

SUNSHIELD 100

100% PURE ACRYLIC SOLAR REFLECTIVE COATING

DESCRIPTION

SUNSHIELD-100 is a single component, 100% pure acrylic based, highly engineered, elastomeric, insulating solar reflective coating that incorporates 'ceramic' technology for thermal reflection and substrate insulation. Solar reflective coating is waterborne, high build formula that reflects the radiant solar heat, insulates, sound proofs, beautifies and protects the substrate. After drying it forms a film of exceptional strength and durability that gives excellent resistance to solar radiations.

FEATURES / ADVANTAGES

- SUNSHIELD-100 gives temperature difference from 4⁰ C to 6⁰ C in surface temperature from inside
- Resistance to chalking and flaking
- Ultra violet resistance for outstanding durability
- Available in attractive light shades, white is recommended
- Aesthetic appeal and protection against water and carbon dioxide penetration
- Waterborne chemistry for uncomplicated handling and clean up
- Suitable for brush methods of application and optimize rheology for high film build in one coat
- Breathability for preventing moisture build up in walls and roofs (MICROPOROUS)
- Can be applied on slightly damp surfaces too

TYPICAL APPLICATION

SUNSHIELD-100 is mainly designed for:

- Exterior RCC surfaces, masonry walls or facades
- Asbestos sheets, sloping roofs, farm sheds
- Water storage tanks of metal, plastic, cement etc.
- Warehouses, godowns, cold storage, etc.

TECHNICAL INFORMATION

CARATERISTICS

Nature	: one component water thinnable
Thinner	: municipal or potable water [Solar reflective coating + 40% water]
Drying time	: dry to touch – 30 minutes
Recoating period	: minimum 6-8 hrs at room temperature (ideally 24 hrs.)
Solar Refractive Index (SRI)	: >78

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Solar Reflection : > 0.70
 Initial remittance : > 0.75

Coverage on Asbestos panel (1 sq.ft.)

<u>Coat applied on</u>	<u>Coverage [sq.ft./ltr./2 coat]</u>
• Concrete substrate	: 20 – 25
• Plastic and metal	: 25 - 30
• Cement slurry (1:1)	: 25 - 30
• On asbestos roof	: 25 - 30

Temperature difference : up to 10⁰ C (surface temperature deduction)
 No. of coats : 2, depending upon the substrate & D.F.T. required
 Shades : as per shade card, (light shades will give better solar reflectance)
 Method of application : by brush
 Finish : rough and matt
 Dry film thickness : 150-200 microns per two coats

Adhesion on

- Concrete : Excellent
- Asbestos : Excellent
- Metal and plastics : Excellent

DIRECTION FOR USE

Adequate surface preparation as given below is necessary for product performance.

SURFACE PREPARATION

NEW MASONRY

SUNSHIELD-100 Solar Reflective Coating should not be applied to concrete and to other surfaces less than 7 days old. Ideally concrete should be allowed to cure for 28 days before application. Power wash to ensure no under bound sand or cement remains on the surface. Allow the surface to dry and then apply Sunshield-100 Solar Reflective Coating.

EXISTING MASONRY

Power wash to remove all loosely adhered coatings, dirt, mild dew and other contaminants. Apply **REFRESH** to the surfaces affected by algae and fungi followed by a jet of water after half an hour (refer literature of Choksey's REFRESH). Fill any existing cracks up to 3mm with **PAINTEX-4** (Acrylic latex Caulk) paintable sealant, and more than 3mm with polysulphide sealant.

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PLASTIC SURFACE

Clean the surface with water and allow it to dry. Scuff with fine emery paper 320. Clean with water once again. Apply SUNSHIELD-100.

METAL SURFACE

Scuff with fine emery paper 320. Clean the dust with dry cloth then apply SUNSHIELD-100.

APPLICATION OF SUNSHIELD-100

SUNSHIELD-100 Solar Reflective Coating can be applied only by brush. The material is to be diluted with specified percentage of water. Dampen the surface slightly with water. Apply first coat at a spread rate of 4.0 - 4.5 m²/ltr. Allow it to dry for minimum 6 hrs, (Preferably 24 hrs) before application of second coat. Apply second coat of SUNSHIELD-100 Solar Reflective Coating at a spread rate of 4.5 – 5.0 m²/ltr after thinning it with specified percentage of water.

SHELF LIFE

18 months in original packing if stored at room temperature i.e. 20⁰ C – 35⁰ C.

PACKING

1 liter, 4 liters and 20 liters

PRECAUTION

- The substrate should be free from Chalking
- All dust, grease and loose paints, powdery particles, fungus and algae need to be completely removed from the walls.
- Apply REFRESH on the walls to remove remaining traces of fungi/ algae and allow it to stand for one hour.
- Clean the walls after one hour with water jet to remove the REFRESH applied and wait for one hour.
- Fill the existing cracks more than 3mm in size with suitable sealant of CHOKSEY CHEMICALS PVT.LTD for better product performance / capability.
- Do not over-extend the brush.
- For better results clean the coated surface with water periodically, may be after every 6 months.
- No ponding of water is recommended on the coated surface.