

RoofSPEC 01316

Specification for installing Sandtoft Double Panties roof tiles on low pitch roofs

Breyer Group

Nuffield Lodge

Generally

This guidance is intended for general domestic roof installations, where the roof pitch is 22 degrees or lower. It assumes that the rafters are spaced at no more than 600mm centres and the tile battens are fixed directly into the rafters.

The roof and all Sandtoft products must be installed fully in accordance with this specification and in conformity with the requirements of BS 5534 and BS 5250.

All site work must be carried out adopting normal standards of good workmanship and in conformity with the requirements of BS 8000-6: the British Standard Code of Practice for workmanship on building sites. Where site visits/inspections are required these are in an advisory capacity and it is the responsibility of the contractor to ensure any works are carried out in accordance with our specification.

The specification below refers to Sandtoft details and installation guides. All these, plus video guides and much more information, are available on our website at www.wienerberger.co.uk

Tile

- Double Pantile

Roof construction

- Base: trussed rafters at 450mm centres
- Roof pitch: 16.2 degrees

Underlay

- Install Protect Viking Air strictly in accordance with Protect installation instructions.
- Lay underlay horizontally over the rafters with a drape between each rafter. Allow a minimum 150mm horizontal lap between courses and minimum 100mm vertical laps. If necessary increase the horizontal lap to coincide with a tile batten
- Ensure there are no cuts, tears or perforations generally in the underlay. Repair any that do occur using Sandtoft Multi-tape (Product Ref: 6180006) or discard and replace as necessary
- Ensure the underlay provides a watertight seal around all penetrations and junctions
- **Air permeable underlays are not a total waterproof barrier and if used as a temporary roof covering, some rain penetration may occur. In certain conditions, particularly if there is persistent heavy rainfall combined with subsequent freeze/thaw conditions, the underlay should not be exposed for more than a few days. In the event of severe weather conditions, the underlay should be covered with tarpaulin.**

(Refer to the Protect installation recommendations for Viking Air)

Counterbattens

- Timber to be sawn softwood; species, grading and preservative in conformity with BS 5534
 - Fix 50 x 38mm tile counterbattens, directly over rafters and fixed at maximum 300mm centres
- (Refer to the Sandtoft installation guide for battens)*

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Nail tape (Product Ref: 6180010)

- Lay Sandtoft butyl nail tape over underlay, coinciding with all rafters and any other fixing points to fixing the battens or counterbattens

Battens

- Timber to be sawn softwood; species, grading and preservative in conformity with BS 5534
- Fix 50 x 25mm tile battens, nailing into every rafter using 65 x 3.35mm smooth round steel nails
- Joints to be square cut; butted centrally on rafters and must not occur more than once in any group of four battens on any one rafter
- Set the eaves course batten to give a 45 to 55mm overhang of the tiles into the gutter
- Set the top course batten to allow the ridges to overlap the tiles by at least 75mm
- Measure the distance from the eaves batten to the top course batten to determine the number of courses and exact tile gauge. Make sure the tile headlap is at least 75mm
(Refer to the Sandtoft installation guide for battens)

- **Tile fixing specification**

- Comply with the Sandtoft fixing specification for this project as follows:
- Roof pitch: 16.6 degrees
- Perimeters: all tiles nailed and clipped
- Local areas: all tiles nailed and clipped
- General areas: all tiles nailed and clipped

Note: the above specification has been calculated using the method given in BS 5534 from data taken from a visual survey carried out at ground level only. Therefore, it remains the client's responsibility to ensure that this data is accurate and that all relevant details that may affect the site wind speed have been identified. Sandtoft can re-calculate the fixing specification using amended data if required.

Tiling generally

- Headlap: minimum 100mm
- Tile: Sandtoft Double Pantile (Product Ref: 24520101+colour code)
- Tile colour: tbc
- Lay each course of tiles straight bonded with tails aligned. Nail tiles using 65 x 3.75mm aluminium ring shank clout head nails. Clip tiles where specified using Sandtoft aluminium tile clips secured with 50 x 3.35mm aluminium ring shank clout head nails
- Set out as far as possible to avoid cut tiles. Where cuts are unavoidable, ensure cut tiles are large enough to nail and/or clip
(Refer to the Sandtoft installation guide for Double Pantile)

Eaves

- Set the fascia height to ensure a fall to the underlay support tray. If this means the eaves course tiles cannot be set to the same angle as the tiles above then it will be necessary to fix a tilt batten over the underlay support tray. This must be notched to allow free flow of water from underlay to gutter (see Sandtoft low pitch roof eaves detail).
- Fix spacer trays continuously to ensure free passage of air between underlay and insulation at wall plate. If necessary, depending upon depth of insulation, fix addition spacer trays (available separately, Product Ref: 6030000)
- Lay underlay support trays over the fascia, overlapping each by 100mm. Seal the laps between underlay support trays using Sandtoft Multifix adhesive Product Ref: 6180005).

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- Lap the underlay over the underlay support trays by at least 150mm (see Sandtoft low pitch eaves detail). Use Multifix adhesive or doubled sided tape to seal the underlay to the underlay support trays.
- Fix Sandtoft bird comb fillers over fascia (Product Ref: 6030045)
- Position the first tile batten so that tiles overhang the gutter by 45 to 55mm. Nail all eaves course tiles and clip if required by the fixing specification
(Refer to the Sandtoft Double Pantile eaves detail)

Dry verge (Product Ref: Multiverge Dry Verge system: LH unit 6040+colour code RH unit 6040 +colour code associated fittings)

- Carry the underlay 40mm over the edge and turn down the gable wall or bargeboard
- Set the tile battens to overhang the gable wall or bargeboard by 35mm
- Install Multiverge dry verge system in accordance with Sandtoft's installation guide
- Colour: tbc
(Refer to the Sandtoft Multiverge detail and installation guide)

Bonding gutter with firebreak (Product Ref: Mortarless Bonding Gutter 100mm: 6020016)

- Cut the tile battens to finish fully supported on the rafter and/or party wall
- Finish the underlay to turn up over the ends of the battens
- Lay mortar bed over party wall to finish flush with tops of the tile battens
- Install Mortarless Bonding Gutter Eaves 100mm (Product Reference: 6030057)
- Install Mortarless Bonding Gutter Ridge 100mm (Product Reference: 6000173)
- Install the Mortarless Bonding Gutter in accordance with Sandtoft's installation guide
(Refer to the Sandtoft Mortarless Bonding Gutter detail and installation guide)

Dry valley (Product Ref: Mortarless Valley Trough 105mm: 6020011)

- Fix 19mm valley boards, supported on bearers and flush with the tops of the rafters
- Lay a continuous strip of underlay centred on the valley and lap the general underlay over this by at least 300mm
- Cut the tile battens to the valley, making sure the ends of the battens are fully supported over the valley boards
- Install Mortarless Valley Eaves 105mm (Product Ref: 6020033)
- Install the Mortarless Valley system in accordance with Sandtoft's installation guide
(Refer to the Sandtoft Mortarless Valley detail and installation guide)

Dry hip (Product Ref: Roll Hip system 6m: 2452837566)

- Lap the underlay on one side of the hip over the underlay on the other side by at least 150mm
- Cut the tile battens to the hip, making sure the ends of the battens are fully supported, either on bearers or onto the hip batten
- Hip tiles: Sandtoft segmental ridge (Product Ref: 24528550+colour code) with hip starter ridge at eaves (Product Ref: 24528563+colour code)
- Colour: tbc
- Install the Roll Hip system in accordance with Sandtoft's installation guide
(Refer to the Sandtoft Roll Hip detail and installation guide).

RoofSPEC 01316**Dry ridge (Product Ref: Roll Ridge system 6m: 2452837566)**

- Lay the underlay to finish 5 to 10mm from the ridge apex
- Set the position of the top course battens to allow the ridges to overlap the tiles by at least 75mm
- Ridge tiles: Sandtoft half round ridge (Product Ref: 24528350+colour code) with ridge block end at gables (Product Ref: 24528353+colour code)
- Colour: tbc
- Install the Roll Ridge system in accordance with Sandtoft's installation guide
(Refer to the Sandtoft Roll Ridge detail and installation guide)

Dry mono ridge (Product Ref: Profile Ridge system 6m: 6070919+Profile fillers 6070789)

- Lay the underlay to finish 5 to 10mm from the ridge apex
- Set the position of the top course battens to allow the mono ridges to overlap the tiles by at least 75mm
- Ridge tiles: Sandtoft half round mono ridge (Product Ref: 24518356+colour code) with LH & RH mono ridge block end at gables (Product Ref: 245183+colour code)
- Colour: tbc
- Install the Profile mono ridge system in accordance with Sandtoft's installation guide
- Fit spacers and screw mono ridge tiles to fascia with stainless steel screws and sealing washers
(Refer to the Sandtoft Profile mono ridge detail and installation guide)

Junctions

- Fix a WB LR (lead replacement) saddle (Product Ref: 6010+colour code) to provide a weathertight detail at each: -
- Junction of ridge with hip
- Junction of ridge with valley
- Junction of ridge with abutment
- Top junction of two valleys
- WB LR colour: tbc

Roof slope terminals

- Terminal: Sandtoft low pitch Max ventilator (Product Ref: 24510269+colour code)
- Colour: tbc
- Connect and position as required