



ALFASHIELD WHITE

(High Quality Waterproofing Liquid Membrane)

DESCRIPTION

ALFASHIELD WHITE A Single component synthetic resin based waterproof coating. As it being Thixotropic and its flexibility makes it ideal for using on Vertical as well as Horizontal surfaces. Due to its white colour, it offers excellent UV Resistance & Solar reflectivity. Gives cooling effect due to the reflective properties an economical pollution free coating.

FEATURES

- Single Component, Cold Applied and Highly Elastic Rubber Like Membrane.
- Superior wetting & adhesion properties
- Unique Additives added to make it durable.
- Adapts itself over the irregular deck contours.

BENEFITS

- Requires no mixing or heating, saves labour costs and application time.
- Forms an impervious & waterproof blanket.
- Ensures durable bond & resists peeling, chipping, hence lasts longer.
- Highly Resistance to oxidation, UV & ozone.
- Withstands expansion/contraction & deck movements, Resists Crack.

TECHNICAL SPECIFICATIONS

Appearance	Viscous Liquid
Solid Content	62+ 2%(ASTM – D 1644-03)
Colour	White, Grey.
Viscosity (Spindle No: 4/7; RPM: 10/20@25°C	50000 to 70000 CPS (thixotropic)
Specific Gravity	1.30 + 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	2.70 (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)

PRINCIPAL APPLICATION AREAS:

Be it Waterproofing over roofs ranging from, asbestos, asphalt, cement to concrete and terrazzo tiles. Can readily be used and recommended for both horizontal and inclined structures. Waterproofing of roof slabs, terraces, balconies, sun shades, parapet walls, etc. It will Provide 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: ALFASHIELD WHITE waterproof membranes can be applied on all types of surfaces be it concrete wood or 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 cementations substrate are to be well compacted and at least 28 days old, with toweled 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 will depend on the nature of the surface where ALFASHIELD WHITE is to be applied .On an average, over a smooth surface an area of approx. 30 sq. ft. per kg (First Coat) & 27 sqft per kg (Second coat) can be acheived. Two coats of the product will give 300 microns DFT

IMPORTANT PRECAUTIONS

Asphalt roof surfaces to be coated with ALFASHIELD WHITE 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 5o 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.

ALFASHIELD WHITE membranes is tough and resistant to the abrasion for 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 ALFASHIELD WHITE diluted 1:2 with Treated 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 air drying of the primer and bonded areas, ALFASHIELD WHITE 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 ALFASHIELD WHITE 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 ALFASHIELD WHITE diluted 1:2 with treated water.

After the primer coat is completely air dried, prepare two coats of ALFASHIELD WHITE as briefed above. **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 notbe used for cleaning since in unfavorable conditions they may cause damage to the coating.

METAL ROOFS:

- **Iron or galvanized iron:** remove loose paint with a wire brush. De-rust corroded areas and prime with suitable metal primer.
- **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 ALFASHIELD WHITE is carried out as previously mentioned.

**CONCRETE ROOF:**

After cleaning the roof surfaces, prime with ALFASHIELD WHITE diluted 1:2 with treated water. After complete air drying of the primer, proceed as described under asphalt roof surfaces to apply ALFASHIELD WHITE.

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 ALFASHIELD WHITE.

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

For thermal insulation 100% closed cellular structured, jointed extruded polystyrene panels are placed over the ALFASHIELD WHITE. 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 shortness of breath, coughing, wheezing, laryngitis, nausea, vomiting, headache, Immediately shift victim to fresh air, and, if needed immediately start artificial respiration. Give oxygen if breathing is laboured. 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 18 months in unopened container. Store away from sunlight and preferably below 30°C. Storage should be frost protected.

PACKING : ALFASHIELD WHITE is available in 1 kg, 5 kg, 10 kg, 20 kg. pail, & 50 kg 200 kg. Drum.