



3.05 Fast Repair MortarF4

Fiber reinforced, thixotropic repair mortar

PRODUCT DESCRIPTION

Fast Repair Mortar F4 is a one component thixotropic, dual shrink age compensated, fiber reinforced high strength Formulation for structural concrete repairs.

- Can be applied vertically or overhead by low pressure wet-spraying or hand trowelling
- Dual shrinkage compensated
- One component - only addition of water
- High early and ultimate strengths
- Quality controlled - uniform, predictable results
- No additional bonding agent required
- Spray able, virtually nore bound
- Impermeable to aggressive elements
- Capable of vapour diffusion and resistant to frost and dew-salt
- Resists the penetration of CO₂ and moisture (carbonisation), at the same time checks corrosion and is to a high degree resistant .

FIELDS OF APPLICATION

Up to 50mm thickness in one layer, such as:

- Repairs to bridges, parking garages, tunnels
- Repairs to piers, navigation locks, dams, sea
- Walls and other marine structures
- Repairs to industrial structures such as oil storage facilities, silos, chimneys etc.
- Extensive repairs to beams, columns and other structural elements
- Repair of structural members subjected to
- Repetitive loading



TECHNICAL DATA

TYPE	RF4	
Color	Grey powder	
Water/powder ratio, byweight	0.14	
Density of freshly mixed mortar kg/dm ³	2.3	
Compressivestrength, (ASTM C109, 7cmcube)	1d	2,900PSI
	3d	7,250PSI
	7d	8,700PSI
	28d	10,150PSI
Flexural strength (ASTMC348)	28d	>1,305PSI
Tensilestrength (ASTMC496)	28d	580PSI
Resistivityapprox.	125000cm	
Water penetration (DIN1048)	<5mm	
Diffusion	2.58x10	

CONSUMPTION:

One 25kg bag of FAST REPAIR MORTAR F4 mixed with 3.5liters water will yield approximately 12.4 liters. Approximately four bags of 25kg are required per 1m² area at 50mm thick application.

supplied in:	25-kg-bag
storage:	Dry
shelf-life:	9 months in close dcontainers
test certificate:	BAM Berlin Corrosion protection no. VII. 1/25201/1 Adhesion bridge no. VII.1/25202/2
hazardclass:	No dangerous substance follow safety datasheet



PROCESSING

SURFACE PREPARATION:

The prepared surface should be structurally sound and free from contaminants. Remove concrete that has been saturated with oil or grease. Simple lights and blasting will not provide a sufficient profile for most repairs. Depending on the substrate condition and environmental requirements, use an effective method for removal of weak concrete such as, wet grit blasting, high pressure water jetting and needle scaling. Saw cut the boundary of repair area perpendicular to the surface to at least 10 mm depth and remove concrete within the saw-cut boundary at least to that depth. Where saw cutting is not possible, after material removal, prepare the edge of the repair area vertical. Prepare the final surface free from dust and debris and to a rough profile with at least 5 mm level difference between surface troughs and peaks. Where rebar are corroded, cut back the concrete to at least 20 mm behind rebar. Grit blast around the rebar to remove corrosion products. Replace the affected part of rebar if the diameter after grit blasting is found reduced by more than 20% of the original diameter.

MIXING:

FAST REPAIR MORTAR F4 must be mixed mechanically. Use a heavy-duty, slow speed drill with spiral mixing paddle or a Pan Type mixers etc.

Place approximately 80% of the water in the mixer. Keeping the mixer running, add powder slowly. Mix for 3-4 minutes or until a lump-free mix is obtained. Add from the balance 20% water, while continuing to mix, until the desired consistency is achieved.

PLACING

FAST REPAIR MORTAR F4 has been formulated for placing both by trowel and spray application, depending on the size and location of the repair area. For best results, before application by trowel, apply the first layer by gloved hand including packing behind the rebar, and then firmly trowel on the rest to required thickness.

When applying by hand force FAST REPAIR MORTAR F4 tightly on to the substrate to ensure intimate contact with the pre-wetted substrate. If applying by spray, for best results, utilize the services of an experienced nozzle man. Finish the final surface smooth using a wood, plastic or synthetic sponge faced trowel. When the material has stiffened to the point where finger pressure lightly marks the surface, give a final firm troweling using a steel float.

WARRANTY

This product is warranted to be free of defects in material and workmanship, and conform to FastChem Construction Chemicals ("FastChem") quality control standards. All recommendations, statements and technical data herein are based on tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty or guaranty of any kind, expressed or implied including but not limited to an implied warranty of merchantability or an implied warranty of fitness for a particular purpose and user assumes all risk, loss, damage, expense and liability resulting from his or her direct use, indirect use or consequential to their use of the product. FastChem shall not be liable to the buyer or any third person for any injury, loss or damage directly or indirectly resulting from use or inability to use the product. Fast Chem's sole responsibility shall be to replace that portion of the product which proves to be defective. Any warranty claim must be made within six (6) months from the date of the claimed breach. This limited warranty applies only if the product was properly installed and used according to all instructions and was properly stored prior to use.

FastChem Technologies (Pvt) Ltd. Pakistan
Head Office Lahore:
20-A. Commercial Area Pak Arab Housing
Society Lahore.
Tel: 92(42)35803536 Mob: +92-322-4321261



المكتب للشرق الأوسط
404، سوق، البحر، برج الخليفة،
دبي، متحده عرب الامارات،
رقم البريد: 487177

Website: www.fastchemtechnologies.com, Email: info@fastchemtechnologies.com