

Emaco S75

Shrinkage controlled micro-concrete for all types of structural repairs

Description

Emaco S75 is a ready to use mixture requiring addition of potable water consisting of dry powders and selected aggregates specially formulated to produce shrinkage compensated consistent, fluid micro concrete.

Conformance

Emaco S75 has been formulated to meet the requirements of the SABS Test Method 862-2: 1994 and ASTM C1437-01.

Typical Uses

Emaco S75 is suitable for the following:-

- Repairs requiring high fluidity e.g. heavily congested steel or repairs.
- As a mass infill repair mortar for structural repairs where there is load bearing.
- Soffit repairs where heavy loadbearing is required.
- Repairs to restricted access areas, where use of hand applied mortars would prove impractical.
- Repairs to columns suffering from major loss of section.

Special Features

User friendly – It is ready to use from the bag, suited to local conditions and easy to apply. Can be hand packed into large voids or cast as a fluid micro concrete.

Enhanced durability – works in tandem with extremely low permeability to prolong effective service life.

Compatibility

Modulus of repair medium is compatible to that of host concrete.

Limitations

Do not attempt repairs on a 5°C and falling temperature scale. Avoid excessive heat (35-40°C) Cooling of mix water or covering of area with shade netting may be necessary to reduce heat. The maximum lift should not exceed 300mm unless precautions are taken.

Water Addition

Water added at the following rates per 25kg bag of Emaco S75 will give the consistency indicated:-

	Water addition	Yield
Plastic	2.5 l	12 l
Flowable	3.5 l	12.5 l

Compressive strength development (Mpa)

Mix	1.5 litres		2.5 litres		3.5 litres	
	Dry	Wet	Dry	Wet	Dry	Wet
Curing condition						
1 day	38	-	29	-	20	-
7 days	76	83	60	57	38	38
28 days	91	95	72	69	52	49
Average cube mass	2450g		2384g		2293g	

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Application procedure

Preparation

It is essential that the surface of the concrete to be repaired is sound, clean and uncontaminated. Corrosion must be removed from steel reinforcement before application of Emaco[®]S75. In certain instances where there is a significant loss of section, the steel may have to be replaced. Defective areas should have a 20mm deep saw cut made around the perimeter. Cut back all defective concrete to a sound base. Feather edging must be avoided. Minimum thickness for repair should not be less than 20mm. Care should be taken to ensure formwork is water tight and constructed in line with normal concreting practice. The use of formwork tape (Groutex) is recommended in order to eliminate grout loss.

The unrestrained surface of the repair should be kept to a minimum and care should be taken to ensure at least 20mm cover to reinforcement. Soaking prior to placement is essential and provision should be made for drainage outlets. Where Emaco[®]S75 is to be poured ensure access is available and a head of pressure can be maintained.

Storage

Store under cover, out of direct sunlight and protect from extremes of temperatures.

Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging. For specific storage advice consult BASF Construction Chemicals SA's Technical Services Department.

Safety precautions

As with all chemical products, care should be taken during use and storage to avoid contact with eyes, mouth, skin and foodstuffs (which can also be tainted with vapour until product is fully cured or dried). Treat splashes to eyes and skin immediately. If accidentally ingested, seek immediate medical attention. Keep away from children and animals. Reseal containers after use.

Note

For professional use only

Field service, where provided, does not constitute supervisory responsibility. For additional information contact your local BASF Construction Chemicals SA representative. BASF Construction Chemicals SA reserves the right to have the true cause of any difficulty determined by accepted test methods

Quality and care

All products originating from BASF Construction Chemicals' SA facility are manufactured under a management system independently certified to conform to the requirements of the quality, environmental and occupational health & safety standards ISO 9001:2000.

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As all BASF's technical datasheets are updated on a regular basis it is the user's responsibility to obtain the most recent issue.

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