BRITMET
LIGHTWEIGHT ROOFING

Product Data Sheet - Plaintile

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Technical Specification

Minimum pitch: 15°

Maximum pitch: 90°

Overall width: 1320mm

Cover width: 1260mm

Side lap: 60mm

Step: 20mm

Batten gauge: 160mm

Batten gauge (0.9mm): 158mm

Roof cover per plate: 0.2m2

Tiles per sqm: 5

Steel base: 0.45mm & 0.9mm

Weight as laid per m2: 8kg & 12kg

Base coat: Acrylic resin

Top coat: Stone granules with clear acrylic overglaze

Chemical resistance: Non-toxic fungicide incorporated

Biological resistance: Unaffected by normal air pollution

Fixings: The contractor shall utilise the roofing manufacturers recommended fixings and sealant

Ventilation: Roof ventilation should meet. The recommendations of Building Regulations 1991 (amended 1992 and 1994). Approved document F2 1995 'Condensation in roofs', BS5250: 2021 'control of condensation'.

Design

Plaintile is designed for roof pitches from 15° to 90°. Britmet Plaintile is 1260mm(width) x 160mm(height). This lightweight roofing panel is designed to emulate natural slates and must be fixed with a broken bond finish, in a right to left fashion.

Materials

Plaintile is manufactured using the highest grade Aluzinc steel, coated with a stone granule finish and a clear, acrylic overglaze.

Approvals

- British Board of Agrément 89/2272
- Manufactured using ISO 9001 approved materials
- ISO 14001
- Fire resistance: AA classification equal to traditional roof tiles and slates

Complies with:

The Building Regulations 2000 (as amended) England and Wales.

- Requirement B3(4) Internal fire spread (structure)
- Requirement B4(2) External fire spread
- Requirement C2(b) Resistance to moisture
- Regulation 7 moisture and workmanship

The Building (Scotland) Regulations 2004

- Regulation 8 Durability, workmanship and fitness of materials
- Regulation 8(1) Durability, workmanship and fitness of materials
- Regulation 9 Building standards - construction
- Standard 2.1 Compartmentation
- Standardd 2.2 Separation
- Standard 2.8 Spread from neighbouring buildings
- Standard 3.10 Precipitation
- Regulation 12 Building standards - conversions

The Building Regulations (Northern Ireland) 2000

- Regulation B2 Fitness of materials and workmanship
- Regulation C4 Resistance to ground moisture and weather
- Regulation E4 Internal fire spread - structure
- Regulation E5 External fire spread
- Ventilation systems comply with Building Regulations 1990(F2) & BS5250 (1989)

Recommended timber batten sizes
(roofing & vertical applications)

Rafter or truss spacing (mm)	Minimum nailing requirements	Batten width (mm)	Batten width (mm)
450	1no 75mm x 3.35mm	38	50
600	1no 75mm x 3.35mm	50	50
900*	1no 75mm x 4.00mm	50	50
1200*	1no 100mm x 4.00mm	50	50
1500*	1no 125mm x 12g screw	50	75

**underlay supports between rafters/truss to be used, (wire support or nylon type)*

Recommended laps for underlay

Pitch	Minimum headlap		Minimum sidelap
	Not fully supported	Fully supported	
15°-34°	150mm	100mm	100 - 150mm
35°+	100mm	75mm	100 - 150mm

**Any penetrations to the underlay should be suitably sealed to prevent water ingress. Roofing underlay laps to valleys should comply with recommenndations of BS5534 Part 1: 2014 section 4.2.1.6*

Recommended roofing underlay

Roofing underlay is required & should comply with recommendations of BS5534: Part 1:2014 & BS8000	
Unsupported (roofing underlay draped over rafters or counter-batten)	Roofing underlay with BS5534:2014 Slating and tiling code of practice and BS5250:2021 Code of practice for condensation
Fully supported (roofing underlay laid directly to boarding)	Roofing underlay with BS5534:2014 Slating and tiling code of practice and BS5250:2021 Code of practice for condensation

Estimation Chart *(guide for 0.45 gauge only)*

Overall roof length (m)	No. of tile panels	Rafter length to suit full course of tile incl. fascia (m)	No. of tile panels
1.260	1	0.130	1
2.520	2	0.290	2
3.780	3	0.450	3
5.040	4	0.610	4
6.300	5	0.770	5
7.950	6	0.930	6
8.820	7	1.090	7
10.080	8	1.250	8
11.340	9	1.410	9
12.600	10	1.570	10
13.860	11	1.730	11
15.120	12	1.240	12

Compatible Flashings


Angle Ridge


Barge/Verge

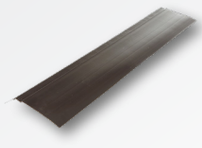

Eave Vent Strip


Barrel Ridge End Cap


Hip End Cap 90°


Tile Vent

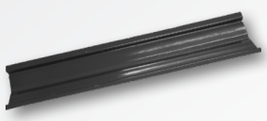

Sidewall


Eave Felt Carrier


Barrel Ridge


5 Way Top Cap


Ridge End Cap


Valley


Cover Flashing


Hip End Cap 135°


3 Way Top Cap

General Specification:

Plaintile panels roof pitches from 15° to 90°. Plaintile lightweight roofing tiles, to be supplied by Britmet. Each tile must be secured using 4 coloured 2.6mm x 50mm galvanised fixing nails, driven through the downturned nose of the tile into the face of the battens.

Battens:
Treated tiling battens of approved quality (E.g., tanalised), of suitable section, should be laid at 160mm centres, (for 0.45mm thick) except the eaves batten (see eaves section), and secured to the rafters using galvanised nails. Joints in the battens should be staggered and meet halfway across the top of the rafters, as standard code of practice.
Please note: It is the responsibility of the installer to ensure correct batten usage

Underlay:
Approved roofing underlay must be laid over rafters, lapped and secured to the rafters with galvanised clout nails and carried well into gutters. All to comply with current regulations.

Angle Ridge flashing:
Two tile battens should be fitted side by side on both sides of the ridge using galvanised nails. An additional 50mm x 50mm batten is to be secured on top of the rearmost of the two tile battens in a position to suit the fitting of the Plaintile angle ridge. If necessary, the top course of tiles can be cut and bent using a guillotine and bender (available to hire from Britmet). The rear edge of the tile is to be turned up to form a 25mm - 38mm upstand against the top tile batten. Each tile must be secured using 4 nails driven through the downturn as previously described. The angle ridge flashing is to be fitted over the top batten and nailed through the downturn of the ridge into the tile upstand and face of the batten, using 5 nails on each side.

Angle Hip flashing:
A 38mm x 38mm hip batten is to be nailed to the tile battens on each side of the hip rafter using galvanised nails. Tiles should be cut and bent to form a 25mm-35mm upstand against the hip battens, using a guillotine and bender (available to hire from Britmet). The hip flashing is to be fitted over the battens and nailed through the downturn, into the face of the battens using 5 nails on each side.

Eaves:
The bottom course of tiles is to be secured using 4 coloured 2.6mm x 50mm galvanised fixing nails. These must be driven vertically through the tile, as near to the high point of the tile profile as possible and into the fascia board or through the eaves batten placed approx. 20mm behind the fascia board if the Plaintile eaves ventilation system is used. These nail heads will then be sealed using the Plaintile touch-up kit. If using the top of the fascia board or eaves vent, this must be in line with the top of the battens. Then, fit Lay Board or Tilting Fillet at the eaves if appropriate, to ensure any moisture on the underlay drains into gutter.

Roof pitch above 15 degrees:
The top of the fascia board should be fixed 23mm below the top face of the eaves batten allowing for the Plaintile 10mm eaves vent system.

Roof pitch below 15 degrees:
The top of the fascia board should be fixed 25mm below the top face of the eaves batten allowing for the Plaintile 25mm eaves vent system. Note: Where the insulation follows the roof slope, the Plaintile ventilation tray should be installed between the rafters.

Valley:
The valley should be formed from lead, moulded glass fibre or similar approved lining, supported on valley boards. Tile battens should project over the valley to provide fixing for the tiles. Plaintile panels should be measured, cut and bent using a guillotine and bender (available to hire from Britmet), allowing sufficient downturn into the valley.

Barge board cover:
The timber barge board should project 25mm above the top of the tile battens. A 50mm x 50mm timber batten to run parallel to the fascia board. Plaintile panels should be cut and bent up against the timber barge batten.
The Plaintile scribed barge board cover is to be secured using 5 fixing nails driven through the downturned edge into the barge board and 5 nails to be driven vertically into the barge batten (the heads of the vertically fixed nails to be sealed, using the Plaintile touch-up kit).

Sidewall flashing:
Plaintile scribed sidewall flashing should be secured using fixing nails, one driven vertically into each batten (these nail heads need to be covered, using the Plaintile finishing kit). Plaintile cover flashing should then be dressed over the vertical section of the side wall flashing and dressed into the brickwork.

Plaintile inline and soil vent:
To provide additional ventilation, the Plaintile inline tile vents are available, providing an airflow of 7,500mm2.
The tile underlay must be cut to allow the spigot of the tile vent to pass through. The Plaintile panel vent is installed to provide full weather security. The tile vent is secured by overlapping a Plaintile panel on either side and nailing through the nose of the tile, as previously described. Nails must not penetrate the vent tile.
The Plaintile inline vent tile can also be used as a weather protected exit point for soil pipes or extractor fan ducts by means of a flexi-hose and pipe adapter that connects the vent to 100mm stacts or duct work.

All work must be inspected upon completion and any damaged work should be replaced. All debris to be completely cleared from the roof area prior to the removal of the scaffolding.