

NUROOF COOL

PRODUCT CODE: TRP 200 Range

TECHNICAL DATA SHEET

Product Description A premium quality UV-resistant water based acrylic roof coating with Infrared reflective technology with a minimum Total Solar Reflectance (TSR) of 30%.

Intended Uses • An extremely durable, weather resistant coating for use on cementitious and galvanised roofs.

- Features & Benefits**
- UV-resistant for long lasting protection.
 - Reduction of roof surface temperature by approximately 10 °C
 - Reduction of interior temperature by up to 8 °C
 - Can lead to power and cost savings by reducing the need for cooling.
 - Thermal emittance < 1
 - Easy application by brush, roller or airless spray.
 - Easy to clean equipment with water after use.
 - Can be used on prepared cladding, galvanised garage doors, galvanised gutters and down pipes.
 - 12 Year Quality Guarantee. (Refer to terms & conditions at www.plascon.co.za)
 - The coating has a minimum **TSR** of 30%

Total Solar Reflectance (TSR)

Product Code	Colour	% TSR*
TRP 200	Atmosphere Grey	32.85
TRP 201	Sunset Dusk	36.31
TRP 202	Blue Aureole	37.84
TRP 204	Black Coffee	31.46
TRP 205	Rising Moon Sky	36.98
TRP 206	Earth Shadow	31.31
TRP 207	Rainforest Green	36.31
TRP 209	Antique Red	36.30
TRP 210	Moonlit Sky	40.14
TRP 211	Tan Sky	48.83
TRP 212	Khaki Dawn	47.80
TRP 213	Bushveld Plains	46.36
TRP 214	Ashen Sky	40.95
TRP 215	African Pan	46.58
TRP 216	Green Leaf	38.47
TRP 62	White	86.00

*TSR value over white

Product Information	Appearance	Low Sheen
Colours	Standard colours as per colour card	
Solids	Approx. 48% by mass; 36% by volume	
S G @ 23 °C	1,25 kg/ℓ (approx)	
Recommended DFT	35 – 50 µm per coat	
Viscosity @ 23 °C	Approx. 105 KU	
Flash point	Non Flammable	
Theoretical spreading rate	7 -8 m ² /ℓ per coat (on smooth surfaces)	
Practical Spreading Rate	The practical spreading rate will vary depending on the porosity and profile of the substrate, as well as the application technique and tools used. (See table below in "application details")	



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Application Details

Mixing Stir thoroughly with a flat paddle until homogeneous and occasionally during use.
 Method Brush, roller or airless spray. To maximise the % TSR and hence the cooling effect of **NUROOF COOL (TRP 200 Range)** on dark coloured roofs apply one coat of **NUROOF COOL (TRP 62) WHITE** as a base coat
 Thinning Do not dilute. Ready for use
 Cleaning Water
 Substrate Primed or sealed galvanised steel, Granular cement tiles, fibre-cement sheets, through-colour roof tiles, zinalume and Aluzinc.

Application Environment

Surface Temperature	Ambient Temperature	Relative Humidity
Min: 10 °C	Min: 10 °C	Min: 10%
Or 2 °C min. above dew point		
Max: 50 °C	Max: 35 °C	Max: 85 %

Drying time

Touch dry 30 min @ 23 °C
 Dry to handle 1 h @ 23 °C
 Over coating 2 h @ 23 °C

Practical spreading rate (per coat)

Cement and fibre cement sheeting	5 m ² /ℓ (Typical)
Galvanised iron	5.9 m ² /ℓ (Typical)
Granular cement tiles	1.5 - 3 m ² /ℓ (Typical)

Calculating the quantity of paint required:

Calculating the surface area of the roof:
Step 1: Calculate the flat square metre area
Step 2: Adjust to the pitch of the roof by adding the following %:

Pitch of roof	Add factor %
High	40
Normal	30
Low	20

Step 3: Adjust the roof type to account for the profile by adding the following %:

Roof Type:	Add factor %
Profiled corrugated	30
Profiled IBR	30
Profiled smooth cement tiles	25
Profiled granular cement tiles	25

- You now have the total area of the roof in square metres.
- Divide the figure by the average spreading rate of paint for the particular roof surface. This will give you the number of litres of paint required per coat.
- Multiply by 2 to obtain the total number of litres for 2 coats.

Storage & Packaging

Store away from direct sun, heat and severe cold.
 Shelf life: 2 years
 Packaging: 5 ℓ and 20 ℓ.

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Surface Preparation

Surfaces must be clean, firm (sound) and thoroughly dry before painting.

Remove any fungal growth or algae with household bleach (3, 5% solution of sodium hypochlorite) thinned 2 parts bleach to 1 part water by volume. Leave on surface for approximately 1 hour and then scrub with a hard bristle brush to remove all dead growth. Rinse thoroughly with fresh water. Allow to dry. Repair leaks and defective flashing with **PLASCON ROOFSEAL MEMBRANE (WRM 1)**

1. GALVANISED IRON:

- 1.1 **New:** Remove fabricators pre-treatment oil, grease and any other contaminants with **METALCARE GALVANISED IRON CLEANER (GIC 1)**. Hose and scrub down with a hard bristle brush and fresh water and repeat cleaning process until a water break-free surface is obtained. Prime with **METALCARE GALVANISED IRON PRIMER (GIP 1)**.
- 1.2 **Unpainted and weathered:** Remove oil, grease, white rust or any other contaminants with **METALCARE GALVANISED IRON CLEANER (GIC 1)** to achieve a water break-free surface. Rinse thoroughly with fresh water. Then prime with **METALCARE GALVANISED IRON PRIMER (GIP 1)**. Areas showing **red rust** must be abraded back to bright metal, patch primed with **PLASCOSAFE 18 PRIMER (EMS 18)** and then the whole surface primed with **METALCARE GALVANISED IRON PRIMER (GIP 1)**.
- 1.3 **Previously painted :** Carry out adhesion tests on previous coating. Cross cut test to ISO 2409-2013 standard. Remove faulty paint and scrub entire area with **POLYCELL SUGAR SOAP POWDER solution (500g into 5 Litres water)** . Clean with high-pressure water jet to remove sugar soap solution, chalk and dirt. Treat any bare areas as in 1.2 above

2. FIBRE-CEMENT SHEETING:

- 2.1 **Unpainted and weathered:** Remove dust, dirt, loose granules, friable and powdery material with high-pressure water jet or alternatively scrub down with a hard bristle or wire brush and water. Allow surface to dry. Seal entire surface with **PLASCON BONDING LIQUID (CVI 14)**. Allow 16 hours to dry. Apply 2 coats of **NUROOF COOL (TRP 200 Range)**, allowing 2 hours drying between coats.
- 2.2 **Previously painted in poor condition:** Strip completely. Restore powdery and friable surfaces to a sound condition by applying **PLASCON BONDING LIQUID (CVI 14)**. Allow to dry for at least 16 hrs @ 23 °C. Apply 2 coats of **NUROOF COOL (TRP 200 Range)** before contamination of the surface can take place.

3. CEMENT TILES AND GRANULAR TILES:

- 3.1 **Unpainted and weathered:** Remove dust, dirt, loose granules, friable and powdery material with high-pressure water jet or alternatively scrub down with a hard bristle wire brush and water. Allow surface to dry. If surface is still sound, apply **NUROOF COOL (TRP 200 Range)** direct on the substrate. If surface is still friable and powdery seal with **PLASCON BONDING LIQUID (CVI 14)**. Allow to dry for at least 16 hrs @ 23°C. Apply 2 coats of **NUROOF COOL (TRP 200 Range)** before contamination of the surface can take place, allowing 2 hours drying between coats.
- 3.2 **Previously painted :** Carry out adhesion tests on previous coating. Cross cut test to ISO 2409-2013 standard. Remove faulty paint and scrub entire area with **POLYCELL SUGAR SOAP POWDER solution (500g into 5 Litres water)** .Clean with high-pressure water jet to remove **POLYCELL SUGAR SOAP POWDER solution**, chalk and dirt.
- 3.3 **Previously painted in poor condition:** Strip completely. Restore powdery and friable surfaces to a sound condition by applying **PLASCON BONDING LIQUID (CVI 14)**. Allow to dry for at least 16 hrs @ 23 °C. Apply 2 coats of **NUROOF COOL (TRP 200 Range)** before contamination of the surface can take place, allowing 2 hours drying between coats.

4. ZINCALUME AND ALUZINC:

Scrub surface thoroughly with **POLYCELL SUGAR SOAP POWDER solution (500g into 5 Litres water)**. Rinse thoroughly with clean water to neutralise. Allow to dry. Prime with **PLASCOSAFE 18 PRIMER (EMS 18)**.

5. CHROMADEK:

Scrub surface thoroughly with **POLYCELL SUGAR SOAP POWDER solution (500g into 5 Litres water)** or **REMOVAL HIGH STRENGTH CLEANER & DEGREASER (RCI 70)** and scouring pads to remove chalk and contaminants. Rinse thoroughly with clean water to neutralise. Allow to dry. Prime with **PLASCON EPIWASH STRONTIUM CHROMATE PRIMER (AW 255)**. Allow 1 hour to dry but not more than 14 days before overcoating.

6. SPECIAL CAUTION TILES:

N.B. The painting of **clay, slurry coated tiles, slate and wooden shingles** is **NOT RECOMMENDED**.

7. EXTREMELY POROUS SURFACES-UNPAINTED CEMENT AND WELL-WEATHERED TILES:

Remove dust, dirt, loose granules, and friable and powdery material with a high-pressure water jet or by scrubbing with a hard bristle or wire brush and water. Allow surface to dry. Apply undiluted **BONDING LIQUID (CVI 14)** (refer to technical data sheet for application details). Allow to dry for at least 16 hrs @ 23 °C before applying 2 coats of **NUROOF COOL (TRP 200 Range)**, allow 2 hours to drying between coats. Overcoat before contamination of the surface can take place.

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Application	<ul style="list-style-type: none"> • Stir thoroughly with a flat paddle. • Apply by brush, roller or airless spray of NUROOF COOL (TRP 200 Range) to a total DFT of 70 - 100 µm. • To maximise the % TSR and hence the cooling effect of NUROOF COOL (TRP 200 Range) on dark coloured roofs apply one coat of NUROOF COOL (TRP 62) white as a base coat and thereafter two coats of NUROOF COOL (TRP 200 Range) in the colour of your choice. • Allow at least 2 hours drying time between coats. • N.B. When painting corrugated sheet roofs, start at the apex and work downwards completing a full sheet at a time joining in the valleys to avoid lap marks.
Cautions	<ul style="list-style-type: none"> • Do not dilute NUROOF COOL (TRP 200 Range). • Friable and powdery surfaces require special care before painting- if in doubt contact Plascon Advisory Service 0860 20 40 60 • For health reasons, avoid dusting when preparing fibre-cement surfaces. Keep surfaces wet and wash off residues with water. • The painting of slate, clay, slurry tiles and wooden shingles is not recommended. • Do not apply to surfaces where the temperature is less than 10 °C. • Do not paint under conditions of frost, dew, rain or fog or inclement weather. Note: Painting under the above conditions may affect the performance of the paint film. • To ensure that colours on a project are consistent, check that batch numbers are the same. • The Plascon 12 year Quality guarantee is not applicable where NUROOF COOL (TRP 200 Range) is used on flat roofs.
Safety Precautions	<ul style="list-style-type: none"> • Keep out of reach of children. • Ensure good ventilation during application and drying. • Do not pour paint down the drain • In case of skin contact, wash with soap and water or a recognised skin cleaner. • Avoid contact with eyes. In case of contact, rinse eyes immediately with plenty of water and seek medical advice if symptoms persist. • Harmful if swallowed. Seek medical attention and do not induce vomiting. • Refer to Safety Data Sheet for complete information.

DISCLAIMER:

The recommendations contained herein are given in good faith and are meant to guide the specifier or the user. They are based on results gained from our tests and experiences and are believed to be reliable. No guarantee is implied by the recommendations contained herein since conditions of use, method of application and cleanliness of the substrate prior to painting are beyond our control.

NB: Technology may change with time necessitating changes to this Technical Data Sheet (TDS). It is the responsibility of the user to ensure that the latest TDS is being used.

NB: TO ORDER: Quote product name, product code number, packaging and colour.

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