

## INSTALLATION GUIDE

**Dynaslates** are designed to be fitted in the same way as natural slates but with an installation benefit in being lighter, easier and quicker to fit, and more robust.

### DELIVERY

The slates are delivered on pallets. They can be bundled and strapped on request. However the experience of roofers is that the loose option is easier and quicker as the slates can be carried in convenient quantities.

### STORAGE AND HANDLING

The slates are to be stored flat. The production method ensures consistency of **Dynaslates** and there is no need to randomise them prior installation. If the slates come from more than one manufacturing batch, it is advisable to mix the batches.

### GENERAL FIXING INFORMATION

The installation of slates is part of the BBA and Fire Certifications. It must be followed for pitched roof applications.

ROOF STRUCTURE	
Battens	50mm x 25mm at 200mm centres
Foil faced insulation	25mm (Celotex TB3025 or Kingspan or similar)
Breathable membrane	Knauf 'Breathline' or similar
SLATES	
Fixing	hooked and nailed
Slates gap	2mm
Coverage	20/m <sup>2</sup>
Minimum Pitch	25 degrees
Cutting /Score and snap tools	utility knife, straight edge

## FIXING DETAILS

1. **Hooks:** the recommended fixing method is integral to the performance of the tile in wind and fire. Hooking the lower edge prevents the possibility of slates lifting in high winds or curling in case of fire. It also helps to achieve a more regular appearance of slates on the roof.
2. **Nails:** as with all slates, nailing tightness and consistency is important. We advise nailing the **Dynaslates** with care as too much pressure may bend them, especially if the substructure is uneven. Therefore we would recommend pre-drilling and tapping the nails home evenly.
3. **Gaps:** a 2mm gap between slates allows for heat expansion and contraction, natural for all materials. We advise adjusting the gap depending on the weather conditions upon installation, e.g. increasing the gap slightly in very cold weather. Careful spacing will also allow the slates to be laid evenly so that rows comprise whole slates, starting with a slate-and-a-half or half slate at the verge.

## VERGES, HIPS, RIDGES

We do not supply moulded slates for ridges or hips.

1. **Ridges:** we suggest traditional ridge tiles are used, as on natural slate roofs. These may be fixed with mortar over an expanded metal strip (stainless steel brick mesh 150mm wide or similar) nailed to the top slates.
2. **Hips:** the same fixing method may be used for hips formed from mortar.
3. **Edges:** we suggest two options:
  - a. **Dynaslates** are easily worked by the score-and-snap method. Slates halved this way may be applied at the verges. We advise placing the riven edge to the outside, or roughen the new edge. Where possible it is advisable to use ridge clips.
  - b. Alternatively source natural slate-and-a-half products of appropriate dimension. We suggest choosing a close colour match to the **Dynaslates** to achieve the natural slate roof finish.

## JOINTING

We do not supply "slate-an-a-half" slates.

1. **Recommended method:**
  - a. To butt-joint two **Dynaslates** for "slate-and-a-half" applications, it is recommended to use 3M Scotch-Weld Structural Plastic Adhesive DP-8005. The adhesive should be applied to a 50mm wide strip of either Polypropylene or Polyethylene plastic material (or even a strip of **Dynaslates** if the thickness is acceptable for the application) and two **Dynaslates** butt-jointed down the centre of the strip. The recommended time to handling strength for Dynaslates is 20 minutes, with a full cure time of 8-24hrs.
  - b. The Product Data Sheet is available to download from the Dynaslate Ltd website.
  - c. The product is available from 3M distributors, like Viking ([www.vikingtapes.co.uk](http://www.vikingtapes.co.uk)).

## 2. Minor joint alternative:

- a. For minor **Dynaslates** joints where there is less shear integrity requirement, a similar solution can be obtained using 3M 9485 VHB 50mm wide Transfer Tape.
- b. The Product Data Sheet is available to download from the Dynaslate Ltd website.
- c. The product is available from 3M distributors, like Viking ([www.vikingtapes.co.uk](http://www.vikingtapes.co.uk)).

## MAINTENANCE

**Dynaslates** are maintenance free. They are robust and can be walked on at any time of their life, e.g. during installation of TV aerials and house repairs, leaving the slates in exactly the same condition as before.