



COOLING
OUR URBAN
ENVIRONMENT

INFRARED HEAT REFLECTIVE

B-16 Z/P I.R. Grey Anti-Corrosive Primer

Astec B-16 I.R. Grey Primer is labelled with the Good Environmental Choice[®] logo as it has been independently verified to meet strict environmental guidelines and specifications set by the Australian eco labelling program.
Lic No. AST 2007



A Cathodic Barrier with Outstanding Adhesion to New Metal Surfaces..

PRODUCT TYPE;

Infrared Heat Reflective Synthetic Alkyd anti-corrosive primer.

INTRODUCTION;

Dark Coloured Coatings for Metal Rooves no longer need to be HOT.....!

A coating doesn't have to be white to be cool..... As an Architect, Builder or Homeowner, rich, dark colour is an important part of your building design and decoration. Unfortunately, dark colours soak up the sun and get hotter and hotter as the day progresses. As a result, building temperatures and power consumption are increased and greater demand is placed on our environment and global resources.

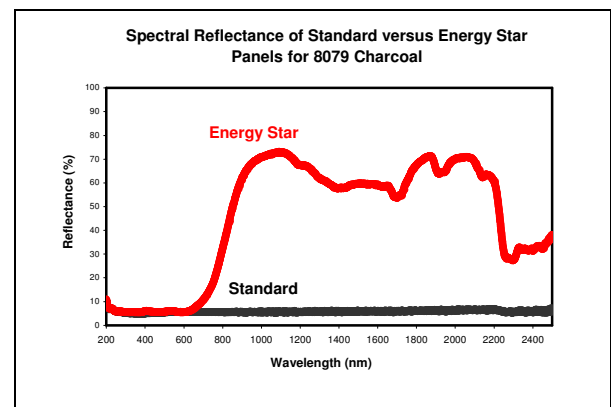
In a world that now demands we be more energy efficient and resource conscious, the use of dark colour, although attractive, presented a design challenge for our industry to overcome. It would be the "holy grail" in coating technology, to achieve a black or deep tone that would reflect solar heat and stay cool.....

As a result of ongoing research and development into heat reflective coatings, Astec developed a new technology of colour infused nano ceramics that reflects heat by selective reflection of infrared light. This technology has enabled us to offer dark colour metal roof coatings that reflect fully 50% of Solar energy and provide positive results for our environment and consumers.

The successful development of Energy Star B-16 I.R. Grey Primer enables you to make choices to provide positive contributions to our global environment with reductions in Urban Heat, Smog and through it's energy efficiency, help reduce Co2 emissions.

Our environment is constantly changing and we are all making choices that have an impact now and into the future. Choose Energy Star with confidence and *Paint with Pride*.

The comparative data represented on the graph below is actual Spectral results printed during tests conducted to ASTM E-903 on a Lambda 9000 Solar Reflectometer. The graph shows the difference in heat reflection between Energy Star and a standard dark roofing paint.



DESCRIPTION;

B-16 I.R. GREY PRIMER is a resin rich anti-corrosive primer manufactured as a concentrate to enable long-term storage without the normal hard settle of the anti-corrosive pigments.

Because **B-16 I.R. GREY PRIMER** remains cool, adhesion and film integrity of the product will last more than 400% longer when compared to a standard roofing primers. Quite simply, the less heat on the coating the longer they last.



This product contains high levels of anti-corrosive pigments accommodating maximum weather exposure experienced by metal roofing decks. Zinc Phosphate, the cathodic protection ingredient, chemically prevents the iron from reacting with the oxygen in the air to form rust. Higher than normally required levels of Zinc Phosphate is incorporated in the primer for added resilience to the levels of electrolysis experienced on metal roofing decks.

B-16 I.R. GREY PRIMER is manufactured principally for use in the Astec Seamless Metal Roofing System and has also found considerable use in the maintenance and restoration industries i.e. as a mist primer for adhesion of new topcoats to new galvanised metal; a shop primer for new construction steel and for the priming of bare corroded steels on previously painted surfaces after the application of Astec Rus-traint.

Most importantly, the Solar reflective properties of the product ensure that the primer will not attract heat and boil beneath semi-opaque protective top-coats. Additionally, it provides a cool surface for subsequent top-coats applied in direct sunlight.

PROPERTIES:

B-16 I.R. GREY PRIMER is a fast drying low solvent content material that is manufactured to strict mill tolerances to produce an exceptionally fine milled product with excellent flow and levelling characteristics. This milling process ensures continual ease in spray application resulting in even, wet film builds across an entire surface. This formulation **is resin rich**, therefore, adheres extremely well to bare steel and galvanised sheet. **B-16 I.R. GREY PRIMER** promotes tremendous adhesion for top-coats to new galvanised metal requiring only a mist prime to achieve this result.

This primer concentrate can be cut by up to forty percent with Astec All Purpose Thinners for spray applications or cut with Mineral Turpentine to slow down the drying time for brushing applications. Any thinned primer should be stored in an appropriate separate container as once the material is thinned it can allow the normal settling of the anti-corrosive pigmentation.

B-16 I.R. GREY PRIMER provides excellent long-term protection against corrosion on substrates exposed to maximum weather conditions and is an ideal concentrate for cost effective shop prime and structural steel applications.

KEY PROPERTIES

- Resin rich concentrate.
- **High Solar Reflectivity in dark colours**
- Energy efficient.
- Cooler internal building temperatures.
- Reduces Urban Heat output.
- Strong anti-corrosive properties.
- Very strong surface bond.
- Excellent intercoat adhesion with acrylic's

PRINCIPAL USES:

B-16 I.R. GREY PRIMER is designed for use on metal substrates and components where high levels of corrosion resistance are required and for applications requiring an adhesive base coat for top-coat adhesion.

SUBSTRATE:

Metal, pre-painted metal or galvanised metal.

COLOUR RANGE:

Grey.

PREPARATION:

1. Where blast cleaning is admissible, blast clean to AS 1627.4 Class 2.
Note; the best coating system performance will be obtained with the highest class of blast cleaning.
2. Power wire brush or hand tool clean.
Note; use Astec Rus-traint over this method of preparation before applying B-16. Refer to the Technical Bulletin on Astec Rus-traint.
3. High pressure water blast with a Kranze Turbo Nozzle.
Note; use Astec Rus-traint over this method of preparation before applying B-16. Refer to the Technical Bulletin on Astec Rus-traint.
4. Regardless of the preparation system, any remaining surface contaminant should be removed before any coatings application. For example, deposits of grease or oil are to be removed with Astec All Purpose Thinners and any dust removed with compressed air.

5. For seafront preparation where blast cleaning is inadmissible, refer to the Astec Performance Standard, **SEAFRONT ENVIRONMENTS Preparation of Corroded Metals where Blast Cleaning is Inadmissible.**

If Unsure, Contact Astec for the correct preparation technique, sealers, primers and undercoats before proceeding.

MIXING:

- Thoroughly mix before use with a paint wacker or broad flat stick.

APPLICATION:

- The best results will be obtained by spray or brush application methods.
- For spray applications, B-16 can be thinned between 10% and 40% dependant upon the wet film requirement that is determined by the level of anti-corrosive protection required. Conventional air or airless spray equipment is suitable for B-16 application. When using airless spray equipment use a 515 to 518 tip.
- For brush application B-16 can be reduced up to 40% with Mineral Turpentine to slow the drying process thus assisting brushing out.

PRECAUTIONS FOR USE:

Highly flammable. Avoid heat, sparks, flame and contact with oxidising agents. Equipment should be earthed. Avoid contact with skin and eyes. Always use a respirator during applications.

LIMITATIONS

Highly flammable. Avoid heat, sparks, flame and contact with oxidising agents. Equipment should be earthed.

PACKAGING

20, 10,4,1 ltr open top drum or pail.

WARRANTY

The technical data furnished herein is based upon data believed by Astec Paints to be true and accurate at the time of writing, however, no guarantee of accuracy is given or implied and is subject to change without notice. It is given in good faith for the assistance of users. No legal warranty expressed or implied is made as to its accuracy, completeness or otherwise. Every person dealing with this material herein does so at their own risk absolutely and must make independent determinations of suitability and completeness from all sources to ensure their proper use. We have no control over the condition under which these products are stored, handled or used, therefore our recommendations must not be regarded as a-mounting to legal warranty or as involving any liability on us.

PRODUCT DATA	
Gloss level	Low Sheen
Drying Time at 25 °C	15 minutes
Recommended thinners	Astec All Purpose Thinners (fast)or Mineral Turpentine (slow)
Recoat time at 25 °C	20 minutes
Abrasion resistance	Good
Solvent resistance	Splash (fair)
UN number	1263
Dangerous Goods Class/Subsidiary Risk	3.1
Hazchem Code	3YE
Poisons Schedule	5
Theoretical spread rate at required D.F.T (80 microns Dry)	4.5 m ² per ltr
Theoretical spread rate at 30 microns dry	12 m ² per ltr
Specific gravity	1.104
Solid content	36% V/V
P.V.C.	31% V/V
%T.S.R.	68.3