

QUICK REFERENCE FIXING INSTRUCTIONS

Onduvilla tile strips

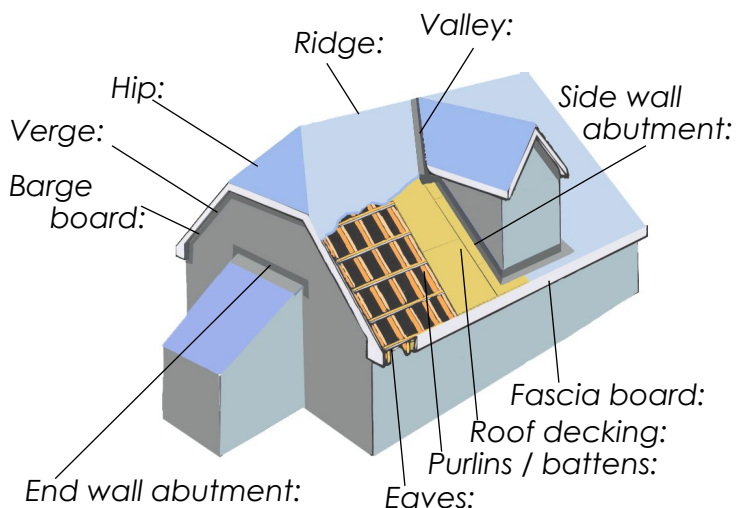
Part 01: Onduvilla fixing specification

Part 02: Basic fixing details

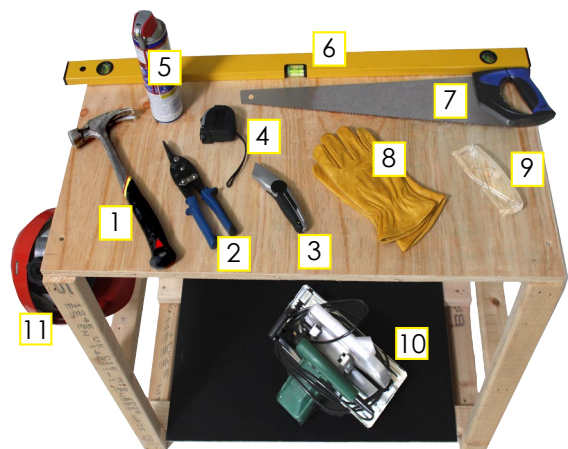


Note: Consult the Onduvilla design and installation manual and complementary instruction films for comprehensive product, design and fixing information.

Roof terminology



Recommended tool kit



- | | |
|--------------------------|----------------------------------|
| 1 Hammer: | 7 Course bladed hand saw: |
| 2 Tin snips: | 8 Protective gloves: |
| 3 Roofers knife: | 9 Protective glasses: |
| 4 Tape measure: | 10 Electric rotary or skill saw: |
| 5 Spray lubricating oil: | 11 Protective hard hat: |
| 6 Straight edge: | |

Roof construction:

Minimum recommended roof slope

The minimum recommended roof slope to which Onduvilla tile strips can be fixed is:

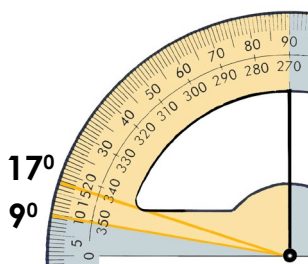
On fully supporting decked or close boarded roofs:

9° degrees

On treated timber battens (50 x 25 mm minimum size)

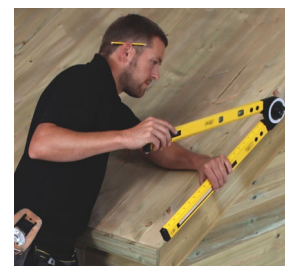
17° degrees

It is recommended that Onduvilla roof tiles should always be laid on an Ondutiss vapour permeable roof underlay membrane.



First calculate the slope of your roof using a protractor to set the fixing specification suitable for your roof from the options detailed below.

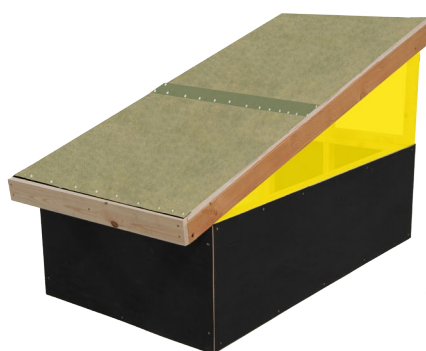
Next measure your roof and take note of the Onduvilla materials and tools required to cover your roof including any Onduvilla tile strip system accessories required for your project.



Onduvilla roof support structure options: Roof deck or tile battens

Roof deck fixing specification:

Onduvilla minimum roof slope when laid on fully supporting roof deck: **9° degrees or greater.**



9° degrees
(15%)

Onduvilla tile strips are ideally laid on a roof decking laid in strict accordance with relevant British Standards and related Codes of Practice.

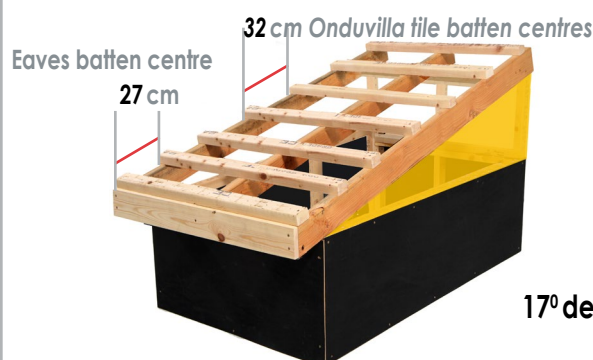
Minimum roof slope decked roofs: 9° degrees.

Minimum deck thickness: 18 mm (Check that the fixings selected do not penetrate the roof deck).

Note: An Onduvilla Air vapour permeable membrane should be first fixed below Ondutile tiles laid in accordance with the Ondutiss product and fixing instructions available on line.

Tile battens fixing specification:

Onduvilla minimum roof slope when laid on battens set at 32 cm centres: **17° degrees or greater.**



17° degrees
(30%)

Onduvilla tile strips can be laid on a purlins with a minimum batten width of 50 mm and 25 mm depth in conformity with relevant British Standards and Codes of Practice.

Minimum roof slope decked roofs: 17° degrees.

Minimum batten depth: 25 mm. Check that the battens have sufficient depth to provide support to roof loading between the rafters or roof trusses.

Note: An Onduvilla Air vapour permeable membrane should be first fixed below Ondutile tiles laid in accordance with the Ondutiss fixing instructions available on line.

Notes:

Caution

Covering of roofs can be a hazardous operation. All work should be carried out with due regard to Health and Safety regulations relating to working at heights.

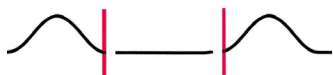
Maintenance

To ensure long life the roof should be cleared of leaves and debris and gutters cleaned regularly and any overhanging branches cut to avoid contact with the surface of the roof.

Designers Note

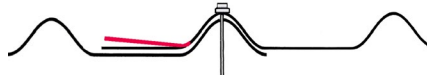
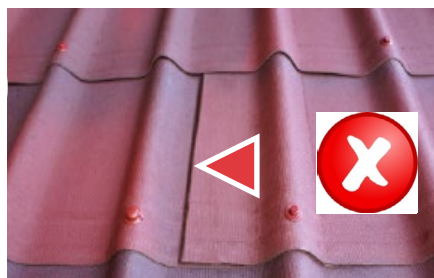
Refer to the **Onduline Design and installation manual** for comprehensive design and product information including condensation, vapour control and fire resistance limitations and product terms and conditions.

Cutting Onduvilla tiles across width to form tile side laps:



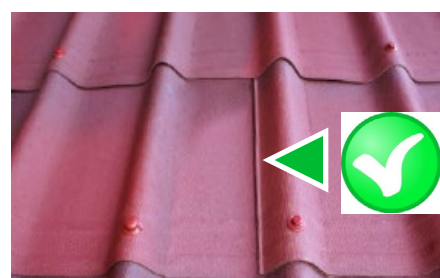
Onduvilla tile starter course

Create a broken bond tile pattern by starting alternate courses of tiles with a cut length of Onduvilla tile. This avoids a four ply build-up of material at the lap edges and improves the aesthetic of the roof. Cutting the tiles at the corrugation edge.



Cutting starter course

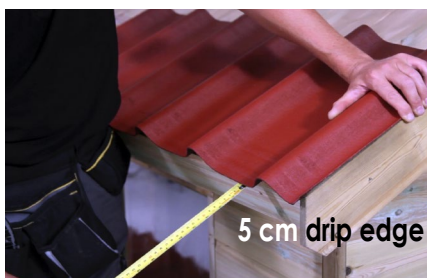
The starter course must be cut tight to the corrugation to avoid the unsecured flat tile section from rising, which compromises both the weathering seal of the tile corrugation; as well as the aesthetic finish of the fixed tiles on the roof.



The correct starter course lap

The tile cut tight to the line of the corrugation ensures the lap is consolidated when the fixing is applied. The lap forming an attractive consistent broken bond tile pattern when viewed from both ends of the roof.

Onduvilla tiles installation on the roof at Eaves and verge:



Fixing to Eaves

Ensure the tiles are positioned square to the line of the eaves and verge, provide a 5 cm drip edge, then secure either end of the tile (allowing for laps).



Broken bond courses

Fix tiles at the opposite end of the roof from the prevailing winds. Then commence every other tile course with a half tile to form a broken bond tile layout to avoid 4 ply build up at tile edges.



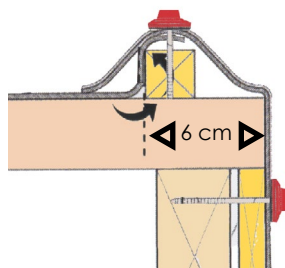
Fixing Onduvilla tiles

Secure the tiles to the battens; or decking using either Onduvilla Monobloc nails or screws. Securing each corrugation starting at either end to ensure correct tile alignment at all times.



Verge piece fixing - Corrugation

Overlay the tiles with pre-formed Onduvilla verge pieces starting with a corrugation at the verge end of the roof. Starting at the prominent roof site line, fix by aligning the tile side lap grooves.



Fixing verge pieces - flat section:

Should the verge abutment align with the flat section of the tile first fix a batten 6 cm from the verge and cut and bend the tile end over the batten, then overlay and fix the tile with the verge.



Forming tile corrugation side laps

The unique Onduvilla SealSmart® weathering grooves make the lapping of corrugations easy just lap the corrugations by aligning the preformed grooves. (To avoid cutting tiles along the width the tile lap can be increased).



Undertile verge fixing option:

Alternatively you can use the Onduvilla under tile verge piece system which is laid prior to the Ondutiss underlay & Onduvilla tiles up the line of the verge to provide to the inner edge of the verge piece with a trimming batten fixed up the line of the verge. Then simply fix the verges to each purlin using 20 mm Large headed galvanised clout nails.

Fixing verge to flat section

Should the tile terminate on a flat section then simply mark out the verge cut line allowing for a 5mm overhang at the verge. Next remove the tile from the roof and cut the tile on the bench then reinstated and fixed using 20 mm large headed galvanised clout nails.

Fixing verge to corrugation

Fix the Onduvilla tiles starting at the end of the building with the most prominent roof sight line. The tiles being fixed with a 5mm overhang from the verge.

Verge fixing options : Under tile verge piece



Onduvilla verge piece to ridge:

At the ridge first trim the verge piece using tinsnips, if using ridge apron pieces first fix them and overlay with the verge piece before finishing with the ridge closure piece.



Fixing the Slim cap ridge units

Provide a minimum of 10 cm support to the ridge abutment to accept ridge fixings. Then position and fix the two ridge apron pieces, then overlay them with slim cap ridges and fix at each corrugation using a ridge end cap to finish the ridge line.



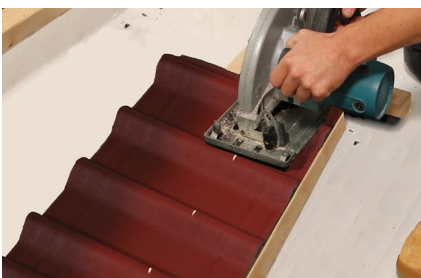
Fixing ridge piece

Provide support in the roof structure to accept the ridge fixings this point is dependant on the roof pitch. Then mark a fixing line on the roof lay the ridges with a minimum of 20 cm end lap and fix at each corrugation, ridge accessories are available to enhance performance.



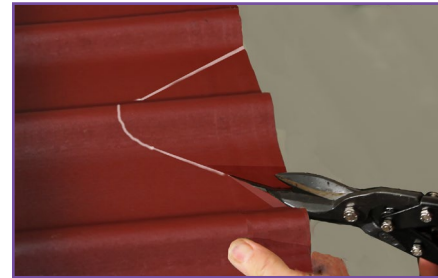
Cutting with hand saw

Use a coarse bladed handsaw to cut Onduline sheets, apply spray lubricating oil onto the saw to avoid the saw teeth from binding with bitumen.



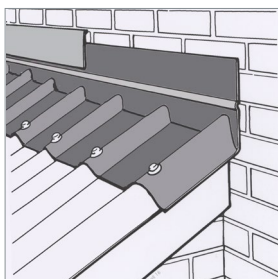
Cutting with circular or skill saw

Support the sheet either side of the line to be cut taking care to allow the safe operation of power rotary circular or skill saw in accordance with the manufacturers instructions.



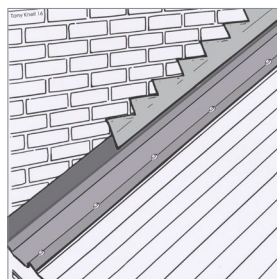
Cutting with tinsnips

First mark out the sheet or Ondutile accessory and cut with an oiled pair of tinsnips to form detailed shapes in the Ondutile tiles and accessories.



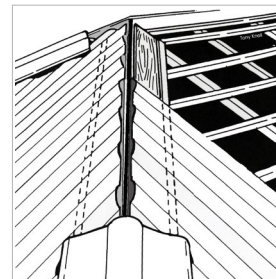
Onduline apron fixing

Use Onduline pre-formed apron flashing to seal end wall abutments, lay the upstand against the wall and fix the front apron at each corrugation.



Side wall abutment

Metal or Onduband flashing tape is used to seal the side wall abutments with a 7.5cm upturn against the wall, with a separate wall cover flashing.



Hip and ridge fixings

Set the hip abutment roof structure to accept the Onduvilla standard ridge fixings. Then fix hip trimming battens and boards to accept the ridge fixings.

Ondutiss roof underlays:

Onduvilla is resistant to the build up of condensation. However any single thickness roofing material is at risk of condensation formation during the winter months. Generally air movement generated by the installation of high and low level ventilation will reduce this risk. Onduline Ondutiss underlays and ventilation accessories will significantly assist with in this provision.

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