



HL470e

Energy Efficient Thermal-ModeratingTM Floor Coating

PRODUCT DESCRIPTION

HL470e is a 100% resin rich and low V.O.C. self-leveling floor coating designed as an effective thermo moderating coating, functioning as an insulation medium to moderate temperature migration between coated structure and its environment. HL470e keeps building cool in warm climate and prevents heat loss in cool climate thus reduces electrical consumption on air-conditioner and heater and formation of condensation.

SUITABLE USES

New or existing concrete and floor slabs including primed ferrous and non-ferrous metals.

- Education, residential, industrial, commercial building and many more
- Green buildings
- As underlay insulation for carpet, vinyl tile, screed, etc.

ADVANTAGES

- Low V.O.C. non-toxic and odorless
- Excellent thermal moderating property
- Prevent condensation and fungus growth
- Non combustible, safe application

SUBSTRATE REQUIREMENT

To obtain desirable result, it is important that HL470e is applied onto clean, sound and water-tight substrate free of dirt, oil, grease, soot, adhesives, laitance and other surface contamination and defect.

SURFACE PREPARATION

Concrete substrate must possess sufficient mechanical strength at 3000PSI and above, cured for 14 days, free from dust, grease, laitance, or loose paints. Well sand blasted and leveled. Mechanically grind to remove all surface laitance. Repair cracks and voids with

Epoxy and fiberglass if necessary, ensure humidity below 75%, ground moisture below 12% when check with an electronic or colour coded Protimeter.

SEALER COAT

Apply a coat of Epoxy 126FS Sealer, 2 components epoxy sealer over prepared substrate. Maintain minimal coverage of 0.15 -0.20 kg/m². Consumption may differ with flatness, porosity of substrate and application technique.

WORKING WITH HL470e

We recommend only trained and approved applicator to be engaged to performance application of HL470e.

APPLICATION OF HL470e

Equip with right tool and equipment before mixing of HL470e. Sample Stirrer is shown below.

Start with adjusting the mixer to lower speed or 150-200 rpm. Stir Part A and move the MG peddler in direction opposite to MG peddler blade rotation for 5 minutes to obtain a homogenous and uniform mass.



Slowly added part B while mixer is blending for another 2 minutes.



For trowel application onto floor, set the pin rack to the define thickness before laying the system. Use a spike roller to finish and level.

Pour the mixture onto the floor and level it with the pin rake or trowel. Allow the material to level itself. Remove protection after the coating is slightly tack free.





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PHYSICAL PROPERTIES

Appearance	Low Sheen
Colour	White & pastel
Resin type	Resin rich epoxy
Coverage at 1mm	0.75 kg/m ² (flat surface)
Curing process	
Touch dry	1 hour @ 30°C, 1mm
Initial curing	4 hours @ 30°C, 1mm
Full Curing	24 hours @ 30°C, 1mm
Conductivity & physical performance	
Compressive Strength	30.0 N/mm ²
Thermal conductivity	0.1- 0.2 W.mK
Temp Δ °C	For 1mm thick HL470e
Metal Roof Black	70°C à 51°C (Δ 19°C)
Concrete Panel	65°C à 45°C (Δ 20°C)
Calcium Silicate 6mm	65°C à 52°C (Δ 13°C)
Metal Panel 10mm	70°C à 50°C (Δ 20°C)
Asphalt Sheet	80°C à 50°C (Δ 30°C)
* test result may vary with different substrate type	
Solid Content	>99%
Specific Gavity	0.75
Viscosity	>8,000 CPS

COVERAGE

As heat insulating coating over flat roof

0.5 mm D.F.T. requires about 0.38 kg/m²

1.0 mm D.F.T. requires about 0.75 kg/m²

As an anti condensation coating (flat surface)

1000µ D.F.T. requires about 0.75 kg/m²

5000µ D.F.T. requires about 3.75 kg/m²

PACK SIZE

Part A: 10 KG

Part B: 4 KG

POTLIFE & SHELF LIFE

Pot Life – 20min after mix and kept under close lid and cool condition

Shelf life – 12 months in sealed condition

Remove skin form on top before use

STORAGE & TRANSPORTION

Keep HL470e in cool and dry condition. Store it in its original sealed condition.

LIMITATIONS

HL470e may not bond properly to curing compounds or other coatings on concrete. Bond or pull off test is recommended to determine suitability before actual application. Coverage and consumption may vary on more porous and rough substrate. Application temperature is 15°C to 45°C.

DISCLAIMER CLAUSE

This TDS summarizes our best knowledge of this product, including how to use the product based on the information available at the time of publication. You should read this TDS carefully, consider and try out the information in the context of how the product will be used, including in conjunction with any other product, type of surfaces to, and the manner the product will be applied.

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