Bardoline tile strip shingles

Part 01: Bardoline fixing specification
Part 02: Basic fixing details

Note: Consult the Bardoline Design and installation manual and complementary instruction films for comprehensive product, design and fixing information.

Roof terminology

Recommended tool kit

1. Hammer:
2. Tin snips:
3. Roofers knife:
4. Tape measure:
5. Straight edge:
6. Hot air gun:
7. Hand saw for decking:
8. Power saw for decking:
9. Protective glasses:
10. Angle to form ridge tiles:
11. Protective hard hat:
Roof preparation:

Minimum recommended roof slope

The minimum recommended roof slope to which Bardoline roof strips can be fixed is: 12.5° degrees. Bardoline roof strips must always be laid on an Onduline roof underlay membrane on roof slopes below 20° degrees.

(Indeed its good practice to always use an underlay)

First calculate the slope of your roof using a protractor use this information to select the correct fixing specification for your roof.

Then measure your roof and take note of the materials and tools required to undertake the work, including any Bardoline shingle tile strip system accessories and Ondutiss tile underlay membrane required for your project.

Bardoline roof construction a, b, c,

a Make ready the roof Deck
b Lay Onduline roof underlay
c Fix Bardoline tile strips

Bardoline shingle tile strips must be laid on a roof deck in accordance with relevant British Standards & Codes of Practice.
Minimum roof slope: 12.5°
Minimum deck thickness: 12 mm
We recommend 18mm exterior quality structural plywood.

Note: Any irregularity in the surface of the decking will become apparent through the shingle strips in service.

Onduline underlay must be used on roof slopes below 20° degrees, the membrane laid with a 15 cm end laps and nailed at 10 cm centres using 1 cm large headed galvanised clout nails.

Note: Select one of the range of Ondutiss underlays either conventional or vapor permiable to match your design requirements.

Finally fix the Bardoline tile strips in accordance with the instructions set out in the Bardoline fixing instructions.

Note: Remember before fixing the shingles to your roof take time to look at the instructional video available on the Onduline website.

Fixing details:

Shingle tile strip alignment
Interlocking side tabs automatically aid the horizontal alignment of the shingle tile strips.

Whilst slots posicioned in the top of the shingle tile strip engage with the edge of the next course to provide assured alignment of the tile tabs vertically.
To get the best from Bardoline shingles it is essential to fix it in accordance with the fixing instructions. Follow these fixing details and you will create an attractive, durable, and low-maintenance roof on your building.

**Fixing details:**

**Nailing shingles**
Fix the shingles by nailing with five 20mm large headed galvanised clout nails per tile strip. Nail through strip centre band and into the top edge of the lower course. Fix nails straight and flush with strip surface.

**Note:** When securing shingles to a vertical cladding application a second course of nails at the top of each shingles is required.

**Laying Bardoline**
Lay the tile strips diagonally across the roof by starting every other course with a random cut length, nail the shingles in place and then heat the bitumen bonding strip on the lower course with a hot air gun and compress the upper tile tab to consolidate joint. On completion check the tile bonding, use adhesive to reinforce laps as required.

**Eaves Preformed tray option**
Nail the preformed Bardoline eaves tray units to eaves fascia providing a 20 cm end lap between trays, this creates an ideal drip edge into the gutter, next overlay with the Onduliss underlay. The base course is formed by cutting the tile tabs from a rectangular shingle tile strip and nailing the back section onto the roof, to which the shingles eaves course can be overlaid. Make sure the base course bitumen tabs align eaves course tile tabs.

**Vertical and horizontal tile alignment slots**
Ensure the shingles are positioned square to the line of the eaves and verge. Interlocking side tabs provide horizontal alignment of shingle tile strips. Whilst horizontal tile alignment is created by engaging guide slots cut into the top edge of the tile strip, which when opened form a slot into which the next course is engaged.

**Fixing the shingles onto the roof**
Lay the shingles diagonally across the roof taking care to keep them square to the line of the eaves and verge at all times in a broken bond pattern. Cut them tight to the line of the ridge and verge using a roofers knife and a deep batten or rule to cut against to protect your fingers should the knife slip.

**Consolidating bond of the tile tab**
Bond the tile tabs by gently heating the bitumen tab on the lower course with a hot air gun. Next consolidate the bond by pressing the a batten. Check the bond after cooling and reinforce laps joints with gun applied adhesive as required. **Note:** Take care to keep the bitumen strip clean of roof debris prior to heating.

**Forming ridge tile detail option**
On a bench cut the underside of the rectangular shingle into four pieces, trimming the top lapped section removing the side slot sections as illustrated. The tiles are then placed on a former and heated and bent to the required roof angle, they can then be taken to the roof for fixing. This forms four ridge tiles each providing a 14.5 cm ridge cover.
**Caution**

Covering of roofs can be a hazardous operation. All work should be carried out with due regard to health and safety regulations.

**Maintenance**

To ensure long life the roof should be cleared of leaves and debris and gutters cleaned regularly.

**Designers Note**

Refer to the Onduline Design and installation manual for comprehensive design and product information including condensation, vapour control and fire resistance limitations and product terms and conditions.

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**Ridge tile fixing**

Bardoline tile pieces fabricated on the bench are then positioned on the roof to cover ridge, verge or hip roof abutments as required. The tiles are secured by first nailing the tile section to be lapped with large headed clout nails, the bitumen strip on the lower course is then heated with a hot air gun and the bond consolidated by pressure applied from a cut batten. On exposed sites reinforce the seal by first applying a thin bead of bitumastic sealant adhesive 2.5 cm from the edge of the ridge tile piece.

**Hip & Ridge Fixing**

The Bardoline tile strips are first cut tight to the ridge or hip abutment; the hip tiles are then laid up the roof and trimmed using tin snips to the ridge line. The detail is then completed by securing the ridge tile pieces.

**Ventilated Ridge**

Provide 2.5 cm gap in decking at the ridge lay shingles to ridge line, position and fix preformed ridge unit lapping sections and nailing through designated line. Finish ridge by overlaying with Bardoline ridge tiles pieces.

**Valley preformed lining**

Proprietary valley linings can be incorporated into decked roof construction ensuring it provides a minimum of 7.5 cm gutter depth. Ondutiss underlay must be dressed over the valley lining. Envelope the exposed edge of decking with trimmed detail tape; or suitable roofing membrane.

**Verge fixing options Preformed and conventional**

In addition to the detail strip described above pre-formed Bardoline verge pieces can be used to form a secure verge the decking is overlaid 2.5 cm from the verge barge board to engage the unit which then is nailed in position. Conventional verge flashings materials can also be used in accordance with the manufacturer’s instructions.

**Side wall abutment**

Dress the underlay 65 mm up the wall abutment, then form a 7.5 cm upstand in the shingles by gently heating and bending the fold line using a hot air gun. Finish with a separate cover flashing.

**End wall abutment**

Gently heat tile strip and fold up 75 mm upstand to wall abutment. Use adhesive to bond tile strips. Alternatively use a metal apron flashings Finish with a separate cover flashing.

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Note: The information in this brochure is correct at the time publishing, Onduline reserve the right to change specifications at any time without prior notice. Production team: Tony & Kev Knell, Roger King, Claire Hayzer Version 01 -01 -16.