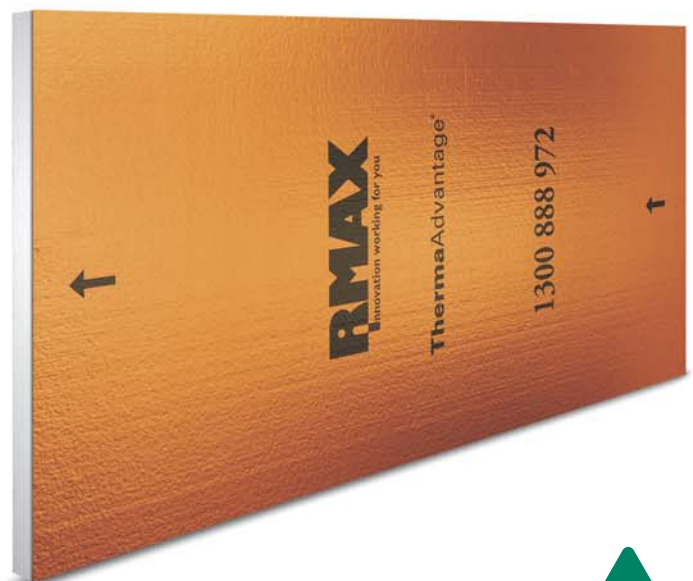


Conserve Energy and Save Costs with **ThermaAdvantage®**

Australia's leading foil enhanced insulation panel for walls, roofs and floors.

- ✓ Safe Environmental EPS.
- ✓ Fully BCA compliant.
- ✓ Increases energy efficiency.
- ✓ Decreases energy bills.
- ✓ Long-life, non-degradable.
- ✓ Safe to handle, easy to install.
- ✓ Lightweight.
- ✓ Earlier weather proofing of building envelope.



Available in four thicknesses and two sheet sizes:

Thicknesses: 10mm, 15mm, 20mm or 25mm
Sheet sizes: 2500mm x 1200mm or 2700mm x 1200mm



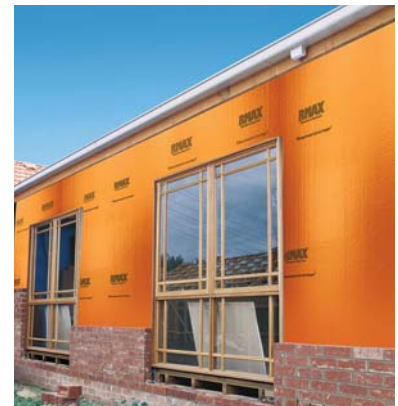
RMAX **ThermaAdvantage**[®] is a foil insulated expanded polystyrene (EPS) board suitable for internal or external insulation. It is an effective combination of proven RMAX EPS insulation with the addition of reflective foil backing.

ThermaAdvantage[®] Foil Insulated Board provides superior levels of insulation while reducing heating and cooling costs. It combines the outstanding thermal characteristics of EPS with the high reflectivity and low emissivity (see explanation below) of aluminium foil producing a cost effective, space saving insulation product.

Unlike conventional 'between stud' insulation, **ThermaAdvantage**[®] provides a continuous insulation membrane by completely covering studs and noggins, which can occupy approximately around 15% of wall area. This large proportion of wall area when uninsulated, promotes heat loss and gain, while creating other related problems such as dust encroachment into the interior living spaces.

ThermaAdvantage[®] provides enhanced levels of protection and security from severe weather over the entire lifetime of the building and meets the requirements of the BCA AS/NZS 4859:1 code.

In addition to its insulative qualities, **ThermaAdvantage**[®] can provide real benefits during construction by giving an early weather proof building envelope allowing internal trades to commence work prior to completion of the external finish. This saves time in overall construction.

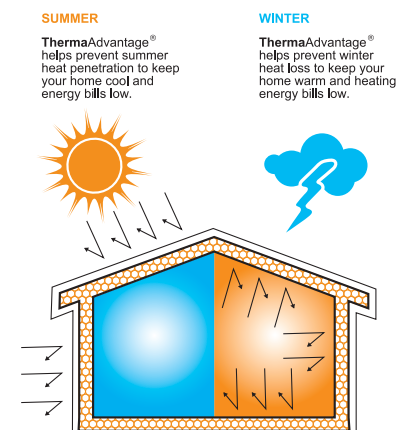


Emissivity and Reflectivity

Emissivity is the amount of radiant heat energy emitted or radiated from the surface. The lower the emissivity value the greater the insulation protection from radiant energy transfer.

Reflectivity is the ability a surface has to reflect radiant heat energy. The higher the reflectivity, the less potential a material has to absorb radiant heat. Thus less heat is conducted through its mass and emitted or re-radiated through the opposite side.

Combining the low thermal conductivity of RMAX EPS with the reflective properties of aluminium foil, RMAX **ThermaAdvantage**[®] significantly reduces heat transfer through walls, floors and ceilings.



FEATURES	BENEFITS
Thermal performance.	Provides superior levels of insulation comfort with reduced heating and cooling costs. Insulates up to 15% more area by covering framing studs and noggins thus reducing thermal leakage and increasing overall insulation efficiency.
Complete wall cover.	Enhances insulation characteristics, reduces dust encroachment. Provides an early weatherproof envelope to the structure.
RMAX Environmental EPS.	Enhances R values of the structure. Low environmental footprint.
Long term R values.	Provides “as new” insulation for the life of the structure. Doesn’t settle.
Thin, lightweight panels.	Saves space without loss of insulation qualities. Easy to handle.
Easy to install.	Can be shaped with knife or hand saw.
Safe to use.	Non-irritant, inert and does not contain harmful gases.
Neutral environment.	Does not promote bacterial growth or provide a food source for insects or vermin.
Moisture resistant.	Retains its R value even under the most severe conditions.
Breathability.	No need for costly vents to be installed.

Easy to Install.

ThermaAdvantage[®] panels are lightweight, clean and easy to cut to shape on site using a knife or handsaw. The panels can be quickly fixed to the stud using Pryda board fixers located on every stud horizontally and positioned at 600mm centres vertically. Once fixed in place, the joints are then sealed with an RMAX approved joining tape.

Safe.

ThermaAdvantage[®] is made from inert EPS and does not irritate the skin like some fibreglass insulation products, nor does it give off harmful fibres or gases. It does not provide a food source or host environment for insects, vermin or bacterial growth, nor does it decay or rot.

Long term R values.

Of all insulation products, **ThermaAdvantage**[®] stands out due to its superior thermal insulation qualities. EPS performance does not deteriorate with age due to its cellular structure, which contains only stabilised air. **ThermaAdvantage**[®] can provide ‘as new’ insulation protection for the life of the building. Performance is further enhanced by its low moisture vapour transmission rate, dimensional stability and non-sagging characteristics.

Moisture Resistant.

The EPS used in the production of **ThermaAdvantage**[®] is highly resistant to the adverse affects of moisture. Even when force saturated to moisture content ten times its own dry weight, RMAX EPS has been found to retain 80% of its R value.

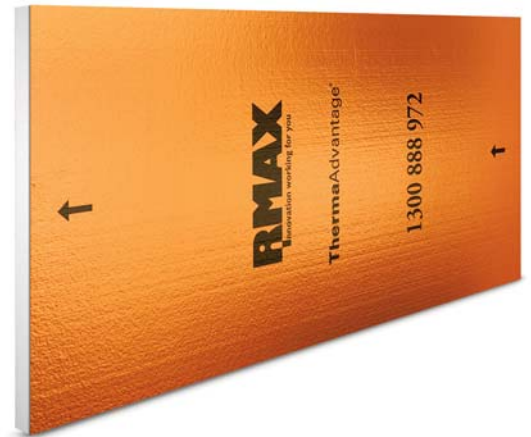


PRODUCT SPECIFICATIONS

Product Specification	TAd10	TAd15	TAd20	TAd25
Reflectance				
Anti-Glare Face	95%	95%	95%	95%
Reflective Face	97%	97%	97%	97%
Emittance				
Anti-Glare Face	E0.05	E0.05	E0.05	E0.05
Reflective Face	E0.03	E0.03	E0.03	E0.03
Sheet Thickness	10mm	15mm	20mm	25mm
Sheet Size (mm)	2500 x1200 2700 x1200	2500 x1200 2700 x1200	2500 x1200 2700 x1200	2500 x 1200
Weight (grams)	767 848	995 1100	1233	1467
Core Density (kg/m³)	13.5	13.5	13.5	13.5
Core	Fire Retardant SL Grade EPS	Fire Retardant SL Grade EPS	Fire Retardant SL Grade EPS	Fire Retardant SL Grade EPS
Anti-Glare	Metal Etching UV Stabilised Spec Formula: 21477	Metal Etching UV Stabilised Spec Formula: 21477	Metal Etching UV Stabilised Spec Formula: 21477	Metal Etching UV Stabilised Spec Formula: 21477
Adhesive	Contact Adhesive Proprietary Formulae	Contact Adhesive Proprietary Formulae	Contact Adhesive Proprietary Formulae	Contact Adhesive Proprietary Formulae
Ozone Depleting Substance				
Content	0	0	0	0
Manufacture	0	0	0	0
VOC (volatile organic compound)				
Content	0	0	0	0
Manufacture	<0.8 g/l	<0.8 g/l	<0.8 g/l	<0.8 g/l

Product Testing

Thermal Performance	AS/NZS 4859.1
Surface Corrosion	AS/NZS 4859.1 Appendix I
Thermal Resistance	ASTM C518
Emittance	ASTC-E408
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
Nominal Density	AS 1366.3
Cone Calorimeter	AS/NZS 3837
Vapour Transmission	AS 2498.5
Dry Delamination	AS/NZS 4201.1 Method 1
Wet Delamination	AS/NZS 4201.1 Method 2
Shrinkage	AS/NZS 4201.1 Method 3
Water Barrier	AS/NZS 4201.4
Sound Transmission Loss	AS 1191-2002



ThermaAdvantage®

FOIL INSULATED BOARD

Comparative Testing of some materials to AS 1530.3 - Early Fire Hazard test

Material	Ignitability Index 0-20)	Spread of Flame Index (0-10)	Heat Evolved index (0-10)	Smoke Developed Index (0-10)
ThermaAdvantage®	0	0	0	0-1
EPS	12	0	3	5
Australian Softboard Timber	16	9	7	3
Oregon	13	6	5	3

*Summary of 'R' Values

System	Ref No.	Application	Product	Winter Heat Flow Out	Summer Heat Flow In	
Residential Walls	1	Brick Wall	TAd10*	R2.1	R1.8	
	1	Brick Wall	TAd20*	R2.4	R2.1	
	2	Cladded Wall-Weather Board	20mm Batten	TAd10	R1.8	R1.8
	2	Cladded Wall-Weather Board	20mm Batten	TAd20	R2.0	R2.0
	3	Double Brick		TAd10*	R2.1	R2.0
	3	Double Brick		TAd20*	R2.1	R2.0
Underfloor	4A	Floor Saddle				
			TAd10*	R2.9	R2.0	
			TAd20*	R3.1	R2.2	
Concrete Systems	5	Wall Single Airspace	28mm Batten	TAd10*	R1.4	R1.2
	5		28mm Batten	TAd20*	R1.7	R1.5
	5		16mm Batten	TAd10	R1.3	R1.1
	5		16mm Batten	TAd20	R1.5	R1.3
	6	Ceiling Single Airspace	28mm Batten	TAd10	R1.0	R1.3
	6		28mm Batten	TAd20	R1.3	R1.6
	7	Wall Dual Airspace	28mm Batten	TAd10*	R1.9	R1.7
	7		28mm Batten	TAd20*	R1.7	R1.6
	7		16mm Batten	TAd10	R1.7	R1.6
	7		16mm Batten	TAd20	R2.0	R1.8
	8	Ceiling Dual Airspace-90mm air gap	28mm Batten	TAd10	R1.5	R3.0
	8	-90mm air gap	28mm Batten	TAd20	R1.7	R3.2

Physical Property	Units	Product Spec.	Performance
Weighted Sound Reduction Index (Rw)	dB (Decibels)	15mm Thick SL Grade ThermaAdvantage®	Rw=8dB

*NOTE:

Perceived Change in Decibel Level

Change in Sound Level	Perceived Change to the Human Ear
± 1 db	Not Perceptible
± 3 db	Threshold of Perception
± 5 db	Clearly Noticeable
± 10 db	Twice (or Half) as Loud
± 20 db	Fourfold (4x) Change

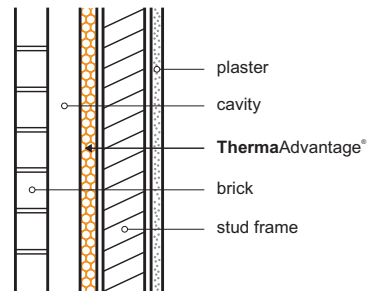
*These R values have been verified in accordance with AS/NZS 4859.1:2002/Amdt 1 2006. Other R values in this table are based on RMAX calculations. For verification of the RMAX calculated results please consult your RMAX sales representative.

The values 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.

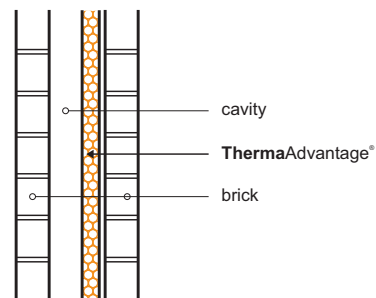
APPLICATION TIPS

ThermaAdvantage® is quick and simple to install. It is fastened using a combination of self drilling screws, washers, aluminium tape and/or adhesive for a secure and permanent fix. Its lightweight construction and ease of workability means it is suitable for virtually every kind of building and construction method.

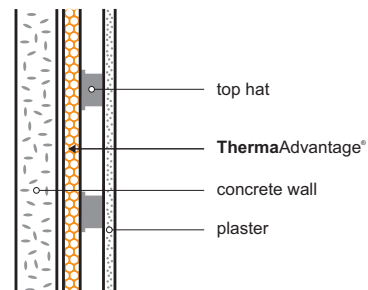
BRICK VENEER



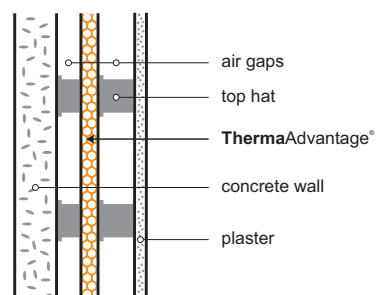
DOUBLE BRICK



PRE CAST or CONCRETE WALL DIRECT FIX

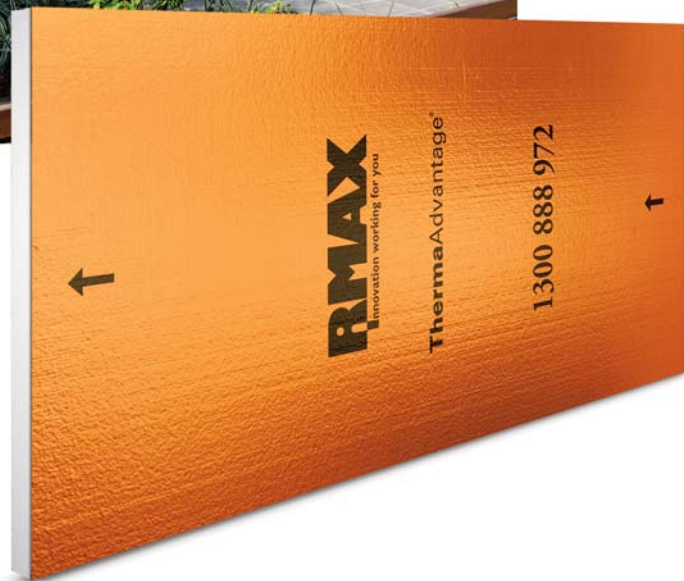


PRE CAST or CONCRETE WALL DIRECT FIX WITH SPACER

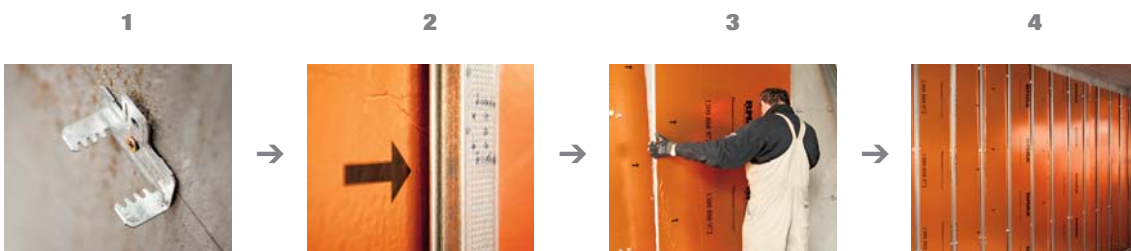


ThermaAdvantage[®]

FOIL INSULATED BOARD



As simple as;





RMAX and the Environment

EPS (Expanded polystyrene) is highly energy efficient. The energy saved over the lifetime of an EPS insulation panel in reduced heating demand, more that compensates for the raw material used in its production.

The effective application of EPS insulation can cut carbon dioxide emissions by up to 50%. The energy used in its manufacture is recovered within six months by the energy saved in the buildings when EPS is used to insulate the building.

RMAX promotes the use of EPS, with its superior thermal insulation properties, to lower energy requirements and reduce the impact of buildings on the environment.

RMAX EPS is free from ozone depleting substances in manufacture and composition. EPS is made without CFCs, HCFCs or HFCs. Manufacturing is done with blowing agents that have Zero Ozone Depleting Potential (ODP).

Recycling EPS

EPS products are recyclable and RMAX has established recycling facilities in all of its plants throughout Australia. RMAX is a member of PACIA (Plastics and Chemical Industries Association) and helped establish the EPS Industry Group, known as EPSA. RMAX, through EPSA play a major role in facilitating the collection and recycling of EPS in Australia.

Energy Efficient Manufacture

The manufacture of EPS is a low pollution process. There is no waste in production as all off cuts or rejects are re-used.

RMAX - Innovation Working for You

RMAX is a company driven by innovation. We have pioneered Rigid Cellular Plastics product technologies, leading the development of innovative product solutions for our customers and international partners.

In the Australian building industry, RMAX was the first to introduce termite resistant expanded polystyrene (EPS) - Isolite PerformGuard® EPS. The exclusive patented technology incorporates a safe, non-toxic inorganic additive that is a deterrent to termites.

Identified by its grey colour, this material has been incorporated into Thermawall®. Other new and innovative products from RMAX are ThermaWallSilver® and ThermaProof®. For details on these and other products in our range, visit www.rmax.com.au.

We are committed to working with our customers to deliver high quality creative solutions to construction problems. Contact us and see how our innovative approach using EPS in building construction can help you.

Developed in Australia. Made in Australia.

RMAX ThermaAdvantage® has been developed in Australia by RMAX specifically for Australian conditions and to meet the stringent Australian Building codes in all States. It is manufactured in RMAX plants in Australia in controlled production processes to maintain consistent quality.



All Greenhouse Gas emissions associated with printing this product have been offset.

This product is 100% Carbon Neutral



The pictures and illustrations shown in this brochure are for illustrative purposes only to demonstrate creativity and design and construction flexibility. They do not imply that RMAX ThermaAdvantage® was used in their construction.

Australia's Largest Rigid Cellular Plastics Manufacturer

Expanded polystyrene does not contain any ozone depleting substances and none is used in its manufacture.

RMAX pursues a policy of continuous improvement in the design and performance of its products. The right is therefore reserved to vary specifications without notice.



www.rmax.com.au

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innovation working for you

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