

INSTALLATION INSTRUCTIONS – VELTITECH 145

Scope

These instructions apply to slated and tiled roofs which are not boarded with sawn softwood planks or continuous OSB, plywood, chipboard or similar. For use in other constructions or with alternative roof coverings (e.g. metal sheet) contact Technical Solutions (Tel. 08708 702595).

General – all roof constructions

The outer roof covering should be applied as soon as the installation of the underlay is complete. Any rips or tears in the underlay should be repaired using a proprietary tape.

Insulation at rafter level (Warm roof)

Veltitech 145 must be laid draped between rafters/counter battens with a minimum uninterrupted, continuous 25 mm air gap between the underlay and insulation (Note: a nominal 50 mm gap is likely to be reduced to 25 mm under the drape of the underlay). This 25 mm air gap must be positively ventilated to the capacity of 25,000 mm²/m at low level and 5,000 mm²/m at high level.

The batten cavity above the Veltitech 145 need not be positively ventilated as long as the slates/tiles are classified as air open when tested in accordance with BS 5534 – consult slate/tile manufacturer. If these conditions are not fulfilled then positive ventilation to the capacity of 25,000 mm²/m at low level and 5,000 mm²/m at high level must be provided to the batten cavity.

Laying procedure – insulation boards above rafters:

1. Ensure the fascia board is fixed at the correct height. Fit RedVent 25 Fascia Vents along the top of the fascia board. The finished eaves detail must be such that the final course of slates or tiles lies in the correct plane and the underlay maintains a positive fall.
2. Nail the Underlay Support Tray through the fascia vent to the top of the fascia board with the leading edge forming a drip into the gutter. Trays should be butted up against one another (not overlapped) and fixed at centres not greater than 300 mm.
3. Ensure the rear edge of the Underlay Support Tray rests on the rafters below the line of the first tiling batten. For plain tiles it will be necessary to remove the rear section of the tray by snapping or cutting along the score line. If Veltitech 145 is laid over counter battens, ensure that these extend below the line of the first tiling batten in order to support the rear of the tray.
4. Roll out Veltitech 145 horizontally across the roof with the bottom edge in line with the top of the fascia.
5. Continue to lay Veltitech 145 ensuring that each course overlaps the one below by the correct amount, see table.
6. At ridges and hips follow relevant ridge/hip details as per the Redland Book - A Guide to Roofing.
7. At verges and side abutments follow relevant verge/side abutment details as per the Redland Book - A Guide to Roofing.
8. At valleys follow relevant valley details for lead or GRP valleys, troughs or valley tiles as per the Redland Book - A Guide to Roofing.

Insulation at ceiling joist level (Cold roof)

Veltitech 145 must be laid with a minimum drape between rafters of 10 mm. The roof void below Veltitech 145 must be positively ventilated to a capacity of 10,000 mm²/m at low level when the rafter pitch is greater than 15 degrees. In addition, if the rafter pitch exceeds 35 degrees, or the roof span exceeds 10 m, or the roof is a lean-to or monopitch, then the roof must also be positively ventilated to a capacity of 5,000 mm²/m at high level. If the rafter pitch is 15 degrees or lower the low level ventilation must be increased to 25,000 mm²/m.

Insulation at both rafter and ceiling joist level (Hybrid roof)

The roof void below Veltitech 145 must be positively ventilated to a capacity of 5,000 mm²/m at high level and 25,000 mm²/m at low level.

Headlap and Sidelap

The headlap of the Veltitech 145 should be in accordance with the following table taken from BS 5534. Sidelaps must be a minimum of 100 mm and should coincide with a rafter/counter batten line in order to secure the roll ends. Avoid laps above the same support in consecutive layers. Minimum headlap, at given rafter pitch:

12.5 – 14.5	225	150
15 – 34.5	150	100
35 and above	100	75