



STARPROOF WF-SP-600

(High Quality Waterproofing Membrane)

DESCRIPTION

STARPROOF WF-SP-600 is a special synthetic resin based waterproof coating. Because of its excellent flexibility and thixotropic nature it is ideal for use on vertical as well as horizontal surfaces. It is single pack, very economical and pollution free water proof coating. Due to its white color, it offers excellent UV Resistance & Solar reflectivity. Gives cooling effect due to the reflective properties.

PRINCIPAL APPLICATION

- Waterproofing for roofs ranging from asphalt, asbestos, cement to concrete and terrazzo tiles.
- Recommended for both horizontal and inclined structures.
- Waterproofing of roof slabs, terraces, balconies, sun shades, parapet walls, etc. Provides additional waterproofing and protection when used as base or intermediate coat in brickbat coba / IPS flooring.
- Waterproofing of new as well as old surfaces
- Waterproofing membrane for FLAT ROOFING SYSTEMS (Traditional and Inversed)

SUBSTRATES

Nature of substrates: **STARPROOF WF-SP-600** waterproof membranes can be applied not only to concrete but also to wood and metal surfaces. With the latter a special primer is necessary.

Roof Pitches: The membrane can be applied for all roofs to any extent of slope.

Condition of substrate: Concrete and cementitious substrate are to be well compacted and at least 28 days old, with troweled finish. Wood panels or metal sheeting should be solidly fixed and cleaned. All surfaces must be clean, dry and free from dust or rust and oil residue.

COVERAGE

Coverage depends upon the nature of the surface to be applied. But on average, smooth surface will give approx 30 sq ft per kg (First Coat) & 27 sq ft per kg (Second coat). Two coats of the product will give 300 microns dft.

IMPORTANT PRECAUTIONS

Asphalt roof surfaces to be coated with **STARPROOF WF-SP-600** must be at least one year old and load bearing. Application when rain threatens should be avoided for all substrates. The application at temperatures below 5°C will result particularly in case of thick coats, incomplete film formation and consequent reduced elasticity of the film as well as the possibility of formation of cracks in the coating.

Low temperatures and high atmospheric humidity (such as fog) will slow down curing rate, and vice versa.

STARPROOF WF-SP-600 membranes are resistant to the abrasion or light pedestrian traffic. However, they can be damaged by heavy traffic, high heeled shoes and furniture, and thus should be protected by tiles, slabs, etc. in such cases.

METHOD OF APPLICATION

* *WATERPROOFING CONVENTIONAL ROOFS*

Asphalt surfaces: Old asphalt surfaces and asphalt roofing felt after cleaning must be primed with **STARPROOF WF-SP-600** diluted 1:2 with sweet water. This would strengthen the weathered surfaces. Blisters in asphalt roofing felt must be cut open cross wise, dried and bonded with suitable adhesive.

After complete drying of the primer and bonded areas, **STARPROOF WF-SP-600** is applied with brush, roller or spray gun. A brush with horse hair bristles will provide almost texture-free, smooth surfaces. Dilution upto 20% for 1st coat and 10% for 2nd coat is allowable.

For spraying, **STARPROOF WF-SP-600** may be diluted with a little water. Higher dilution would lead to sedimentation and blocking of spray gun.

* **Terrazzo Tile Roofs:** Damaged or washed-out joints should be cleaned and repaired or re-grouted. After thorough cleaning to remove all loose material, prime the entire surface with **STARPROOF WF-SP-600** diluted 1:2 with sweet water.

After the primer coat is completely dried, make two coats of **STARPROOF WF-SP-600** as previously described.

Star Specialties Polymers Pvt. Ltd.

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* **Flat roofs with zero pitch:** Flat roofs without pitch, so-called zero pitch roofs, are roof surfaces where puddles may develop and which therefore pose special problems. Puddles after curing cannot be rectified which may necessitate redoing the entire waterproofing. Hence dry weather condition is a prerequisite to help satisfactory curing and puddle free coating.

Broom with hard bristles (example of stiff plastic) should naturally not be used for cleaning since in unfavorable conditions they may cause damage to the coating.

* **Metal Roofs:**

1. Iron or galvanized iron: remove loose paint with a wire brush. De-rust corroded areas and prime with suitable metal primers.
2. Zinc or aluminum: remove loose paint with a wire brush. Remove corrosion if present and prime with solvent primer. Thoroughly remove moss and mildew with wire brush; subsequently clean the surface with a broom. After thorough drying of the primer, application of **STARPROOF WF-SP-600** is carried out as previously mentioned.

* **Concrete Roofs:** After cleaning the roof surfaces, prime with **STARPROOF WF-SP-600** diluted 1:2 with sweet water. After complete drying of the primer, proceed as described under asphalt roof surfaces to apply **STARPROOF WF-SP-600**.

APPLICATION OF MEMBRANE

Standard procedures to be followed for cleaning, the substrate and primer coat application. After complete drying of the primer coat, give two coats of **STARPROOF WF-SP-600**.

Curing for 48 hours is adequate at normal temperatures. However at low temperature conditions curing time to be extended accordingly and ensure complete curing before laying thermal insulation and mechanical protection.

THERMAL INSULATION

100% closed cellular structured, jointed extruded polystyrene panels are placed over the **STARPROOF WF-SP-600** continuous waterproof membrane. The thickness to be determined by the degree of insulation required.

MECHANICAL PROTECTION

Roofs not subject to traffic: Fine mesh nylon sheet should be placed over the insulation before covering with washed gravel (15/30 mm gauge) to a minimal thickness of 5 cm. Where the thickness of the insulation is more than 5 cm. apply gravel to the same thickness as the insulation.

Roofs subject to traffic: Protection by prefabricated concrete slabs, using wedges made from small squares of **ROOFMATE 20 X 20** cm to adjust levels and allow rain water to drain under the protection. Protection by in-situ concrete screed: a 'KRAFT' paper protection should be placed over the insulation and topped with a concrete screed of 4 to 5 cm. thickness.

HEALTH & SAFETY

As with all chemicals, caution should always be exercised. Protective clothing such as gloves and goggles should be worn.

INHALATION: Inhalation of vapor or mist should be avoided. If inhaled symptoms include coughing, wheezing, laryngitis, and shortness of breath, headache, nausea, and vomiting. Immediately shift victim to fresh air, and, if needed immediately start artificial respiration. Give oxygen if breathing is labored. Get emergency medical help.

EYE CONTACT: Flush eyes with water for 15 minutes and call for medical help.

INGESTION: causes nausea, vomiting, and loss of consciousness. If accidentally swallowed do not induce vomiting rather call for medical help immediately.

SKIN CONTACT: Flush with water or soap and water till all traces have been removed. Seek medical attention if required.

STORAGE & SHELF LIFE

Shelf life is 12 months in unopened container. Store away from sunlight and preferably below 30°C. Storage should be frost protected.

PACKING

STARPROOF WF-SP-600 is available in 20 kg. pail, 200 kg. metal drum.

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TECHNICAL DATA

Appearance	Viscous Liquid
Solid Content	63 ± 5% (ASTM – D 1644-03)
Color	White, Grey.
Viscosity (Spindle No: 7; RPM : 10 25° C	50000 to 70000 CPS (thixotropic)
Specific Gravity	1.10 ± 0.10 (ASTM – D 1475-03)
Curing Time	Approx.48 hours (at 20°C, 50% RH) (ASTM C 4125)*
Drying Time @ 25° C.	Approx 2 hours (ASTM D 1640-03)
Hardness Shore A	55 ± 5 (ASTM – D 2240-05)
Resistance to Temperature	Approx. -30 °C to +100 °C
Elongation Break	> 300 % (ASTM – D 2370-98)
Tensile Strength N / mm ²	1.99 (ASTM – D 412-98a)
Water Permeability	almost zero
UV Resistance	10,000 hrs No deterioration or color fade.(ASTM D 822)
Flash Point	Non-flammable
Chemical Resistance	Good
Insulation Properties	Good
Adhesion Strength N / mm ²	66.00 (ASTM – D 903-98)
Pull Off Test N / mm ²	2.704 (BS 1881:part 207:1992)
Water Vapor Transmission g / h - m ²	0.97 (ASTM E 96-095)

WARRANTY

The information given is based on our knowledge and performance of the material. Every precaution is taken in the manufacture of the product and our responsibility is limited to the quality of supplies with no guarantee of results in the field, as manufacturer has no control over site conditions or execution of work

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