



STRUCTURAL REPAIR F

FLOWABLE STRUCTURAL PERFORMANCE CONCRETE.



20kg

APPLICATION:

Saturate the concrete substrate with water just prior to concrete application. Avoid water ponding. Pour or pump the Cemix® Structural Repair F into place while the substrate is still damp. Where appropriate, use a suitable header box & pipe delivery system, or a suitable grout pump. Application is from the bottom of the repair up, completely filling the void & avoiding air entrapment. Compact the concrete once it is in place. For a durable repair apply product to a minimum depth of 25mm. Trowel finish as required.

Curing:

It is very important to prevent early plastic state moisture loss prior to the product setting. Cure product thoroughly after it has set by keeping it wet & covered for at least 7 days. Avoid product freezing for at least 3 days.

DESCRIPTION:

Cemix® Structural Repair F is a flowable structural performance concrete for concrete repairs & concreting which are poured or pumped into place. It is useful when a flowable product is required, reinforcing is congested and/or repair volumes are too large for hand placed mortars. It is used for remedial work on concrete where high performance & durability are required.

TYPICAL APPLICATION/USES:

Cemix® Structural Repair F may be used for:

- Flowable concrete repairs & performance concreting to all concrete structures
- Congested steel reinforcing repairs & concreting
- Smooth off form finishes
- Columns
- Beams
- Bridges
- Marine structures
- Water retaining structures
- Precast connections and between precast elements
- Structural void filling

ADVANTAGES:

- Flowable
- 5mm maximum aggregate size
- One component
- Shrinkage compensated
- Short curing times
- High bond strength
- Durable
- Waterproof
- Impermeable to water borne aggressors such as chloride ions
- Improved abrasion resistance

DURABILITY ENHANCER, STEEL PROTECTIONS & WATERPROOFING:

Cemix® Structural Repair F contains an integral crystalline concrete durability enhancer & waterproofing material, which further protects & waterproofs the mortar in-depth by making it completely impermeable to water borne aggressors such as chloride ions. This admixture permanently protects the mortar & imbedded structural steel from long-term corrosion & deterioration.

SUBSTRATE PREPARATION:

Concrete substrates should be sound & roughened to ensure a good bond. They should be uncoated & clean, free from all contaminants, loose particles, dirt, oil, mould, curing compounds, sealers & paints etc. For a durable repair cut a square or rectangular perimeter edge around the repair at least 25mm in depth. Remove all oxidation from exposed rebar & ensure that there is at least 25mm (or 'finger room') behind each rebar. For deep critical repairs use anchors and steel mesh as required to enhance bonding. The better the substrate preparation & condition the better the end result. The concrete substrate should ideally be at least 3 months old.

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TECHNICAL DATA:

WORKING TIME:	40 minutes at 20°C
CHLORIDE ION PERMEABILITY:	<1000 Coloumbs
THERMAL COEFF. OF EXP:	9.0×10^{-6} mm/mm/°C
APPEARANCE:	Sand / Cement Grey
STRENGTH:	40MPa @ 7 days; 60MPa @ 28 days
BOND STRENGTH:	>3MPa
APPLICATION TEMP:	5°C - 30°C
<i>The data shown above reflects typical results based on laboratory testing under controlled conditions. Reasonable variations may occur on site.</i>	

COVERAGE:

20kg: Approximately 10.5L or 0.0105m³

PACKAGING:

Cemix® Structural Repair F is available in 20kg.

STORAGE & SHELF LIFE:

Cemix® Structural Repair F can be stored in its original packaging in a dry place well sealed for a period of six (6) months after production. Do not store opened bags.

CLEANING:

Clean all tools with water & brush immediately after use.

FORMWORK PREPARATION:

The area to be repaired must be enclosed with good quality rigid watertight formwork. The formwork must be able to rigidly confine the Cemix® Structural Repair F until it has set. Treat the formwork with a Cemix® form release agent. Formwork should be flushed out just prior to application.

HEADER BOX & AIR VENTS:

When not pumping the material & where appropriate, use a suitable header box delivery system to pour the product into place. Create a head of pressure to force the product into place. Avoid air entrapment by use of filling pipes or pump which fill from the bottom up. Use suitable air vents to vent air as the product flows into place.

MOVEMENT / CONTROL JOINTS:

Honour any control joints in the concrete substrate – do not apply product over control joints.

MIXING:

Mix whole bags of product. Add 2.5L of water to mixer & then add product gradually to water. Add rest of water slowly whilst mixing until the desired consistency is achieved. Maximum total water is approximately 3.0L per 20kg bag. Mix thoroughly for 4 minutes using a drill & paddle or mechanical mortar mixer. Do not mix more product than can be mixed, placed & finished in 40 minutes. In hot weather consider using chilled mixing water. In very cold weather consider using warm mixing water. For deep & large volume pours, use chilled mixing water to counteract the heat of hydration and prevent thermal cracking.

LIMITATIONS:

Substrate Temperature - +5°C min. / +30°C max.

Ambient Temperature - +5°C min. / +30°C max.

PRECAUTION:

For deep & large volume pours, use chilled mixing water to counteract the heat of hydration and prevent thermal cracking.

SAFETY:

Avoid contact with eyes & skin, both from wet & dry mix. Do not breathe in dust. Wear suitable protective clothing, gloves, eye protection & barrier cream. Wear a suitable dust mask. Wash thoroughly after handling & store any leftover material properly.

FIRST AID:

Irrigate eyes & skin with plenty of water & seek medical advice immediately.

SPILLS AND LEAKS:

Keep out of sewers & storm water drains & dispose of any leftover material as trade waste in accordance with local authority guidelines.

DISCLAIMER:

Please Note: Recommendations and advice regarding the use of this product are to be taken as a guide only. Other than as appears on this products packaging, Cemix® LTD. does not give any warranty express or implied as to the suitability of this product for your particular use, because the usage of this product is beyond the control of Cemix® LTD. If you need advice concerning the use of suitability of this product for your particular application, please contact Cemix® LTD first. If this product is defective because of Cemix® LTD's fault, please contact the supplier or Cemix® LTD. who will replace it at no cost.

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