

The Insulation Spacer reducing thermal bridging

- ✓ Load bearing
- ✓ Australian made
- ✓ Meets or exceeds
NCC 2019
requirements

Roof Razor[®]
For commercial metal roofs

Designed to achieve optimal thermal performance and reduce thermal bridging

At **Fletcher Insulation**, we know the importance of insulation in a building. That's why we want to ensure that you get optimal thermal performance through selecting the right products to achieve the desired thermal performance for the building.

The Fletcher Insulation range of building blankets includes Pink® Building Blanket, Permastop® Building Blanket and Permatuff™ Building Blanket, which are designed to provide thermal performance for metal roofing applications.



In Climate zone 1 (humid tropical locations), an additional layer of reflective foil laminate is installed over the top of Roof Razor® for increased condensation protection.

When designing a system where Fletcher Insulation's range of Building Blanket is used, it is important to ensure you allow for a product that helps the blanket achieve maximum thermal performance.

The unique design of Roof Razor® results in a strong but narrow footprint on the purlin that significantly reduces thermal bridging, allowing the designer to meet or exceed NCC2019 requirements.

Roof Razor® roofing spacer is engineered to minimise the amount of compressed blanket atop the purlin, as the innovative design cuts through the blanket like a razor, allowing full recovery of the insulation between the safety wire mesh and metal cladding.

Proudly Australian made and designed for Australian buildings and insulation products

Roof Razor® is proudly made in Australia and thoughtfully designed with a 1200mm length to match typical Permastop® Building Blanket width, allowing a direct line of sight to the purlin.

Key features and benefits

Suitable for roof pitches up to 30 degrees	Accommodates most commercial roof applications.
Small footprint	Reducing the impact on thermal bridging.
Supplied with pre-loaded screws	Easy to install, does not require additional components such as starter blocks thus speeding up installation times.
Australian made	Specifically designed for Australian metal roof construction.
Available in a range of heights	To assist with the selection of Fletcher Insulation roofing blanket.
Delivered in multiple pallet drops along the roof	No need to move product down the line which reduces manual handling time and creates a safe and efficient work practice.
Compatible with both pierced and concealed fix roof cladding	Suitable for most commercial metal roofing manufacturer's roofing profiles.
1200mm length to match typical Permastop® Building Blanket width	Allows a direct line of sight to the purlin.
Cuts through insulation to give a direct connection to the purlin	Forms a strong secure connection to the purlin.

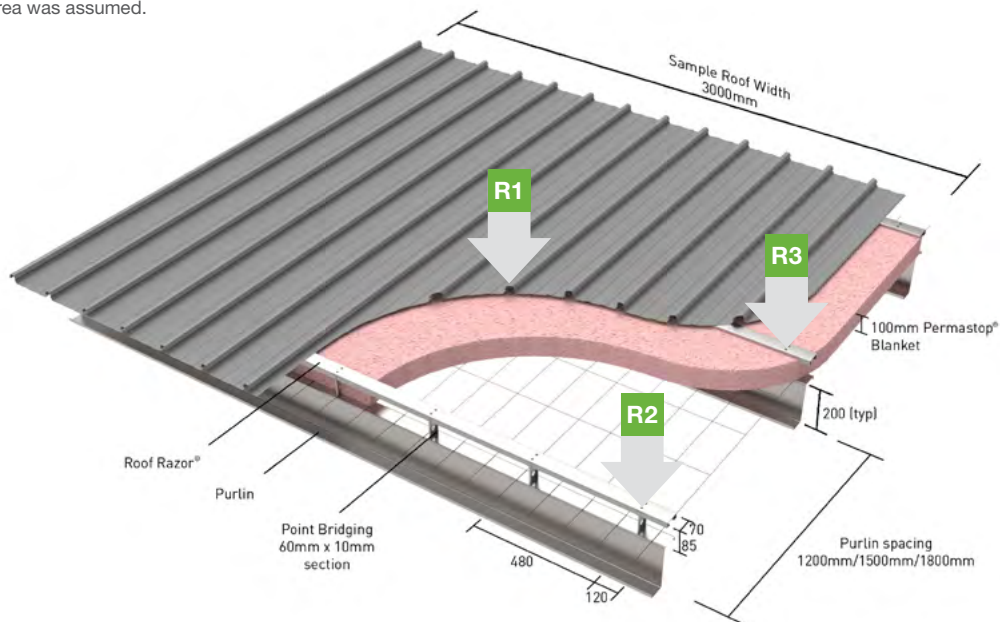
Achieving reduced thermal bridging with thermal resistance pathways

Thermal bridges are paths where heat can escape quicker than it does through the surrounding materials, regardless of your insulation. A thermal bridge is formed when the insulation layer is bypassed by a very conductive material, allowing heat to be transferred through and reduce its overall effectiveness.

The distinctive design of Roof Razor® offers a resilient but reduced footprint on the purlin that considerably reduces thermal bridging, allowing designers to meet or exceed NCC2019 requirements. Roof spacer systems with a greater footprint may not achieve the thermal performance benefits that Roof Razor® can deliver.

Thermal resistance pathways for a typical roof	Fractional area*
R1 – Through bulk insulation	F1 = 92%
R2 – Through Roof Razor® leg and purlin	F2 = 0.2%
R3 – Through Roof Razor® and partially compressed insulation	F3 = 7.8%

*Fractional areas depend on roof construction and can differ between projects. In this case an 8% purlin area was assumed.



Example calculation of system R-value*

Metal roof deck with 130mm Permastop R3.0 roof blanket and 115mm Roof Razor® Insulation Spacer attached to steel purlins with no ceiling.

*For individual project system R-value calculations please refer to Fletcher Spec Pro at [insulation.com.au/tools/fletcherspecpro/](https://www.insulation.com.au/tools/fletcherspecpro/) or contact Fletcher Insulation Technical Service on 1300 654 444 or technical@insulation.com.au



	R-value in Winter (up)	R-value in Summer (down)
Layer 1 outdoor air film	R0.04	R0.04
Layer 2 roof sheet	R0.00	R0.00
Layer 3 insulation 115mm Roof Razor® FI safety mesh	R2.97	R2.67
Layer 4 indoor air film	R0.23	R0.80
Total R-value	R3.24	R3.51

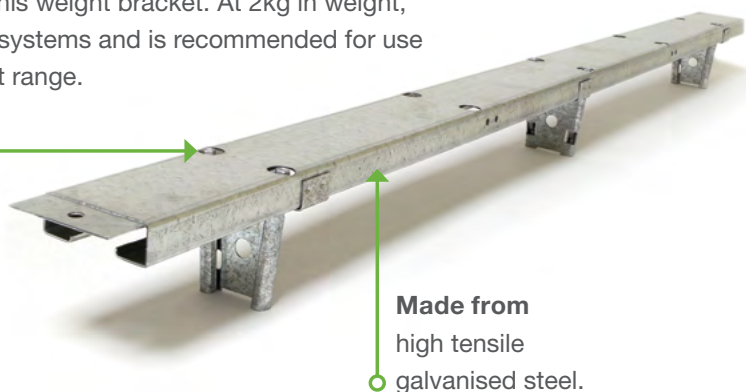
Reference: NZS 4214 Methods of determining the total thermal resistance of parts of buildings.

Strong, reliable, durable

With a dead-load capacity of 205kg between legs (irrespective of span), the Roof Razor® can be used in requirements for HVAC weight-loads within this weight bracket. At 2kg in weight, the Roof Razor® is strong and durable for metal roofing systems and is recommended for use with the Permastop® and or Permatuff™ Building Blanket range.

Faster fasteners

Roof Razor® is available with pre-loaded fasteners for metal roofing applications and does not require additional components such as starter blocks. The length of the Roof Razor® fixings mean less time fixing long, harder-to-secure fasteners into the purlin.



Made from high tensile galvanised steel.

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.

Product data

Product description	Spacer height mm	Spacer length mm	Pieces per pack	Lineal metres per pack	Product Code
Roof Razor® standard; with pre-loaded screws	60	1200	6	7.2	396299
	85	1200	6	7.2	396291
	115	1200	6	7.2	396292
Roof Razor® standard; without pre-loaded screws (for fixing to timber battens)	85	1200	6	7.2	396295
	115	1200	6	7.2	396296
Roof Razor® cyclonic; with pre-loaded screws	60	1200	6	7.2	396300
	85	1200	6	7.2	396293
	115	1200	6	7.2	396294
Roof Razor® metal roof cyclonic; without pre-loaded screws	115	1200	6	7.2	396301

Please check all stock availability with your local Fletcher Insulation representative. Product stock varies and not all products are stocked in every Fletcher Insulation location.



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Customer Service Phone
1300 654 444
 Email: info@insulation.com.au
www.insulation.com.au