

HEAT INSULATING EXTERIOR COATING

Description

Dr. Fixit Heatshield is heat reducing & 'Energy Saving' elastomeric coating composed of acrylic emulsion polymers, microspheres, properly selected & graded inert fillers, light fast & weather durable white pigments, additives & water as medium. It is used as a heat insulating & waterproof coating on building rooftops & exterior walls because it helps in reducing power consumption substantially by reducing the load on air-conditioners & keeps the interiors cool with additional function of waterproofing.

Dr. Fixit Heatshield contains advanced material of 'Hollow Micro spheres based on Borosilicate Glass as micro bubbles' having remarkable 'Heat Insulation' property. The unique spherical shape of the glass bubble produces stable voids which results in low thermal conductivity and a low dielectric constant. When applied on substrate, the hollow micro spheres form a closely packed structure like 'Air Space' within the dry film layer that serves as insulation medium to resist heat transfer. Dr. Fixit Heatshield has thus the ability to slow down heat transfer remarkably and keep interiors of externally coated surface of a building cooler by re-radiating most of the solar heat back into the atmosphere.

Areas of Application

- Terraces and rooftops of buildings - cementitious, asbestos & metal surfaces.
- Exterior walls of buildings
- Cold storages, computer server rooms, electrical control panel rooms, etc.
- Metal & concrete storage tanks for water, chemicals and fuel in petrochemical industry.

Features & Benefits

- **Heat Insulation** - Reduces the conductivity of heat from exterior to interior thus maintains the temperature.
- **Solar Reflectance** - 83.8% solar reflectance (ASTM E-903), re-radiated heat back to atmosphere
- **UV and IR resistant** - Resistance to UV & IR emission protects coating from damage and reduces heat conductivity.
- **Microbial resistant** - Resistance to algae and fungus growth results into lesser maintenance.
- **Toxicity** - Non-Toxic & water based system.
- **Waterproofing** - Excellent waterproofing increases the durability of Dr.Fixit Heatshield.
- **Saving** - Reduction in electrical consumption for air-conditioners, saves energy cost..

Method of Application

Surface Preparation: on Cementitious Surfaces

- Surface to be applied upon must be free from dust, loose material, paint, oil, or any other material which may impair adhesion
- Mechanical means such as wire brushing & shot blasting can be used. Finally vacuum cleaning of all loose solids and liquids can be done if required
- All surface cracks upto 5 mm width should be filled up with Dr. Fixit Crack X or Dr. Fixit Unifiller.
- Cracks more than 5 mm and all separation gaps should be filled up with Dr. Fixit Pidicrete URP or Dr.Fixit Unibond SBR modified mortar or as specified..

1 PRIMING

- All new cement-sand renderings & concrete surfaces should be allowed to age for 6 to 8 weeks before surface coating
- Attain SSD condition before priming
- Prime with Dr. Fixit Primeseal (2 part primer : 1 part water)
- Apply with brush or roller.

Dr. Fixit Heatshield



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2 APPLICATION

- Apply 3 coats of Dr. Fixit Heatshield without any dilution by brush or roller at an interval of 2 hours.
- Allow the coated surface to air cure fully for 7 days.

Surface Preparation: on Metal Surfaces

- Metal surface should be cleaned to remove existing paint, rust by appropriate mechanical or chemical means.
- New surface should be de-greased and cleaned well

1 PRIMING

- Prime the metal surface with suitable anti-corrosive primer.
- Priming is not required for new GI sheets.

2 APPLICATION

- Apply 3 coats of Dr. Fixit Heatshield without any dilution by brush or roller at an interval of 2 hours.
- Allow the coated surface to air cure fully for 7 days.

Precautions & Limitations

- Do not dilute.
- Always to be kept as final coat.i.e. No overcoating on Dr.Fixit Heatshield.

Technical Information

PROPERTIES	SPECIFICATION	RESULTS
Appearance		Free flowing, homogeneous & uniform paste.
Colour		White
Solid content, %	ASTM D 1010	> 60
Sp. Gravity		1.01 - 1.05
Thermal conductivity		0.029 w/mK
Elongation, %	ASTM D 412	200
Abrasion resistance	ASTM D 968	No wear after 450 litres of falling sand
Wind driven rain resistance	TTC - 555	No moisture penetration after 24 hours.
Tensile strength @ 25°C, N/mm ²	ASTM D 412	0.276
Total solar energy rejected, %		94
SRI Value %	ASTM E-903	83.8
Accelerated weathering (2000 Hrs)	ASTM D 4587	Pass
Mildew resistance	ASTM D 3273-731	No growth
Corrosion resistance	ASTM D 610/800	No rust
Relative heat gain, Btu/hr/sq.ft		30

Coverage

30 sq.ft per ltr per coat.

*Coverage may vary depending upon the texture and porosity of the surface

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Packaging

1, 4 and 20 litres.

Shelf Life & Storage

- Shelf life is 12 months from the date of manufacturing. Store in a cool & dry place.
- Keep away from direct sun light.

Health & Safety Precautions

- Skin Contact: Wash skin with soap & water. Remove contaminated clothes.
- On eye contact: Immediately splash eyes with plenty of water. Consult Physician if irritation persists.
- Ingestion: Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a Physician.

Other Product Categories Available

DR. FIXIT has wide range of Waterproofing & Construction chemicals which includes,

- Waterproofing Products
- Repair Products
- Sealants
- Flooring Products
- Exterior Coating Products
- Tile Fixing Range
- Concrete Admixtures
- Grouts



Pidilite Industries Limited

Construction Chemicals Division
Ramkrishna Mandir Road
Post Box No. 17411
Andheri (E) Mumbai 400059 INDIA
Tel +91-22-2835 7000 • Fax +91-22-2835 7008
website www.doctor-fixit.com • E-mail drfixit@pidilite.com
Toll Free No.: 1800-22-5502

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