

NAIL FIXING SITEWORK

Storage on site

Slates should be stored in pallets whenever possible.

Slates should be stacked no more than 2 pallets high on their long edge on dry, level ground. Two battens should be placed under each row of slates.

Preparatory work

SORTING AND STACKING SLATES

Each slate should be inspected and the thicker end selected for the tail, after being holed, they should be stacked into three separate stacks.

Thick slates should be used on the lower roof (eaves), medium slates on the middle roof area and the thin slates on the upper roof (ridge) section.

DRESSING AND HOLING SLATES

Slates up to 4mm thick can be dressed and holed by hand using a spike hammer. Thicker slates can be holed by hand or machine.

When holing by hand, the slate must be laid flat over a narrow iron and holed from the reverse side (bed) towards to face, thus leaving a small countersunk hole which allows for the head of the fixing nail.

Each slate should be holed twice at a distance from the tail equal to the holing gauge (gauge + head lap + 10 mm) and between 20 and 25mm from the long edge of the slate.

When holing by machine, a boring method is recommended. If a machine with a punching method is used, care must be taken to ensure proper maintenance and adjustment of the holing machine to prevent excessive breakage. If slates are drilled, do not drill more than one at a time.

CUTTING SLATE

When using a slate cutting machine for cuts to hips and valleys etc, proper adjustment and maintenance is required.

To maintain adequate laps and allow proper fixing, slates must not be cut too narrow. As a general rule, no slate should be less than one half the width of the slate.

At verges and abutments, the alternate courses must be started with a slate and a half or a slate of not less than 145mm.

At valleys, hips and other angled surfaces, the slates must be cut on the rake using wider slates to maintain an adequate width of head or tail of no less than 95mm.

Traditional holing and nailing method

When holing and nailing it is imperative that slates are fixed in accordance with BS 5534, Code of practice for slating and tiling.

Reference should also be made to BS 8000:6 Workmanship on building sites. SSQ will not entertain claims for loss or damage where this has not been strictly adhered to. The main stages are outlined below:

1. Hole slates to correct gauge, measuring from the tail of the slates. The position of the holes can be calculated using the formula:

$$\text{Holing gauge} = \text{gauge} + \text{lap} + 10 \text{ mm}$$

Holes should be between 20 and 25mm from the long edges of the slate. At the same time, sort the slates into three or four groups of equal thickness.

See BS 8000:6.

2. Fix underlay as specified.
3. Mark out the roof to the correct batten gauge.

The gauge may be adjusted to provide equal numbers of courses up the slope length, provided that the specified lap is not reduced.

4. Fix battens.
5. Using a chalk string, set out the vertical perp lines of the slates from eaves to ridge to maintain a straight line.
6. Load slates on roof so that the thinnest slates near the ridge.
7. Fix slates to perp lines, laying to give an overall appearance, with the tails of the slates aligned.

Use slates of consistent thickness in any one course, laid with the thicker end as the tail. Form verges by using slate and a half slates and full slates in alternate courses to maintain bond. Fix each slate with two nails through prepared holes.