

PRODUCT DATA SHEET

SikaEmaco® S 750

(formerly MEmaco S 750)

Shrinkage controlled micro-concrete for all types of structural repairs

DESCRIPTION

SikaEmaco® S 750 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.

USES

SikaEmaco® S 750 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.

CHARACTERISTICS / ADVANTAGES

- Easy to mix, apply and finish
- Economical
- Excellent adhesion
- Shrinkage compensated
- Rapid strength development
- Compatible with the properties of typical concretes
- Vapour permeable
- High resistance to freeze/thaw cycling
- Can be hand packed into large voids or cast as a fluid micro concrete.

PRODUCT INFORMATION

Packaging	25kg Bag
Shelf Life	12 Months from date of production
Storage Conditions	Store properly in undamaged original sealed packaging, in dry cool conditions.

TECHNICAL INFORMATION

Compressive Strength	Mix	1.5ltr	2.5ltr	3.5ltr
	1 day	38 Mpa	29 Mpa	>12 Mpa
	7 days	76 Mpa	60 Mpa	38 Mpa
	28 days	91 Mpa	72 Mpa	52Mpa

APPLICATION INFORMATION

Yield	Mix	Water Addition	Yield
	Plastic	2.5 ltr	12 ltr
	Flowable	3.5 ltr	12.5 ltr

Layer Thickness	Min. 25mm - max. 200mm
Ambient Air Temperature	Min 5°C – Max 35°C
Substrate Temperature	Min 5°C – Max 30°C

BASIS OF PRODUCT DATA

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

USES

- Refer to the Method Statement for Concrete Repair using SikaEmaco® system for more information regarding substrate preparation or refer to the recommendations provided in EN 1504-10
- Avoid application in direct sun and/or strong wind.
- Do not add water over recommended dosage
- Apply only to sound, prepared substrate
- Do not add additional water during the surface finishing as this will cause discolouration and cracking
- Protect freshly applied material from freezing

ECOLOGY HEALTH AND SAFETY

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY / PRE-TREATMENT

Concrete:

The concrete shall be thoroughly clean, free from dust, loose material, surface contamination and materials

which reduce bond or prevent suction or wetting by repair materials. De-laminated, weak, damaged and deteriorated concrete and where necessary sound concrete shall be removed by suitable means. Steel Reinforcement:

Rust, scale, mortar, concrete, dust and other loose and deleterious material which reduces bond or contributes

to corrosion shall be removed. Surfaces shall be prepared using abrasive blast cleaning techniques or high pressure water-blasting to Sa 2 (ISO 8501-1) Reference shall be made to EN1504-10 for specific requirements.

MIXING

SikaEmaco® S 750 can be mixed with a low speed (< 500 rpm) hand drill mixer or for machine application, using a force action mixer 2 to 3 bags or more at once depending the type and size of mixer. Pour the recommended water in a suitable mixing container. While stirring slowly, add the powder to the water and mix thoroughly at least for 3 minutes adding additional water if necessary within the mixing time to the maximum specified amount and adjust to the required consistency.

APPLICATION

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 SikaEmaco® S 750. 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 such conditions require the use of an epoxy bonding system, the surface must be clean, dry and coarse aggregate exposed to ensure a sound mechanical key. Either SikaBrace ADH 1414 or SikaBrace ADH 2200 may be used, dependant on application. Where SikaEmaco® S 750 is to be poured ensure access is available and a head of pressure can be maintained.

CURING TREATMENT

Protect the fresh mortar immediately from premature drying using an appropriate curing method e.g. curing compound, moist geotextile membrane, polythene sheet etc.

CLEANING OF TOOLS

Clean all tools and application equipment with water immediately after use. Hardened material can only be mechanically removed.

LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

LEGAL NOTES

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

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