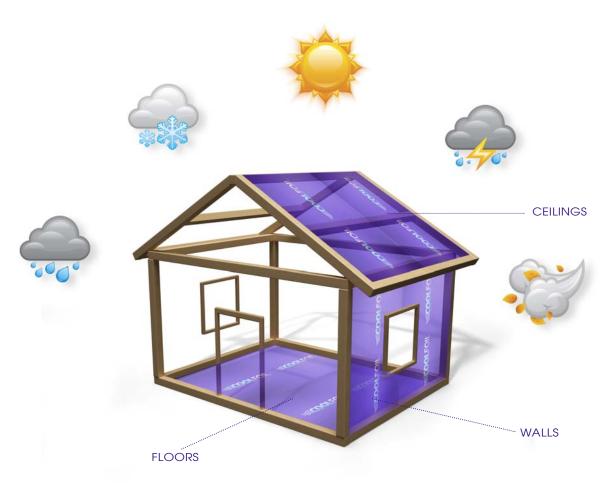
# SCOOLFOIL ECO





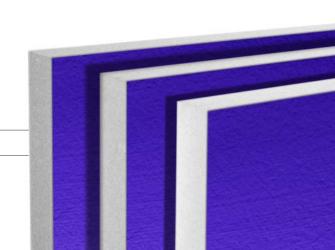
# THERMAL INSULATION THAT WORKS: ... rain, hail or shine!

Rigid Panel EPS Insulation for:

RESIDENTIAL

COMMERCIAL

**UNDERFLOOR** 



# 12 GOOD REASONS to choose Cool Foil Rigid Panel Insulation

- Thermally efficient
- Acoustically effective
- Weatherproof
- Fire Retardant
- Easy to install
- Lightweight

- Save on Energy Costs
- Economic EPS
- Rigid-No Sag
- Will not delaminate
- Earlier Lock-up
- Safe to Handle

# Available in 2 sheet sizes: SHEET SIZES:

2440<sub>mm</sub> x 1200<sub>mm</sub> 2700<sub>mm</sub> x 1200<sub>mm</sub>

THICKNESSES

High Density:

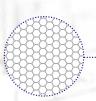
Eco Range: Eco<sup>10</sup> 10mm, Eco<sup>20</sup> 20mm,

ECO<sup>10</sup> 10mm, ECO<sup>20</sup> 20mm, ECO<sup>25</sup> 25mm

Can also be customised to size to achieve R-Value



Industrial grade reflective foil is permanently adheres to the EPS panel and enhance over all insulation efficiency. The distinctive deep purple colour minimises glare and eye fatigue during installation.



#### **EPS CELLS**

Expanded Polystyrene (EPS) beads are bonded together to form a unique cellar structure that resists the conduction of thermal energy. The cellar structure traps air between the beads, repels moisture and makes EPS a lightweight, highly efficient thermal insulator.

#### HIGH DENSITY RANGE (HD)

The **HD Range** has been specifically designed for applications requiring thicker and denser panels. This is achieved by significantly increasing the number of EPS beads per cubic meter to achieve higher R-Value.



#### NO-DAMAGE DELIVERY

Every Cool Foil order is meticulously wrapped and securely bound onto a 100% re-cycleable cardboard pallete to ensure that all deliveries are protected in transit and will arrive safely on-site undamaged.



## **Cool Foil Rigid Panel Insulation**

Cool Foil insulation panels are a durable, economical and highly effective thermal insulator that has been specifically designed to protect Australian residential homes and commercial buildings from the extreme weather conditions and temperature fluctuations commonly experienced throughout the country.

Each panel is made from minute Expanded Polystyrene (EPS) beads that have been bonded together under extreme heat and pressure to form a rigid, lightweight and waterproof material that is resistant to the conduction of thermal energy. An additional commercial grade reflective foil is adhered to each panel to enhance it's overall insulation characteristics that make it ideal for modern Australian buildings.





## -

# Tough, Versatile, Economical

Cool Foil is a tough insulation material that will not sag, degrade or succumb to mould, insect attack or extreme weather conditions. It is the ideal insulation choice for:

- Walls, Ceiling and Under Floor
- Residential homes; new or retro fit
- Apartment buildings and Townhouses
- Commercial Offices
- Industrial units and Factories

Cool Foil is light to lift and manoeuvre around work sites and can be cut and trimmed to fit virtually any shape. The rigid flat panel design assists overall structure strength and provides an ideal early weatherproof shield that allows other trades to start work without the need to wait for brick work to be completed.

It is a proven and popular insulation material that is widely used around the world. It's low unit cost and ease of installation make Cool Foil EPS panels a highly sought after and preferred insulation material compared to many other alternatives.

R Value Reference							
System	Application	Product	Heat Flow Out (Winter)	Heat Flow In (Summer)			
Residential	Brick Veneer	Eco 20mm	R2.4	R2.1			
		Eco 15mm	R2.3	R2.0			
		Eco 10mm	R2.1	R1.8			
	Cladded Wall 20mm batten	Eco 20mm	R2.0	R2.0			
		Eco 10mm	R1.8	R1.8			
	Double Brick	Eco 20mm	R2.1	R2.0			
		Eco 15mm	R1.9	R1.8			
		Eco 10mm	R1.8	R1.7			
Under Floor	with saddle	Eco 15mm	R2.6	R1.3			
		Eco 10mm	R2.2	R1.2			
Concrete	with single air space 28mm batten	Eco 20mm	R1.7	R1.3			
		Eco 15mm	R1.5	R1.4			
		Eco 10mm	R1.4	R1.2			
	with double air space 28mm batten	Eco 20mm	R2.2	R2.1			
		Eco 15mm	R2.1	R2.0			
		Eco 10mm	R1.9	R1.8			
	Concrete floor with 28mm batten	HD 50mm	R3.4	R2.0			
		HD 65mm	R3.0	R2.4			
	Concrete floor direct fixes	HD 50mm	R2.5	R2.0			
		HD 65mm	R3.0	R2.4			
Ceiling	Factory iron clad	Eco 20mm	R1.9	R3.9			
		Eco 15mm	R1.6	R3.7			

# Rigid Panel EPS Insulation for:

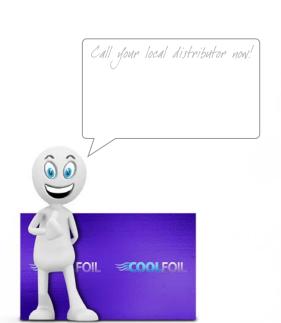
RESIDENTIAL

COMMERCIAL

**UNDERFLOOR** 







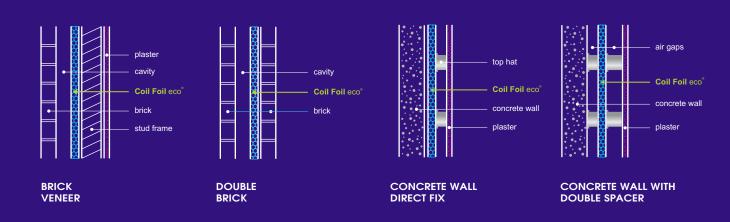
<sup>\*</sup>The R values listed have been verified in accordance with As/NZS 4859.1:2002/Amdt 1 2006. Other R values in this table are based on Cool Foil's calculations. For verification of the Cool Foil calculated results published are based on determinations derived from As/NZS 4859.1:2002/Amdt 1 2006, Material for Thermal Insulation of buildings and the Australian Institute of Refrigerations Air -Conditioning & Heating (AIRAH) Handbook (2007 Edition). Calculations incorporate dust assumptions of As/NZS 4859.1:2002/Amdt 1 2006. Total R values are for the insulation path only and include indoor and outdoor air films. Cavity air space insulation values were estimated using Reflect 3 software using infra-red emmittances e1 and e2 and defined air gaps. The results have been independently verified as per the requirements of As/NZS 4859.1:2002/Amdt 1 2006.

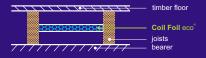


### **COOLFOIL** eco

Product Specifica	eco10	eco15	eco20	eco25	
Sheet Thickness		10mm	15mm	20mm	25mm
Sheet Size (mm)	2440 x 1200	1	1	/	1
	2700 x 1200	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
Core	Fire Retardant EPS	✓	✓	✓	✓
Reflective Surface Reflectance	100% Reflective Aluminium 97%	/	1	1	/
Emittance	E0.03	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
Anti-Glare Reflectance	TBA Purple UV Ink 95%	/	/	1	1
Emittance	E0.05	<b>√</b>	<b>√</b>	<b>√</b>	<b>√</b>
Adhesive	Approved Proprietary Formula	1	1	1	<b>√</b>
Vapour Transmission (max) ug/m²s Nil		1	1	1	1

Product Testing				
Thermal Performance	AS/NZS 4859.1			
Thermal Resistance	ASTM C518			
Emittance	ASTM-E408-71			
Ignitability	AS 1530.3			
Flame Spread	AS 1530.3			
Heat Evolved	AS 1530.3			
Smoke Developed	AS 1530.3			
Rigid Cellular Polystyrene - Moulded	AS 1366.3			
Cone Calorimeter	AS/NZS 3837			
Vapour Transmission	AS 2498.5			
Delamination	AS/NZS 4201.1			

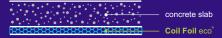




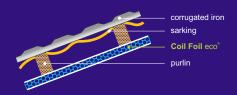
UNDERFLOOR TIMBER



UNDER FLOOR CONCRETE



UNDER CONCRETE DIRECT FIX



**COMMERCIAL FACTORY ROOF**