

DIFFBOND

TechnicalData: DIFFCOR/CR/06-18

Product Description:

DIFF-BOND is high-strength epoxy bonding compound for metallic and non metallic and ceramic material. It's highly thixotropic material with no sagging and running and can be applied on vertical and horizontal surface. Originally developed for ceramic tile bonding. DIFF-BOND compound is high solid 100% reactive and does not contain any solvents or diluents. This highly dimensionally stable system has very low shrinkage after cure.

Application:

Ceramic tile adhesive which having very high adhesive strength.

Easy application: Adhesive spreads readily.

Excellent bond strength to Metals, ceramics, Concrete surfaces.

High bonding strength to a wide variety of substrates.

High shear strength compound.

Resistant to a variety of chemicals.

Tough and durable.

Temperature ranges 20-150°C.

Technology	Epoxy
Chemical Type	Epoxy
Appearance(Base)	White
Appearance(Activator)	Off white
Appearance(Mixed)	White
Components	Two component-requires mixing
Mix Ratio, by volume Resin: Hardener	1:1
Mix Ratio, by weight Resin: Hardener	1:1
Cure	Room temperature cure
Application	Adhesive

TYPICAL PROPERTIES OF UNCURED MATERIAL

Base:

Viscosity: Paste
Weight per liter: 1.01 kg/liter

Hardener:

Viscosity: Paste
Weight per liter: 0.915 kg/liter

Mixed:

Viscosity: Paste
Coverage: 0.2 m² @ 2mm thick/1kg

TYPICAL CURING PERFORMANCE

Curing Properties

Gel Time @ Ambient temp, minutes 35 to 30

Curing time vs. Temperature

Ambient temp	20°C	25°C	30°C
Pot life	60min	45min	30min
Full cure	14-15hrs	11-12hrs	8-10 hrs.

Typical cured properties of material

Compressive strength (ASTM D642) 1000-12000Psi
Flexural strength (ASTM 790) 4500-5000 Psi
Hardness shore D (ASTM D2240) 80-85
Tensile strength (ASTM D882) 200-2500 Psi
Shear strength (ASTM D1002) 8000 Psi
On grit blasted MS surface

PROCEDURE:

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 best recommendation consult technical depart for surface preparation method applicable to the surface.

Mixing

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