

# Natural Slate - Fitting Recommendations - 77

## Cembrit Ltd

### BS 8000: Part 6: 1990

The BS 8000: 1990 Part 6 Code of Practice for slating and tiling roofs remains in force. Section 4.3 - 'Natural slate fitting and accessories' applies to all natural slate regardless of origin or grade and recommends the following:

- Sort slates into 3 or 4 groups of equal thickness
- Lay slates of equal thickness in any one course, with the thicker slates in the lower courses & the thinner slates in the upper courses

### BS EN 12326 Product Standard

BS EN 12326 is the product standard for slate - it does not specifically cover brand selection, merely provides a classification system which the specifier uses to assess the appropriate quality and thickness of slate for his design.

### Common Terminology

Natural slate may commonly be described as best, premium, first, second, third, mixed, thick, clumps or heavies. These terms do not appear in BS EN 12326 and are not regarded as standard ratings.

### Natural Slate Quality

The terms mentioned in the previous paragraph do not mean that the 'first' from one quarry is necessarily better than the 'second' from another, the opposite may be the case. One factor in the purchase price of slate is the amount of quality control in rock selection and the slate reject rate employed by the quarry. The "looser" the quality criteria the lower the cost. However the broader tolerances on quality mean more time will need to be spent on site by the roofer and the greater the likely wastage.

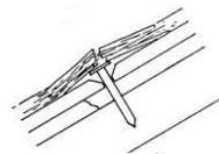
### Slate Fixing

#### General Recommendations for Fixing Roof Slate

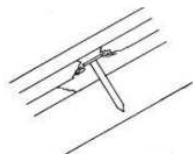
- Slates should be sorted into at least 3 different thickness grades before holing & fixing. This ensures that slates in any one course are of a similar thickness & helps prevent unsightly gaps between courses or kicking slates
- Slates should be holed with either drilling or boring from the underside. Each slate should be holed to the specific headlap. Slates must be holed at the thin end (which is overlapped by subsequent courses of slate)
- Mounting holes should be 20-25mm in from the side of the slate & for head-nailing the holes are usually around 25mm from the slate head
- Mounting nails should be 3.35mm diameter & long enough to penetrate into the batten by a minimum of 15mm but without penetrating the underlay



#### Correct Nailing



Nail not driven in far enough



Nail driven in too far

#### Incorrect Nailing

- The roof MUST be marked out prior to any slate fixing. It should be checked for squareness & the long side of the slate should be parallel to the direction of water run-off. Roof battens will give the horizontal positioning of the slates & a chalked string line may be used for vertical alignment & to ensure a small (max 5mm) gap between slates



- Slates should not be cut any less than 150mm wide & at the end of each alternate course, 'slate-and-a-half' sizes should be used to provide half-bond between courses



- Thicker grade slates must be used at the eaves graduating to thinner grades at the ridge. This will ensure that the slates lie flat & give an even appearance to the finished roof



- Slates are holed from the rear at the thin end of the slates, so that subsequent overlapping courses lie closely & neatly on the roof.