

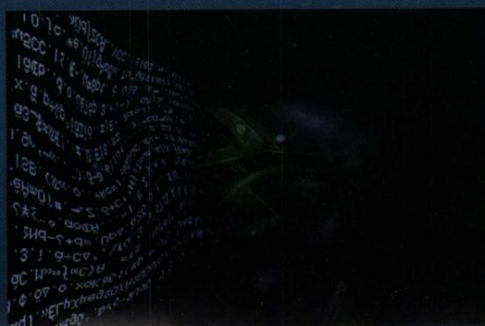
P A R S E C

Thermo-Brite III



state of the art
evolution

the art of evolution...



PARSEC Thermo-Brite III

INTRODUCTION



PARSEC Thermo-Brite, a name synonymous with state-of-the-art radiant barriers, is now even better with its latest technical achievements.

Called the **Parsec Thermo-Brite III**, the supreme heat insulation material is the culmination of years of intense developing, testing and field-trialling, which result in a more superior product.

Building on its past successes, **Parsec Thermo-Brite III** has modified the structure of the article as well as the manufacturing processes to incorporate additional enhancements and to improve the overall quality. The product's revised design allows it to be employed in all construction environments and special engagements requiring high thermal and moisture barrier properties.

Born of innovative technology derived from the eminent NASA Space Program, **Parsec Thermo-Brite III** has been significantly improved for use in all climates of the world ranging from the hot tropics to the cold tundra. Its advanced manufacture gears it to meet the rising demands of the construction industry in the 21st Century; in fact, it actually represents the next generation of premier solar radiation barriers from **Parsec inc.**

WHAT IS THERMO-BRITE?

"The most effective way to counter solar energy TB-III protects your building against radiant heat like no other insulation material."

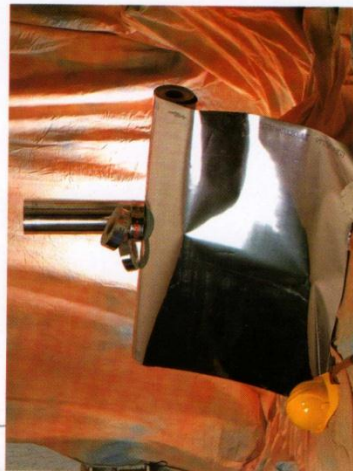
Parsec Thermo-Brite is a superlative heat insulation product available in the market today.

Because of its foremost manufacture, the result of years of research and development, the technical specifications have been raised notably.

Parsec Thermo-Brite III is a tough, tear-proof, non-corrosive, multi-layered, pressure-laminated, highly reflective surface with a protective coating. It not only acts as a radiant barrier, combating the external heat to preserve the coolness of the interior, but as a moisture and air barrier as well. In hot weather, it effectively prevents radiant heat from entering the building while in cold climate it protects the building from external vapour and air infiltration thereby conserving the warmth inside.

In either case, cost is reduced in energy consumption to maintain the desired room temperature. Considerable savings are achieved through the economic use of power to operate the air-conditioning equipment.

Where solar radiation is concerned, **Parsec Thermo-Brite** blocks 95% of the radiant heat.



PARSEC Thermo-Brite III

OUTSTANDING FEATURES OF THERMO-BRITE III

1. The coated aluminium layer has been thickened to enhance its resistance to UV radiation exposure, while at the same time the non-organic and opaque nature of the strip is more able to prevent damage by UV radiation degradation over time. Durability of the coated film is also increased, and the greater barrier properties afford lower permeability to the passage of water vapour.
2. Extra polymers have been added into the structure which further counter the solar energy.
3. While the expanded metal content intensifies the toughness of **Parsec Thermo-Brite III**, it also enables the installers to work easier because of its heavier and harder product feel. Thus, installers can more easily conform the material to the shape of uneven surfaces.
4. The new coating procedure reliably coats all metallic surfaces uniformly so that the low emissivity properties of the surface are not harmed by atmospheric contaminants.



HOW THERMO-BRITE RADIANT BARRIER WORKS

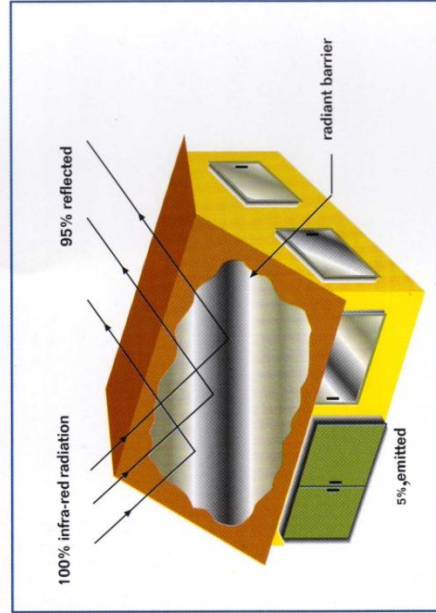
When the sun shines, its radiant heat is automatically absorbed by the roof and walls. This energy then passes on to the interior, heating up the inside of the homes and buildings.

To counteract this thermal heat transfer, a protection barrier has to be implemented in the roof and wall systems. Thermo-Brite III serves this purpose best.

Because of its superior constitution, **Parsec Thermo-Brite** is able to perform its task creditably. When installed, the highly reflectively surface can repel 95% of the solar heat, while the fortified backing is strong enough to withstand stretching and elongating. As it is tear-resistant it is not easily damaged on site, thereby facilitating installation. The strength of the material permits it to be spread across purlins or rafters without the aid of netting.

Besides its principal role of being a radiant barrier, **Parsec Thermo-Brite** also acts as a water barrier to roof leakage when used in both metal and tile roofs.

The extremely low water vapour transmission rate due to the reinforced barrier properties proves useful in the case of insulating air-conditioning ducts and chilled water pipes, where condensation inside the articles is fatal. This remarkably low permeability to the passage of moisture and gases is critical in cold climatic conditions.



"Feature for feature, TB-III scored significantly and eminently. Its edge has placed it in the forefront of thermal insulation technology."

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APPLICATIONS OF THERMO-BRITE III

Thermo-Brite III can be used as:-

A) Radiant Barrier

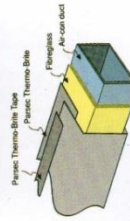
When applied to the roof and wall, it can reflect solar heat effectively, efficiently and economically. It can also prevent moisture and air from penetrating.

B) Vapour Barrier

When air-conditioning ducts and chilled water pipes are completely wrapped with TB-III, the product can protect them from external moisture transfer which will cause condensation inside. Its extremely tough material prevents on-the-job damage, which could cause moisture to seep through the most minute rips or punctures.

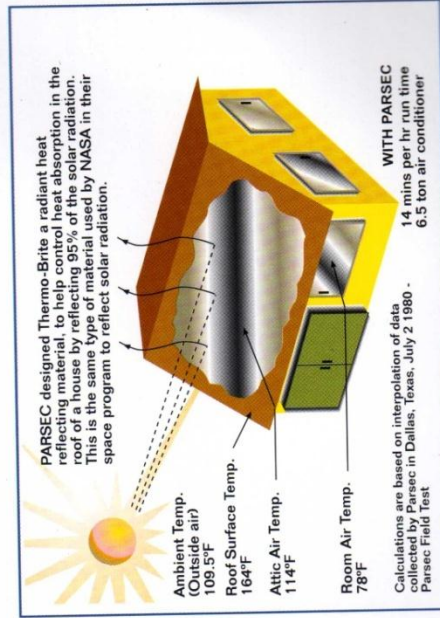
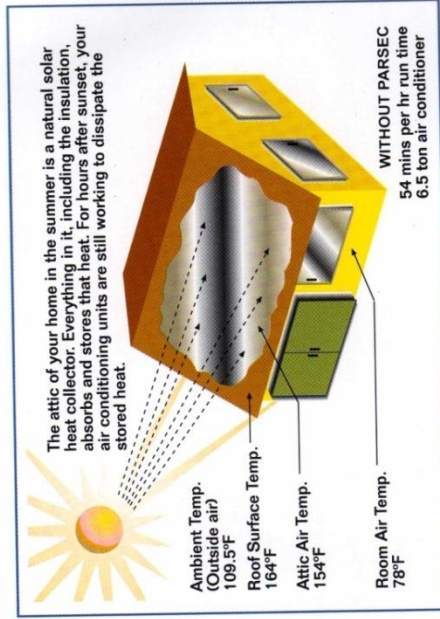
The installation of **Parsec Thermo-Brite** in buildings and structures will result in valuable cost savings to the fuel bill in the subject of keeping the interior cool.

There is really no bigger name than **Parsec Thermo-Brite III** in Thermal radiant barriers.



"With TB-III, you don't have to worry about radiant heat anymore. TB-III works so well in keeping away external heat that you get the maximum benefit of a cool interior."

PARSEC Thermo-Brite III



PARSEC THERMO-BRITE TAPE

To complement Parsec Thermo-Brite radiant barrier, the Parsec Thermo-Brite Tape has been specially developed to work in conjunction with the product.

Parsec Thermo-Brite Tape is an exceedingly heavy duty, waterproof, particularly coated, highly metalized, solar heat-resistant film with a permanent pressure sensitive adhesive backed by a removable paper.

When applied, the exclusively formulated acrylic adhesive ensures a state of permanent bonding, resisting weather changes (heat, cold and humidity)

PHYSICAL PROPERTIES

PARSEC THERMO-BRITE III

Reflectivity (Both sides) ASTM E-408	0.95 R
Emissivity (Both sides) ASTM E-408	0.05 E
Thickness	150 microns
Puncture Propagation and Tear Resistance ASTM D-2582	newtons = 16
Beach Puncture (Pyramid Head) (ASTM D-781)	16 kg-cm
Tensile Strength (Break) (ASTM D-882) Machine Direction (MD) Transverse Direction (TD)	5857 g/cm width 5340 g/cm width
Elongation at Break (ASTM D-882) Machine Direction (MD) Transverse Direction (TD)	94 % 100 %
Yield (ASTM D-882)	151 grams/m ²
Water Vapor-Transmission (ASTM E96, Method B)	0.0015gr/ft ² /hr

Surface Flame Spread (British Std 476, Part 7)	Class 1
Fire Propagation Test (British Std 476 Part 6)	Class 0
MIL-Std 810 (Method 507) Salt Fog Test MIL-Std 810 (Method 509) Humidity Test	No defect observed No defect observed
Roll Size:	1.25 m x 96 m
Roll Weight:	±19 kg/roll

PARSEC THERMO-BRITE TAPE

Thermal Conductance & Transmittance (ASTM C236-66)	
Air Leakage (ASTM E283-73)	
Roll Size:	50 mm x 91.4 m 38 mm x 91.4 m
Roll Weight:	1600 g 1000 g



"With the latest technological advances TB-III is now a leading heat resistant product. Reliability, Consistency and Innovation are its key-words."

PARSEC Thermo-Brite III



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