

ONDULINE FIXING GUIDE

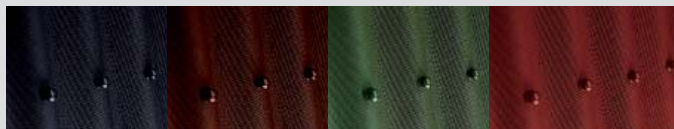
Easy to handle
Simple to fix
Ideal for DIY



Onduline[®]
SOUTH AFRICA

www.onduline.co.za

Available in Black, Brown, Green & Red



ONDULINE[®] is the world's largest manufacturer of bituminous sheets. ONDULINE[®] roofing sheets are easy to handle and so simple to use. The design guide sets out the correct fixing method, illustrates how ONDULINE[®] accessories can be used to provide simple solutions to your design requirements.

ONDULINE[®] MATERIAL COMPOSITION

ONDULINE[®] is a bituminous corrugated roofing sheet developed over 50 years to provide outstanding weathering performance.

It is manufactured from a mono-layer of organic fibers impregnated with bitumen under pressure and heat. The colour pigmentation system stains the colour into the sheet. The resulting sheet is flexible and corrosion resistant.

- Guaranteed waterproof for 15 years
- Easy to fix and handle, requiring no specialist skills or equipment
- Contains no asbestos and presents no health hazard.

ONDULINE[®] APPLICATIONS

ONDULINE[®]'s versatility makes it ideal not only for conventional mono and duo pitched roofs, but also for a wide range of specialist applications. Contact the sales office for further details.

Curved roofs

The flexibility of ONDULINE[®] sheeting makes them perfect for curved roof projects (see illustration 18).

Oversheating system

ONDULINE[®]'s light weight makes it ideal for overheating existing deteriorated corrugated roofs.

Vertical cladding

ONDULINE[®] is used extensively as a wall cladding and rain screening material.

ROOF SUPPORT STRUCTURES

It is essential that the correct support be given to ONDULINE[®] sheets. Use this table to avoid problems. First establish the roof pitch. You can then check if a decking is required, or at what centres the purlins should be fixed. Finally, note the sheet end and corrugation side lap.

Roof pitch



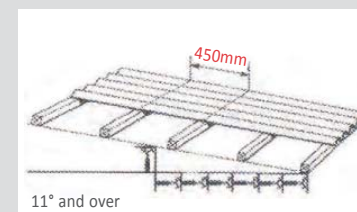
5 - 10°

Support: decking or purlins at 450mm centres

End lap: 300mm (sealed internally)

Side lap: 2 corrugations

Gradient: 1 in 11 tot 1 in 6



More than 11°

Support: purlins at 450mm centres

End lap: 200mm

Side lap: 1 corrugation

Gradient: 1 in 6 tot 1 in 4

ONDULINE[®] ROOF DESIGN

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[®] ventilation accessories will assist with prevention of condensation.

Insulation can also be easily incorporated to create a warm roof construction.

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 regularly be painted.

Designer's note

On curved roofs over buildings with high humidity levels, ie. agricultural animal housing, it is essential that high levels ventilation is incorporated and the dome centre sheet is fully supported. (Details available from the technical department).

ONDULINE[®] - GUARANTEE

ONDULINE[®] sheets, if installed in direct compliance with the manufacturers fixing instructions, are covered against water ingress as a result of defective material, for a period of 15 years. Defective workmanship, hail damage and colour retention is not covered in terms of the guarantee.

Onduline
SOUTH AFRICA

Onduline South Africa
1 Derick Coetzee Rd, Jetpark, Boksburg
T : 0861 98 99 89
info@onduline.co.za – www.onduline.co.za

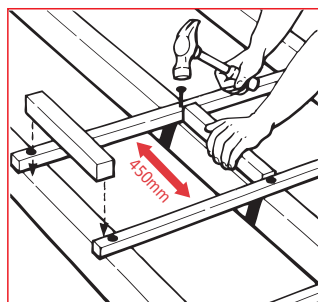
FIXING GUIDE

To get the best from ONDULINE® sheeting, it is essential to fix it in accordance with these instructions.

To identify the technical terms referred to, consult the drawing on the back cover.

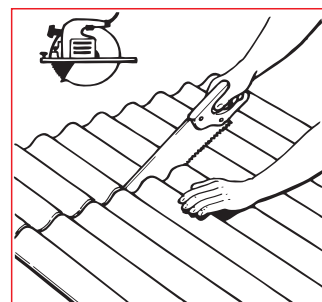
ADVANTAGES:

- Top insulation
- Wind withstanding
- Ecological
- High flexibility



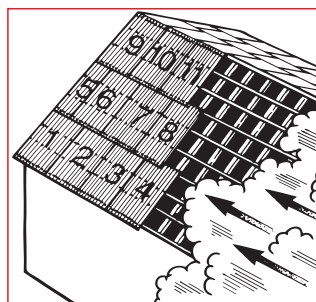
1 Setting out

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



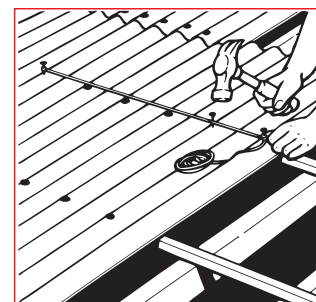
2 Cutting

First mark out the sheet cut with an oiled course-toothed handsaw, or preferably a power saw.



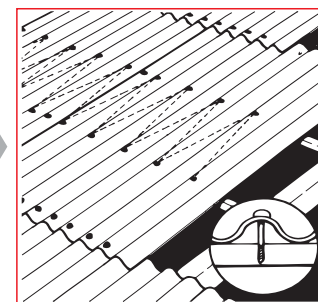
3 Sheet layout

Start fixing sheets at the opposite end of the roof from the prevailing winds. Cut a sheet in half vertically and use to lay sheet courses in a broken bond pattern.



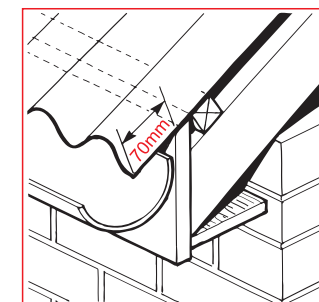
4 Nailing

Use only Safetop nails on timber, check if you have the correct side and end sheet laps. Use a sting line to keep fixings on line.



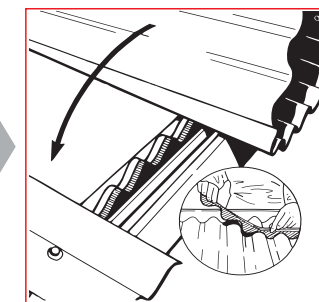
5 Nailing pattern

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



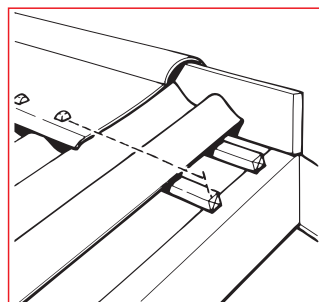
6 Eaves detail

The maximum sheet overhand at the eaves is 700mm. Reduce the distance of the first purlin from the fascia accordingly.



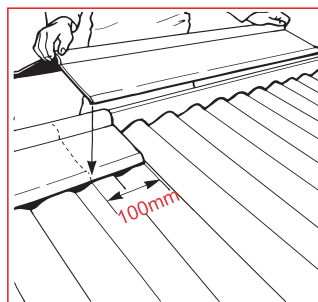
7 Corrugation filler

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



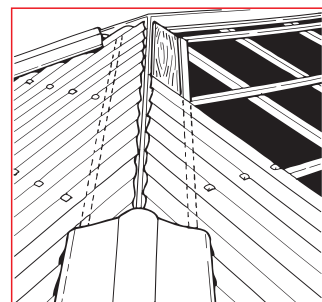
8 Ridge unit fixing

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



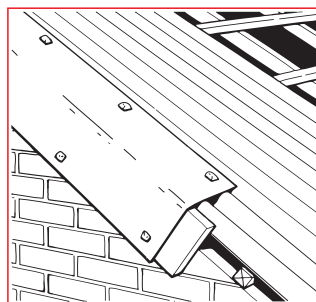
9 Ridge unit fixing

Start fixing the ridge from the opposite end of the roof from prevailing winds and from a 100 mm overlap. Use a string line to align and nail at every corrugation.



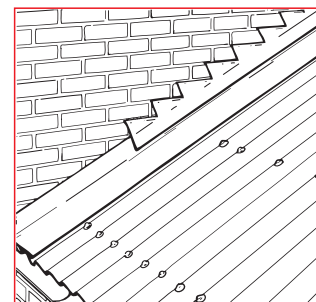
10 Hip detail

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



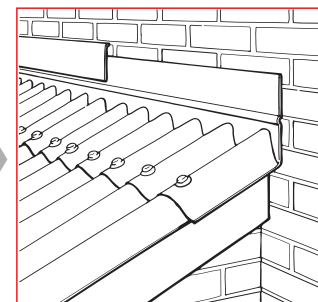
11 Verge fixing

Fasten barge board level with the top of finished ONDULINE® roof. Barge boards are then overlaid and nailed into position.



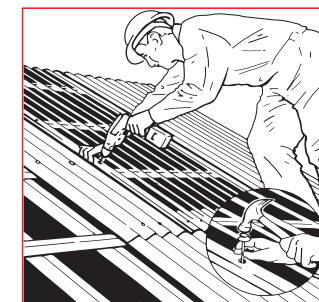
12 Side wall abutment

Form side wall flashing to ONDULINE® roof using ONDULINE® flashing tape or similar and fix separate cover flashing to wall.



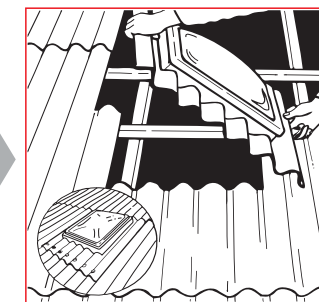
13 Abutment flashing

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



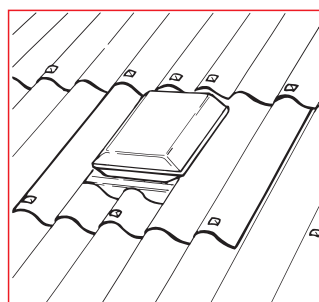
14 Roof lights

ONDULINE® glass fibre roof lights are easily fixed for natural illumination. They require pre-drilling before nailing into position.



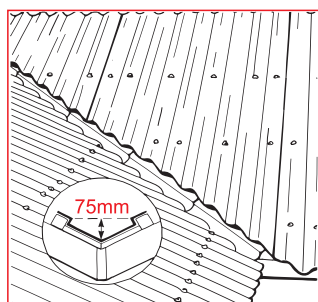
15 Roof window

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



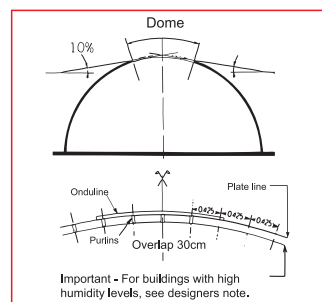
16 Roof ventilator

Roof ventilators are available in two sizes to provide increased ventilation. Simply cut opening in sheet and nail in position.



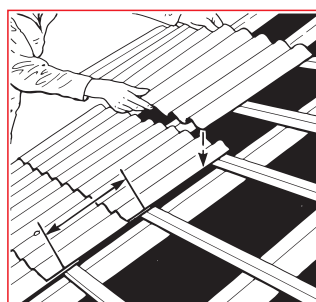
17 ONDULINE® valley lining units

Fix valley boards / trimming purlins and line with either aluminium, metal or GRP preformed liner units. The vertical valley depth should be 75mm.



18 Curved roof detail

Cover the dome with a full sheet laid with double corrugation side lap and 300mm end lap, supported on purlins at 435mm centres. The purlin centres on side walls revert to 610mm.



19 ONDULINE® tile effect

Cutting ONDULINE® sheets into 500mm lengths and fixing with 200mm overlap easily creates a pleasing tile effect shadow line.

Material specification (nominal)

Sheet size	2 x 0,95m
Weight	6,4kg
Corrugation size	9,5 x 3,8cm
Colour	PP Prepigmented Black, Brown, Green and Red

Note: take care to fix the black ONDULINE® sheets the correct way up. The underside is easily identified by its dappled surface finish.

Building Notation

