

INSULATION

E-THERM

E-Therm is a three-in-one solution replacing traditional Foil sarking, Bulk fibre and Noise Insulation with one easy application.

E-Therm is thin insulation. It works by creating highly reflective airspaces in your home's roof, walls and floors. E-Therm works with your existing construction materials. It's like an umbrella against solar radiation and protects your environment from the harsh weather conditions unique to Australia.

Many people find their homes unliveable on summer days because of soaring temperatures. On a sunny day, solar energy is absorbed by the roof, heating the roof sheathing and causing the underside of the sheathing and the roof framing to radiate heat downward toward the ceiling. A hot roof space will conduct heat into the interior space of your home, making the cooling system work harder and increasing your energy bills.

Hot homes are created by radiant heat transfer from the sun. Radiant heat is heat that is transmitted from a heat source through space. It is the heat we feel from distant objects like the sun or a fire. Radiant heat is unique because it does not require a medium to travel through. Radiant heat is also called infra-red heat or infra-red energy.

E-Therm is a material that is installed in buildings to reduce summer heat gain and winter heat loss by effectively reducing the transfer of radiant heat. A roof exposed to the sun for a prolonged period will absorb a great deal of heat, sometimes reaching temperatures in excess of 75o Celsius. E-Therm barriers can help prevent overheated attics from warming the interior of a home. Conventional thermal insulation can slow down radiant heat transfer, but will not stop it.

E-Therm reduces building heating and cooling energy usage by reflecting radiant heat back towards its source, reflecting as much as 97%. By reflecting radiant heat rather than absorbing it, E-Therm provides substantial energy savings in warm climates.

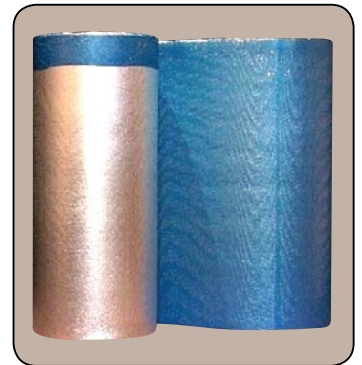
When a E-Therm barrier is placed on the roof trusses, much of the heat radiated from the hot roof is reflected back toward the roof. This keeps the ceiling cooler than it would have been without E-Therm and thus reduces the amount of heat that moves through into the rooms below the ceiling. Studies have shown that E-Therm barriers can lower a cooling bill significantly when used in warm, sunny climates.

Traditional forms of insulation absorb Radiant heat energy and lose efficiency in humid conditions. E-Therm barriers reflect it. E-Therm consists of a thin sheet of a highly reflective material, aluminium foil, applied to both sides of a LDPE foam sheeting. LDPE (low density polyethylene) is an inert, highly insulating semi rigid foam that is 100% recyclable!

E-Therm also reduces indoor heat losses through the ceiling, walls or floors in the winter.

Furthermore, E-Therm barriers reduce the amount of noise radiated from the roof by up to 12 decibels, reducing rain, aircraft and traffic noise through the roof into the rooms of the home.

Because E-Therm is made from materials that are excellent at reflecting heat and poor at absorbing it, they reduce heat transfer from the roof sheathing to the attic floor, where conventional insulation is usually placed. All materials give off or emit energy by thermal radiation as a result of their temperature. The amount of energy emitted depends on the surface temperature and a property called "emissivity" (also called "emittance").



All prices **DO NOT** include GST.

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Emissivity is the property that determines how well a E-Therm barrier will perform. A closely related material property is the “reflectivity” (also called the “reflectance”). This is the measure of how much energy is reflected and not absorbed by the barrier. E-Therm barrier materials have high reflectivity (94%) and low emissivity (6%) and work best when they face an open air space to perform properly.

It can also be combined with bulk insulation for increased energy efficiency, but it reduces heat gains without the need for increasing wall cavity thickness in order to accommodate bulky insulation.

E-Therm barriers also act as a vapour barrier, preventing the passage of moisture, air and dust and replaces foil sarking.

STANDARD	
PRODUCT CODE	5390
NAME	E-Therm Silver
THICKNESS	8mm
TYPE	Standard
WIDTH	1200mm
LENGTH	25 metres
WEIGHT	Approx 17kgs
PRICE	



ANTI-GLARE	
PRODUCT CODE	5391
NAME	E-Therm Blue
THICKNESS	8mm
TYPE	Anti-Glare
WIDTH	1200mm
LENGTH	25 metres
WEIGHT	Approx 17kgs
PRICE	



E-Therm Accessories

(Note: Price and availability on request)

- Timber fix clips (bag 125 clips)
- E-Pin Insulation (bag 100 sets)
- Spike and Washer 50mm
- E-Spacer 42mm (bag 100pcs)
- FX-10 Primer Spray (150g can)



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