

Tile and slate battens - an installation guide

Batten Type

Timber species should be in accordance with BS 5534. Seek advice from the timber supplier. Battens for single lap tiles, when fixed on rafters spaced at centres up to 450mm, should be 38 x 25 mm in section. For rafter spacings up to 600 mm centres the battens should be 50 x 25 mm in section. Battens for double lapped plain tiles should be 38 x 25mm for rafter spacings up to 600mm. Battens for double lapped slates should be 50 x 25mm for rafter spacings up to 600mm. Where battens are fixed to rigid sarking which will provide adequate structural support to the rafters the batten thickness can be reduced to 19mm. Further advice is given in the NFRC Technical Bulletin 15.

Installation

Battens should be secured by nailing into each rafter using galvanised or sherardized smooth round nails. Annular ring shank or helical threaded shank nails may also be used. The minimum nail size is 65 x 3.35mm but in any event the resistance of the fixing to wind uplift resistance should be determined using the information given in BS 5534.

Each batten should be not less than 1200mm long. For trussed rafter roofs where the batten gauge is more than 200mm there should be no more than one joint in any four consecutive battens on the same rafter. Where the batten gauge is less than 200mm there should be no more than three joints in any twelve consecutive battens on the same rafter. Where battens are jointed ensure the cut ends are square and the joint is located centrally over the rafter. Secure each batten end by splay nailing. Ensure that full support is provided to fix the ends of the battens at hips and valleys.

Set the first batten at eaves so that the first course of tiles overhangs the gutter by 45 to 55mm, or into the centre of the gutter, whichever is the lesser distance. Generally, battens should be parallel to the eaves and ridge lines. Where this is not possible, due to the shape or design of the building, fix the battens to be at right angles to the line of drainage.

The last batten should be set so that the ridge tiles overlap the top course of tiles by at least 75mm.

To determine the gauge for variable lap tiles divide the distance between the first and last batten by the maximum tile gauge. Round the answer up to the nearest whole number. Then divide the distance between the first and last batten by this figure to determine the actual gauge.

For fixed gauge tiles check the batch of tiles to determine the shunt possible between courses. If it is not possible to set the battens to obtain full courses between the limits of the available shunt then it will be necessary to have a short course of cut tiles at the top. Tiles in the short course should be neatly cut, discarding the upper piece and drilling the remaining tile to allow a nail fixing to the batten.

Where two roof slopes of unequal pitch intersect at a hip or valley, set out the battens on both slopes to the lesser roof pitch.

For more information please contact Sandtoft Technical Support on 0870 145 2021.

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