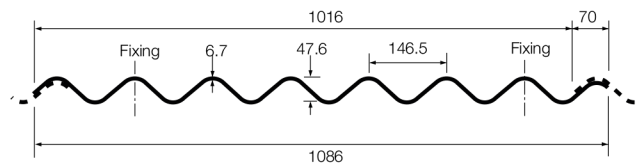


# Profile 6 installation guide

## Key facts

- Minimum pitch: 5° (88mm fall in 1m)
- Maximum purlin centres: 1375mm for loadings up to 1.89kN/m<sup>2</sup>
- There must always be 2 fasteners per sheet per purlin, no more and no less.
- Do not walk on the sheets – always use crawling boards, roof ladders, etc.



## Lap requirements

Establish the requirement for lapping and sealing by reference to the map of the UK right and the tables below.

### Sheltered to moderate sites

Less than 56.5 l/m<sup>2</sup> of wind-driven rain per spell.

Minimum Roof pitch	Minimum End lap	End laps treatment	Side laps treatment
≥22.5°	150mm	Unsealed	Unsealed
≥15°	300mm	Unsealed	Unsealed
≥15°	150mm	Sealed	Unsealed
≥10°	150mm	Sealed	Sealed
≥5°	300mm	Double sealed	Sealed

### Moderate to severe sites

More than 56.5 l/m<sup>2</sup> of wind-driven rain per spell.

Minimum Roof pitch	Minimum End lap	End laps treatment	Side laps treatment
≥25°	150mm	Unsealed	Unsealed
≥17.5°	150mm	Sealed	Unsealed
≥15°	150mm	Sealed	Sealed
≥10°	300mm	Sealed	Sealed
≥5°	300mm	Double sealed	Sealed

Buildings that stand above their surroundings, or are in area with no windbreaks within 1km, such as on coasts or hilltops, should be considered to be in areas of severe exposure.

For buildings in the North and West of Scotland and the Isles, denoted on the map by refer to the Highlands and Islands data sheet.

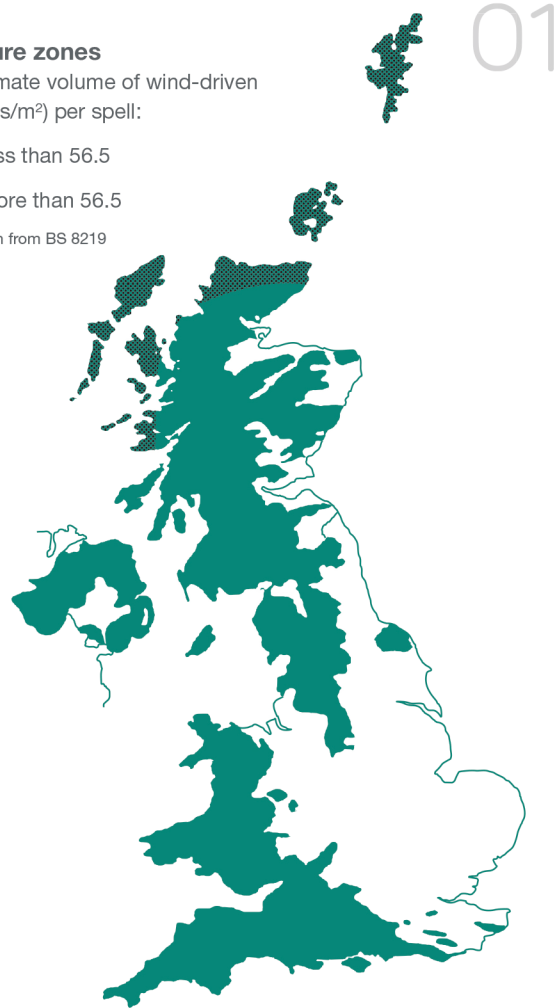
## Exposure zones

Approximate volume of wind-driven rain (litres/m<sup>2</sup>) per spell:

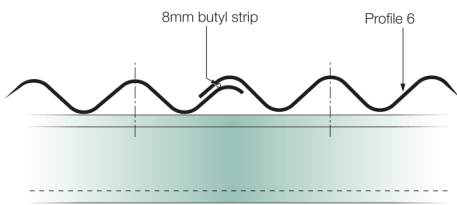
less than 56.5

more than 56.5

Note: Taken from BS 8219

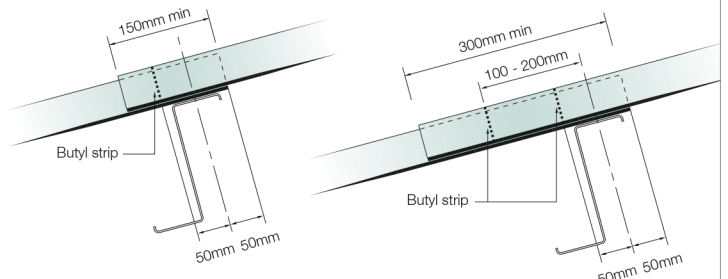


## 02



### Sealing

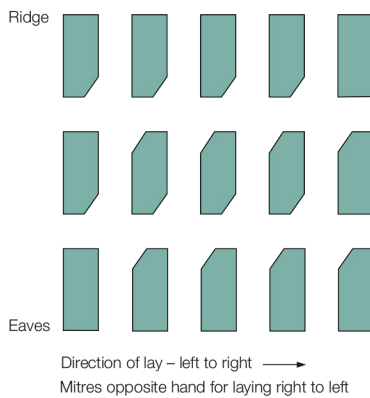
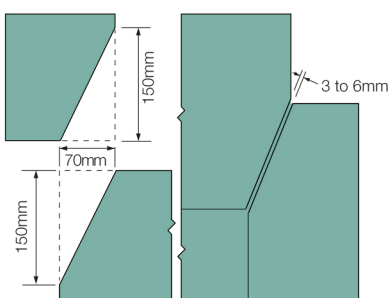
Lap sealant to be 8mm diameter butyl strip sealant, positioned as shown. Gun grade sealants are not suitable. When end laps are double sealed, the second strip of sealant should be 100-200mm below the fasteners.



## 03 Laying the sheets

Sheeting on both slopes should commence at one end of the building, rising in vertical tiers, 1 sheet wide from eaves to ridge. When using cranked crown ridges, it is essential that the slopes are accurately aligned.

## 04



### Mitres

To avoid 4 thicknesses of sheet at the junctions of side and end laps, 2 of the sheets have the corners mitred so they lay in the same plane. The nominal dimension of the mitre cut is the side lap (70mm) x the end lap (minimum 150mm). The gap between the mitre cuts of the 2 sheets should be 3-6mm.

When using cranked crown ridges, both the sheet and the ridge must be mitred but when using 2 piece ridges, mitres are not required. Profiled translucent sheets are generally laid unmitred, as are the corresponding fibre cement sheets at these junctions.

## 05 Fasteners

There must be 2 fasteners per sheet per purlin. Holes through the sheet must be drilled, never punched, and be 2 mm larger than the fastener diameter.

Topfix fasteners are commonly used as these drill through the Profile 6 sheet, open up the oversize hole and drill into the purlin. They also have an integral sealing washer. There are different fasteners for drilling into timber, light gauge steel and heavy gauge steel. Check with the manufacturer that the fastener is suitable for the roof pitch and purlin type. For single skin sheeting, the fastener sizes are typically as follows.

- 6.5 x 130mm for timber
- 6.3 x 105mm for cold rolled steel
- 6.3 x 110mm for hot rolled steel

Traditional fasteners, such as M8 x 120mm drive screws for timber, crook bolts for zed purlins and hook bolts for angle section purlins, should be used with sealing washers and caps.

The fasteners should be positioned on the first full corrugation to the side of the side lap (see opposite page). At end laps, the fasteners should be 50mm from the top end of the lap.

For vertical sheeting contact Marley Eternit for further advice.

