NUROOF COOL

PRODUCT CODE: TRP 200 Range

TECHNICAL DATA SHEET

Product Description:
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 primed or sealed galvanised steel, granular tiles, cement tiles, fibre-cement sheets, through-colour roof tiles, Zincalume and Aluzinc.

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.com)
- The coating has a minimum TSR of 30%

Total Solar Reflectance (TSR)

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

*TSR value over white

Product Information:
- Appearance: Low Sheen
- Colours: Standard colours as per colour card
- Volume Solids: 36%
- Viscosity @ 23 °C: Approx. 105 KU
- Recommended DFT: 35 – 50 µm per coat
- Recommended WFT: 97 – 139 µm per coat
- Theoretical spreading rate: 7 - 8 m²/L @ 50 µm per coat (on smooth surfaces)
- Practical Spreading Rate: The practical spreading rate will vary depending on the profile of the substrate, as well as the application technique and tools used.
- TVOC: 40 g/L
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Application Details

Mixing Method
Stir thoroughly with a flat paddle until homogeneous and occasionally during use.

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

Cleaning
Do not dilute. Ready for use

Water

Drying time
Touch dry: 30 min @ 23 °C

Over coating: 2 h @ 23 °C

Application Environment

<table>
<thead>
<tr>
<th>Surface Temperature</th>
<th>Ambient Temperature</th>
<th>Relative Humidity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Min: 10 °C</td>
<td>Min: 10 °C</td>
<td>Min: 10%</td>
</tr>
<tr>
<td>Or 3 °C min. above dew point</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Max: 50 °C</td>
<td>Max: 35 °C</td>
<td>Max: 85%</td>
</tr>
</tbody>
</table>

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 %:

<table>
<thead>
<tr>
<th>Pitch of roof</th>
<th>Add factor %</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>40</td>
</tr>
<tr>
<td>Normal</td>
<td>30</td>
</tr>
<tr>
<td>Low</td>
<td>20</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Roof Type:</th>
<th>Add factor %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profiled corrugated</td>
<td>30</td>
</tr>
<tr>
<td>Profiled IBR</td>
<td>30</td>
</tr>
<tr>
<td>Profiled smooth cement tiles</td>
<td>25</td>
</tr>
<tr>
<td>Profiled granular cement tiles</td>
<td>30</td>
</tr>
</tbody>
</table>

- 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.
Packaging: 5 L and 20 L.
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Surface Preparation

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 MULTISEAL (WSS 2) or PROFESSIONAL WATERPROOFING COMPOUND (PWC 520) and the appropriate waterproofing membrane.

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

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 & 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 PLASCODE 18 PRIMER (EMS 18) and then the whole surface primed with PLASCODE 18 PRIMER (EMS 18) or METALCARE GALVANISED IRON PRIMER (GIP 1). Roofs within 1km of the coast:

2. **UNPAINTED CEMENT AND WELL CONTAINING BRAVE TILES:**

3. **CEMENT TILES AND GRANULAR TILES:**
   3.1 **Unpainted:** 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 h to dry. Apply 2 coats of NUROOF COOL (TRP 200 Range), allowing 2 h drying between coats.
   3.2 **Previously painted in good condition:** Carry out adhesion tests on previous coating. Cross cut test to ISO 2409 standard. Remove faulty paint and scrub entire area with a POLYCELL SUGAR SOAP POWDER solution (500 g into 5 L water). Clean with high-pressure water jet to remove sugar soap solution, chalk and dirt. Seal bare areas with PLASCON BONDING LIQUID (CVI 14). Allow 16 h to dry.
   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 h @ 23 °C. Apply 2 coats of NUROOF COOL (TRP 200 Range) before contamination of the surface can take place.

4. **ZINCUMILE AND ALUZINC:**

5. **CHROMADEK:**

6. **SPECIAL CAUTION TILES:**

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 h @ 23 °C before applying 2 coats of NUROOF COOL (TRP 200 Range), allow 2 h to drying between coats. Overcoat before contamination of the surface can take place.
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Application
- To properly prepared and sealed surfaces apply NUROOF COOL (TRP 200 Range) by brush, roller or airless spray at 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 h 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
- 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, bituminous surfaces and wooden shingles is not recommended.
- Do not apply to surfaces where the temperature is less than 10 ºC.
- 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 and product codes 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
- 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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