# DIFFUSION ENGINEERS LTD



#### DIFF FLOOR PRIME

TechnicalData: DIFFCOR/CR/06-18

## **Product Description:**

**DIFF-FLOOR PRIME** is a low viscous a two-component, penetrating epoxy primer used to prime concrete surfaces. It is commonly utilized as part of a complete flooring system.

#### **Application:**

**DIFF-FLOOR PRIME** is a 'resin rich' system that 'wets out' surfaces completely thus ensuring maximum adhesion to concrete metal surface. The Low Viscosity allows the penetration in concrete pours and there by exhibiting strong bond to the top layers. Temperature range 20 to150°C.

Technology	Epoxy	
Chemical Type	Epoxy	
Appearance(Base)	Dirty Off white	
Appearance(Activator)	Brown	
Appearance(Mixed)	Off white	
Components	Two component-requires	
	mixing	
Mix Ratio, by volume	4:1	
Resin: Hardener		
Mix Ratio, by weight	4:1	
Resin: Hardener		
Cure	Room temperature cure	
Application	Floor coating	

## TYPICAL PROPERTIES OF UNCURED MATERIAL

Base:

Viscosity: Paste
Weight per liter: 1.08 kg/liter

Hardener:

Viscosity: Paste
Weight per liter: 1.14 kg/liter

Mixed:

Viscosity Paste

Coverage 0.66 m<sup>2</sup> @ 1mm thick/1kg

TYPICAL CURING PERFORMANCE

**Curing Properties** 

Gel Time @ Ambient temp, minutes 25-30

**Curing time vs. Temperature** 

Curing time vs	Curing time vs. remperature				
Ambient	20°C	25°C	30°C		
temp					
Pot life	40-50min	30-35min	25-30min		
Full cure	4-6hrs	3-4hrs	2-3hrs.		

Note: For vehicular traffic it need curing of 48 hours

Typical cured properties of material

Compressive strength (ASTM D642)	4000-4500 Psi
Flexural strength (ASTM 790)	4000-4500 Psi
Hardness shore D (ASTM D2240)	70-75
Tensile strength (ASTM D882)	3500-4000 Psi
Shear strength (ASTM D1002)	1250-1500 Psi

### SURFACE PREPARATION: FOR CONCRETE SURAFC E

Concrete should be at least 28 days old, laitance deposits should be removed by mechanical scrubbing or grinding, concrete floor should be thoroughly wasted with water. Concrete surface must be dry before the application of DIFF-FLOOR SC REED

In case of oily surface, floor should be burn with flame thoroughly and ensure complete burning of soaked oil in the floor.

#### **Application**

Mechanical Cleaning is a must especially, where oil, grease & other debris & coating has occurred. This cleaning should go as deep as several mm to make sure that concrete floor is ready to have good adhesion with DIFF-FLOOR PRIME.

Prior to application of Epoxy Floor Screed, priming of the concrete floor is an important issue. It is highly recommended to use DIF F-FLOOR PRIME which is a solvent free epoxy resin & compatible with DIFF-FLOOR SCREED. To prime the surface, mix part A with part B well, use stiff brush to apply mixed primer in a thin continuous film to the concrete surface. Apply screed when the primer coat is tacky.

### 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.

