



## INSULATION



- ✓ Safe
- ✓ Ecofriendly
- ✓ 100% Australia

- ✓ Roof Insulation
- ✓ Wall Insulation
- ✓ Floor Insulation





## E-therm is a 3 in 1 reflective foil insulation solution replacing traditional foil sarking, bulk fibre, and acoustic noise insulation with one easy product.

With innovative and superior foam technology incorporated in the product, E-therm will also achieve the “thermal break” requirement set by the Building Code of Australia, J Section, when used on buildings with steel framework. E-therm has also been successfully tested and meets all Green Star low VOC Compliance requirements.

E-therm Reflective Foil Insulation is a thin insulation that works by combining closed cell airspace with highly reflective surfaces. It can be used in Domestic, Commercial and Horticultural building applications. E-therm is made using quality materials, and incorporates a bimetallic highly reflective aluminum film that sandwiches a low conductive layer of low density closed cell polyethylene foam. This foam has a very low rate of thermal conductivity, effectively reducing the amount of heat transmission into the building. E-therm also acts as a vapor barrier reducing the passage of moisture and dust particles into the roof and wall cavities.

### Why choose E-therm Insulation

- › Effective Thermal and Acoustic Insulation
- › Made incorporating Recycled materials
- › Fibre free – safe to install
- › Insulation lowers your carbon footprint
- › Made in Australia
- › Meets or exceeds Australian Standards
- › Maintains original structure – does not collapse
- › Protecting your home from Wind, Dust, Noise and Solar Radiation

E-therm is Greenstar and Basix compliant in that it meets International ODP-EMI4 requirements. This means there are no ozone depleting substances used in either the manufacturing process or the composition of the actual product.

E-therm also contributes to reducing it's own carbon footprint, by utilising an in house recycling facility, and incorporating up to 80% recycled foam content in the manufacture of the product.

E-Therm's energy efficient products greatly reduce cooling and heating costs helping achieve the 5 Star Energy Rating, lowering greenhouse gas emissions.

E-Therm is Australian made not transported from overseas, a further reduction in harmful greenhouse gas emissions.

By choosing E-Therm you are maximising both energy saving and environmental benefits for the whole life of the building, which will not only benefit the planet but also create long term energy cost saving solutions for you!



Thermal break,  
Insulation,  
Vapour Barrier  
and Acoustic  
Barrier

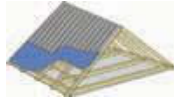


# Indicative R-Values

6.5mm thermal performance - deduct R0.05 - in most cases the same as 8mm

## Metal Roof

Pitched Metal Roof with Flat Ceiling



R-Value	Heat In	Heat Out
5mm	1.36	2.4
8mm	1.46	2.5
60mm Air Gap		

E-THERM UNDER METAL OVER BATTEN

## Tile Roof

Pitched Tile Roof with Flat Ceiling

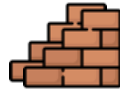


R-Value	Heat In	Heat Out
5mm	1.24	1.91
8mm	1.34	2.01
60mm Air Gap		

E-THERM UNDER TILES UNDER BATTEN

## Double Brick Wall

110mm brick



R-Value	Heat In	Heat Out
5mm	1.12	1.07
8mm	1.22	1.17
20mm Air Gap x 2		

DOUBLE BRICK, E-THERM IN MIDDLE OF CAVITY

## Cladded Wall

Cladding  
10mm Plasterboard

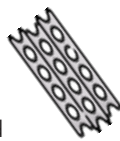


R-Value	Heat In	Heat Out
5mm	2.44	2.48
8mm	2.54	2.58
15mm Air Gap x 2		

E-THERM BEHIND CLADDING

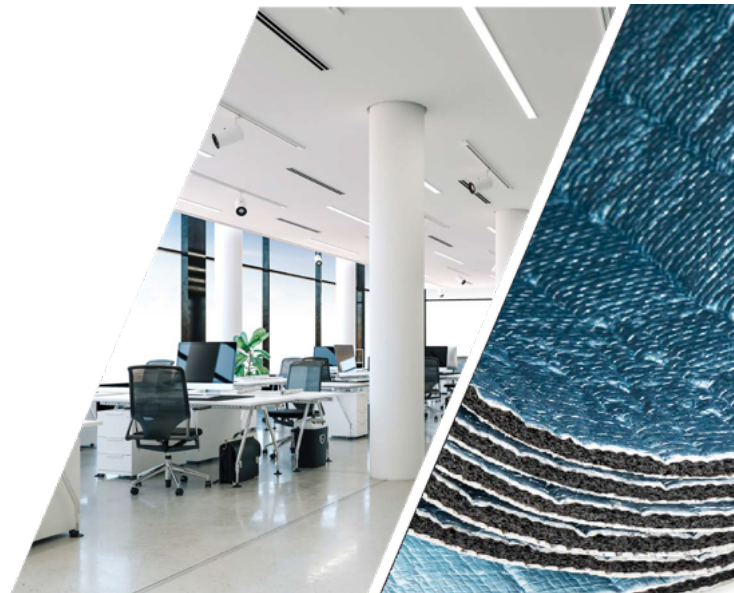
## Concrete Tilt Slab Wall

Cladding  
10mm Plasterboard



R-Value	Heat In	Heat Out
5mm	1.78	1.82
8mm	1.88	1.92
20mm Air Gap x 2		

E-THERM BEHIND CLADDING



## Insulation Performance

E-therm™ has been independently tested by Australian Hearing National Acoustic Laboratories, an accredited and recognised Australian testing authority.

E-therm™ insulation (8mm) on its' own achieves a STC 12 giving up to 12dB sound reduction to help minimise rain, aircraft and traffic noise. This is one of the highest acoustic ratings.



## E-therm™ Insulation - the ORIGINAL innovation for thermal break

The Building Code of Australia requires a thermal break in steel framed walls and roof construction.

To reduce thermal bridging on walls a minimum thermal break of R0.2 is required between the steel frame and wall cladding. On roofs this R0.2 thermal break is required between the steel frame and metal roof if there is no ceiling, or the ceiling is also attached to the underside of the frame.

E-Therm's 6.5mm and 8mm products meet or exceed the BCA's requirement for steel framed construction, making E-Therm the all-in-one solution.

## Product Dimensions

Ethern 5mm		
Thickness	5mm	Nominal
Length	22.25mtr	30m <sup>2</sup> cover per roll, plus overlap piece
Width	1.35mtr	
Weight	13Kg	Approximate Weight
Ethern 6.5mm		
Thickness	6.5mm	Nominal
Length	22.25mtr	30m <sup>2</sup> cover per roll, plus overlap piece
Width	1.35mtr	
Weight	15.5Kg	Approximate Weight
Ethern 8mm		
Thickness	8mm	Nominal
Length	22.25mtr	30m <sup>2</sup> cover per roll, plus overlap piece
Width	1.35mtr	
Weight	18Kg	Approximate Weight

## Technical Specifications

Specification	Standard	Rating
Emissivity	ASTM E 408-71	Silver 0.03
Antiglare 0.06		
Material R-Value	ASTMC518	5mm R0.16 6.5mm R0.20 8mm R0.25
Thermal Performance	AS/NZS 4859.1	Compliant
Flammability Index	AS/NZS 1530 Part 2	≤5 Pass
Ignitability Index	AS/NZS 1530 Part 3	0 Pass
Spread of Flame Index	AS/NZS 1530 Part 3	0 Pass
Heat Evolved Index	AS/NZS 1530 Part 3	0 Pass
Smoke developed Index	AS/NZS 1530 Part 3	0 Pass
Toxic Fume Performance	BS 6853	Non-Toxic Pass
Airborne Sound Performance	AS 1191	STC 12 Rw (12dB reduction)
Vapour Barrier Performance	AS/NZS 4200	Medium
Duty Rating - Extra Heavy Duty	AS/NZS 4200	2.4mtr span (without product support mesh)
Edge Tear Test	AS/NZS 4200	Pass
Dry Delamination	AS/NZS 4200	Pass
Wet Delamination	AS/NZS 4200	Pass
Water Penetration	AS/NZS 4200	Pass
Shrinkage	AS/NZS 4200	Pass
Compression Recovery	ASTM D 545-84	95%
Load Bearing	ASTM D 545-84	10Kn