Emcekrete HP 100 F M (previously known as Emcekrete HP 100 F)

Ultra-High Performance, Shrinkage Compensated Cementitious Grout

Product Properties

- 2-stage shrinkage compensated
- Coarse quartz sand filler for thicker buildup -max 3mm grain size.
- Rapid strength development
- High ultimate strength
- Chloride free
- Excellent flowability
- Can be blended with chippings

Areas of Application

- Concrete repairs
- Post tensioned cable grouting
- Beam and column enlargements
- Concrete anchors
- Column bases
- Bridge bearings
- Machine foundations
- Cavities

Application

Surface treatment

Surfaces to be grouted shall be clean and free from oil, dust and unsound material and contaminants. All absorbent surfaces such as formwork or pre-packed aggregate shall be thoroughly wetted but free of surface water before grouting work commences.

For pressure grouting situation, check that formwork is properly constructed and sealed to prevent loss of grout pressure.

Mixing

Pour 3.25 kg of the premeasured clean water into a clean container and gradually add 25 kg Emcekrete HP 100 F M while mixing with a sheer type blade with a minimum drill speed of (400-500rpm). If necessary, additional amount of water can be added gradually as required while mixing continuously to get the desired consistency. Do not exceed the recommenced maximum water dosage of 3.50 kg per 25 kg bag of Emcekrete HP 100 F M.

Mix materials for 2 to 3 minutes until grout becomes homogeneous. Then stir the grout for several seconds to release trapped air before placing it immediately.

Placement and Curing

Once mixed, grout shall be placed within 25 minutes to maintain best flow characteristics.

For free pouring situations, pour sequence must be planned to ensure continuous unidirectional flow to prevent formation of trapped air pockets within the grout mass.

A minimum head of 150 mm is recommended for all free pour placement of grout. The usage of air vents and chains to assist grout flow is recommended.

When pour section exceeds 75 mm in thickness, it is recommended that clean single size (minimum 10 mm) aggregate be packed in the void to better distribute the hydration energy of the grout. In such cases, the weight ratio of aggregate to grout shall not exceed 1:1.

Curing

If formwork is used, leave the formwork in place for at least 3 days. After removing the formwork, cure the surface immediately with curing compound, Master CurePlus GP or other approved methods.

MC-Bauchemie GmbH & Co. KG • Am Kruppwald 1-8 • D-46238 Bottrop • Tel: +49 (0) 2041 101-10
MC-Bauchemie (M) Sdn Bhd • Lot S113 • 2nd Floor • Centrepoint • No.3 Lebuh Bandar Utama • Bandar Utama • 47800 Petaling Jaya • Selangor • Malaysia • Tel: +603 7728 1233
Email: enquiry@mc-bauchemie.com.my

Technical Data for Emcekrete HP 100 F M			
Characteristics	**Unit**	**Value**	**Comments**
Aggregate Size	mm	≤ 3.0	
Fresh Mortar Density	kg/dm^3	2.2 - 2.3	
Compressive Strength (BS 1881: Part 116)	N/mm²	~ 35 ~ 75 ~ 100	1 days 7days 28 days
Bleeding (ASTM C940)	%	0	after 3 hours
Expansion (ASTM C940)	%	~ 1.5	
Flow (BS cone)	mm mm	270 260	fresh after 60 minutes
Initial Setting Time (ASTM 191)	hrs:min	~ 6:00	at 22ºC
Yield	litres	~ 12.8	per 25kg bag
Water Dosage	litres	3.25 – 3.50	per 25kg bag
Pot Life	min	~ 60	
Grouting height	mm	min ≥ 8 max ≤ 75	

Product Characteristics for Emcekrete HP 100 F M	
Packaging	25kg & 20kg bag
Storage	Can be stored in shaded, cool and dry conditions for ***12 months*** in original unopened packs.
Disposal	In the interest of the environment, please empty all bags completely and dispose of in accordance with statutory regulations.

Safety Advice
Please take notice of the safety information and advice given on the packaging labels and safety information sheets.

Edition 11/25. 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.

MC-Bauchemie GmbH & Co. KG • Am Kruppwald 1-8 • D-46238 Bottrop • Tel: +49 (0) 2041 101-10
MC-Bauchemie (M) Sdn Bhd • Lot S113 • 2nd Floor • Centrepoint • No.3 Lebuh Bandar Utama • Bandar Utama • 47800 Petaling Jaya • Selangor • Malaysia • Tel: +603 7728 1233
Email: enquiry@mc-bauchemie.com.my