

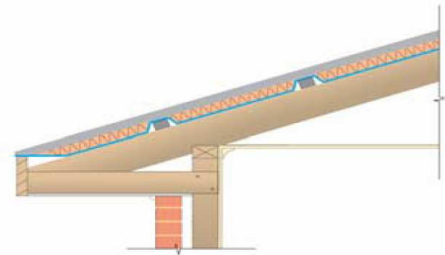
THERMAL PERFORMANCE PREDICTION METAL ROOF-(NON-VENTILATED) TOTAL R3.1 (HEAT FLOW DOWN)

Fletcher Insulation™ manufactures Permastop® in Australia under ISO 9001 quality manufacturing standards and is supplied free of material defects.

Fletcher Insulation™ Permastop® aluminium foil faced blankets have two components:

- FBS-1 Bio-Soluble glasswool blanket in various thicknesses;
- **Sisalation®** in light, medium or heavy duties that is adhered to cover one side of the blanket.

Permastop® achieves the following Declared Material R-values at the following FBS-1 glasswool thicknesses when tested at 23°C in accordance with AS/NZ 4859.1.



The thermal performance of the reflective air space will vary depending on the installation method. The BCA Part J requires commercial buildings in Climate Zones 1 to 6 to be designed for a 'Summer' (heat flow down) condition; while commercial buildings in Climate Zones 7 and 8 are required to be designed for a 'Winter' (heat flow up) condition.

Application: Metal Roof Pitched with flat plasterboard ceiling (Non-ventilated)

Permastop® R1.8 (75mm) with Sisalation® draped over roof battens under metal roof sheets; Foil side of Permastop® facing into the unventilated airspace below; Internal ceiling.

**Compressed Permastop® constitutes a thermal break of over R0.20 ensuring NCC2011 Section J requirements.

Summer calculations based on ambient air temperature at 36°C and internal 24°C.

Element Description:	SUMMER
Outdoor Air Film	0.04
Metal Roof	0.00
Permastop® R1.8 (75mm) with Sisalation®	1.68
Unventilated Reflective Air Space	1.09
Ceiling lining	0.06
Indoor Air-Film (Non-Reflective Surface)	0.16
Total R-Value	3.1

DISCLAIMER

- Calculations contained in this document refer to the following sources:
 - ICANZ Handbook (November 2010)
 - AS/NZS 4859.1 (2002) – Amendment 1 2006
 - NCC2011 Volume One & Volume Two
 - Fletcher Insulation™ Greenbook (September 2011)
- Suitability of system as designed and constructed to be provided by parties other than Fletcher Insulation™
- Please refer to specified product/s technical datasheets for installation instructions and relevant Australian Standards which may apply

