



Thermacon “Insulsteel 80.”

“Insulsteel 80” has been developed by **Thermacon Insulsteel Pty. Ltd** as a thermal break to comply with the BCA standards* and the National Construction Code 2011, which requires an R0.20 thermal break for steel framed constructions to reduce thermal bridging and conductivity between the building products. Insulsteel 80 exceeds the above requirements. A chemically cross-linked polyethylene foam structure, Insulsteel 80 is laminated on both sides, with highly reflective foil, with one side antiglare, making this product ideal as an Insulation as well as a Vapour Barrier and a Thermal Break.

*BCA Vol 1. Section J1.3(d) J1.5(b) (c) Vol 2. 3.12.1.2(c) Roof 3.12.1.4 (b) Wall.

Thermacon Insulsteel can also be used in other forms of construction such as tilt slab concrete walls, (with breather holes) brick veneer walls, and timber roofs. (Please consult our user and installation guide for further details).

Product Information

Product Thickness	8.0 mm (min)
Roll Size	22.25m x 1.350mm (30m ²)
Roll Weight	13kg
Roll Diameter	510 mm
Reflectance Antiglare	92%
Reflective Side	97%
Max Span	2.4m (without support)

Product Testing

Test	Test Standard	Result
Corrosion Resistance	AS/NZS 4859.1 Appen 1	Pass
Thermal Resistance	AS/NZS 4859.1 ISO8302:1991	R0.266
Cone Calorimeter	AS/NZS 3837	Group 1
Flammability	AS 1530.2	Low (Index <5)
Ignitability Flame Spread		0/0/0/1
Heat Release	AS 1530.3	
Smoke Release		
Emittance	ASTM-E408	Reflective E0.03 Anti-glare E0.08
Vapour Transmission	ASTM E96-2005	Medium
Dry Delamination	AS/NZS 4201.1-1994	Pass
Wet Delamination	AS/NZS 4859.1-2002 App.1	Pass
Shrinkage	AS/NZS 4201.3-1994	Complies – 0.3%
Duty	AS 4200.1-1994 Table1.Complies	Extra Heavy Duty

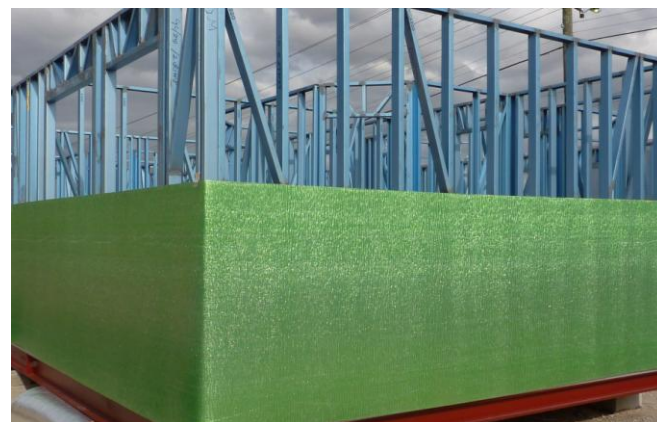
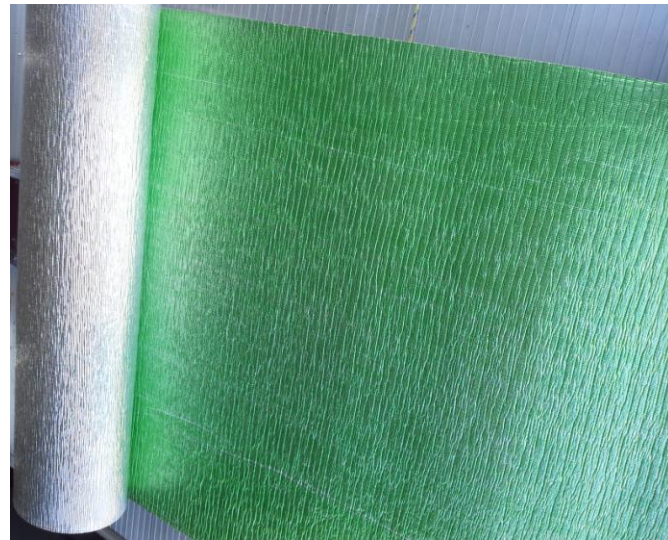
Thermal Performance[^]

Construction Type	Heat Flow In	Heat Flow Out
Steel Stud Frames Wall Insulsteel 80	R1.78	R1.98
Brick Veneer Wall Insulsteel 65	R1.85	R2.11
Commercial Metal Roof Suspended Ceiling Insulsteel 65	R3.05	R1.44
Tilt Slab Concrete Office Wall Insulsteel 65	R1.9	R2.1

For other Thermal Performance figures please consult our Technical Data Sheet.

[^] The R-Values shown were prepared and certified by James M. Fricker MIEAust. CPEng. Consultant engineer in insulation to the BCA, the NCC 2011, and the insulation industry. These values are based upon product in an in service condition, and are in accordance with AS/NZS 4859.1:2002.

Total R Values are based on product in-service conditions in accordance with AS/NZS4859.1:2002/Amdt 1 (Dec 2006) including the alteration of insulation material R for temperature and derations of reflective foil emittances due to dust as noted. Where a cavity is sealed, it is assumed there is no dust and n=hence emittance is not derated.



Thermacon Insulsteel products carry a 10 year warranty on Commercial applications and a 15 year warranty on Domestic applications against Delamination and Oxidation.

** subject to Thermacon Insulsteel Pty Ltd standard warranty guidelines (available upon request). **



All Thermacon Insulsteel products are manufactured under licence by Unipro manufacturing Co. Ltd