

VS TOP-COAT

SPECIAL PAINTS

Description

VS-TOP-COAT is water base radiant heat reflecting, insulating and thermal barrier elastomeric coating. On application, it forms a waterproof elastomeric reflective surface seal in the form of monolithic uniform thermal insulated membrane, Which reflects sunlight to a greater extent and prevents the roofing materials from getting heated up, even in peak summer afternoons. **VS-TOP-COAT** can prevent more than 95% of solar radiation from being absorbed in to the structure thus providing protection against thermal shocking, lengthening the life-span of buildings.

How does insulation work?

The tightly packed film reflects and dissipates heat by minimizing the path for the transfer of heat. The ceramics are able to reflect, refract and block heat radiation (loss or gain) and dissipate heat rapidly preventing heat transfer through the coating with as much as 90% of solar infrared rays and 85% of ultra violet-rays being radiated back into the atmosphere. Special chemicals in cool coat are Nano acrylic polymer modified with special additives resulting in excellent adhesion, very low water absorption, low vapor permeability, high temperature stability, elastic in nature, low VOC. and many more resulting in outstanding thermal insulating coating.

Area of Uses

Slopping roof, Flat terrace & Exterior walls, Industrial sheds, galvanized (GI) sheet (MS) sheets, concrete asbestos, Building roof, Hospital buildings, Domestic residence, warehouses, factories, Offices, shopping malls, cold storage areas, Animal refuges,

storage facilities, water tanks etc. & Topping for waterproofing system to enhance life of the systems

Features

- o Single component, easily applicable by brush roller or spray. User friendly.
- o Adheres strongly to a wide variety of sound substrates such as concrete, metal, modified bitumen, wood.
- o UV light protection maintains aesthetic appearance & ageing. Prevents growth of moss, fungus
- o Heat-not-conductive property saves conditioning energy cost up to 35%.
- o Unique non-conductivity (to heat-cold) property keeps the building warm in winter and cool in summer resulting enhancement of structural life
- o Elongation & excellent adhesion of the product have the resistance power for expansion & contraction due to heat & cold
- o VS-TOP-COAT has excellent anti corrosive property so when applied on metal surface it protect from corrosion
- o VS-TOP-COAT have excellent thermal insulation property and best performance is observed on metal surface
- o Light weight-puts less stress on the building. Attractive color shades available if required
- o Low VOC (volatile organic compounds)
- o Excellent waterproofing properties

Typical Properties

1	Appearance	white semi solid	2	Recommended DFT.	250-300 micron
3	Salt spray test	250 hours	4	Pull out strength	7.1 tonnes
5	Film formation	Excellent	6	Touch dry	30-40 min
7	Total solid	60%	8	SP Gravity at 30°C	1-1.1
9	Finish	Eggshell to matt	10	pH	8 – 9
11	Recoat ability	6-8 hours	12	Complete curing time	72 hrs
13	Coverage	15-18 sqft (2 coat)	14	Elongation % at break	100
15	Shelf life	1yr in sealed drum	16	Adhesion test	no peel off coating
17	Application method	By brush or roller	18	Water absorption % by wt	1 %
19	Fire resistance	10 seconds	20	Abrasion resistance	6000 cycles

21	Roof Temp. Reduction RCC cement finished surfaces Asbestos cement sheets Powder coated sheet	- o 10° C to 12° C - o ... 12° C to 15° C - o ... Up to 20° C
22	UV & weather resistance	No ageing/withstands up to 2100hrs. cycles

	D822, ASTM G23)	
23	Flexibility	Permanent flexibility no migration or leaching out of any ingredient on exterior exposure for a longer period
24	Tensile strength at break (ASTM D412)	17 kg/ cm ²
	Heat resistance at 175° C for 30 minutes	No blistering cracking or delamination observed
26	Base	Water base elastomeric acrylic resin base coating
27	Solar Reflective Index (SRI)	104

Direction for Use

Surface preparation is very important to get the best result and to avoid failure. The substrate must be sound enough, clean and free from dust, dirt, grease, oil, sludge, moss, blistered cement coating, loose plaster etc. Thoroughly wire brush the surface to remove saturated dirt and loose partials. Wash the surface to remove dust. Allow the surface to dry completely.

Metal surface:- If applied on metal surface care should be taken that metal is not hot & it is not corroded.

If hot it is to be cooled with water or best is to be applied in morning & evening slot

If corroded it is to be treated with (RUST CONVERTER)

PRIMER COAT:- If the substrate is too old, primer coat is required. Dilute the material in 1:1 proportion with water and apply one coat by brush or roller allow to dry for ½ hrs.

CONCRETE SURFACE:-CRACK TREATMENT:- Seal the cracks of parapet wall & roof by creating V groove with **VS-TOP-COAT** ELASTOSEAL allow it to dry for 24 hrs. before applying primer. Mix the content of the pack its own container to achieve homogenous free flowing consistency. Apply first coat of **VS-TOP-COAT** by brush or roller to plug the pores & shrinkage crack. Allow the coating to dry for minimum 4-5 hrs. before 2nd coat. Minimum 2 coats are recommended. If required additional coat may be applied

Precaution:-

1. Do not apply on damp surface or in rain.
2. Do not add water unless recommended
3. On metal surface do not apply on hot surface see that temperature is in between 25-30 °C

Note:

I Cooling Energy Savings will be influenced by

1. Choice of color, (the temperature will reduce by 4°C) based on Ambient temperature
2. Building Design (Including roof pitch, materials & window placement, Ventilation, etc.)

3. Occupancy
4. Ratio of exposed roof area to floor area.
5. According to ambient atmospheric conditions such as temperature, wind velocity etc.

II

1. Corrugate surface attracts 25% extra area.(When compared to flat surface)
2. Coverage may depend on the roughness and porosity of the surface.

Safety

Avoid contacts with eyes or inhalation irrigate the affected areas with cleaned and sufficient quantity of water

Note

All data in the technical application information given to our customers are examples of indications as to the possible ways of applying our products that are known. to us and that correspond to the present state of our knowledge Due to the numerous possible application variations in industrial practice and the necessary limited number of application examples that have been prepared, this information given without obligation or liability of any kind whatsoever on our part