# Solarthane

## Self-priming Anti Corrosive Aliphatic Acrylic Polyurethane

**FEATURES**

Fast drying
Direct-to-metal coating
Excellent weathering performance

**BENEFITS**

- Can be applied direct-to-metal or with various primers
- Good long-term UV resistance

**DESCRIPTION**

Solarthane is a fast-drying, high build, two component polyurethane coating which exhibits excellent drying times. It has excellent UV resistance and good corrosion resistance in direct-to-metal applications for C1 to C3 environments, over primers for C4 to C5 environments.

**BASIC USES**

Recommended as a direct-to-metal finish coat or as a finish coat over properly primed substrates for sheeted metal roofing. **Not recommended for continuous immersion service.**

**PACKAGING**

5 litre kit

**COLOUR**

Available in limited colours. White & Pastel shades may require multiple coats for adequate hiding. Consult your local Tremco Sales Representative or Customer Service Department for availability.

**NOTE:** StonCor Africa is committed to being a "lead-free" supplier. This, however, results in certain bright colours having a lower obliteration in comparison to "lead-based" coatings. Some colours (particularly red, orange and yellow) may require multiple coats when applied over darker surfaces. Light coloured primers are available to mitigate against this.

**NOTE:** Some colours of Solarthane may require 2 coats to hide when applied over darker surfaces.

**GLOSS**

Semi-gloss

**SUBSTRATES & COMPATIBLE COATINGS**

Can be used over properly prepared sheeted metal roofing. Can be used over urethane, epoxy and others as recommended.

**GRADE**

Spray, Brush, Roller

**STORAGE**

Store indoors.
Shelf life Part A: 36 months minimum when stored at 25°C
Shelf life Part B: 24 months minimum when stored at 25°C

**NOTE:** Polyurethane materials are moisture sensitive. Keep tightly covered before use. Moisture contamination will cause poor cure of the coating or gelation of Part B.
Temperature: 4 to 43°C
Humidity: 0 to 90%

**APPLICATION**

**Surface Preparation:** Remove any oil, grease, dust, chalking and dirt from surface to be coated.

**Roof Sheeting:** ISO 8501 St2 for maximum protection.

**Previously Painted Surfaces:** Lightly sand or abrade to roughen and de-gloss the surface. Existing paint must attain a minimum 3A rating in accordance with ASTM D3359 "X-Scribe" adhesion test.

**Mixing:** Mix separately, then combine and mix in the following proportions – do not mix partial kits
Part A: 4.375 litre
Part B: 0.625 litre

**Thinning:** Thin up to 20% by volume with Carboline Thinner # 25 for normal spray or brush application.

**NOTE:** Substitute thinners may contain alcohols which will inhibit the cure of Solarthane. Use of thinners other than those supplied or approved by StonCor Africa may adversely affect product performance and void product warranty, whether expressed or implied.

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## APPLICATION

**Spray Application:** Use sufficient air volume for correct operation of equipment. Use a 50% overlap with each pass of the gun. On irregular surfaces, coat the edges first, making an extra pass later.

**Airless Spray:**
**Pump Ratio:** 30:1 (min)*
**Material Hose:** 10mm I.D. (min)
**Tip Size:** 0.013 to 0.015*
**Output PSI:** 2100 to 2300 (145 to 159 bar)
**Filter Size:** 60 to 100 Mesh
*Teflon packings are recommended and are available from the pump manufacturer.

**Brush & Roller:** Brushing recommended only for touch-up of small areas. Use natural bristle brush, applying with full strokes. For roller application, use a short nap mohair roller with phenolic core. Avoid re-brushing and/or re-rolling.

## COVERAGE RATES

5.2m²/litre at 125 microns
8.67m²/litre at 75 microns
13m²/litre at 50 microns
Material and application losses will vary and must be taken into consideration when estimating job requirements.

## THEORETICAL SOLIDS CONTENT

By volume: 65% ± 2% (Colours)
By volume: 62% ± 2% (Aluminium)

## RECOMMENDED THICKNESS

75 to 150 microns when applied direct-to-metal
40 to 100 microns when used as a topcoat
**Excessive film thickness will cause gassing and poor film appearance.**

## TEMPERATURE RECOMMENDATIONS

| | Material | Surface | Ambient | Humidity |
|---|---|---|---|---|
| Minimum | 18°C | 2°C | 2°C | 0% |
| Maximum | 43°C | 54°C | 49°C | 85% |
| Optimum | 24°C | 24°C | 23°C | 60% |

Do not apply when the surface temperature is less than 2°C above the dew point.
Special thinning and application techniques may be required above or below normal conditions.

## TEMPERATURE RESISTANCE

**Continuous:** 93°C
**Non-continuous:** 121°C

Discolouration may be observed above 82°C.

## CURE TIME

| Surface Temperature | Dry to Handle | Final Cure |
|---|---|---|
| 16°C | 8 Hours | 10 Days |
| 24°C | 4 Hours | 7 Days |
| 32°C | 2 Hours | 5 Days |

**NOTE:** The above times are based on ASTM 1640, Drying, Curing or Film Formation of Organic Coatings, Sections 7.7 (dry to handle). These times are based on recommended dry film thickness of 75 microns. Higher film thickness will lengthen cure times.

**Relative Humidity:** 50%
**Rain Resistance:** Requires a minimum of 3 hours at 25°C and longer at lower temperatures. Surface moisture before this time will decrease the gloss.

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**CLEAN-UP**

Use Thinner # 2. In case of spillage, absorb and dispose of in accordance with local applicable regulations.

**SAFETY**

Read and follow all caution statements on this product data sheet and on the material safety data sheets for this product. Employ normal workmanlike safety precautions. Hypersensitive persons should wear protective clothing, gloves and use protective cream on face, hands and all exposed areas.

**MAINTENANCE**

Your local Tremco Roofing sales representative can provide you with effective maintenance procedures which may vary, depending upon specific conditions. Periodic inspections, early repairs and preventive maintenance are all part of a sound program.

**TECHNICAL SUPPORT**

Your local Tremco Roofing sales representative, working with the Technical Service staff, can help analyse conditions and needs to develop recommendations for special applications.

**VOC VALUES**

Thinner # 10: 25% - 242g/litre
As supplied: 88g/litre
These are nominal values

**Pot Life:**
3 Hours at 25°C and less at higher temperatures. Pot life ends when the material becomes too viscous to use.

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