BRITMET
LIGHTWEIGHT ROOFING

Product Data Sheet - Ultratile

sales@britmet.co.uk | 01295 250998 | www.britmet.co.uk

Technical Specification

Minimum pitch: 10 °

Maximum pitch: 90°

Overall width: 1308mm

Cover width: 1248mm

Side lap: 60mm

Step: 22mm

Batten gauge: 369mm

Batten gauge (0.9mm): 365mm

Roof cover per plate: 0.48m2

Slates per sqm: 2.08

Steel base: 0.45mm & 0.9mm

Weight as laid per m2: 7kg & 11kg

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'.

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

Materials

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

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 (2021)

Design

Ultratile is designed for roof pitches from 10° to 90°. Britmet Ultratile is 1248mm(width) x 365mm(height). This lightweight roofing panel is designed to emulate natural tiles and must be fixed with a broken bond finish, fixed in a right to left fashion.

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	25
600	1no 75mm x 3.35mm	50	25
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) Please note: When using tek screws with the 0.9mm gauge panels, a minimum 50x25mm batten must be used. For 0.9mm gauge panels, if truss spacing is 450mm or less, 38x25mm batten can be used with predrilled holes and nails but not tek screws.*

Recommended laps for underlay

Pitch	Minimum headlap		Minimum sidelap
	Not fully supported	Fully supported	
10° to 12°	300mm	200mm	100 - 150mm
12.5°-14°	225mm	150mm	100 - 150mm
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
1.200	1	325mm	1
2.400	2	690mm	2
3.600	3	1055mm	3
4.800	4	1420mm	4
6.000	5	1785mm	5
7.200	6	2150mm	6
8.400	7	2515mm	7
9.600	8	2800mm	8
10.800	9	3245mm	9
12.000	10	3610mm	10
13.200	11	3975mm	11
14.400	12	4370mm	12
15.600	13	4705mm	13
16.800	14	5070mm	14

**for wastage on hips and valleys, allow an additional 1.32 slate per 1m.*

Compatible Flashings

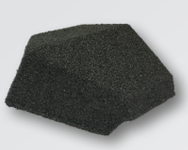

Angle Ridge


Barge/Verge


Left Hand Sidewall


Right Hand Sidewall


Tile Vent

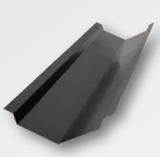

Hip End Cap 90°


Hip End Cap 135°

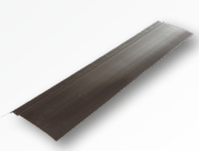

Ridge End Cap


3 Way Top Cap


5 Way Top Cap


Valley


Cover Flashing


Eave Felt Carrier


Eave Vent Strip


Ridge Vent Strip

General Specification:

Ultratile panels can be applied to roof pitches from 10° to 90°. 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 (for 0.9mm Ultratile, a coloured TEK screw can be used - Part No: ASF2 - 00E55).

Battens:
Treated tiling battens of approved quality (E.g., tanalised), of suitable section, to be laid at 370mm centres, (for 0.45mm thickness gauge) or 368mm centres (for 0.9mm thickness gauge) 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 is to be laid over rafters, lapped and secured to the rafters with galvanised clout nails and carried well into the 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 should be secured on top of the rearmost of the two tile battens in a position to suit the fitting of the Ultratile angle ridge. If necessary, the top course of tiles to 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 to 38mm upstand against the top tile batten. Each tile must be secured using four 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 five nails on each side.

Angle ridge (ventilated) roof pitches from 10° to 35°:
Felt underlay to be cut back allowing a continuous 12.5mm air gap on either side of the centre line of the ridge. If necessary, the top course of tiles to be cut and bent using a guillotine and bender (Available to hire from Britmet). Each tile to be secured using four fixing nails driven through the downturn nose of the tile into the battens. A batten, not exceeding 50mm x 50mm, is to be fitted on the universal vent piece (Supplied by Britmet) and secured through the tile into the battens on the underside, using 75mm galvanised nails. The ridge flashing to be fitted over the batten and nailed through the downturn into the face of the batten using five nails on each side.

Angle hip flashing:
A 38mm x 38mm hip batten should 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 from Britmet). The hip flashing is to be fitted over the battens and nailed through the downturn, into the face of the battens using five nails on each side.

Eaves:
The bottom course of tiles to be secured using four coloured, 2.6mm x 50mm galvanised fixing nails 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 Ultratile eaves ventilation system is used. These nail heads are to be sealed using the Ultratile touch-up kit. The top of the fascia board or eaves vent, if used, are to be in line with top of battens. 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 Ultratile 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 Ultratile 25mm eaves vent system.
Note: Where the insulation follows the roof slope, the Ultratile 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. Ultratile panels should be measured, cut and bent, using a guillotine and bender (available 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. Ultratile panels should be cut and bent up against the timber barge batten.
The Ultratile scribed barge board cover to be secured using five fixing nails drive through the downturned edge into the barge board and 5 nails are to be driven vertically into the barge batten (the heads of the vertically fixed nails should be sealed, using the Ultratile finishing kit).

Sidewall flashing:
Ultratile scribed sidewall flashing is to be secured using fixing nails, one driven vertically into each batten (these nail heads can be covered, using the Ultratile touch-up kit). Ultratile cover flashing can be dressed over the vertical section of the sidewall flashing and dressed into the brickwork.

Ultratile inline and soil vent:
To provide additional ventilation, the Ultratile inline tile vents are available, providing an airflow of 7,500mm2. The tile underlay must be cut to allow the adapter of the tile vent to pass through. The Ultratile panel vent is installed to provide full weather security.