

Roof Razor® Insulation spacer

Description

Roof Razor® is an insulation spacer specifically designed for Australian metal roof construction. It sits between the roof structure and the external cladding membrane creating a space for insulation to recover to its full nominal thickness between purlins. Roof Razor® is a solution to the Section J requirement of the National Construction Code (NCC) that insulation must maintain its position and thickness between purlins.

Application

Roof Razor® is compatible with both pierced and concealed fix roof cladding and is suitable for use on roofs with a pitch up to and including 30 degrees.

Roof Razor® is specifically designed for fixing to metal purlins. For applications requiring a spacer solution suitable for timber battens, Roof Razor® is supplied without pre-loaded screws:

- For 85mm Roof Razor® Fletcher Insulation recommends screws that are 62mm long + penetration depth;
 - For 115mm Roof Razor® Fletcher Insulation recommends screws that are 92mm long + penetration depth.
- Note:** penetration depth is determined based on the type of timber used in addition to the screw manufacturer's recommendations.

Physical Characteristics

| Product description | Spacer height mm | Spacer length mm | Pieces per pack | Lineal metres per pack | Product Code |
|---|------------------|------------------|-----------------|------------------------|--------------|
| Roof Razor® Standard; pre-loaded | 60 | 1200 | 6 | 7.2 | 396299 |
| | 85 | 1200 | 6 | 7.2 | 396291 |
| | 115 | 1200 | 6 | 7.2 | 396292 |
| Roof Razor® Standard; not pre-loaded (for fixing to timber battens) | 85 | 1200 | 6 | 7.2 | 396295 |
| | 115 | 1200 | 6 | 7.2 | 396296 |
| Roof Razor® Cyclonic; pre-loaded | 60 | 1200 | 6 | 7.2 | 396300 |
| | 85 | 1200 | 6 | 7.2 | 396293 |
| | 115 | 1200 | 6 | 7.2 | 396294 |

Compliance

- Compliant with section J of the NCC Clause J1.2(c)
- Structurally engineered and certified for use
- Roof Razor® Cyclonic is Low-High-Low (LHL) tested in accordance with NCC Volume 1 Specification B1.2.

Roof Sheet Fastener Yield Capacity Requirements

| Non-Cyclonic | Cyclonic |
|--|---|
| 0.583kN per 12 gauge 14 TPI roof sheet fastener (not supplied) | 1.43kN per 14 gauge 10 TPI roof sheet fastener (not supplied) |

Roof Razor® Cyclonic is equipped with an extra batten insert to increase the fastener yield capacity, and is pre-loaded with 6 x 14 gauge 10TPI class 4 fasteners.

Physical Properties

| | Roof Razor® Standard | Roof Razor® Cyclonic |
|---|--|--|
| Cover | 1200mm | 1200mm |
| Weight | 2kg | 3kg |
| Wind regions | A&B | C&D |
| Roof sheet fastener yield capacity | 0.583 kN per 12g 14TPI (not supplied) | 1.43 kN per 14g 10TPI (not supplied) |
| Batten material | 1.15BMT G550 Z275 | 1.15BMT G550 Z275 |
| Cyclonic insert | N/A | 1.15BMT G550 Z275 |
| Pre-loaded fasteners (for fixing to purlin) | 6 x 12g 14TPI Class 4 | 6 x 14g 10TPI Class 4 |
| Minimum purlin thickness | 1.2 BMT | 1.5 BMT |
| Minimum purlin width | 50mm | 50mm |
| Fastener centres | 38mm | 38mm |
| Dead load capacity | 205kg between legs irrespective of span | 205kg between legs irrespective of span |
| Pack quantity | 6 | 6 |
| Pallet quantity and weight | 60mm: 240 (40 packs), 500kg 85, & 115mm: 180 (30 packs), 400kg | 60mm: 240 (40 packs), 680kg 85mm, 115mm: 180 (30 packs), 540kg |
| Pallet dimensions L x W x H (m) | 60mm: 1.15 x 1.25 x 0.98 85mm: 1.15 x 1.25 x 0.80 115mm: 1.15 x 1.25 x 0.98 | 60mm: 1.15 x 1.25 x 0.98 85mm: 1.15 x 1.25 x 0.80 115mm: 1.15 x 1.25 x 0.98 |

Roof Razor Load Capacity Table (kPa)

| Spacing of Purlins (mm) | Load Direction | Roof Razor Fixing Centres (mm) | | | |
|-------------------------|----------------|--------------------------------|-------|----------|-------|
| | | Non Cyclonic | | Cyclonic | |
| | | 240 | 480 | 240 | 480 |
| 600 | Down | 98.80 | 24.70 | 98.80 | 24.70 |
| | Up | 19.86 | 9.93 | 10.96 | 5.48 |
| 900 | Down | 65.87 | 16.47 | 65.87 | 16.47 |
| | Up | 13.24 | 6.62 | 10.96 | 5.48 |
| 1200 | Down | 49.40 | 12.35 | 49.40 | 12.35 |
| | Up | 9.93 | 4.97 | 9.93 | 4.97 |
| 1500 | Down | 39.52 | 9.88 | 39.52 | 9.88 |
| | Up | 7.94 | 3.97 | 7.94 | 3.97 |

Notes

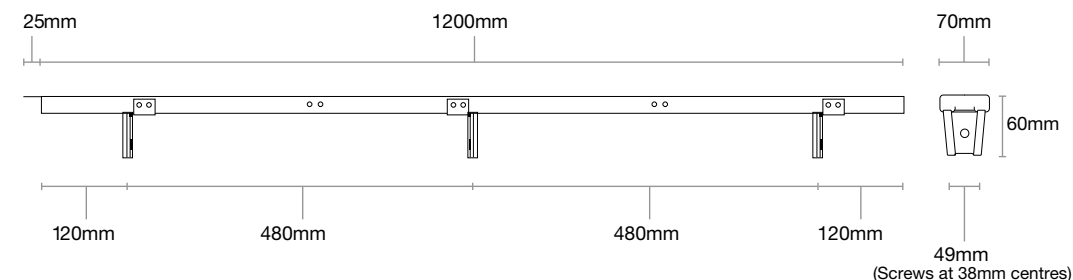
1. All loadings shown are ultimate strength limit and state design wind capacity.
2. All screws to AS3566.1:2002 (R2015).
3. Calculations are based on the use of #14 gauge fixing screws, for metal framing only.

Material Specifications

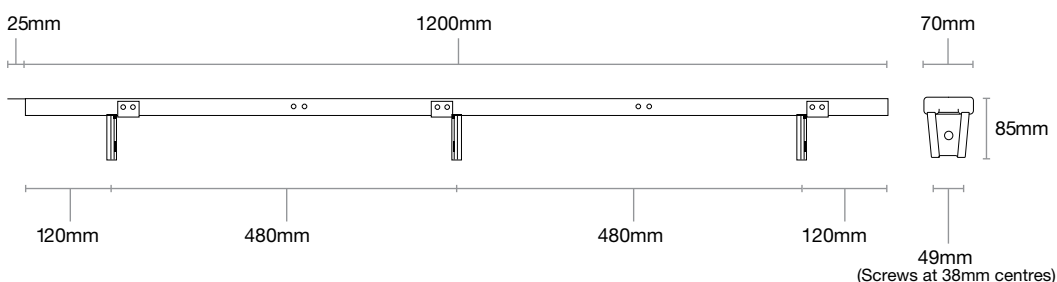
Roof Razor® is available in three heights to suit most commonly used blanket thicknesses:

- 60mm Roof Razor® is suitable for use with 75-80mm thick building blanket;
- 85mm Roof Razor® is suitable for use with 100-120mm thick building blanket;
- 115mm Roof Razor® is suitable for use with 130-145mm thick building blanket.

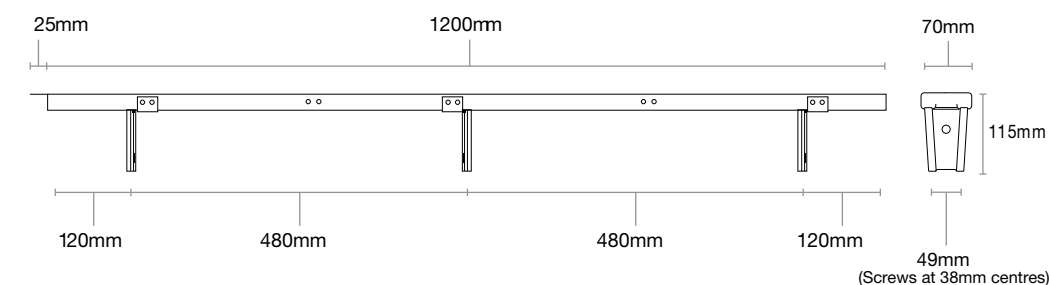
60mm high to suit blankets 75-80mm



85mm high to suit blankets 100-120mm



115mm high to suit blankets 130-145mm



Technical Specification

When specifying, state the following:

Fletcher Insulation 60mm, 85mm or 115mm Roof Razor® insulation spacer.

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