

DIFFGLASS XTREME

TechnicalData: DIFFCOR/CR/06-18

Product Description: DIFFGLASS XTREME , a heavy-duty lining system for concrete and steel substrates that offers unique combination of vinyl ester novolac resin with Glass flake reinforcement and inert mineral fillers produce a dimensionally stable coating with extremely low permeability and ideally suited for immersion service, splash/spillage exposure of concentrated acids and aggressive solvents.

Application: Corrosion resistance coating for concentrated acids, alkalis, extreme corrosive environment like Sox, Nox gases e.g. Bag House Coating, Acid storage tanks, and Chemical pumps

Diffglass Xtreme has excellent resistance to broad range of acids, alkalis and solvents. Filled with highly chemical resistant glass flake that enhances impermeability. Seamless, high tensile strength composite, extremely low permeation rate, superior performance to acid-proof brick makes it versatile product. Excellent dimensional stability; withstanding wide temperature range. Superior compatibility with concrete and steel when compared with conventional coatings. Temperature range 20 °C to 170 °C.

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|---|-------------------------------|
| Technology | Vinyl ester epoxy Novolac |
| Chemical Type | Vinyl Ester |
| Appearance(Base) | White |
| Appearance(Activator) | colorless |
| Appearance(Mixed) | grey |
| Components | Two component-requires mixing |
| Mix Ratio, by volume Resin: Hardener | 98.5 : 1.5 |
| Mix Ratio, by weight Resin: Hardener | 98.5 : 1.5 |
| Cure | Room temperature cure |
| Application | Chemical resistance |

TYPICAL PROPERTIES OF UNCURED MATERIAL

Base:

Viscosity: Sprayble/Brushable
Weight per liter: 1.5 kg/liter

Hardener:

Viscosity: liquid
Weight per liter: 0.85 kg/liter

Mixed:

Viscosity
Coverage
thick/1kg

Putty/Paste
0.55 m² @ 1mm

TYPICAL CURING PERFORMANCE

Curing Properties

Gel Time @ ambient temp minutes 50 to 60

Curing time vs. Temperature

| Ambient temp | 20°C | 25°C | 30°C |
|------------------|-----------------|-----------------|-------------------|
| Pot life | 55-60min | 50-55min | 45-50min |
| Full cure | 18hrs | 14-16hrs | 10-12 hrs. |

Typical cured properties of material

Compressive strength (ASTM D642) 5000-5500 Psi
Flexural strength (ASTM 790) 6000-6500 Psi
Hardness shore D (ASTM D2240) 80-85
Tensile strength (ASTM D882) 4500-5000 Psi
Elongation At break % (ASTM D882) 0.98
Shear strength (ASTM D1002) 2000-2500 Psi
On grit blasted MS surface
Salt spray resistance (ASTM B117) 5000 hrs

Surface preparation: Clean surface to remove oily, rust and any foreign particles. Abrasive blasting with compressed air to achieve surface Preparation of SA 2^{1/2} 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 surface profile of 100 to 120 grit sandpaper.

Application Procedure:

Concrete surface should be primed with DIFFGLASS XTREME series Primer.

Pour activator into DIFFGLASS XTREME base Container. Mix thoroughly until a proper blend is attained.. If reinforced tape is recommended. Saturate the reinforcement with activated mixture. Roll out saturate coat until the whiteness of the reinforcement disappears and then spread base coat mixture onto surface by trowel to a thickness of 1/16". Immediately lay the reinforcement fabric into the basecoat and press out all air pockets with a dry paint roller/Trowel. After the saturated basecoat has dried, grind down any burrs that have appeared on the surface. For hand application use trowel / specially designed brush or for spray, 1 to 2 coats of a DIFFGLASS XTREME, selected according to chemical exposure. Second coat can be applied as soon as first coat is tack free.

NOTE: Recoat time is normally maximum 24 hours but temperature dependent

Storage: To be place in cool & dry place at ambient temp, best before 90 days.