DIFFUSION ENGINEERS LTD



DIFF-CERAGLASS

TechnicalData: DIFFCOR/CR/06-18

Product Description:

DIFF-CERAGLASS is High solid, heavy duty glass flake filled modified epoxy coating system designed to meet aggressive environments with excellent resistant to acid, bases and solvent

Application:

Diffceraglass is useful for trenches, contaminant vessels, tank linings, process area surface, Exterior coating of pipelines. Structures or other steel surfaces

DIFF-CERAGLASS has extremely low permeability that provides impermeable barrier to corrosive environment and is suitable for steel and concrete surfaces. Excellent resistance over vide range of chemical, corrosive and abrasive environments. DIFF-CERAGLASS has low maintenance and ease of reparability. Temperature ranges 20-150°C.

Technology	Epoxy	
Chemical Type	Epoxy	
Appearance(base)	White	
Appearance(activator)	Pale yellow	
Appearance(Mixed)	Off white	
Components	Two component-requires	
	mixing	
Mix Ratio, by volume	2:1	
Resin: Hardener		
Mix Ratio, by weight	1.5:1	
Resin: Hardener		
Cure	Room temperature cure	
Application	Structure coating	

TYPICAL PROPERTIES OF UNCURED MATERIAL

Base:

Viscosity: liquid Weight per liter: 1.3 kg/liter

Hardener:

Viscosity: liquid Weight per liter: 1.0kg/liter

Mixed:

Viscosity liquid

Coverage 0.55 m² @ 1mm thick/1kg

TYPICAL CURING PERFORMANCE Curing Properties

Curing time vs. Temperature

Ambient temp	20°C	25°C	30°C
Pot life	50-60min	40-50min	30-40min
Full cure	12-14hrs	10-12hrs	08-10hrs.

Note: For vehicular traffic it needs curing of 48 hours

Typical cured properties of material

Compressive strength (ASTM D642)	5500-6000 Psi
Flexural strength (ASTM 790)	8500-9000 Psi
Hardness shore D (ASTM D2240)	84-88
Tensile strength (ASTM D882)	5500-6000 Psi
Elongation At break %(ASTM D882)	0.98
Shear strength (ASTM D1002)	2250-3000psi
On grit blasted MS surface	

Abrasion resistance H-18 wheels 3188mg 1000 cycles (ASTM D 4060)

Water Vapor Permeability 0.0018

SURFACE PREPARATION: FOR CONCRETE SURAFC E

Clean surface to remove oily, rust and any foreign particles. Abrasive blasting with compressed air to achieve surface Preparation of S A 21/2 or Metal surfaces should be grit blasted to a SSPC-SP5 or NACE #1.

For Concrete surface should comply with moisture testing as prescribed by ACI Test Method 515 R- 16 "Dryness of Surface". Concrete surfaces should be grit blasted to a finish similar to the profile of 100 to 120 grit sandpaper.

Application

For Higher Built-up DIFF-CERAGLASS *TW version is recommended .Use Trowel or Specially designed brush to apply a minimum 1000 micron thickness of DIFF-CERAGLASS in specified ratio and allow to harden . Apply second coat as soon as first cost is tack free.

Mixing:

Mix "base and activator" in specified ration which is supplied in contrasting colors, on clean flat surface. Mix with stirrer until a uniform blend free of streaks is obtained.



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