



KEM MORTAR FS

Fast Setting Cement Based Patching Material

Ref: CR/MR – V1-0612

Description

KEM MORTAR FS a rapid setting mortar made from special cements, fine aggregates, additives and fibers. It requires only the addition of potable water for mixing. It produces high early strength and achieves initial set in 10 to 30 minutes. Final set is achieved in 30 - 90 minutes. Repaired areas may be opened to traffic within 2 - 4 hours, after application.

Uses

KEM MORTAR FS is for quick repairs of horizontal concrete surfaces such as airport runways, expressways, highways, bridge decks, sidewalks, parking decks, loading docks and floors. It may be used in vertical application with proper form work & care.

Advantages

- Ready to use, requires only additional water
- High early strength reduces traffic closure times.
- Non shrink & fiber reinforced
- Excellent adhesion to well prepared concrete substrates and steel reinforcement.
- No Chloride
- No cracks in repaired area

TYPICAL PROPERTIES @ 25°C:

Compressive Strength: N/mm²

Age	Compressive Strength (N/mm ²)MORTAR	Compressive Strength With aggregate (N/mm ²)
2 Hours	2	8
4 Hours	13	21
24 Hours	36	44
7 Days	42	55
28 Days	58	64

Result may vary depending on water & ambient temperature.

Wet density: 2230 kg/M³ with 11% water for mortar like consistency.

Direction for uses

SURFACE PREPARATION: Surface must be structurally sound, clean, and free of loose or deteriorated concrete, dust, dirt and all contaminants. Vertically cut all edges of patch area to a minimum thickness of 5 mm. surface shall be made rough to provide proper bonding. Prewet prepared area with potable water immediately before application. Do not allow excess water on the surface. Prime all concrete and steel surfaces with KEM Bond SBR to 1 volume of KEM MORTAR FS powder. Apply by brush using a stippling action. Allow surface to become tacky (Usually 5 to 10 minutes at 25° -30° C).

MIXING: KEM MORTAR FS requires 2.5 to 2.75 liters of water per 25 kg bag. Take measured amount of water into a clean mixing container, add the measured amount of KEM MORTAR FS, and thoroughly mix for 2 – 4 minutes to get semi flowable consistency. Initially, the mixture will seem very stiff, but near the end of the mixing time, it will "relax" and achieve a semi-flowable consistency. Never add additional water or retemper. For large repairs, preferably use a rotary mixer with rubber tipped blades. Pour the required amount of water into the mixer, and add the KEM MORTAR FS. Mix just long enough to achieve the proper consistency. To fill patches deeper than 60 mm, add clean, dry, 9.5 to 12.5mm size aggregate to the KEM MORTAR FS. The mix ratio must not exceed 15kg of aggregate to each bag of KEM MORTAR FS.

Mixing Procedure for using additional aggregates:

Start mixer, load water, load rock, and then add KEM MORTAR FS. Mix well to achieve workable consistency, but not more than 6 minutes. Do not add sand. Do not use liquids other than potable water for mixing. Clean mixing equipment between batches. The amount of water will depend on quantity of aggregates added. Generally use 2.6 – 3 liters of water for bag of KEM MORTAR FS shall be adequate.

Placing: Place the mortar by pouring and finish ensuring that it is well consolidated and compacted.



Curing: After compaction by lightly tamping apply a brush coat of KEM Bond SBR and float the surface to a smooth finish.

Packaging

KEM MORTAR FS is available in 25 kg bags.
KEM Bond SBR is available in 5, 20 and 200kg packing.

Coverage: A 25 kg bag after mixing with 11% of water will produce 12.4% liters of mortar. If aggregates are added then volume increases accordingly.

Precautions

Cleaning: All equipment must be cleaned with water immediately after use. Mixes containing this product must not be emptied into drainage systems.

Protection: All work must be protected from rain and frost until fully hardened.

Storage and Shelf Life

Storage: Stored in dry conditions at moderate temperature and humidity.

Shelf Life: 6 months

Fire resistance

KEM MORTAR FS is not flammable.

Safety & Precautions

KEM MORTAR FS is non toxic but is mildly alkaline. Gloves should be worn during application. Splashes to the skin or eyes should be removed with clean water. In the event of prolonged irritation, seek medical advice.

Chembond Chemicals Limited

Chembond Centre, EL-71, MIDC,
Mahape, Navi Mumbai, India 400 710.
Tel.: +91 22 39213 000 , Fax: +91 22 3921 3100.
website: www.chembondindia.com,
e-mail: enquiries.conschem@chembondindia.com

Limitation of Liability:

This information is based on our current level of knowledge. It is given in a good faith but it is not intended to guarantee any particular properties. The users must satisfy themselves that there are no circumstances requiring additional information or precautions or the verification of details given herein.