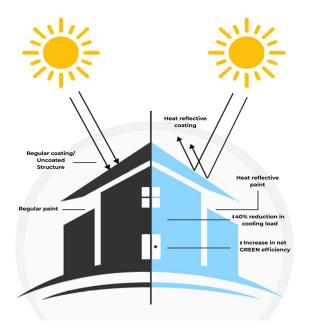


Beat the summer heat, keep your house cool and Green.



**SUMMER** is back, and with it is the sun beating down on the roofs of our houses. The resultant trapped heat in today's concrete structures ends up making summer afternoon's unbearable & evening's uneasy. How would you feel if there was a way in which you could **reduce the temperature** of your room by atleast **5°C** without even having to switch on your AC?

**POLYLAC® THERMOSHIELD**, a heat reflective & thermally insulating roof coating system is the answer to most of your problems. This innovative coating system will help reduce the **surface temperature** of your roofs, walls, terraces by at least 11—15°C when coated compared to an uncoated roof, where the surface temperature can go up to 50-55°C in the afternoons.

### What is Thermoshield -

Polylac® ThermoShield is a two- component urethane based high solid and elastomeric coating. The coating system is based on a novel reactive polymeric IPN (Inter Penetrating Networks) containing functional additives. This coating system forms a uniform film & shields the coated surface from IR & UV radiation by reflection & insulation, thus protecting it from ageing and normal weathering.

This system can be applied horizontally as well as vertically for walls. The resulting film is flexible and leads to reduction in solar heat absorption by the slab & Damp; sun-facing walls, resulting in significant drop in the ceiling (below the slab) & wall temperatures.

# **Application areas:**

- RCC slabs & sun facing walls of houses & Buildings.
- Building roof, terraces and exterior walls.
- Industrial sheds.
- Roofs over petroleum / solvent storage tanks to minimize evaporation losses.
- Raw material storage warehouses of chemical factories where elevated temperatures can product deteriorate quality.
- Cold storages.
- Cargos, containers, wagons.

### Features -

- Two component system, easily applicable only by brush.
- Adheres strongly to a wide variety of surfaces. such as concrete, metal, asbestos etc.
- Water-seal barrier coat increases durability of the system.
- Flexible coatings containing functional fillers to enhance thermal resistance.
- Saves energy requirement of refrigerated or air-conditioned systems by almost 30 to 40%.
- Reduced heat load helps reduce overall environmental impact of HVAC systems.
- Totally washable system.
- Protects against solar radiation while retaining the aesthetic appearance of surface



## **Physical Properties:**

Appearance	White Paste
Consistency	Paste (25%diluted water)
Surface drying time	15 - 20 mins.(30 O C)
Coverage (Concrete)	65 - 75 Sq.Ft./kg.
Dry film thickness	150 - 200 microns

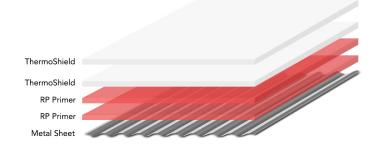
# **Testing Data:**Surface Temperature Difference for various roofs:

Cement roof	11 -15°C
Metal roofs	18°C
PVC Sheets	5°C
Asbestos roofs	10 -12°C

### **Room Temperature Data (Masonry roof):**

Ambient Conditions	40°C, 42% RH
Inside room Temp. (Uncoated)	DBT 37°C
Inside room Temp. (Coated)	DBT 31°C
Comfort conditions	24°C, 60%
RH Reduction in cooling load for coated v/s uncoated roof	up to 40 %





# Directions for use: Subfloor preparation:

The substrate must be clean & free of dirt and oils.

Thoroughly sand-grind the surface to remove dirt & loose particles.

Clean & Wash the surface with water & allow it to dry completely.

# Primer Coat: For Masonry/ asbestos surfaces:

'Aquapox' primer - 2 component water-based Epoxy primer system is used Dilute the mixed contents of Aquapox with 20% water and apply two coat by brush

### For Metal roofs:

Zinc-phosphate based anti-corrosive primer is used A single coat is applied by brush/spray.

Allow the primer to dry for at least 2-3 hrs before applying top coat for both substrates.

## Polylac® Thermoshield coat:

Stir the contents of the 2-pack system and mix thoroughly to get a homogenous free flowing consistency.

Dilute the above material with up to 25% water

Apply the first coat of ThermoShield by brush OR roller and allow it to dry for at least 2-3 hrs before second coat.

A minimum of two coats of & 'Thermo Shield' are recommended.

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