



# Emcekrete®

## Hydraulically setting, high performance, Free Flow, Ready to use Shrinkage compensation grout

### Product Properties

- **Emcekrete®** guarantees a permanent, reliable connection and bond between machine bases and the foundation of structure
- Good pourability and flowability even at low water – powder ratio
- High early and final strength
- Suitable for grouting height up to 100 mm
- Non-Flammable according to EN 13501- class A1.
- **Emcekrete®** Provides Shrinkage compensation as per ASTM C -1107 Grade A.
- Ready to use – Simply Mix with Water
- **Emcekrete®** is free from harmful chlorides and other aggressive constituents. Adjacent steel areas are permanently protected against corrosion.

### Areas of Application

- Grouting of rigid joints e.g. between pre-cast elements or between pre-cast elements and in-situ concrete
- Grouting of power station equipment and machine foundations, like turbine foundations, generators, compressors and engines.
- Grouting for anchor screws, fixing and base plates, steel and concrete supports, bridge bearings and crane rails.
- Grouting of Steel constructions, fastening bolts and steel elements in concrete.

### Application Notes

#### Substrate Preparation

The Substrates for grouting must be free from oil, grease or any other unsound material. Cleaning should be done by means of Hydraulic Water blasting or similar means till achieving a durable sound surface. The surface must be wetted for 24 hours for achieving saturated surface prior to grouting.

#### Form work

Must be Rigid and leak-proof. The form work should be strong enough to provide suitable support for flowing and water tightness and prevent the grout matrix from budging. The shoulder length should be maintaining 50mm to 70mm.

#### Mixing

**Emcekrete®** is ready to use only water with recommended quantity need to be added. To get better workability it is recommended to use mechanical mixture for mixing and the Temperature of water to be added should be 25° C. During mixing of Water in grout 1<sup>st</sup> add 75% of the water and mix for 2-3 min, then add rest 25% of water and mix for 2 min to get better flow and workability. Grouting should be done immediately thereafter.

#### Mounting

The grout needs to be applied immediately after mixing. Pouring of the grout should be continuous and from one side to avoid any air entrapment. For the large area grouting, the grouting should be done from the middle by help of pipe or funnel or any lunching platform.

For any Mechanical Baseplate grouting it is advisable to grout the anchor bolt pockets fast. Then grouting under the base plate is recommended. Please Take into consideration the advices written on the "General Application Advice "for hydraulically setting grouts.

During application and with in the fast few hours after pouring, strong vibrations and shocks near the grout area must be avoided

#### Curing

Depending on the grout thickness the curing process of grouts is accompanied by more or less intensive heat development. Accelerated drying of the grout must be counteracted with suitable measures. If a high sided mould is being used, we recommend pouring water onto the partially dried, matt-moist surface up to the level of mould adge.

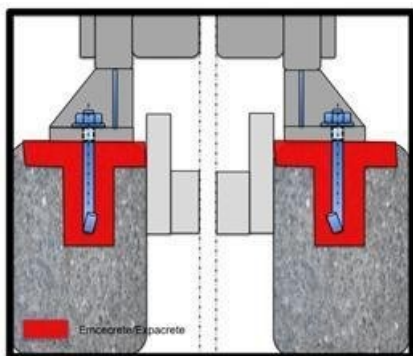
Grouts Can usually be de-moulded approx. 24 hours after pouring. After this period the strength development has proceeded far enough to allow post tensioning bracing to be loaded. In the case of intensive sun and draft exposure, protection of the De- Moulded grout sides with a Curing compound like **Emcoril AC** can be recommended.

#### Notice

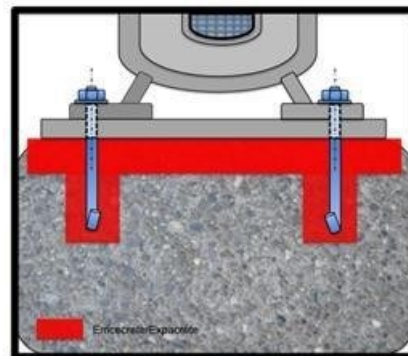
Grouts are suitable for the grouting of Galvanized steel elements in interior spaces. When using outdoors, prevent the contact area between the galvanized elements and the grout from coming into contact with water.

## Further Instructions / Precautions

Application Example



Application Example



## Technical Data For Emcecrete®

Characteristic	Unit	Value*	Comments
Type		Grouting mortar	
Grain Size	mm	4.75mm Down	95-100% Passing Through 4.75mm Sieve
Color		Grey	
Grouting Height	mm	15 - 100	
W/P Ratio		0.12-0.14	
Added Water	Liter %	3.6 – 4.2 12 - 14	Per 30 kg Bag
Flow	mm	≥210	As per EN 445-Grout Spread Method
Expansion	%	1 – 2	As per ASTM C940
Time For Early Expansion			
Start	Minutes	20	
End	Minutes	120	
Compressive Strength	N/mm <sup>2</sup>	20	After 24 hours as per ASTM C109
50mm Moulds @0.13 w/p Ratio	N/mm <sup>2</sup>	35	After 3 Days as Per ASTM C 109
	N/mm <sup>2</sup>	45	After 7 Days as per ASTM C109
	N/mm <sup>2</sup>	50	After 28 Days as per ASTM C109
Application Time	Minutes	60 / 45 / 30	At +5° C / +20° C / +35° C
Processing Conditions	°C	≥+5 - ≤+35	Air and substrate temperature
Yield	liter	15	Per 30 kg Bag
Wet Gross Density	Kg/m <sup>3</sup>	2.2-2.4	
Setting Time			As Per IS 4031(Part 5)
Initial	Minutes	300	@ 25°C Temperature and 50% Humidity
Final	Minutes	540	Setting Time will be Delayed if the Ambient Temperature goes below 21°C specially during Winter Season.

\*All the technical Values were determined in laboratory, at a temperature of 25° C and 50% relative humidity

## Product Characteristics for Emcecrete®

Type of Product	Free flow, non-shrink grout
Form	Grey Powder
Shelf Life	6 Months from date of Manufacture if stored in Unopened Packaging. Protect from Rain, Direct Sunlight, Heat and Frost
Delivery	30 kg sacks
Disposal	Empty packs completely and dispose off carefully to protect our Environment

## Safety Advice

Please Take notice of the safety information and advice given on the packaging labels, safety information sheets and General Application Advice.

**Edition:** - MC/IND/R0/JANUARY2020, Some Technical Changes have been made to this print medium. Older editions are invalid and may not be used anymore. If a technically revised new edition is issued, this edition becomes invalid.

