
## KEY FEATURES

- *Heat Reflective*
- *Complies with AS/NZS 4859.1*
- *Very low absorptance*
- *Energy Efficient*
- *B.C.A. CodeMark Certified*
- *Certified by Good Environmental Choice Australia*
- *Strong anti-corrosive properties*
- *Quick dry formula*
- *Rapid cure and bond strength*
- *Strong bond to Galv Metal*
- *Strong bond to Aluminium*
- *Strong bond to Colorbond*
- *Strong bond to aged alkyd*

(Technical Bulletin)

# B16 IR Grey Primer

**A Quick-Dry Infrared Heat Reflective Anti-Corrosive Primer with Outstanding Adhesion to New Metal**

## Description:

B16 IR Grey Primer is a premium grade, quick dry synthetic alkyd anti-corrosive primer, designed for use on all correctly prepared metal substrates. It is adhesion promoted for outstanding direct to substrate adhesion and provides excellent adhesion even on difficult substrates such as aluminium.

B16 IR Grey Primer has excellent inter-coat adhesion with acrylic topcoats and contains flash rust inhibitors to allow the primer to be applied direct to steel without the threat of flash rust forming beneath the applied primer. Furthermore, has excellent flexibility and copes well with the dimensional instability of metal roofing sheet.

B16 IR Grey Primer is an infrared heat reflective primer that incorporates a new technology developed by Astec of colour infused nano ceramics that reflect heat by selective reflection of infrared light. This technology enables us to offer a dark-coloured metal roof that reflects fully 50% of Solar energy with solar reflectance values of up to 58% higher than standard coatings of the same colour. As an example, standard slate grey has a Total Solar Reflectance, (T.S.R.), value of 16.6% compared with Energy Star Slate Grey that has a T.S.R of 40.30%, (58% higher reflectance).

## Where to use:


ASTEC AUSTRALIAN PAINT MAKERS

### Confidence for Certifiers, Builders and Architects

Astec Energy Star products are the first, and only range of thermally regulated roofing finishes, texture coatings and elastomeric deck and wall membranes to be CodeMark certified and approved for guaranteed compliance with the B.C.A. Section J – Energy Efficiency Guidelines.

CODEMARK™

ENVIRONMENTAL CHOICE AUSTRALIA
CERTIFIED PRODUCTS

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# B-16 IR GREY

## Description cont:

The product contains high levels of zinc phosphate anti-corrosive pigments accommodating maximum weather exposure experienced by substrates such as metal roofing decks. Zinc Phosphate provides cathodic protection and chemically prevents iron from reacting with oxygen in the air to form rust. Higher than normally required levels of Zinc Phosphate are incorporated in the primer for added resilience to the high levels of electrolysis experienced on substrates such as metal roofing decks.

B16 IR 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 red oxide and zinc phosphate pigments that is normally associated with anti-corrosive primers.

B16 IR Grey Primer is a fast-drying solvent-based material that is manufactured to exceptionally fine mill tolerances. This fine milling process ensures continual ease in spray application resulting in even wet films builds across an entire surface. This formulation is resin rich therefore, adheres extremely well to bare steel and galvanised sheet. B16 IR Grey Primer promotes tremendous adhesion for topcoats to new galvanised metal requiring only a mist prime to achieve this result.

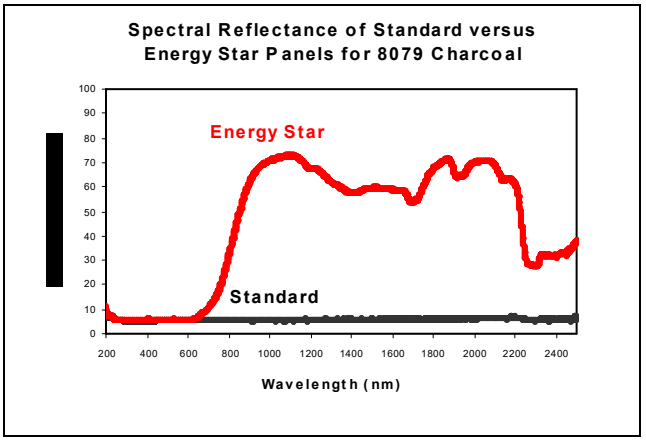
B16 IR Grey Primer is manufactured as a high solid concentrate that can be cut by up to forty percent with Astec All Purpose Thinners for spray applications or cut with Mineral Turpentine to slow down the drying time for brushing applications. Any thinned primer should be stored in an appropriate separate container as once the material is thinned it can allow the normal settling of the anti-corrosive pigmentation.

B16 IR 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.

## High Reflectivity Low Solar Absorptance:

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 temperature and power consumption are increased, and greater demand is placed on our environment and global resources.

The comparative data represented on the graph above 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 a standard charcoal roofing paint and Energy Star Charcoal.




## Durability:

Heat and moisture are the two main contributing factors that accelerate the degradation of exterior coatings. In highly humid, tropical environments, conventional acrylics have been known to last as little as three years. In Australia some dark metal roofing can start to change colour and fade from it's original depth of colour within 3 years.

Energy Star coatings have increased durability and life expectancy compared with conventional paints. Independent laboratory testing to ASTM Standards confirmed Solar Reflectance Indexes of 241% greater than normal paints on a dark colour of Slate Grey.

Heat generated by Solar Radiation from the sun is one major contributing factor to exterior coating degradation, especially in a standard dark colour.

As B16 IR Grey Primer remains cool. After exposure to 2800hrs of UVB 313/Moisture testing, in accordance to ASTM G53-96, the gloss, depth of colour , adhesion and film integrity remained un-changed, This provides a performance increase of more than 400% when compared to a standard roofing acrylic. Quite simply, the less heat on the coating the longer they last.

Moisture is the second major contributing factor to exterior coating degradation, especially in coatings used on roofing surfaces. Atmospheric moisture enters the coating film on a daily basis and swells the coating, greatly reducing it's life.

Specialty silanes used in B16 Primer prevent the entry of moisture into the coating film. As a result, the coating does not swell and can last 400% longer than standard roofing primers. Simply put, the less moisture that the coating film has to tolerate the longer it will last.

# B-16 IR GREY

## Substrates:

Mist primer for adhesion of new topcoats to new galvanized metal, shop primer for new construction steel, for the priming of difficult substrates such as aluminium and for previously painted corroded metals after the preparation and treatment of the corroded areas with Astec Rus-traint.

## Colour Range:

Grey

## Preparation:

Previously painted:

1. Ensure down-pipes to rain-water tanks and storm water are disconnected before cleaning.

2. All surfaces must be clean, dry and free of contaminants. Remove dirt or dust with a wire brush and any grease with a household detergent. Alternatively, the surface should be high-pressure water cleaned to remove any surface contaminants. The most suitable nozzle to achieve the best results is a Kranze Turbo Nozzle. Any deposits of grease, oil or silicone must be removed.

3. Scrape off any loose or flaking paint, then sand any remaining paint to a flat finish. Any existing paint that exhibits a complete lack of adhesion should be entirely removed for the best results. Wipe down with a damp cloth to remove any dust.

4. Rusted surfaces or nail heads should be treated with Astec Rus-traint and once cured spot primed with B16 IR Grey Primer. (See relevant technical bulletin).

5. Prime the entire surface with one light, transparent coat of B16 IR Grey Primer. (See relevant technical bulletin).

New unpainted:

1. Degrease thoroughly with Astec Enviro-green, while frequently changing rags.

2. Prime the entire surface with one light, transparent coat of B16 IR Grey Primer. (See relevant technical bulletin).

## Application:

- The best results will be obtained by spray or brush application methods.

- For spray applications, apply B16 straight from the drum with a conventional air or airless spray gun using a 515 to 518 tip.

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

RECAUTIONS FOR USE:
Avoid contact with skin and eyes; always use a respirator during spray applications.

LIMITATIONS:
Highly flammable. Avoid heat, sparks, flame and contact with oxidising agents. All equipment should be earthed including spray equipment.

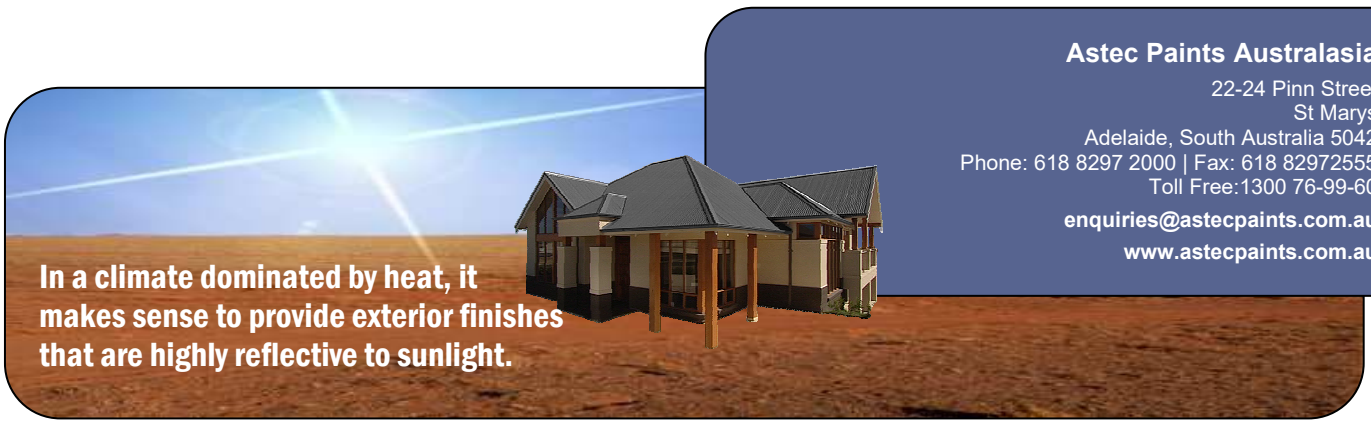
PACKAGING:
20L,10L,4L open top pail.

## Warranty:

# B-16 IR GREY

## Product Data:

| | |
|---|---|
| Colour | Grey |
| Gloss level | Low Sheen |
| Drying Time at 25°C | 15 Minutes |
| Recommended thinners | Astec All Purpose Thinners, (fast) |
| Recommended thinners | Astec B16 Thinners, (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 (100 microns Dry) | 5.7 m² per ltr |
| Theoretical spread rate at 30 microns dry | 19 m² per ltr |
| Specific gravity | 1.091 |
| Solid content | 59% W/W |
| P.V.C. | 30% W/W |
| %T.S.R. *Total Solar Reflectance* (White) to ASTM C 1549-02 | 89.20 |
| Emittance to ASTM C-1371 | 0.89 |

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