

BETONCEM

POLYMER-MODIFIED FIBRE-REINFORCED
MORTAR FOR "SASSO LAVATO" EXPOSED
AGGREGATE FLOORING



DESCRIPTION

The exposed aggregate SASSO LAVATO is a product obtained by mixing cement, marble chips from high-quality stones, river pebbles or natural stone, and a special coloured, fibre-reinforced and additive-modified blend. BETONCEM is a pre-mixed product already containing cement and a fibre-reinforced blend with structural polymer fibres and controlled expansion, to which the selected gravel must be added.

FIELDS OF USE

Restoration of old floors by bonding to the substrate using APSECOL BETON acrylic bonding agents or APSECOL RESIN epoxy bonding agents, where high resistance to vehicular traffic and outdoor exposure is required (please refer to the relevant technical data sheets).

EXPOSED AGGREGATE "SASSO LAVATO" can be laid in thicknesses as thin as 3 cm.

Used for the restoration of outdoor areas damaged by frost or heavy traffic, such as harbour quays and airport aprons.

Betoncem and exposed aggregate flooring systems are used to decorate squares, pavements, public spaces, building entrances, avenues, and areas in historic town centres, etc.

PACKAGING

25 kg bags

CONSUMPTION

Circa 8 kg/m² di BETONCEM + 12,5 kg/m² di ghiaietto per 1 cm di spessore.

MIXING RATIO

Approx. 8 kg/m² of BETONCEM + 12.5 kg/m² of GRAVEL per 1 cm thickness.

FEATURES AND ADVANTAGES

BETONCEM has been designed to be applied also on existing concrete floors and worn surfaces, without the need to demolish the existing concrete.

It can be applied at minimum thicknesses of 30–50 mm. No reinforcement is required.

It can also be pumped. It is easy to apply and can be pigmented. Inorganic pigments are used, which are resistant to the alkalinity of cement. It resists plastic shrinkage cracking, which is controlled by the fibres incorporated into the mix; these fibres also improve long-term crack resistance, which is a fundamental requirement for durability.

Furthermore, BETONCEM presents the following characteristics:

Reduced microcracking and improved control of shrinkage compared to conventional concrete.

- Easy mixing.
- Reduced thickness for the same load.
- Reduced curling.

Uniform strength of the screed, even in critical areas such as construction and control joints.

CERTIFICATIONS

BETONCEM complies with standard EN 13813: screeds and screed materials (DoP No. 251).

ISO 9001 certified quality management system (Certificate No. IT.17.0227.01.QMS).

APSE S.r.l. is an active member of CONPAVIPER.



SUBSTRATE PREPARATION

The surfaces must be flat, clean, and free from dust, oil, grease, mud, loose particles, paint, and anything else that may impair adhesion. Apply APSECOL BETON or APSECOL RESIN to the substrate. Apply BETONCEM onto the fresh adhesive layer, as indicated in the relevant technical data sheets.

SUBSTRATE PREPARATION

To obtain a high-density mortar free from segregation and with uniform quality, it is important to comply with the water/cement ratio indicated in the section "MIXING RATIO". Mixing with a concrete mixer is recommended.

APPLICATION OF THE MIXTURE

Apply the BETONCEM mix using a straightedge, screeded over level guides. The surface may be power-trowelled if subsequent polishing is planned.

Apply the water-based surface retarder, INIBITORE DI SUPERFICIE, to the fresh product, depending on the desired aggregate exposure (refer to the relevant technical data sheet).



CURING

For curing times (at +20°C), refer to the table below:

Pot life	35 min.
Setting time	60 min.
Walkability	2-3 days
Open to traffic	5-7 days
Complete curing	28 days

CLEANING OF TOOLS

Clean with water while the product is still fresh. Remove mechanically after hardening.

DISPOSAL

Dispose of contents and/or container in accordance with local regulations.

WARNINGS

Do not use if the packaging is damaged.
Do not add any additives unless specified by the manufacturer.
Do not add water once the product has started to set.

HEALTH AND SAFETY WARNINGS

For information on safety regulations, hazard statements and cautionary advice, rely on the latest MSDS by making a request to: ufficiotecnico@apsebg.it

STORAGE

Shelf life: 12 months if stored in the original packaging in a dry, moisture-free place.
Store at temperatures between +5°C and +35°C.

PRODUCT TECHNICAL DATA

PHYSICAL CHARACTERISTICS (at +20°C)

CHARACTERISTICS	STANDARD	RESULT
Appearance	-	Powder
Consistency of the mixture	-	Thick
Colour of the mixture	-	Various
Density of the mixture	EN 1015-6	1.95 ± 0.5 g/cm ³

PRODUCT PERFORMANCE ACCORDING TO UNI EN 1504-3

CHARACTERISTICS	STANDARD	RESULT
Compressive strength	EN 12190	≥ 36 N/mm ²
Flexural strength	EN 12190	≥ 9.5 N/mm ²
Adhesion resistance	EN 1542	≥ 1.5 N/mm ²
Böhme abrasion resistance	EN 13892-3	≤ 12 cm ³ / 50 cm ²
Reaction to fire	EN 13501-1	A1

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