

**EXTRA HEAVY DUTY**

**DOUBLE SIDED REFLECTIVE FOAM INSULATION RESIDENTIAL & COMMERCIAL**



**MEETS NCC/BCA REQUIREMENTS FOR A THERMAL BREAK OF R0.2 IN STEEL FRAMED CONSTRUCTION**

**Product Code: TSTB7-30**

Trade Select™ THERMALBREAK 7™ is an Extra Heavy Duty three-in-one reflective insulation, thermal break and medium vapour barrier for use in all roof and wall types. It meets the NCC requirements for in-situ material R-value of R0.20 for a thermal break in steel framed construction, and is also suitable for use in timber framed construction.

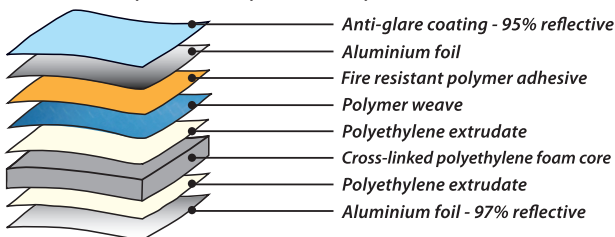
Designed to manage heat gain and heat loss, Trade Select™ THERMALBREAK 7™ offers superior thermal performance to conventional insulation, and reduces thermal bridging and conductivity between building elements.

- ▶ The most cost effective R0.20 thermal break product in the Trade Select™ product range.
- ▶ Group 1 Fire performance classification
- ▶ 150 mm flap provided for increased coverage and reduced wastage.
- ▶ Contributes a reflective R-value when installed adjacent to an air cavity.
- ▶ Highly effective in dampening noise.
- ▶ Fibre-free and non-allergenic.
- ▶ Water resistant, fire resistant.
- ▶ Rigorously tested by independent recognised accredited laboratories in compliance with AS/NZS 4859.1:2002/Amdt 1:2006 to ensure all product claims are met.

**Construction**

Trade Select™ AMETALIN THERMALBREAK 7™ core consists of 7.8 mm of chemically cross-linked, closed-cell XPE foam, one layer of aluminium is laminated to one side with emissivity of 0.03 and one layer of polymer weave to other side emissivity of 0.05.

Ametalin utilises Advanced Laminating Technology; the polymer adhesive remains tacky for an indefinite period and provides superior resistance to heat, fire and delamination.



**Material Group Number for Internal Linings: Group 1**

NCC requirements for the fire hazard of linings stipulate that products must be assessed for material group number. Ametalin has engaged Ignis Solutions professional fire engineers to classify Trade Select™ THERMALBREAK 7™ on the basis of full scale testing in accordance with AS 5637.1:2015 *Determination of fire hazard properties, Part 1: Wall and ceiling linings.*

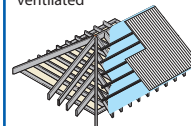
Trade Select™ THERMALBREAK 7™ has achieved the classification of Group 1. This makes Trade Select™ THERMALBREAK 7™ the only reflective insulation product to achieve R0.2 thermal break and Group 1 for fire performance.

**DECLARED TOTAL SYSTEM R-VALUES\***

*The contribution of this product to the total system R-value depends on installation and environmental conditions. The R-values will be reduced in the event of the accumulation of dust on upward facing surfaces and in those cavities that are ventilated.*

**METAL ROOF**

22° pitched flat ceiling ventilated

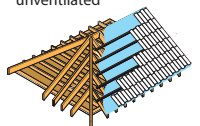


CALCULATION REF: 299r404

WINTER	R <sub>T</sub> 1.3
SUMMER	R <sub>T</sub> 2.8

**TILE ROOF**

22° pitched flat ceiling unventilated

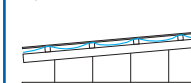


CALCULATION REF: 12084

WINTER	R <sub>T</sub> 1.5
SUMMER	R <sub>T</sub> 2.5

**COMMERCIAL OFFICE**

5° pitched, 1000 mm ceiling

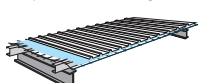


CALCULATION REF: 299r402

WINTER	R <sub>T</sub> 1.4
SUMMER	R <sub>T</sub> 4.6

**WAREHOUSE SHED**

5° pitched, no ceiling

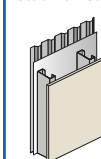


CALCULATION REF: 299r403

WINTER	R <sub>T</sub> 1.0
SUMMER	R <sub>T</sub> 2.0

**WALLS:**

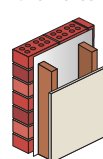
Stud Framed



CALCULATION REF: 299w511

WINTER	R <sub>T</sub> 1.9
SUMMER	R <sub>T</sub> 1.7

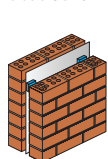
Brick Veneer



CALCULATION REF: 299w502

WINTER	R <sub>T</sub> 2.2
SUMMER	R <sub>T</sub> 1.9

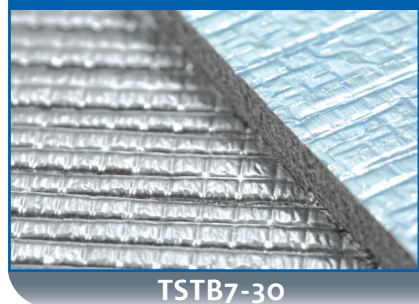
Double Brick



CALCULATION REF: 299w503

WINTER	R <sub>T</sub> 2.3
SUMMER	R <sub>T</sub> 2.1

**Trade Select™ THERMALBREAK 7™**



TSTB7-30

EXTRA HEAVY DUTY

## Classification **DOUBLE SIDED REFLECTIVE FOAM INSULATION RESIDENTIAL & COMMERCIAL**

Trade Select™ THERMALBREAK 7™ classifications in accordance with AS/NZS 4200.1:2017 and AS/NZS 4859.1:2006

PRODUCT		Trade Select™ THERMALBREAK 7™	AS/NZS 4200.1:2017
FLAMMABILITY INDEX	AS 1530.2-1993	Low	Low ≤ 5
MATERIAL THERMAL RESISTANCE	ASTMC518	0.21 m <sup>2</sup> ·K/W (R0.21)	
DUTY	AS/NZS 4200.1:2017	Extra Heavy	Classification
EMITTANCE	AS/NZS 4201.5:1994	Bright side: 0.03 Anti-glare side: 0.05	Value
REFLECTIVITY		Bright side: 97% Anti-glare side: 95%	Value
RESISTANCE TO WATER PENETRATION	AS/NZS 4201.4:1994	High	Pass
VAPOUR BARRIER	ASTM E96	Medium, PROCEDURE B, WET CUP TEST	Classification
MACHINE DIRECTION TENSILE STRENGTH	AS 1301.448s-91	14.6 kN/m	Min 13.0 kN/m
LATERAL DIRECTION TENSILE STRENGTH	AS 1301.448s-91	13.6 kN/m	Min 10.5 kN/m
MACHINE DIRECTION EDGE TEAR	TAPPI T 470 om-89	384 N	Min 90 N
LATERAL DIRECTION EDGE TEAR	TAPPI T 470 om-89	293 N	Min 90 N
RESISTANCE TO DRY DELAMINATION	AS/NZS 4201.1:1994	Pass	Pass
RESISTANCE TO WET DELAMINATION	AS/NZS 4201.2:1994	Pass	Pass
SHRINKAGE (REPEATED WETTING & DRYING)	AS/NZS 4201.3:1994	0.0%	< 0.5%

PRODUCT CODE: TSTB7-30  
 ROLL SIZE: 1350 mm x 22.25 m +150 mm flap (30 m<sup>2</sup>)  
 NOMINAL WEIGHT: 13 kg

THICKNESS: 7.8 mm  
 UNCOMPRESSED R-VALUE: R0.21  
 COMPRESSED R-VALUE: R0.20

### Vapour Barrier Properties

Trade Select™ THERMALBREAK 7™ has a Water Vapour Transmission (WVT) rate of 1.3 grams per square metre per 24 hours tested at 23°C, 50% Relative Humidity (RH).

### NCC Compliant

Trade Select™ THERMALBREAK 7™ complies with AS/NZS 4859.1:2002/Amdt 1:2006 and AS/NZS 4200.1:2017, and therefore meets all the requirements of the *National Construction Code* for insulation and pliable building membranes.

### BUSHFIRE ATTACK LEVELS

Trade Select™ THERMALBREAK 7™ complies with AS 3959-2009 *Construction of buildings in bushfire-prone areas* for use in roof systems BAL – LOW to BAL – 40 and wall systems BAL – LOW to BAL – FZ.

### GROUP NUMBER ASSESSMENT

Group 1

Assessed in accordance with AS 5637.1:2015 *Determination of fire hazard properties* by Ignis Solutions professional fire engineers.

### Total System R-values

R-values apply to typical conditions for mainland Australian capital cities and have been calculated in accordance with AS/NZS 4859.1:2002/Amdt 1:2006. For detailed design of building systems, seek advice based on actual site conditions from a qualified licensed engineer.

### Reflectivity

Trade Select™ THERMALBREAK 7™ is made with aluminium foil

laminates with reflectivity of 97% and emissivity of 0.03 to one side and 95% reflectivity and emissivity of 0.05 to the other in compliance with AS/NZS 4200.1.6.3.

### Storage

This product should be stored upright and under cover in a clean, dry place in the pack provided.

### Dimensions

Trade Select™ THERMALBREAK 7™ is sold in size: 1350 mm x 22.25 m + 150 mm flap (30 m<sup>2</sup>)

### Specification Notes

When specifying, state the following:

**Product Name:** TRADE SELECT™ THERMALBREAK 7™

The insulation to be installed shall be Trade Select™ ThermalBreak 7™ double sided reflective, fibre-free thermo-reflective insulation, comprised of cross-linked, closed-cell core XPE foam with anti-glare foil facing on one side and plain foil facing on the other side, and 150 mm overlap piece included. Material R-value in-situ R0.20. Product is manufactured by Ametalin and shall be installed in accordance with AS 4200.2:2017 *Pliable Building Membranes and Underlays, Part 2: Installation Requirements*.

Emittance Value: Bright Side - 0.03, Anti-glare Side - 0.05

Emittance Classification: IR Reflective, IR Reflective

Material R-value: R0.21 uncompressed / R0.20 in-situ

Vapour Control Classification: Class 2 Vapour Barrier, 0.0113 µg/N-s

Water Control Classification: Water barrier.

Duty: Extra Heavy in accordance with AS/NZS 4200.1:2017

Durability may be affected by environmental factors, including chemical and airborne pollutants, if used in industrial or farm buildings.

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