



Heat Guard 1000 is a single component high heat resistant reflective and waterproof coating which has been designed to dissipate and reflect solar radiation by providing a protective coating. **Heat Guard 1000** is applicable on a variety of substrates such as concrete, blocks, bricks, plaster and screeds, and a variety of shaded metal roofs. **Heat Guard 1000** had added glass beads aggregates embedded into it which can reflect heat off the surface to a great extent.

ADVANTAGES

- ✓ Works as a heat insulation, light reflective coating.
- ✓ Reduces load on air conditioning units.
- ✓ Flexible, crack bridging coating.
- ✓ Non-toxic, can be used in confined areas.
- ✓ Anti-carbonation coating for concrete surfaces.
- ✓ Reduces thermal stress on the coated surface.
- ✓ Does not support fungal or bacterial growth.
- ✓ Also acts as a waterproof coating.
- ✓ UV resistant.

HOW IT WORKS?

Heat Guard 1000 uses its certified solar reflectance properties to greatly reflect the solar heat and efficiently emit the absorbed heat from the roof and facade before heat can enter the inner environment. Its low thermal conductivity also effectively blocks the heat transfer through the substrate to protect your inner environment from the blazing sun. The particles of the reflective glass beads and the insulation polymer used in the production of **Heat Guard 1000** acts as an excellent barrier to heat sound and water.

TYPICAL PROPERTIES AT 25°C

Component	Single
Form	Slurry
Color	White
*Specific Gravity	1.20 ± 0.2 (Can be higher depending upon requirement)
*Drying Time	40 minutes – 45 minutes (It can vary as per site temperature)
*Recoat Time	Minimum 2 hours (Can be less Depending upon weather conditions on site)
*Full Cure	Minimum 07 days
*Bond Strength	1 N / mm ² @ 28 Days
*Initial water absorption	>98% Over Control
*Elongation	160%
*UV Resistance	Of affect or change in color after 300 Hours

*Typical results under laboratory conditions.



SURFACE PREPARATION

The surface should be clean and sound, free of dust loose particles, grease, oil, primers from previous membrane systems or bitumen. Bitumen or primer should be repaired by cutting out to sound concrete and patching with polymer modified repair materials preferably from the patch series of Ressichem repair materials. Cracks, holes, and honeycombs must be repaired prior must be repaired prior to application. Areas at brick / block walls to receive waterproofing should have brick joints evenly finished.

MIXING

Heat Guard 1000 is supplied in premeasured units. It is recommended to agitate the material prior using a slow speed paddle drill mixer in-case some of the material has settled at the bottom of the packaging. Once the product is properly mixed it is ready for application and should be applied using the application criteria.

APPLICATION

Saturate the concrete surface with clean water. Apply first coat while the surface is still damp but free from standing water. Apply using a short stiff bristle brush, roller at a rate of 1-2mm, depending on the expected water pressure. Required thickness is achieved by applying 2 to 3 layers, taking care that each layer is not thicker than 1mm. Leave the first coat to dry for 2 to 3 hours before applying the second coat. Second coat can be rubbed down with a soft sponge. Spray or trowel application is acceptable provided that the mixing ratio is adjusted to achieve the right consistency. Leave the final coat of **Heat Guard 1000** to cure overnight and keep moist for 3-4 days before proceeding to conduct water proofing test. It is recommended that for over hollow blocks or highly porous areas a minimum of 3 to 4 coats at 1 mm thickness to be applied.

CURING

Heat Guard 1000 should be protected from wind, sunshine, and rain until fully cured. In case the ambient temperature goes over 40°C.

PACK SIZE

Heat Guard 1000 is available in 20 KG Pack Size.



INSULATION PROPERTIES

Solar reflectance	89
Emittance	0.86
Solar Reflective index	111
Thermal Conductivity	0.01888 W/m ² K
Losar Heat reflectance	99.3%
Flash Point, °C (COC)	No Flash point detected
Soft fit temperature difference	Reduce up to 10°C to 15°C
Accelerated weathering	PASS – No Cracking

Results as per internal lab testing.

COVERAGE

12 – 18 SFT / KG. Actual coverage depends on porosity and texture of the substrate.

SHELF LIFE

12 months from date of manufacture when stored under warehouse conditions in original un-opened packing. Extreme temperature / humidity may reduce shelf life.

HEALTH AND SAFETY

Heat Guard 1000 is regarded as non-hazardous for transportation. Do not reuse bags or containers and dispose them off as per local rules and regulations. Gloves and suitable masks can be worn during application. Please refer to the MSDS of the product for further health and safety information.