

# QUICK REFERENCE FIXING INSTRUCTIONS

## Onduline Classic sheets

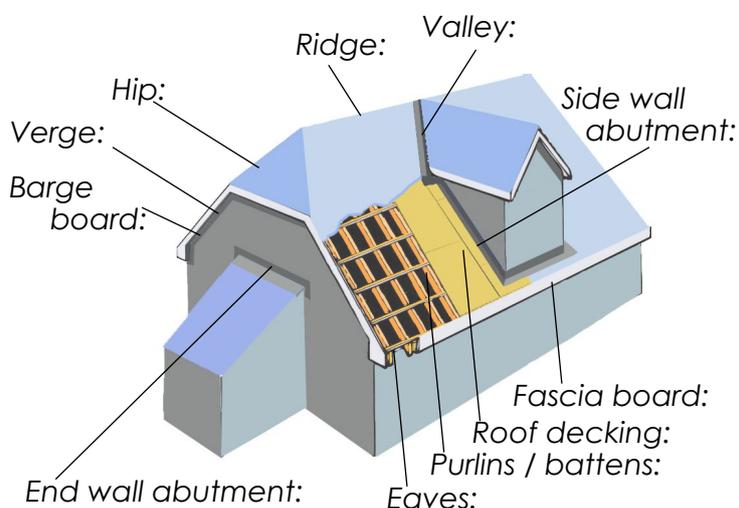
Part 01: Onduline fixing specification

Part 02: Basic fixing details

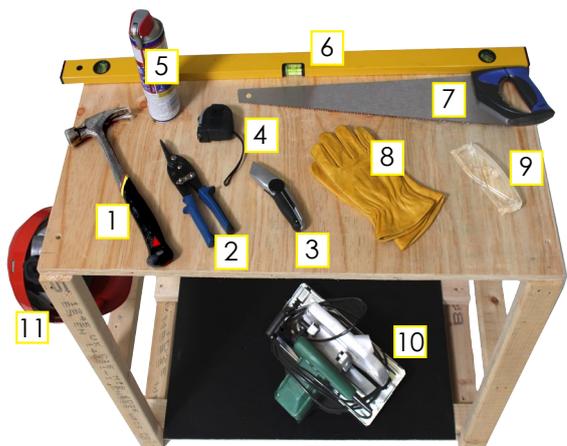


**Note:** Consult the Onduline Design and installation manual and complementary instruction films for comprehensive product, design and fixing information.

### 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:         |    |                               |

# Basic fixing instructions:

Follow three steps to create an attractive, long lasting roof on your building:

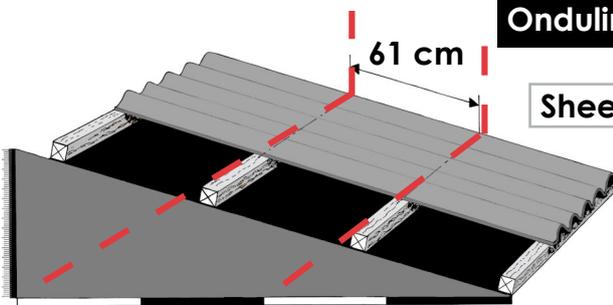
- 1: First measure the slope of your roof.**  
Use this knowledge to select one of the three options.
- 2: Select the option matching the slope of your roof.**
- 3: Fix the roof structure and secure Onduline roofing sheets.**  
Use the details described in your selected option to construct the roof support structure and lay the sheets with correct sheet laps and fixings.

## Roof Slopes of: 15° degrees or greater (Gradient: 1 in 4 or higher) **Option 1**

SLOPE 15° or steeper

Support below sheet: Fix to Purlins at 61 cm (24") centres (max).

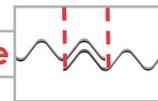
### Onduline sheet fixing specification:



Sheet end lap: **17 cm**



Corrugation side lap: **One**



Nails or screws per sheet: **20**

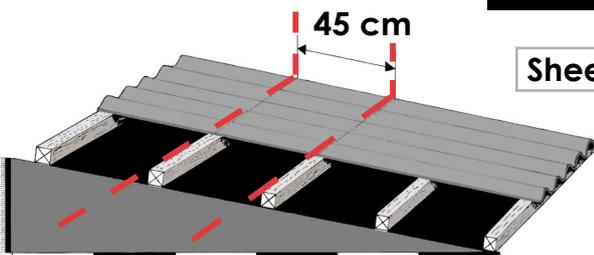


## Roof Slopes of: 10° to 15° degrees (Gradient: 1 in 6 to 1 in 4) **Option 2**

SLOPE 10° to 15°

Support below sheet: Fix to Purlins at 45 cm (18") centres (max).

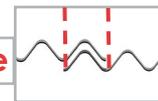
### Onduline sheet fixing specification:



Sheet end lap: **20 cm**



Corrugation side lap: **One**



Nails or screws per sheet: **20**

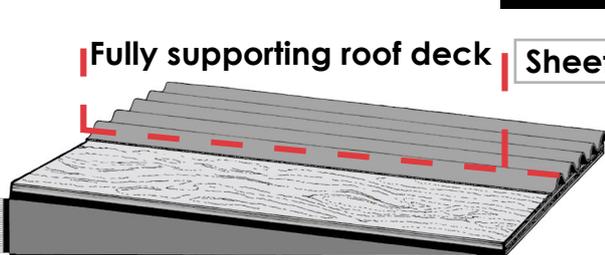


## Roof Slopes of: 5° to 10° degrees (Gradient: 1 in 11 to 1 in 6) **Option 3**

SLOPE 5° to 10°

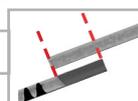
Support below sheet: Fix on fully supporting roof deck (20 mm min).

### Onduline sheet fixing specification:

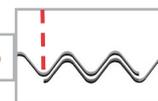


Fully supporting roof deck

Sheet end lap: **30 cm**



Corrugation side lap: **Two**



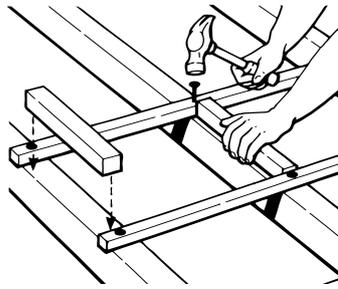
Nails or screws per sheet: **20**



## Fixing details:

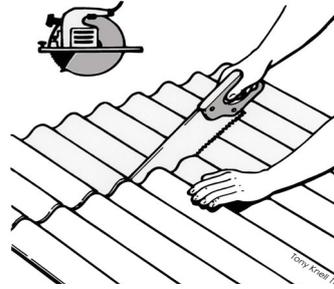
To get the best from Onduline sheeting it is essential to fix it in accordance with the fixing instructions.

Follow these Fixing details and create an attractive, durable, low-maintenance roof on your building



### 1. Setting Out

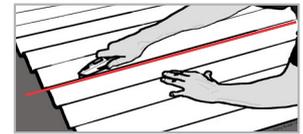
Purlins must be of sufficient section to give support between the rafters. Set purlin centres as detailed on the left. Use spacers to keep the purlins square.



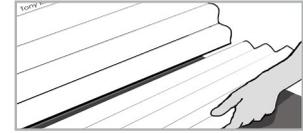
### 2. Cutting

First mark the sheet then cut with an oiled coarse-toothed handsaw or preferably a power saw.

### 1: Score sheet up cut line



### 2: Fold sheet to separate.



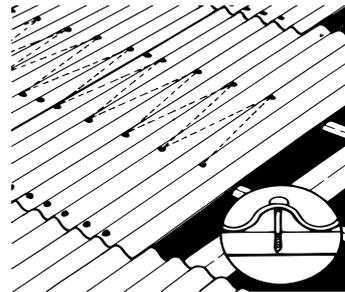
### 3. Cutting up corrugation.

First mark cut line in base of the sheet corrugation, next cut along the line and fold back the sheet along the cut / scored line to separate the sheet into two sections.



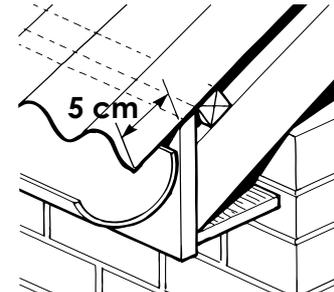
### 4. Sheet fixings

Only use Onduline plastic PP Monobloc or Safetop nails; or Onduline Universal screws; alternatively Safetop washers and cap assemblies can be used with proprietary screws.



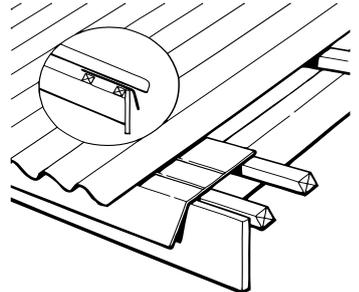
### 5. Nailing or screwing

Nail sheets every corrugation at the eaves and sheet overlaps and either side of vertical joints. Nail every other corrugation on intermediate purlins.



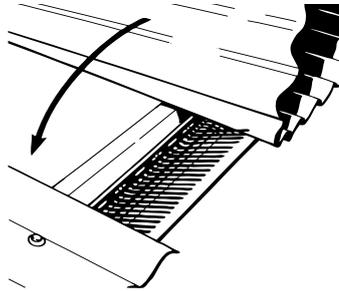
### 6. Eaves Detail

The maximum sheet overhang at the eaves is 5 cm. Reduce the distance of the first purlin from the fascia accordingly.



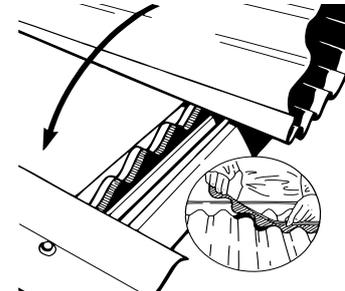
### 7. Eaves Tray

Developed for the use with the Oversheeting & Ondutile systems, the tray can also be used to reduce sheet overhang at the eaves in situations such as width restricted box gutters.



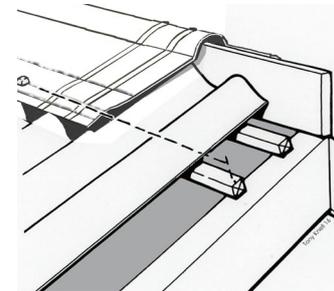
### 8. Eaves Ventilator Strip

Fixed to the eaves purlin it stops ingress of birds and large insects, whilst allowing free airflow.



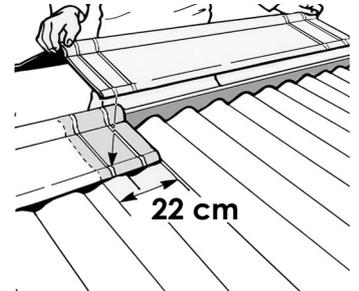
### 9. Corrugation Filler

Seals corrugations at eaves and ridge from penetration of the sand and dust into the roof space.



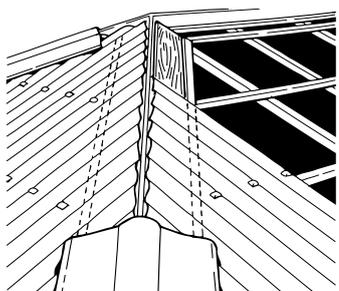
### 10. Ridge Unit Fixing

Fit ridge board and support purlin. Fix second purlin, its position being dictated by the roof pitch. The sheet/ridge can then be fixed.



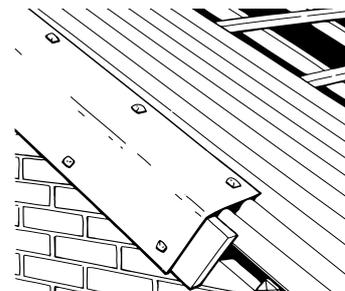
### 11. Ridge Unit Fixing

Start fixing the ridge at the opposite end of the roof from the prevailing winds align weathering grooves to form a 22 cm overlap, secure at every other corrugation.



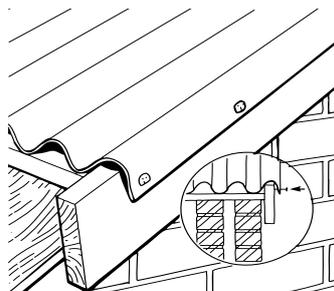
### 12. Hip Detail

Fix hips before ridge. Lay support boards and trimming purlins. Nail ridge units to trimming purlins, cut and dress units and overlay with ridges.



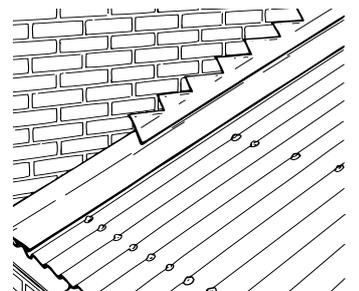
### 13. Verge Fixing

Fasten timber barge board level with the top of finished Onduline roof. The Onduline verge units are then overlaid and nailed into position.



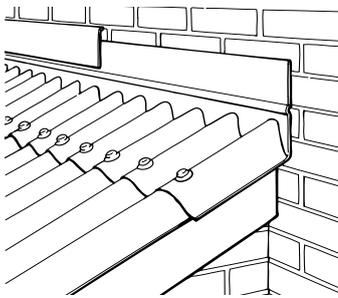
### 14. Verge Fixing

Alternatively, fix barge board level with the underside of the Onduline corrugation and overhang corrugation. Fold down and nail in position.



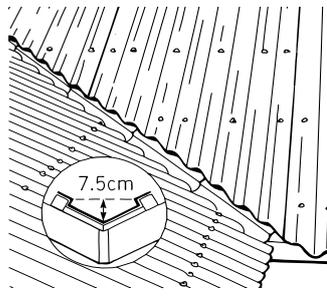
### 15. Side Wall Abutment

Form side wall flashing to Onduline roof, using Onduline flashing tape or similar and fix separate cover flashing to the wall.



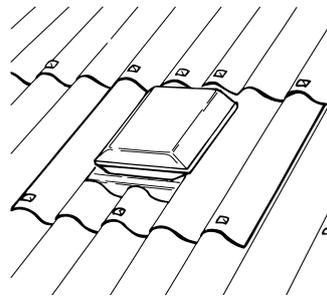
### 16. Abutment Flashing

Use Onduline pre-formed apron flashing to seal end wall abutments. Use separate cover flashing to the wall to allow for movement.



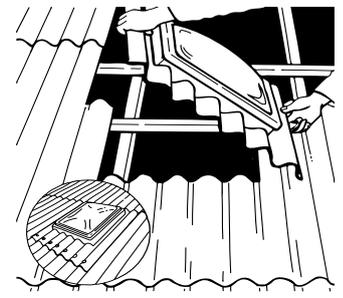
### 17. Valley Lining

Fix valley boards/trimming purlins and lining using either Onduline, metal, or GRP performed liner units. The vertical valley depth should be a minimum of 7.5cm.



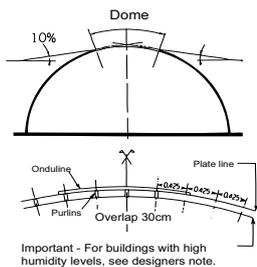
### 18. Roof Ventilator

Onduline roof ventilators are available in two sizes to provide increased ventilation. They should be used on buildings with high humidity. Simply lay unit into sheet and nail into position.



### 19. Roof Window

Provides illumination and ventilation but does not reduce the thermal insulation performance of the roof. Cut opening in sheet and nail into position.



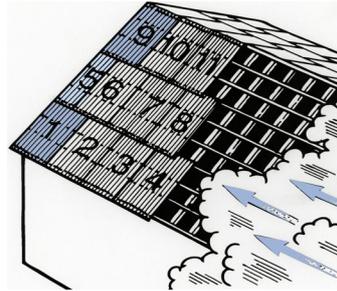
### 20. Curved Roof Detail

The peak of the curve must be supported on 12mm plywood sheet layered over purlins, with double corrugation side lap and 30cm end lap, purlins on side walls revert to 61cm with ventilation provision.



### 21. Roof Lights

Onduline Plastics roof lights are easily fixed for natural illumination. Refer to the They require pre-drilling before nailing into position.



### 22. Sheet Layout

Start fixing sheets at the opposite end of the roof from prevailing winds. Cut a sheet in half vertically (ref drawing 3) to start alternate sheet courses forming a broken bond sheet pattern.



### 23. Identify the top of sheet

Roof Take care to fix Onduline sheets the correct way up, the underside is easily identified by its dimpled rough surface finish, whilst the top of the sheet has a smoother surface finish.

### 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.

### Ondutiss roof underlays:

Onduline 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 avoid this problem. Onduline Ondutiss underlays and ventilation accessories will assist with in this provision.

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