

Smart Fire Retardant Coating

A versatile solution to cater to wide gamut of external stimuli

Space Applications Centre of Indian Space Research Organization at Ahmedabad has developed an omni-purpose thin coating which can be applied easily on any substrate to obtain benefits in terms of fire retardant. This coating overcomes many of the limitations of commercially available paints.

Potential Applications

It can protect almost all type of materials. Hence, it may find applications in all type of finishing materials like wall panelling, false ceiling, doors, windows, walls. Its versatility makes it suitable for use in restaurants, hotels, hospitals, schools, Airports, shopping malls, metro stations, Bus hubs, Commercial buildings as well as personal residence.

Advantages

- Provide two types of protections-fire resistance, flame retardant
- Has good adhesion to all surfaces
- Aesthetically appealing, can be mixed with any paint without loss of its fire retardant property
- Suitable for both indoor & outdoor use. Post curing will not wash off with rain water.
- Superior fire, thermal protection benefits.

Special features

- Can be applied as thin coating on any surface.
- Can be applied over existing surfaces after fire exposure.
- No surface preparation required except cleaning of dust and oil.
- Can protect from any mode of fire. Sustains high temperatures

- Saves substrates up to 50% after fire.
- Reduces moisture absorption by 50%

Mode of application

Can be applied like plaster by trowel. Any extensive training for application not required.

Other Features

- Good adhesion of the coating facilitates vertical and overhead application, minimizes clean up.
- Virtually free of maintenance, doesn't crack or deteriorate significantly with time.
- Dries to the touch approximately 2 to 4 hours after application and cures thoroughly in 48 hours in ambient temperature.

Technical Specifications

Total Solids	:	40 – 50%
Color	:	Whitish Grey
Specific Gravity	:	1.29 gm/cc



Coated v/s bare wood specimen at 400°C