



ISO 9001 Certified Company
 "TIME TESTED PRODUCTS"
 SINCE 1972

Zahabiya SOLABLOK RC-211

High Performance Cool Roof Coating

Zahabiya SOLABLOK RC-211 is water borne, acrylic copolymer based water proof & weather resistant roof coating with special additives that very strongly reflect the solar radiations in all three regions of the solar spectrum i.e. Ultraviolet (UV), Visible and Infra-Red (IR). As a result, the coating and the roof remains cool even in the hottest summer days. Consequently, less heat is transferred through the roof, increasing the thermal comfort as well as significant reduction in energy consumption for air-conditioning (more than 40% in summer).

SOLABLOK RC-211 has high elongation, good flexibility and high weather & UV resistance etc. making it an ideal roof coating product. The coating is easy to apply and can be used on all types of roofs esp. on un-insulated roofs to solve the excessive day time heating problem. Unlike conventional insulations, it does not impede the cooling of roof in the night, increasing the comfort level round the clock. RC-211 has following attributes:



- Waterproof, UV & weather resistant
- Reflects more than 88% solar rays
- Cool to touch and walk
- Reduces roof's peak temperature by 15°C or more
- Reduces summer air-conditioning cost upto 40%
- Increases indoor comfort
- Increases roof's expected life
- Performs best when it is most needed (on hottest days)
- Contains special micro additives to inhibit heat transfer
- Fungus, algae & other micro-organism resistant
- Very low VOC - a truly Green Product. Conforms to LEED IEQ Credit 4.2 requirements
- Low dirt pickup ensures easy maintenance
- Effective on all types of insulated and un-insulated roofs

Radiative Properties of SOLABLOK RC-211

Solar Reflectance (SR):	0.882 [ASTM C1549]; aged (calculated) ¹ : 0.68
Thermal Emittance:	0.86 [ASTM C1371]
Solar Reflective Index (SRI):	110 [ASTM E1980] ² ; aged (calculated) ³ : 82
Surface Temperature:	314K [ASTM E1980] ^{2, 4}

1 Calculated Aged Solar Reflectance = 0.7 x (SR - 0.2) + 0.2 2 Medium Wind Conditions (hc = 12 W/m²K)
 3 Aged SRI calculated using Aged SR value as calculated above. 4 Conditions: Tambient = 310K, W = 1000W/m²

COLOUR:

ODOUR:

VISCOSITY:

DENSITY:

VOC CONTENT:

NON-VOLATILE:

ELONGATION:

TENSILE STRENGTH:

WATER ABSORPTION:

ADHESION:

SERVICE TEMPERATURE:

DRYING:

COVERAGE:

DILUENT:

SAFETY:

STORAGE:

SHELF LIFE:

Bright white matt coating.

Slight ammoniac smell. Odourless when dried [ASTM D1833].

Thixotropic paint, viscosity measures around 32 ± 2 sec with Zahn Cup No. 5 [ASTM D4212].

Wet Paint: Around 0.84 kg/litre [ASTM D1475].

Dry / Cured Coating: 0.74 kg/litre.

0.168% or 2.22g/L

58% ± 1 w/w [ASTM D2369].

160% (at break).

690kPa (at break).

24 hours: 2.2% (immersion method).

72 hours: 5.6%

1 week: 6.6%

>1.27MPa on concrete. It also has excellent adhesion on metal, fibreglass, asbestos, wood, plywood, MDF etc.

Useable between 10°C to 60°C.

Air-drying. Touch dries in 30 minutes with deep drying in 3 to 4 hours [ASTM D1640]. The second coat may be applied after 4 to 6 hours interval, depending on ambient conditions.

Depends on the porosity of the substrate and the method of application. By normal brush the coating may cover around 85 to 90 SFT per kg per coat (8 to 8.5 m²/kg per coat).

Use as supplied. If dilution is necessary, use normal potable water.

The product is Non-Flammable, Non-Hazardous, Non-Toxic and Safe in Handling. A "**Human Friendly & Environmentally Acceptable Product**". However, personal protective equipments (PPEs) should be worn as per standard industrial safety procedures.

Store at cool & ventilated place, away from sunlight between 25 and 30°C. Keep in the original airtight containers when not in use.

Use within 12 months from manufacturing date.



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Application:

Zahabiya SOLABLOK RC-211 is very effective on:

- Concrete Roofs
- Corrugated Metallic Roofs
- Asbestos Roof Sheets
- Fibreglass Roof Sheets
- Exposed Cold Water Pipes & Air Conditioning Ducts
- Floors and Pavements where "cool to walk" coatings are desired such as near pools, mosques, courtyards, terraces etc.

Procedure:

The coating may be applied on a previously cleaned, degreased, smooth & compact surface by brush, roller or spray. For optimum results, the coating may be applied at the coverage of 30 SFT/kg, which is normally achieved in 3 rich coats (excluding primer coat) by brush or roller. *Mix well before use.*



Following procedure is to be adopted for application of Zahabiya SOLABLOK RC-211 as a solar reflective coating on a new or used (compact) concrete roof:

- The surface should be clean and free from any loose particles, dust, grease, algae, mold or any other substance that can reduce the adhesion of the coating. Any previously applied coating should be thoroughly removed. After mechanical and/ or chemical cleaning, the surface should be thoroughly washed and dried for coating application.
- Apply liberally the primer coat of Zahabiya SOLABLOK RC-211 diluted with 30% potable water all over the roof by means of brush so as the coating penetrates into the pores of the surface. Alternatively, Zahabiya WATER SHIELD ZSAC-10/55 (White), diluted with 20% water can be used as a primer.
- Any cracks present should be sealed with Zahabiya SOFT SEAL SPECIAL ZSP-1191, after 4 hours of primer coat.
- With an interval of 4 to 6 hours between the coats, apply 3 rich coats of Zahabiya SOLABLOK RC-211 by brush or roller to get the total coverage of 30SFT/kg for optimum solar reflection.

- Notes:** (1) Zahabiya SOLABLOK RC-211 can also be used in combination with Zahabiya WATER SHIELD ZSAC-10/55 to produce a highly water proof and solar reflective system. Please contact us for further details.
 (2) The coating may be regularly cleaned to maintain its high solar reflection properties since dust accumulation can adversely affect these properties. Gentle wash or mop is recommended.

Zahabiya SOLABLOK RC-211 conforms to minimum Solar Reflective Index (SRI) or Solar Reflectance (SR) requirements of following international standards, regulations or programs. Wherever, there is a requirement of aged SRI or SR data, calculated aged values of RC-211 can be compared.

Regulatory Body	Requirements	
	SRI	SR
• USA Energy Star Program	--	0.65 & 0.5*
• California Energy Commission Title 24	64*	0.55*
• USGBC LEED Initiative	78	--
• ASHRAE / USGBC / IES Standard 189.1-2009	78	--
• Singapore BCA Green Mark	78	--
• Australia Green Star Mark (Credit ENV 3)	78	--
• Dubai Green Building Regulations	78	--
• India Green Building Rating System (LEED 2011)	78	--

* 3 years aged values. All other values are initial SR & SRI.

IMPORTANT NOTICE:

The Information & Data contained herein are correct to the best of our knowledge, tests and experience. These are presented in good faith to the users. The recommendations and suggestions mentioned are made without guarantees or representations as to the results. The Consumer should satisfy himself as to the suitability of the product for the intended purpose and use. **WE ASSUME NO LIABILITY** for damages of any kind and the user accepts the product 'as is' and without any other warranties, expressed or implied. Our warranty is limited to the replacement of so proved defective Zahabiya's original sealed product only, provided used within shelf life as supplied originally.



WINNER "BRANDS OF THE YEAR AWARDS" FROM 2009 TO 2012

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