



CREST NELSKAMP ROOFING STANDARDS ON SITE

This information looks into the current roofing standards that are relevant to the roofer on site, such as BS 5534: the British Standard Code of practice for slating and tiling, BS 8000-6: the Code of practice for workmanship on building sites, Building Regulation Approved Document A and HSG publication 'HSG33 Health and Safety in Roof Work'.

Quality and conformity of materials

When goods arrive on site they must be inspected to ensure they conform to the project specification. This includes the quality of the products or materials as well as their labelling and, where relevant, certification of conformity or third-party certification. Any discrepancies or quality problems should be reported to the supplier immediately. All too often, roof tiles and fittings with obvious faults are loaded onto the roof, installed and the scaffold dropped before being reported. Not only does this result in extra delays and disputes, it's unfair to expect a supplier to pay all the costs involved in removing faulty products and re-installing replacements. If notified straightaway, before installation, a supplier has the chance to replace products without incurring high extra costs to the supplier or delays and costs to the contractor.

Handling of materials

Roof tiles and fittings should be stored as close as possible to the roof to avoid excessive handling, in compact, stable stacks on a firm, even base free from soiling and away from the risk of damage from passing traffic. Once unpacked, tiles and fittings should be handled safely and with care to prevent damage. When stacking on the roof prior to installation, tiles should be distributed evenly around the roof to prevent unbalancing or overloading the roof structure.

Allowable tile surface characteristics

No matter how well packaged, roof tiles will arrive on site with some minor scratches and abrasions caused by transportation, handling and installation can occur, however this does not affect the performance of the products. This is acknowledged in roof tile manufacturing Standards, though, of course, what constitutes 'minor' is totally subjective. Generally, scratches and abrasions tend to weather, or fade, fairly quickly after a period of exposure, though how long this will take depends on the weather. In most cases, a winter usually does the trick. Roof tile colours and surface finishes can vary slightly through the manufacturing processes. It is important, therefore, that tiles be taken from several pallets and mixed randomly when installing on the roof. Other slight imperfections not regarded as faults are minor cracks on the underside of tiles that do not affect the integrity of the tiles and, in the case of concrete tiles, temporary efflorescence and changes in colour, ie fading, through weathering. Clay tiles do not fade or change colour throughout their lifetime.

Roof structure

Before commencing work, the roofer should check that the roof is square and with no uneven junctions, for example at party walls or gable walls. Fascias should be set at the correct height to maintain the general tile pitch at eaves and cavity trays checked for the correct height for the tiling and weathering flashings. At hips and valleys there

should be noggins or boards to support the ends of the tiling battens. Whilst it is also the responsibility of the designer, the roofer should check that the roof pitch is suitable for the tiles and fittings being installed.

When stripping and re-tiling old roofs, timbers should be checked to ensure they are sound and free from insect attack and dry or wet rot. All metal fixings should be checked for signs of corrosion, movement or breakage. It must be established that the roof structure is capable of supporting the new roof covering with an adequate safety factor. For a rule of thumb, Building Regulation Approved Document A stipulates that if a new roof covering is more than 15% heavier than the original, then the structure should be checked by a competent person to establish if it can safely support the increased load and whether extra strengthening work is required. Similarly, if a new roof covering is to be 15%, or more, lighter than the original, then the structure must be checked for adequate anchorage against wind uplift.

Safe access over tiling

In the past, roofers would leave a few tiles unfixed, then push them up so they can walk up the roof on the tiling battens. This course of action is no longer open to them as all tiles should be fixed. (ie nailed and/or clipped).

Roof tiles are regarded as a fragile roof covering, both in terms of safety of the operatives and risk of damage to the materials. Therefore, tiling works should be planned so that battens are used as footholds where they pass over the rafters, to avoid walking directly on laid tiles. Where access or working directly over tiling is unavoidable, this should be done from a kneeling position or from crawling boards or access ladders, suitably packed with foam or other compressible material so as to spread the load and avoiding point contact on the tiles and properly supported and anchored to prevent slipping or tipping.

When stripping old roofs, remember that tiling battens deteriorate with age. They should not be used as footholds unless they have been inspected by a competent person who has confirmed that they are strong enough. If in doubt, they should be regarded as fragile. It is unsafe to work or handle materials in windy conditions. HSE recommends that tiling work should cease if the mean wind speed reaches 23 mph (gusting to 35 mph or over) and if handling rolls of underlay the limit reduces to 17 mph (gusting to 26 mph or over).

Site specific fixing specification

It is a requirement of BS 5534 that the roof tiles, fittings and systems are appropriately fixed to resist wind loads. It is therefore recommended that the roofing contractor obtains a site specific fixing specification before work commences, this is usually offered free of charge by the tile manufacturer. Ideally, this should be done at the design stage, or certainly at tendering stage, if you need any further advice regarding standards in roofing, contact a member of our field sales team, who will be only too happy to assist.