

Technical Guidance

Fixing tiling battens using nail guns

Question

Is it acceptable for nail guns to be used when fixing tiling battens?

Considerations

- BS 5534 'Code of practice for slating and tiling', states that the nails used for fixing tiling battens should generally have a shank diameter not less than 3.35mm. The nail is typically 65mm long to provide a minimum 40mm penetration into the rafter. Nails used in guns are generally of smaller diameter.
- The installed nail should not withdraw, under wind uplift, from the rafter/truss and the tiling batten should not pull over the head of the nail.
- The nail should be stiff enough to resist bending due to roof loads or installers standing on the battens when tiling the roof.
- Nails should not be driven below the top of the batten. This reduces the thickness of timber between the nail head and the underside of the batten, which reduces the pull-off resistance and may damage the batten.

Answer

Nail gun fixings are acceptable if the nail manufacturer can provide tests evidence to show the performance of the nail complies with BS 5534. For example tests carried out by TRADA on one manufacturer's nail gun fixings has shown that his 3.1 x 63mm galvanised nails are an acceptable alternative to a 3.35 x 65mm standard smooth round nail.

Nails with a shank less than 3.1mm are unlikely to comply.

The nail gun should be adjusted so that the nail head finishes flush with the batten and is not left proud or driven into the batten.