1. Laying of Purlins

- Fix the bottom purlin first.
- The purlin spacing has to be maintained at 45cm.
- Ensure that the purlins are in one straight line & parallel to each other.

2. Fixing of sheets

- Start fixing sheets at the opposite end of the roof from prevailing winds.
- Cut a sheet in half vertically, and use to lay sheets courses in a broken bond pattern.
- Using a broken bond pattern reduces the overall thickness of the structure. Follow this for every alternate row.

3. Following the overlapping rules is important to ensure a total waterproofing over time. Side and end overlapping vary according to the roof pitches.

<table>
<thead>
<tr>
<th>Roof pitches</th>
<th>10-15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum purlin distance</td>
<td>45cm</td>
</tr>
<tr>
<td>Overhang at eaves</td>
<td>7cm</td>
</tr>
<tr>
<td>Minimum end overlap</td>
<td>20cm</td>
</tr>
<tr>
<td>Minimum side overlap</td>
<td>1 corrugation</td>
</tr>
</tbody>
</table>
4. Sheet fixing

- Minimum of 14 screws should be drilled per sheet:
  - 5 screws at each corrugation at the end overlap or eaves
  - 3 screws at first intermediate purlin of the sheet
  - 3 screws at second intermediate purlin of the sheet
  - 3 screws at third intermediate purlin of the sheet

- As Onduline is a flexible material, it is important to follow the fixing order and pattern.

5. Ridge fixing

- Add an extra purlin when necessary if the distance between the last purlin and the ridge is greater than 15cm.
- Start fixing the ridge at opposite end of the roof from prevailing winds.
- Maintain 15 cm minimum overlapping between ridges.

For the end overlap, use minimum 20 cm.
For the side overlap, use minimum 1 corrugation.

Select the correct type of drill screw to suit purlin type. Place the head of the drill screw in the socket of the drive tool. Align the top side of the corrugation with the centre of the purlin.
Drive the drill screw through the top of the corrugation and the purlin until the corrugation is correctly stressed.
The use of the drill with an adjustable torque setting is recommended to avoid over compressing the corrugation.
Always use Onduline fasteners for sheet fixing.
6. Hips

- Fix the hip before the ridge.
- Fasten the ridge to the purlins.
- Overlay and clean the ridges if necessary.

7. Valleys

- The vertical valley depth should be 7.5 cm.
- The sheets are cut across (parallel to the valley line). The overhang is 4 cm.
- Valleys could be either metal or Onduline supplied.

8. Curved roofs

When the frame design is established, continuously setup the lines courses to get the right positions of purlins.

Onduline sheets are recommended for curved structures with minimum radius of 6m.

* For detailed technical fixing guidelines, please contact our technical department.