

APSECOL BETON

BONDING ADHESIVE FOR CONCRETE JOINTS

DESCRIPTION

APSECOL BETON is a single-component bonding adhesive suitable for the application of cement-based toppings, all types of plaster and selected types of natural stone or ceramic flooring.

FIELDS OF USE

Main applications include:

- Bonding cement-based toppings and plasters to walls, cementitious substrates and other suitably prepared surfaces.
- Bonding natural stone and engineered stone materials, provided they are not subject to deformation.

APSECOL BETON can be applied to the following substrates:

- Cement screeds made with hydraulic binders or ready-mixed screed products.
- Precast or cast-in-place concrete.
Existing floors made of glazed tiles, cement tiles or porcelain stoneware (after suitable surface preparation such as shot blasting, grinding or sandblasting).
- Heated floors.
- Cement and bastard mortar plasters.

Suitable for interior and exterior flooring in residential, commercial and industrial applications, as well as for urban landscaping projects, including areas exposed to temperature fluctuations and frost. It can also be applied on uneven or irregular substrates, as well as on walls and other vertical surfaces.

PACKAGING

25 kg polythene-lined paper bags.

CONSUMPTION

1.5-2.0 kg/m²

This may vary depending on the flatness of the substrate and the type of preparation.

MIXING RATIO

7-7.5 litres of water per 25 kg bag of APSECOL BETON.

FEATURES AND ADVANTAGES

Once mixed with water, APSECOL BETON forms a plastic, thixotropic mortar that can be easily applied with a trowel, spatula or float, even on vertical surfaces.

The ultra-fine polymer content ensures excellent bonding and outstanding adhesion to the substrate. The enhanced water-retention capacity of the mix reduces the risk of shrinkage cracking.

Once hardened, APSECOL BETON provides good compressive and flexural strength, as well as excellent frost resistance. It is free from chlorides and other corrosive salts that may cause efflorescence.

CERTIFICATIONS

APSECOL BETON complies with the UNI EN 13813 standard: screed materials (DoP No. 228).

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

In general, cementitious substrates must be milled and/or shot-blasted, cleaned of dust, oil and grease, and free from any loose, weak or poorly bonded material, such as cement, lime or paint residues, which must be completely removed. The substrate must be sound, free from cracks, and must have completed its drying shrinkage.

Absorbent substrates: Smooth, compact and well-bonded substrates must be properly prepared.

Mechanically abrade the surface by shot blasting, grinding or scarifying the top layer. Cementitious substrates should be saturated with water at least 12 hours before application.

For highly absorbent substrates or surfaces with a powdery finish, it is recommended to apply the water-based surface primer APSEPOX 910 in one or more coats, according to the instructions for use and depending on the porosity of the substrate.

PRODUCT PREPARATION

APSECOL BETON is prepared in a clean container by first pouring in approximately $\frac{3}{4}$ (5.6 litres) of the total 7.5 litres of water required per 25 kg bag.

Gradually add APSECOL BETON to the container while mixing with a helical mixing paddle at low speed (approximately 400 rpm), moving the paddle from the bottom upwards.

Then add the remaining water until a homogeneous, lump-free mix of the desired consistency is obtained, without exceeding the recommended water content.

For optimum mixing and when preparing larger quantities of adhesive, it is recommended to use a slow-speed electric mixer fitted with vertical blades. The consistency of the mix can be adjusted according to the intended application. Adding excessive water does not improve the workability of the adhesive;

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instead, it causes a reduction in thickness during the plastic stage of drying and adversely affects the final performance, including adhesion, compressive strength and shear strength.

APPLICATION OF THE MIX

APSECOL BETON is applied using a squeegee, trowel or broom, depending on the characteristics of the substrate. It should be applied so as to ensure an even distribution of a sufficient quantity of adhesive (1.5–2.0 kg/m²) to completely cover the substrate. Before applying the screed (SFERODUR FP or SFERODUR 2–5) or plaster, ensure that the adhesive layer is still uniformly wet and that no surface skin has formed. Any partially dried areas should be refreshed by applying an additional layer of APSECOL BETON.

CURING

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

Pot life	30 min.
Adjustment time	30 min.
Full curing	28 days

Temperature, ventilation, substrate absorbency and the applied material may affect the adhesive's workability and setting times.

Protect the finished application from direct sunlight, heavy rain and frost for at least 7 days.

CLEANING OF TOOLS

Clean tools with water while the product is still fresh. Once hardened, the product can only be removed mechanically.

WARNINGS

- Product for professional use only.
- Do not use if the bag is damaged.
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- Do not add any additives unless specified by the manufacturer.
- Do not apply to bituminous substrates.
- Do not apply to surfaces with low mechanical strength.
- Do not add water or re-mix the mix once setting has started in order to extend working time. The product contains all raw materials, correctly pre-dosed in the right proportions, required to produce a high-quality mix; the addition of other substances is therefore not recommended.
- Avoid application in direct sunlight or strong winds.
- Do not use APSECOL BETON on anhydrite screeds, plastic or resilient materials, metals or wood, or on substrates subject to continuous rising damp.
- Do not use APSECOL BETON to level or fill surface irregularities.
- Apply screeds and renders onto the fresh adhesive, ensuring that no surface skin has formed.
- Use a suitable trowel, squeegee or broom.
- Use the double-spread (buttering-floating) technique for all outdoor applications.

HEALTH AND SAFETY WARNINGS

For information on safety regulations, hazard indications, and precautionary advice, refer to the most recent Safety Data Sheet, available upon request at: ufficiotecnico@apsebg.it

STOCCAGGIO

STORAGE

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

DISPOSAL

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

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TECHNICAL DATA OF THE PRODUCT

PHYSICAL CHARACTERISTICS (at +20°C)

CHARACTERISTICS	STANDARD	RESULT
Appearance	-	Fine powder
Consistency of the mixture	-	Dense
Colour of the mixture	-	Grey
Density of the mixture	EN 1015-6	1.8 ± 0.5 g/cm ³

PRODUCT PERFORMANCE IN ACCORDANCE WITH 13813

CHARACTERISTICS	STANDARD	RESULT
Compressive strength	EN 13892-2	≥ 60 N/mm ²
Flexural strength	EN 13892-2	≥ 7 N/mm ²
Adhesive strength	EN 1542	≥ 1.5 N/mm ²
Reaction to fire	EN 13501-1	A1 _{fl}

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