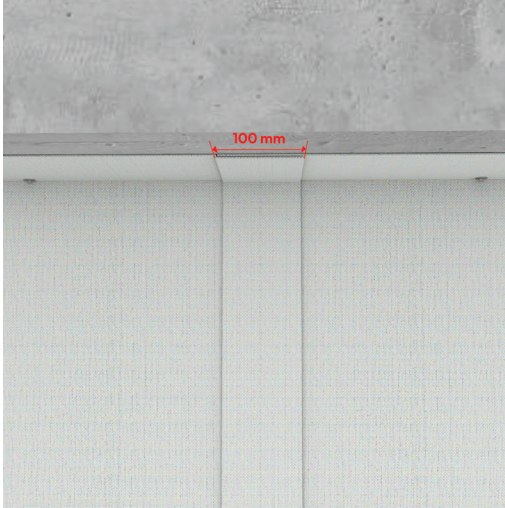
Raise the barrier and temporarily fix it against the top chord using appropriate fixings to suit the soffit material, eg. staples, nails, screws.

Ensure you allow a minimum 100 mm fixing overlap.



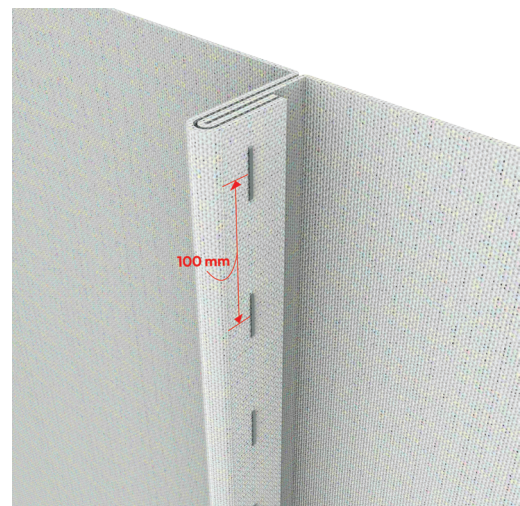
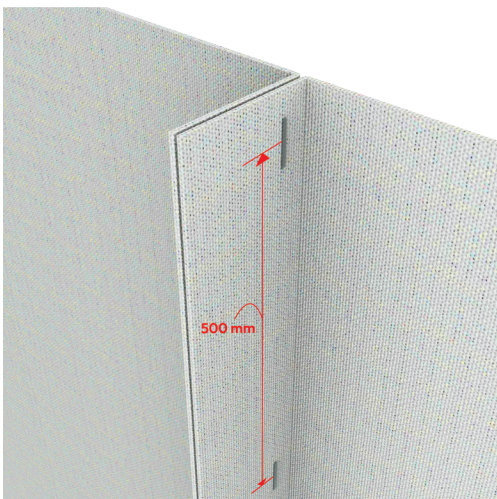
## Step 2 | Overlaying Barrier

The following barrier is positioned in line with the previous barrier, ensuring 100 mm overlap is left on all perimeter edges and a nominal 100 mm overlap wherever two barriers join.



## Step 3 | Folding Joints (double fold method)

- 1) Following the 100 mm overlap between barriers, 50 mm from each barrier is brought forward and centered. The joint is then stapled along the fold line with FIREFLY 8 mm staples (minimum) and at nominal 500 mm centres.
- 2) The overlap is then folded over and stapled with FIREFLY 8 mm staples (minimum) and at nominal 100 mm centres.



## Step 4 | Fixing barrier to the soffit and the perimeter

### a) For concrete structures

Once the barriers are seamed, fix a 25 mm x 25 mm x 0.5 mm galvanised angle onto the soffit along the barrier, to complete the top fix. The galvanised angle is to be fixed using suitable screw fixings, minimum 40 mm long, and at nominal 250 mm centres.

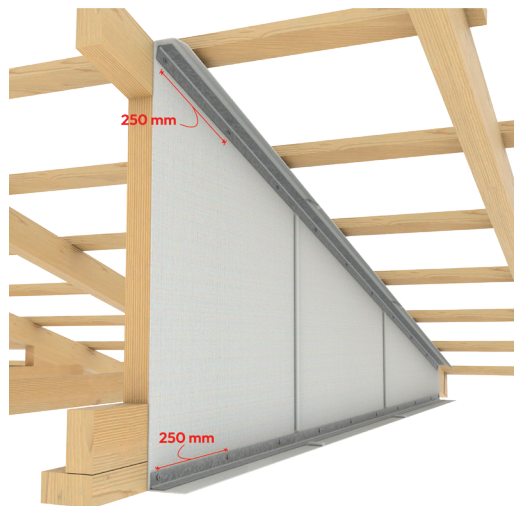
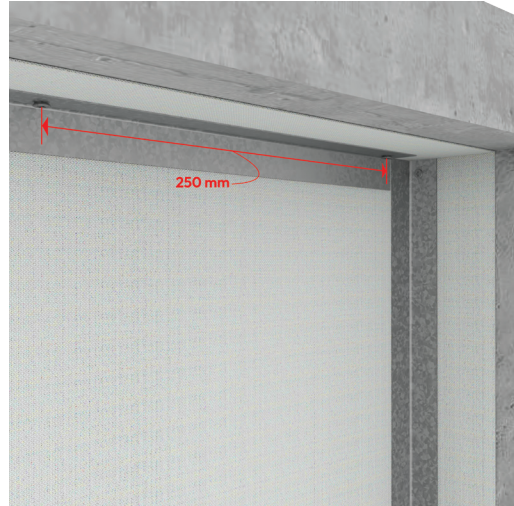
### b) For wooden truss structures

Once the barriers are seamed, fix a 25 mm x 25 mm x 0.5 mm galvanised angle onto the top chord along the barrier, to complete the top fix. The galvanised angle is to be fixed using suitable screw fixings, minimum 40 mm long, and at nominal 250 mm centres.

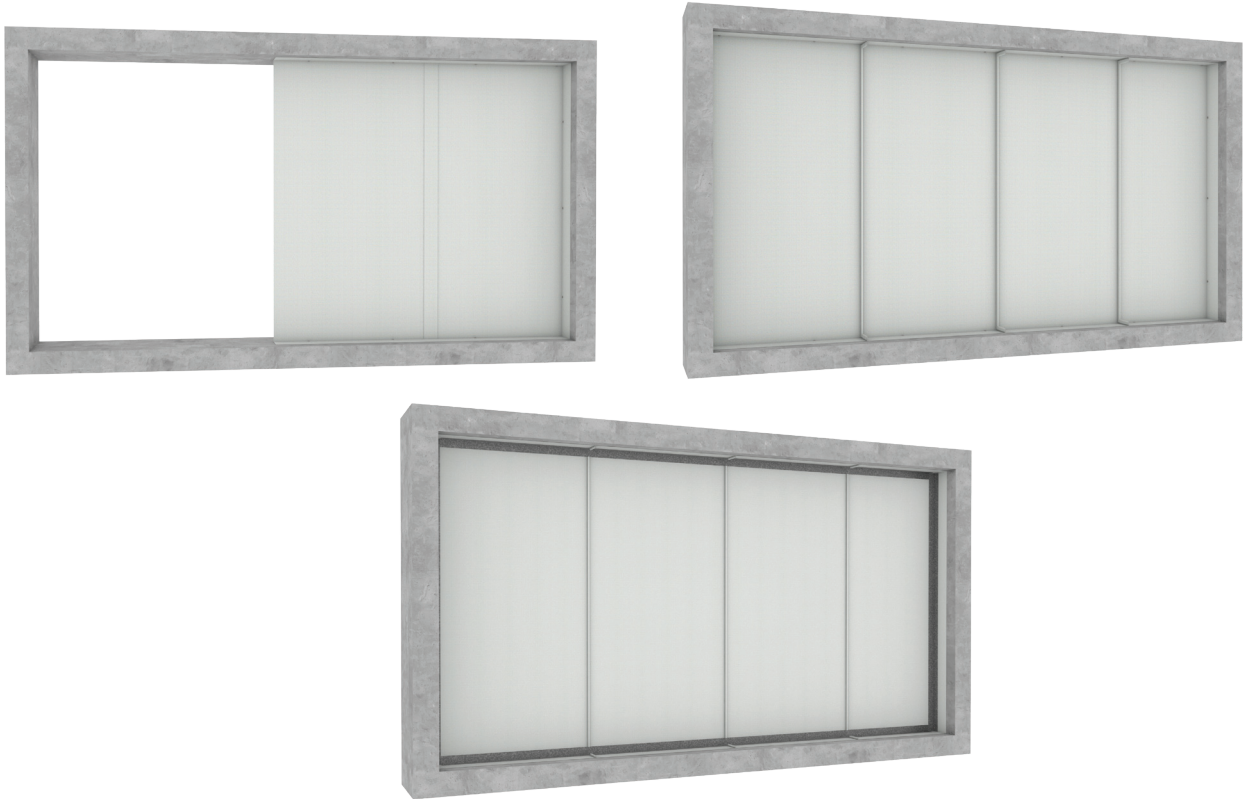
This detail is repeated on all sides, until all outer edges are clamped in place, creating a top, side and bottom fix. All perimeter galvanised angle fittings should be continuous.

Where two galvanised angles connect, they should be overlapped by 25 mm with a central fixing.

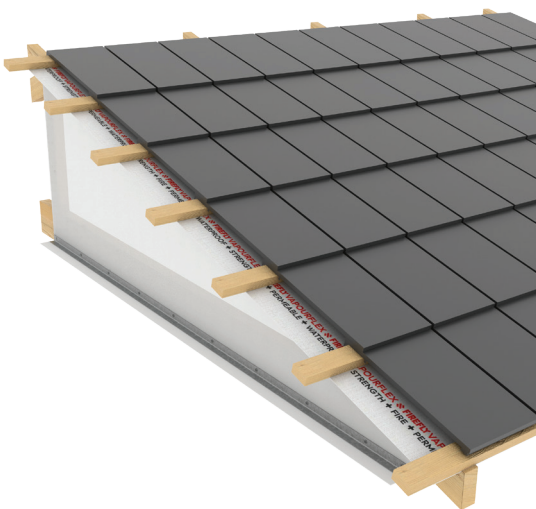
**Note:** The overlap around the perimeter should be glued to the adjacent substrate, using FIREFLY Mastic, ensuring that the seal is tight to prevent the passage of smoke.



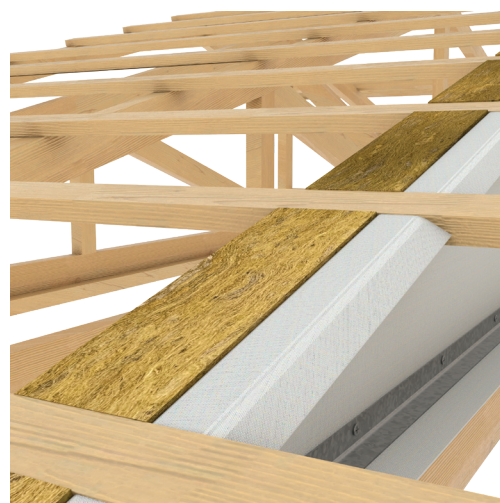
## Installation Overview



### Sarked Roofs



### Un-Sarked Roofs



**Note:** For un-sarked roofs, it is recommended to pack tightly the area between the top chord and the roof covering, between the roof battens, with FIREFLY Party Wall Batt, compressed by 15%. Ensure the barrier overlap is tightly sealed to prevent the passage of smoke.

## Installation Steps | Penetrations

Cut a slot and feather circle into the barrier, 50 mm below the centre line of the penetration. Feed barrier around penetration. Pull the edges of the slot together and seal using the double fold method.

Pleat the uncut side by 50 mm, stapling at nominal 200 mm centres using FIREFLY 8 mm staples (minimum).

Join the cut side, treating it using the double fold method.

Wrap a piece of barrier nominal 150 mm wide, long enough to wrap the perimeter of the penetrating element plus nominal 100 mm. The wrap should extend minimum 100 mm over the penetrating element. Staple the edges together, using FIREFLY 8mm staples (minimum).

Use 2 x 6 mm beads of FIREFLYMastic to attach the wrapping piece to the barrier. Seal any visible gaps with FIREFLYMastic.

Staple the wrapping piece to the pleat and joint, using a single staple for each.

