



The nails and hooks used to attach slates play an important part in slate roofing.

1. Nails

Roofing nails for slates are special nails with wide heads and burrs. Nail lengths are given in millimetres and their diameters in tenths of a millimetre. Nails may have shanks which may be cylindrical or square with barbs. Those of the latter type are very hard to remove.

Nails may be made of mild steel, galvanized mild steel, copper or stainless steel. Mild steel rusts fairly quickly. Galvanized mild steel takes longer to rust but does so eventually. Copper nails do not rust, but their mechanical strength is lower. Copper nails should not be placed in contact with materials such as zinc which could give rise to electro-chemical moments. Barbed square nails are used in windy areas and on bell-tower and dome-shaped roofs where one needs to be sure they cannot be pulled off.

2. Hooks

There are advantages to using hooks instead of nails: laying is easier and slates are more solidly fixed. Repair work is also simpler because slates can be removed more easily.

Hooks may have straight or undulating shanks. They can be made of mild steel hot galvanized or galvanized after manufacture, copper or 18/8 stainless steel. Shank diameter depends on the length of the hook and the type of slate it is to hold. Hooks are usually classified by two figures, the first being their length in cm. and the second their diameter in mm.

Straight hooks are used on relatively steep pitches, where capillarity is not high. Undulating hooks are usually used on lower pitches, because the undulations make it more difficult for water to rise via capillary action.

When roof thickness calls for hooks less than 120 mm long, straight-shank hooks may be used. For hooks longer than this, undulated-shank types must be used. The undulations prevent contact between the side edges of the slates and stop tube capillarity up those edges.

Hooks are made up of the following parts:

- The clip grips the slate by its base.
- The shank may be straight or undulated.
- The cramp attaches the hook to the batten. Alternatively, a pointed end may be used instead of the cramp, with the hook being hammered into the wooden battens or boarding.

Special hooks with shorter ends are used when their placement coincides with a rafter and a cramp type attachment cannot be used. Hooks used on metal sections have narrower cramp ends to grip the sections adequately. Special ridge hooks and double hooks are used to hold slates at the summit. These two types can have cramps or pointed ends.



Check the next video and see the difference between Nails and Hooks fixing:

<https://www.youtube.com/watch?v=hEIJhGoerDQ>



Qwik Slate System
www.qwikslate.com



Hooks roofing system



Nails roofing system



Hooks facade system