

Roof Razor® Insulation Spacer

Introduction

This installation guide provides installation recommendations for Roof Razor® Insulation Spacer for use in commercial metal deck roofing.

Important Notes

Prior to installation, ensure the Roof Razor® Insulation Spacer is suitable for the project application either by referring to the product Technical Data Sheet available for download via www.insulation.com.au or by phoning Fletcher Insulation on 1300 654 444.

When installing Roof Razor® Insulation Spacer, the methods used must be safe and in accordance with relevant safe work practices, Australian Codes and Standards.

- Ensure all safety assessments are carried out relevant to the project and all site safety requirements are strictly adhered to.
- Roof Razor® insulation spacers are to be installed in conjunction with Permastop® or Pink® building blanket products, which must be protected from rain or adverse weather conditions and kept completely dry prior to and during install.

- Ensure the Roof Razor® height is suitable for the thickness of Permastop® or Pink® building blanket to be installed.
- All insulation shall be installed in accordance with AS 3999.
- Refer to latest ICANZ Installation Handbook Part 2: Professional Installation Guide for further information and tips.
- Avoid compressing or over fixing insulation as this will reduce the thermal performance of the installed product.

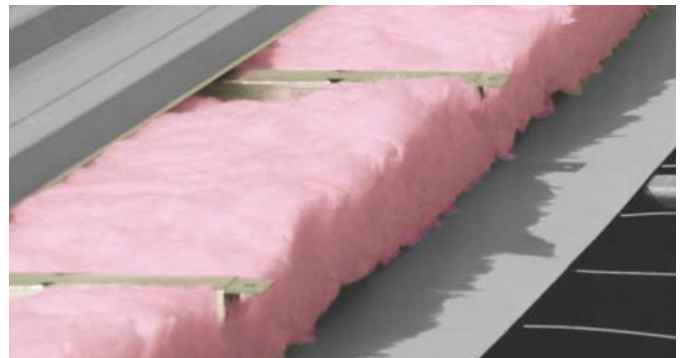


Figure 1: Typical Roof Razor® installation detail (excludes Australian tropical regions)

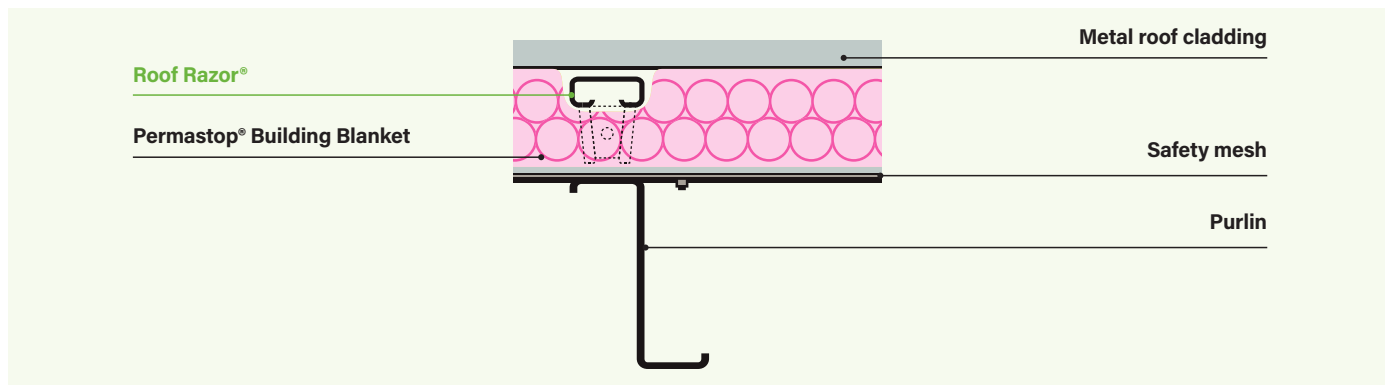
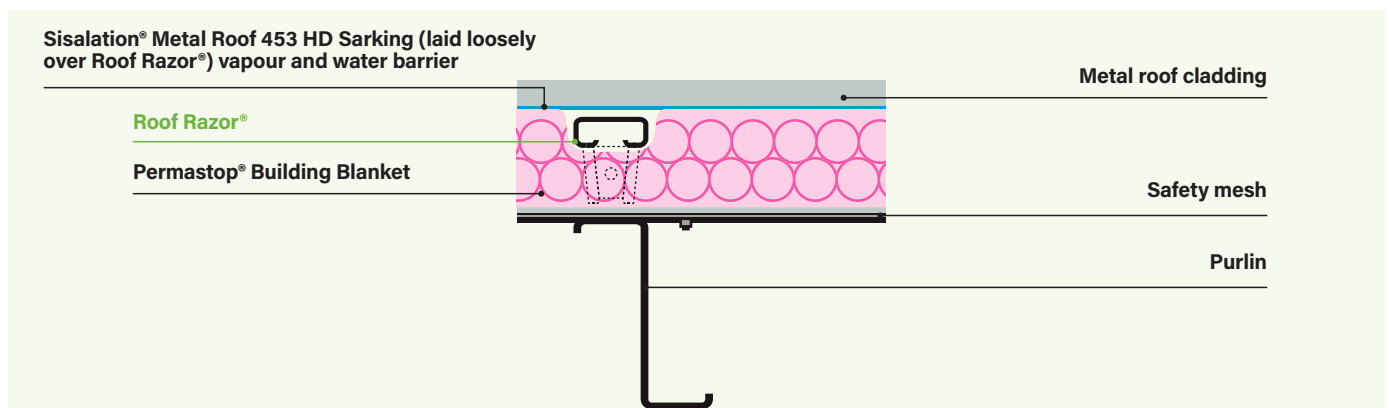


Figure 2: Typical Roof Razor® installation detail for Australian tropical regions



Materials required

- Calculate the quantity of Roof Razor® insulation spacers required, based on total purlin length for the roof area.
- Select Roof Razor® height based on the thickness of the Permastop® or Pink® building blanket to be installed.
- Select fasteners of 60mm, 85mm or 115mm length (to suit Roof Razor® bracket height), if brackets are NOT pre-loaded.
- 12g fasteners for non-cyclonic regions (6 per bracket).
- 14g fasteners for cyclonic regions (6 per bracket).
- As a general rule, allow for 5% wastage for simple roofs and greater allowances for more complex roofs.

Tools



Cordless drill

And spare batteries.



Drive bits

12g/14g as required.



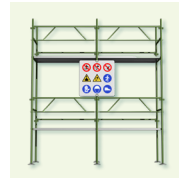
Brackets

Roof Razor® brackets preloaded with 6 fasteners. 12g for non-cyclonic and 14g for cyclonic.



Clothing & PPE

Appropriate wear for site (refer below).



Elevated platform

Or scaffolding as needed.

PPE

Personal Protective Equipment (PPE) must be compliant with the requirements of the specific worksite. Check with site foreman or site representative to ensure that required PPE obligations are met. As a recommendation for handling and installing insulation materials, the following PPE is recommended:



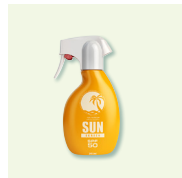
Sunglasses

Safety sunglasses to AS 1336, broad brim hat and sunscreen.



Wide brim hat

Large enough to shade the neck.



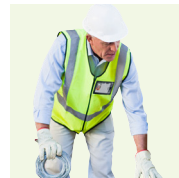
Sunscreen

Use sunscreen on any skin not covered by clothes.



Gloves

Durable gloves are recommended.



Work clothes

Loose fitting clothes, including long sleeved shirts, long pants and cap or hard hat.



Safety shoes

Safety boots/shoes must be worn to protect feet.



Fall protection

Harnesses must be installed and operational.

Safety



Assess

Assess the building structure and site for any safety issues prior to commencing work.



Check

Make note of the location of equipment in the soffit such as lighting luminaires and fire sprinklers.



Electrical wires

Ensure the work area is safe from hazards including electrical cabling. Do not touch any live electrical cables.



Isolate power

If accredited, isolate power at the circuit board where necessary and apply caution tags to circuit breakers.



Electrician

If not accredited, ask appropriate site representative to isolate power at the circuit board where necessary and apply caution tags to circuit breakers.



Height

Working at height can be dangerous, exercise caution when climbing ladders or accessing elevated platforms.



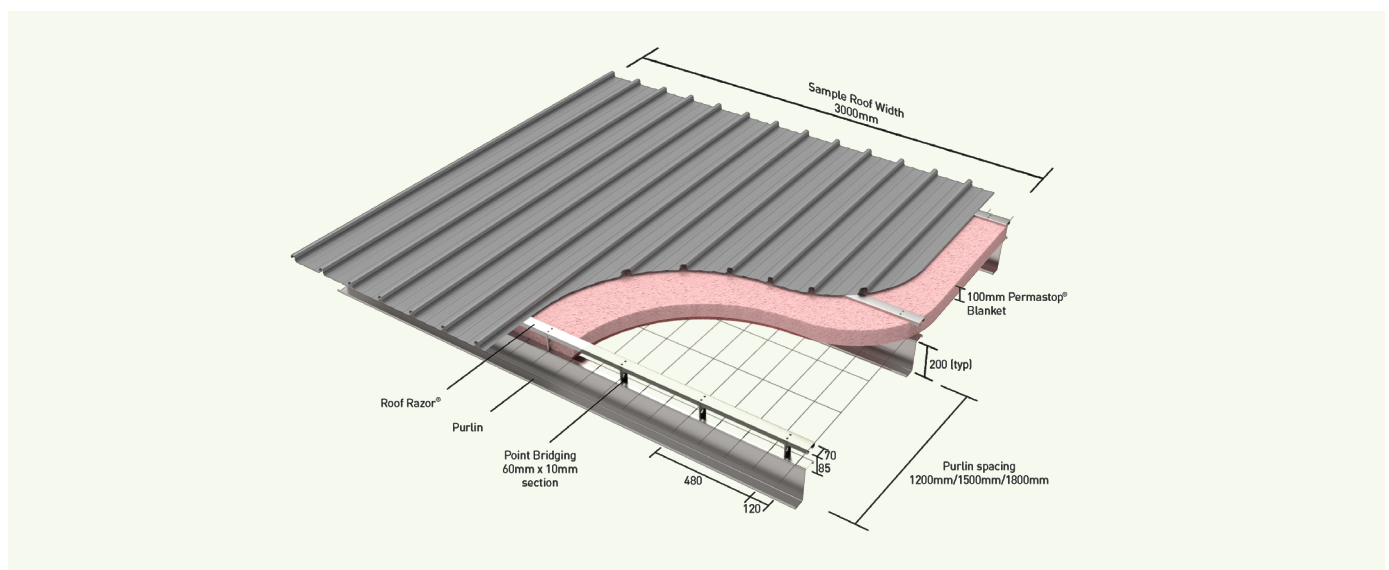
Stay hydrated

Working on roofs can cause heat related illnesses and possible dehydration. Drink water to stay hydrated.

Commercial roofing

- Run tape strapping at regular intervals (3–4 straps per batt) and at 90° to the joists. Install the safety mesh as per the manufacturer's guidelines and in compliance with Codes and Regulations. The safety mesh shall be pulled taut.
- Lay the Permastop® Building Blanket (reflective surface facing down) as per the manufacturer's guidelines and in compliance with relevant Codes and Regulations.
- In Australia's tropical climate regions, Sisalation® Metal Roof 453 HD Sarking should be installed atop of the Roof Razor®, taped and sealed with 72mm wide Vapastop® 883 Reinforced Foil Tape and directly under the metal roof cladding.
- Position Roof Razor® so that the end of its top channel is in line with the side edge of the Permastop® Building Blanket and is centred above and parallel to the top side of the purlin.
- Fasten Roof Razor® onto the purlin using the fixings provided. Firm downwards pressure will be needed to ensure contact of the fixing to the purlin through the Permastop® Building Blanket. Ensure all fixing screws are fastened.
- Lay the roof cladding as per manufacturer's guidelines.
- For cyclonic regions, the fixings must penetrate the flat surfaces of both the top channel of the Roof Razor® and the smaller channel reinforcement beneath it. Fixings must be in the centre of the channel with a variance of no more than 12mm to either side.
- When laying consecutive Roof Razor® brackets, ensure that the tab from one end of the bracket slides completely into the flush end of the next. Abut the two brackets 'hard up' to avoid 'over running' Roof Razor® over long runs.
- The last Roof Razor® on each run can be cut to length by way of a suitable metal cutting tool such as a saw or grinder. A vertical support bracket must be no greater than 120mm from the cut edge. The last vertical support bracket can be removed from the off-cut and relocated as follows:
- Remove the pre-loaded fasteners by unscrewing them from the vertical screw guide.
 - Using a flat edged tool such as a screwdriver, disconnect the screw guide by using the tool as a wedge between the vertical flange of the screw guide and the side of the channel.
 - If the last set of pre-punched holes are within 120mm from the cut edge, relocate the bracket to these holes. If the last set of pre-punched holes are greater than 120mm from the cut edge, fix the top flat edge of the bracket to the underside of the channel with two fixings (one on either side of the underside of the channel).
- Use 2 x 12-14 x 25s for non-cyclonic, or
- Use 2 x 14-10 x 25s for cyclonic regions (not supplied).
- Fix the bracket so that the pre-supplied fixing screws can be replaced into the bracket and so that the heads of the fixings clear the channel when installed.
- Install fasteners as needed.

Figure 3: Typical Roof Razor® installation detail (excludes Australian tropical regions)





1
An overlapping tab specifies where to position the consecutive Roof Razor®.



2
Roof Razor® spans the entire blanket width allowing for a direct line of sight to the purlin.



3
Fasteners are pre-loaded and provide easy access to the fastener head.



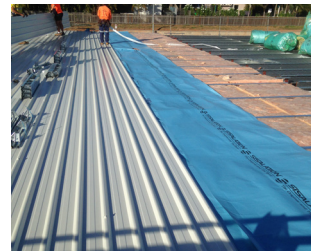
4
Roof Razor® is wide and stable enough to walk and balance on.



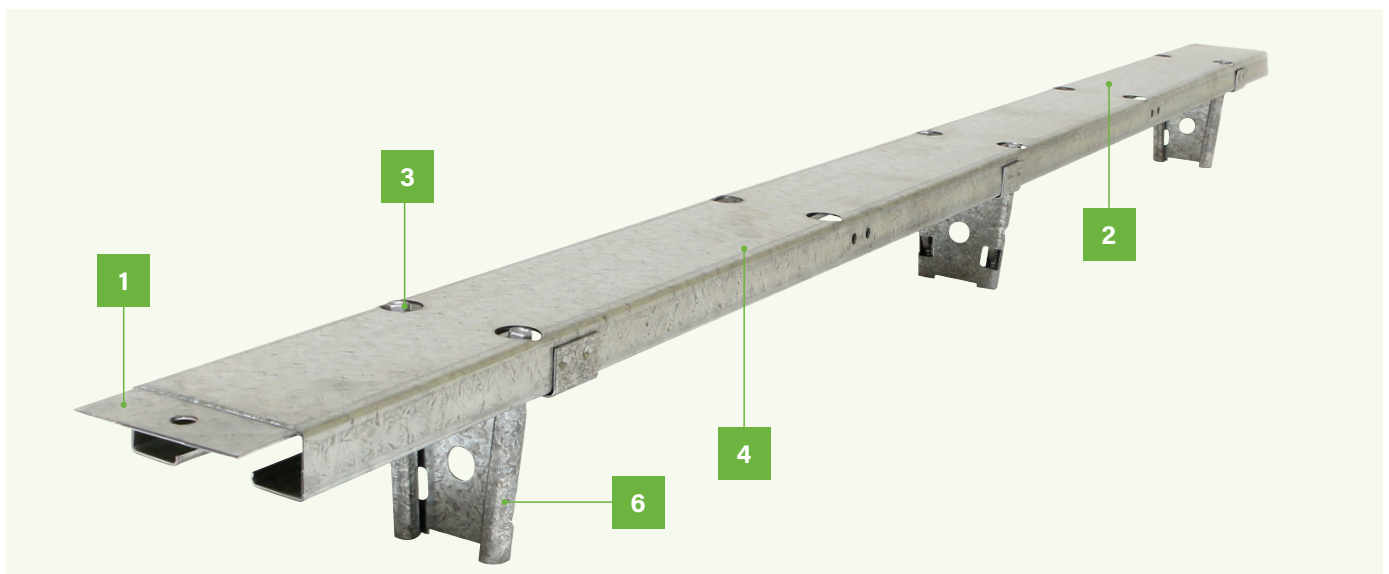
4
Roof Razor® can be trafficked the same as a purlin.



5
A direct connection to the purlin gives a straight and consistent finish.



Please note: In Australia's tropical climate regions Sisalation® Metal Roof 453 HD Sarking should be installed atop of Roof Razor®, taped and sealed with 72mm wide Vapastop® 883 Reinforced Foil Tape and directly under the roof cladding.



Note: If your application/installation is outside these guidelines, please contact Fletcher Insulation technical support at technical@insulation.com.au prior to commencing the install.

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