

Eaves ventilation trays and VPUs

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Question

When using vapour permeable roof underlays in a pitched cold roof is it necessary to provide ventilation trays at the eaves?

Considerations

- NHBC Standards clause 7.2.14 requires that where a vapour permeable underlay (VPU) is used in a cold pitched roof the roof should be ventilated at ridge or high level. Such ventilation opening(s) should be equivalent to a continuous opening of 5mm in accordance with BS 5250 'Code of practice for the control of condensation in buildings'.
- In accordance with BS 5250 where VPUs are used in a cold pitched roof with high level ventilation there is no requirement for ventilation at eaves level.
- Eaves ventilation trays are designed to keep insulation quilt at ceiling level away from the underside of the roof underlay to create a ventilation gap. The omission of the tray enables the roof insulation to extend up to the underlay which in turn improves the depth of insulation at the eaves.

Answer

When using a VPU in a cold pitched roof with high level ventilation it is not necessary to provide eaves ventilation trays but where they have been provided it will assist the removal of water vapour from the roof.

Omission of the ventilation trays allows the roof insulation to be extended further into the eaves which raises the level insulation at that pinch point.

If the insulation is extended into the eaves it is important to not lose the drape in the underlay to maintain effective drainage of water off the underlay and into the guttering.

Note: It is important that an underlay support tray is still provided along the bottom edge of the underlay to prevent the underlay sagging and causing ponding behind the fascia. Some eaves ventilation trays perform both eaves support and ventilation space, these should not be omitted without providing a separate eaves support tray.



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