

Product



- THIS DETAIL SHEET RELATES TO METROSHINGLE, A PREFORMED ACRYLIC-COATED, ALUMINIUM-ZINC ALLOY-COATED STEEL TILE WHICH SIMULATES TRADITIONAL TIMBER ROOFING SHINGLES.
- Metroshingle tiles have a mineral-filled acrylic coating followed by stone granules and a clear acrylic glaze coat, and are available in three colours with a steel thickness of 0.45 mm.
- The tiles may be installed on conventional steel or timber structures with a minimum pitch of 15°.

This Detail Sheet must be read in conjunction with the Front Sheets, which give the product's position regarding the Building Regulations and general information relating to the products, and the Conditions of Certification, respectively.

Technical Specification

1 Description

1.1 Metroshingle tiles are pressed from epoxy or acrylic-coated aluminium-zinc alloy-coated steel sheet to a shape simulating traditional timber shingles (see Figure 1). The tiles are finished with a mineral-filled acrylic coating followed by stone granules and a clear acrylic glaze coat (see Figure 2).

1.2 The tiles have the dimensions of:

thickness of sheet (mm)	0.45
length of sheet (mm)	1330
cover length (mm)	1255
cover width (mm)	235
side lap (mm)	75
weight of tile (kg)	1.7
weight of tiled roof (kgm ⁻²)	5.9

1.3 The tiles have profiled edges top and bottom which interlock during installation (see Figure 3).

1.4 Adjacent tiles are overlapped with side laps of 75 mm (see Figure 4).

1.5 The product utilises a 'secret fix' system of installation with the result that fixings are covered by the product and therefore not visible on the finished roof.

1.6 The tiles are available in four standard colours:

- antique red
- mossgreen
- ebony
- burnt umber.

Figure 1 Metroshingle tile and nailing points

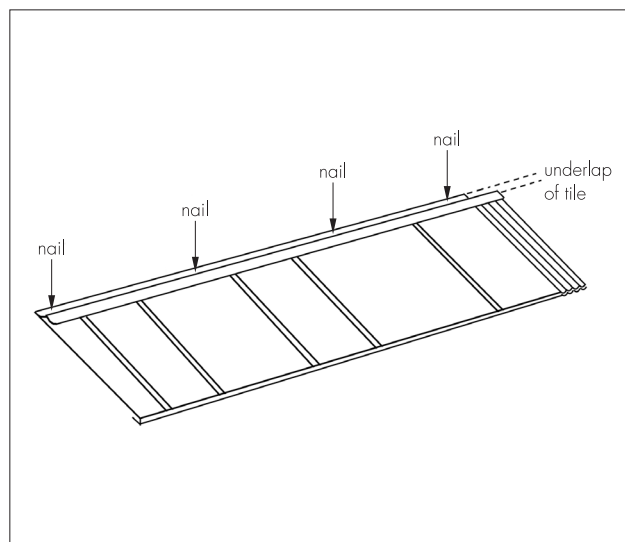


Figure 2 Section through tile

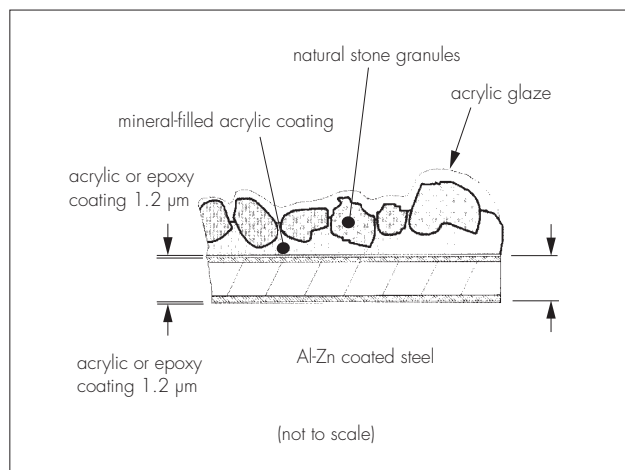


Figure 3 Spacing and fixing details

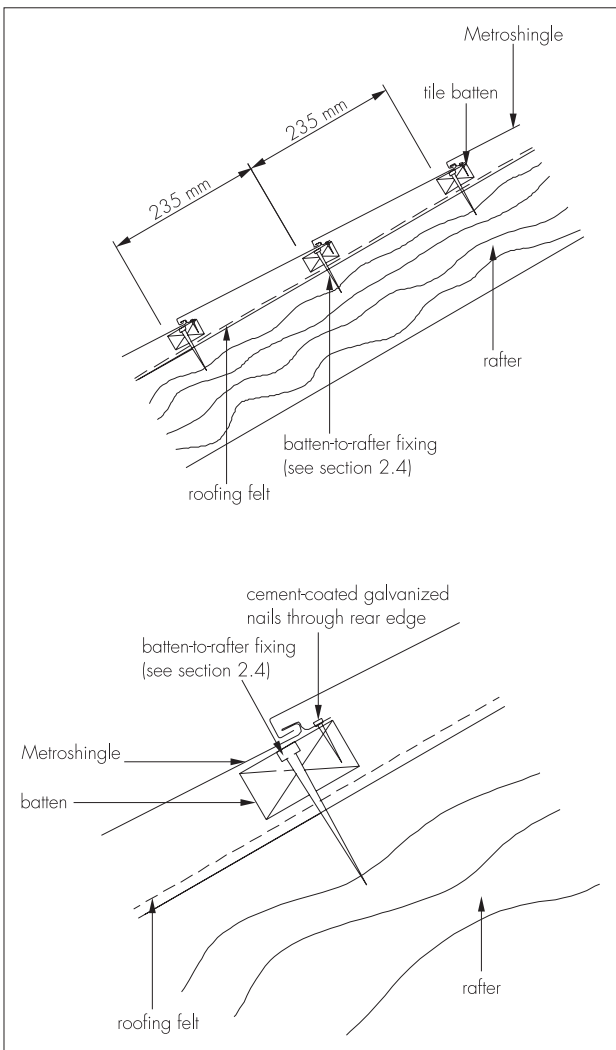
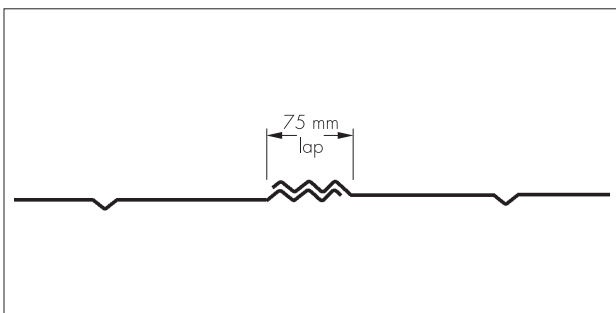


Figure 4 Overlap details



Installation

2 General

2.1 The required batten size for standard truss spacings is given in Table 1. The roof construction should be in accordance with the relevant requirements of BS 5534 : 2003.

Table 1 Minimum permitted batten size for standard truss spacings

Tile profile batten size (mm)	Rafter/Truss spacing (mm)
50 x 40	450
50 x 40	600
50 x 40	900
50 x 50	1200

2.2 Where the rafters/trusses are spaced at 900 mm or 1200 mm centres, polypropylene or nylon tapes must be nailed to the rafters to support the underlay.

2.3 Rafters must be securely tied to the building structure with, for example, galvanized steel straps complying with BS 5628-3 : 2005.

2.4 Battens are secured over the underlay and roof trusses. The fixings used to secure the battens to the rafters must be adequate to resist predicted wind loads.

2.5 Where timber boarding is laid on the rafters, timber counter battens should be installed in accordance with BS 5534 : 2003.

2.6 Starting at the bottom right-hand side of the roof, the tiles are fixed to the first batten through the back edge of the tile using four 35 mm long galvanized nails of diameter 2.7 mm per tile. When fixing the next course, the folded bottom edge of the tile is slotted firmly into the fold in the top edge of the lower course (see Figure 3). Firm upward pressure of the top tile should be maintained to ensure a good overlap fit whilst it is fixed to the next batten.

2.7 The last course of tiles before the ridge may need to be trimmed to fit. In this case, the nails are driven through the tile in such a position that they are covered by the ridge flashing which is subsequently fitted.

2.8 Galvanized screws may be used instead of nails to fix the tiles, but they must be selected to give at least the same pull-out resistance as the nails.

2.9 To avoid tearing the underlay fixings should not penetrate the bottom of the battens.

2.10 Tiles are preferably cut and formed with a guillotine and a tile-bending machine, but small quantities may, with care, be cut with tin snips or sheet metal cutters and bent by hand.

2.11 The accessories are cut, formed and installed as necessary to complete the installation.

Bibliography

BS 5534 : 2003 *Code of practice for slating and tiling (including shingles)*

BS 5628-3 : 2005 *Code of practice for the use of masonry — Materials and components, design and workmanship*



On behalf of the British Board of Agrément

Date of issue: 14th September 2007



Chief Executive

