Pennine

Fitting Instructions for :

e-Slate standard & e-Slate - flame retardent

The following information is just a guide, standard roofing procedures should be applied. Installers should follow guidance given in BS5534 – construction of pitched roofs (section 4), BS 5250 moisture management and ventilation and BS 8000-6 workmanship.

Getting Started: Please ensure that you follow the installation guidelines and the correct procedures as any variance to this will void your warranty.

Before starting, please make sure you have read these instructions and have all necessary tools and materials together.

Roof Base: The slates must be installed onto 18mm ply board or the appropriate grade-oriented strand board (OSB) for sarking. It is also recommended that all previous roofing materials be completely removed before installing the slates.

Underlay: A minimum of one layer of appropriate roofing membrane for board roofs must be installed over the entire roof. Please check suitability with the membrane manufacturer or supplier. The use of any tarbased felt underlay will void your warranty.

Tools: Pencil/Marker, Chalk Line, Hammer, Knife/Snips, Relevant Health & Safety Equipment including PPE

Nails: The slates must be secured using minimum 15mm stainless steel or hot-dipped galvanised clout nails with a minimum head diameter of 5mm. Fixing using nail gun is NOT recommended.

DO NOT ALLOW THE FIXING NAILS TO PASS FULLY THROUGH THE SARKING BOARD.

Flashing: The slates can be used on valleys, ridges and as under flashings (soakers) conventional flashings can also be used. Please ensure adequate cover (lap) for all flashings.

Vents: Please seek advice from a qualified roofing supplier or contractor before fitting.

Important Reminder:

Always ensure that your roof has adequate roof ventilation regardless of the roofing material being used. If not, you may be at risk of serious structural damage.

Slate alignment and overlap: Each slate has embossed guidelines to aid location.

Quantities: - 21-45-degree 210mm guide = average 16 slates per sqm.
15-19 degrees 190mm guide = average 17 slates per sqm
10-14 degrees 170mm guide = average 19 slates per sqm.

Installation Procedure:

Prepare roof base ensuring that the area is clean and free from debris, dirt and sharp edges. When laying the breathable membrane make sure that the underlay is as flat to the base as possible.

Step 1: Lay the first row of slates as a starter course with 20mm overhanging the roof board. The overhang should be supported with an eaves tray, bull nose or plain edge trim to prevent slate sag in warm weather.

Step 2: Lay the second row directly on top of the starter course, stagger the slates so that the centre of the second row is on the gap of the starter row. Cut slates at ends of row to suit with a sharp knife.

Step 3: Stagger the third row with the second row ensuring required lap is achieved using the guidelines.

Step 4: Stagger the fourth row in a similar fashion to that of the previous rows, ensuring required lap is achieved. Follow this procedure up the roof until the ridge is reached.

Step 5: Ridges & Hips: The slates can be used as a ridge and hip (7 per linear metre). Please ensure induced bonding with warm air gun when necessary. A conventional ridge or dry ridge system can also be used.

Flashing: Flashings are to be used around all obstructions on the roof such as dormers, chimneys, valleys, etc. We recommend lead as one of the most durable materials that will last just as long as the slate itself, for all flashings please refer to the flashing manufacturer's fitting instructions.

NB: When the roof section cannot be completed in one day i.e., to ridge or wall, ensure that the top of the exposed top row of slates are tacked down at the top corners on BOTH sides, especially if they are to be left uncovered in hot weather or for more than 24 hours. This will prevent any movement ensuring that successive tiles will maintain full contact with the previously installed row. DO NOT STAPLE

IMPORTANT NOTE:

The slate is a self-bonding slate, which means that over time, and dependent on warm weather, the installed slates will form a permanent bond between each other, this bond is achieved more quickly on lower pitch roofs i.e. below 20 degrees where gravity helps increase the contact between the lapped slates. BBA tests were carried out with unbonded slates The slate is **not recommended** for vertical applications, Mansard style roofs or roofs with a pitch of over 45 degrees, use in such applications will invalidate your warranty.

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