



AdvanceCoat Thermal Shade

High Performance and eco-friendly product of Heat Insulation Coating for Energy-saving and Cooler Buildings

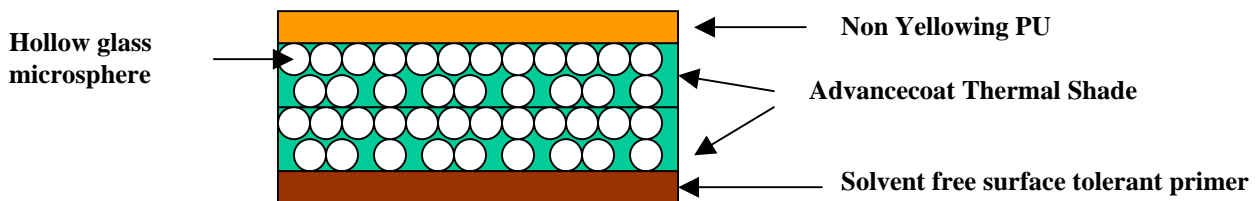
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Introduction

Advancecoat Thermal Shade is a high performance environmental friendly products for heat insulation coating for energy saving and cooler building. It is develop based on hollow micro-sphere of boro-silicate which have very low thermal conductivity.

This system include a surface tolerant solvent free epoxy, two coat of AdvanceCoat Thermal Shade and one coat of non yellowing polyurethane finish.



This system can be use as thermal insulation coating for roof or exterior wall and anti- condensation coating for sweating pipe.

It have following advantages: -

- Excellent thermal insulation
- Excellent heat reflection and internal heat reduction for energy saving
- Reduction of surface condensation
- Excellent anti corrosive, chemical and water resistance
- Excellent weathering properties.
- Low maintenance cost, durable and can prolong the service life of roof material
- Excellent sound insulation.
- Environmental friendly

Thermal Insulation Mechanism

Generally , heat is transfer into building through

- Radiation – The heat from the sun is transfer in electromagnetic waves into the building and it is largest source of heat gain for a building.
- Conductivity – the radiation form sun is convert into heat and transfer through wall or roof by conduction.
- Convection is the heat circulation between the heated ground and air by sun's heat.

AdvanceCoat Thermal Shade is using latest water borne epoxy system with maximum loading of hollow microspheres in the formulation. When the coating is cured, the microspheres which have low thermal conductivity of 0.047W/m.K will form a continuous insulated barrier coating, this will significantly reflect the radiation and reduce the hest transfer through conduction. AdvanceCoat ThermalShade can reflect 80% of sun radiation and 60% of heat conduction as compared to untreated surface.



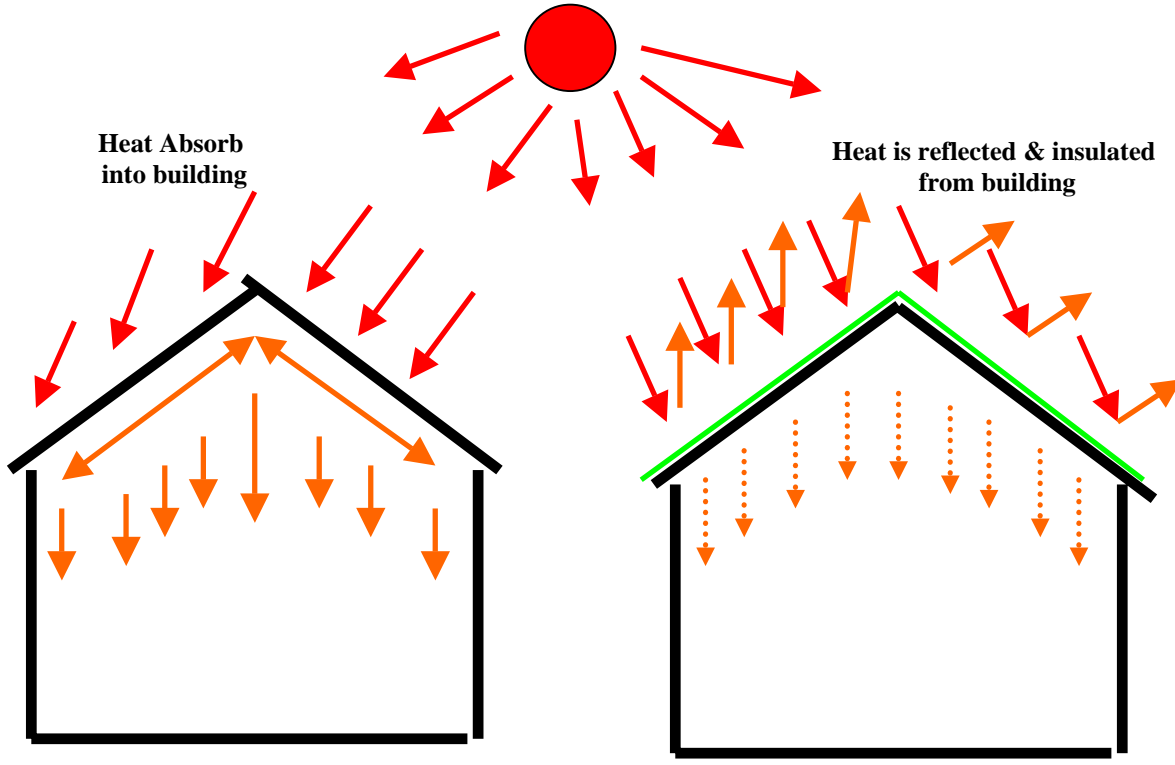
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The diagram below shows heat circulation of untreated and treated roof.



Without coating

With AdvanceCoat Thermal Shade



Photo of Roof Coating