

FASSACOL LATEX S2

DATA SHEET

Superelastic latex for cement-based adhesives



Interior/Exterior



Interior/exterior flooring



In pools



Plastic containers

Advantages

- Improved adhesion
- Better water repellency, i.e. lower absorption
- Higher elasticity

Composition

FASSACOL LATEX S2 is an elastic polymer in aqueous emulsion, featuring high binding capacity, making the adhesive elastic and deformable; the film that forms is resistant to saponification and the elements.

FASSACOL LATEX S2 is used to completely replace the mixing water with cement adhesives:

- AD 8
- FASSACOL made by FASSALUSA (Portugal)
- RAPID MAXI S1

Supply

- Containers of approx. 20 kg

Use

Mixing AD 8, FASSACOL (made by FASSALUSA) or RAPID MAXI S1 with FASSACOL LATEX S2 obtains a high-performance adhesive with excellent elasticity and bonding power, used to bond ceramic tiles of all types and sizes, such as clinker, single-fired, double-fired, terracotta and porcelain gres, even thin slabs, with possible reinforcing mesh on the reverse side, for both interiors and exteriors.

Using FASSACOL LATEX S2 with AD 8 or FASSACOL obtains an improved highly-deformable adhesive with extended open time, classified C2E S2 in accordance with EN 12004; mixed with RAPID MAXI S1, on the other hand, it obtains an improved highly-deformable fast-setting adhesive with extended open time, classified C2FE S2 in accordance with EN 12004.

Substrates include: lime, cement and gypsum base coat plaster and gauged mortars, well cured and dry cement or anhydrite floor screeds, long-standing concrete floor slabs, plasterboard, cementitious waterproof coatings and existing floors. Suitable for application on plasters and floor screeds with heating/cooling systems, on external wall thermal insulation systems, in pools and in places subject to considerable mechanical stress and vibrations.

Products mixed with FASSACOL LATEX S2, given the perfect compatibility of the materials, are especially suitable for use on SA 500, SV 472, SV 472 P, SR 450, LEGEO MIX or FASSAFLOOR THERM screeds, on floor screeds made using FASSACEM binder, on AQUAZIP line waterproofing products, on the FASSATHERM external thermal insulation composite system and on GYPSOTECH system plasterboards.

If used with RAPID MAXI S1, the white version of the adhesive is also suitable for bonding both ceramic and vitreous mosaics, cement and natural stone recomposed tiles that are sensitive to staining and moisture.

Substrate preparation

In general, the application surface must be cured, intact, dry and mechanically resistant. Any traces of oil, grease, wax, paints, varnishes etc. must be removed beforehand, as well as any crumbling or loose parts.

In accordance with UNI 11493-1, for bonding thin tiles (≤ 5 mm), dimensional uniformity of the substrate is considered a critical factor, and therefore the substrate must be levelled and smoothed off before application where necessary.

Cementitious surfaces: It is recommended to moisten application surfaces exposed to strong sunlight, avoiding pools of water on the surface, before applying the adhesive. To level off irregular surfaces, use GAPER 3.30 or LEVEL 30 mortar. Repair deviations in height or horizontal unevenness on the inside using screeds SL 416 or SM 485, depending on the required thickness. Any cracks or recasting on horizontal surfaces will be structurally sealed using FASSA EPOXY 300 two-component epoxy resin. For floor screeds with insufficient surface resistance, evaluate the need to consolidate using PRO-MST, a product with high penetration designed specifically for this purpose.

Concrete: In the event of damaged or degraded parts, exposed reinforcing bars or voids, repair using suitable Fassa Bortolo structural mortars.

Gypsum or anhydrite surfaces: Before applying the adhesive, the surface must be treated using PRIMER DG 74. The treatment can be applied when residual moisture in the substrate is $< 0.5\%$ (0.3% on screed/plaster with heating/cooling systems).

Existing floors: Carefully map the area to make sure that the flooring is solidly fixed to the substrate. Any detached or loose parts must be removed beforehand, and the gaps filled with GAPER 3.30 or LEVEL 30. For particularly smooth substrates, mechanical abrasion is recommended, followed by vacuuming and cleaning the surface. In interiors only, the use of PRIMERTEK 101 primer may be evaluated, depending on the conditions of the substrate, following suitable preparation.

Mixing

Stir FASSACOL LATEX S2 to ensure a uniform product. Pour the contents of a sack into a bucket containing the amount of FASSACOL LATEX S2 specified in the technical data and mix using a mechanical stirrer at low speed for no longer than 3 minutes, until obtaining a fluid, uniform and smooth mixture. Then wait for 5 minutes before applying. Mix again and spread the adhesive using a notched trowel; choose the trowel depending on the type of tile being laid. In any case, during application, apply a thin first layer using the smooth side of the trowel, pressing hard on the substrate so as to ensure maximum adhesion. Adding excess water will not improve adhesive workability, rather may create several different problems and reduce the final performance of the product. In the event of unfavourable temperature-humidity conditions, pot life and open time may vary; if the adhesive forms a film or "skin" on the surface, do not moisten the surface, rather go over it again with the notched trowel. Do not moisten the tiles before application; only wash them in water if the back side is very dusty. The tiles are applied by moving them a little while pressing down and then tapping them carefully so that the surface is in perfect contact with the adhesive. Tiles must be adjusted, if necessary, within the time specified in the Technical Data. Depending on the characteristics of the tile (weight and size) and the thickness of adhesive applied, to assist application it is recommended to use Fassa Bortolo levelling systems (NEW LEVEL TILE kit). In accordance with application standard UNI 11493-1, where required, spread the adhesive on both surfaces being bonded, so as to ensure full contact.

Joints sealing

For sealing joints, use FASSAFILL SMALL cementitious grout for joints from 0 to 5 mm, FASSAFILL MEDIUM for joints from 2 to 12 mm, FASSAFILL LARGE for joints from 5 to 20 mm and FASSAFILL RAPID for joints from 2 to 20 mm. If high chemical resistance is needed, use epoxy-based joint sealants such as FE 838 (for joints from 3-15 mm) or FASSAFILL EPOXY (for joints from 1-10 mm). Seal the construction joints (expansion and perimeter joints, corners between floors and coverings, edges, etc.) using FASSASIL NTR PLUS (one-component neutral silicone sealant). In accordance with standard UNI 11493-1, the joints may not be less than 2 mm wide; for exterior applications and in critical conditions, wider joints are recommended. In addition, the typical maximum size of the divisions for exteriors is 9-10 m² and interiors 24-25 m².

Warnings

- Product for professional use.
- Read the safety datasheet before use.
- Mix the product well, until completely homogenized, before use.
- Fresh adhesive should be protected from direct sun, rain and frost for at least 24 hours.
- Do not use directly on coatings or membranes made from bitumen or tar.
- Verify compatibility of the adhesive with slabs made from stone material or natural stones, applying reinforcing systems on the rear.
- Comply with national standards in force.
- Classification of the adhesive in accordance with EN 12004 refers to use of FASSACOL LATEX S2 o completely replace the mixing water, in the quantity specified in the Technical Data.

FASSACOL LATEX S2 it must be used in its original state without the addition of foreign materials.

Storage

Protect from frost. If stored in a suitable environment, in its original packaging, the material has a shelf life of 12 months. Once the product has expired, it must be disposed of in accordance with current legislation.

Quality

FASSACOL LATEX S2 is subjected to accurate and constant checks in our laboratories. The raw materials used are rigorously selected and controlled.

Technical Data

Adhesive	AD 8 + LATEX S2	FASSACOL + LATEX S2	RAPID MAXI + LATEX S2
Quantity of FASSACOL LATEX S2	36-38%	32-34%	31-33%
Maturing time	approx. 5 minutes	approx. 5 minutes	approx. 5 minutes
Specific weight of the wet mortar	1500-1600 kg/m ³	1500-1600 kg/m ³	1500-1600 kg/m ³
pH	> 12	> 12	> 12
Pot life at +20°C	approx. 3 hours	approx. 3 hours	approx. 40 minutes
Application temperature	from +5°C to +35°C	from +5°C to +35°C	from +5°C to +35°C
Tile adjustment time	approx. 30 minutes	approx. 30 minutes	approx. 15 minutes
Waiting time before sealing the joints	after at least 48 hours	after at least 48 hours	after at least 3 hours
Ready for normal use	7-14 days*	7-14 days*	24-48 hours*
* depending on the intended use and the climatic conditions			

Performance in accordance with EN 12004

Adhesive	AD 8 + LATEX S2	FASSACOL + LATEX S2	RAPID MAXI + LATEX S2
CLASS	C2 E S2	C2E S2	C2FE S2
Initial tensile adhesion strength (EN 1348)	≥ 1 N/mm ²	≥ 1 N/mm ²	≥ 1 N/mm ²
Tensile adhesion strength after water immersion (EN 1348)	≥ 1 N/mm ²	≥ 1 N/mm ²	≥ 1 N/mm ²
Tensile adhesion strength after heating (EN 1348)	≥ 1 N/mm ²	≥ 1 N/mm ²	≥ 1 N/mm ²
Tensile adhesion strength after freeze-thaw cycles (EN 1348)	≥ 1 N/mm ²	≥ 1 N/mm ²	≥ 1 N/mm ²
Extended open time – tensile adhesion strength (EN 1346)	≥ 0.5 N/mm ² after no less than 30 minutes	≥ 0.5 N/mm ² after no less than 30 minutes	≥ 0.5 N/mm ² after no less than 30 minutes
Early tensile adhesion strength (EN 1348)	Not applicable	Not applicable	≥ 0.5 N/mm ²
Transverse deformation (EN 12002)	≥ 5 mm	≥ 5 mm	≥ 5 mm

Typical consumption*

Adhesive	AD 8 + LATEX S2	FASSACOL + LATEX S2	RAPID MAXI + LATEX S2
Type of trowel			
Square notch 6x6 mm	approx. 2.0-2.8 kg/m ² of powder and 0.8-1.0 kg/m ² of latex	approx. 2.2-3.0 kg/m ² of powder and 0.7-1.0 kg/m ² of latex	approx. 2.3-3.0 kg/m ² of powder and 0.7-0.9 kg/m ² of latex
Square notch 10x10 mm	approx. 3.5-4.2 kg/m ² of powder and 1.3-1.5 kg/m ² of latex	approx. 3.7-4.5 kg/m ² of powder and 1.3-1.5 kg/m ² of latex	approx. 3.8-4.6 kg/m ² of powder and 1.2-1.4 kg/m ² of latex
*All consumption data refer to one single spread.			

The above information refers to laboratory testing; it is possible that in practical applications on site these may differ considerably according to the conditions in which the material is applied. In any case the user must check that the product is suitable for the intended application, taking all responsibility for its use. Fassa reserves the right to make technical modifications without notice.

Technical specifications regarding the use of Fassa Bortolo products for structural or fire prevention applications will only be officially valid if provided by Fassa Bortolo's "Technical Service" and "Research, Development and Quality System". If necessary, contact Technical Service in your country of reference (IT: area.tecnica@fassabortolo.com, ES: asistencia.tecnica@fassabortolo.com, PT: assistencia.tecnica@fassabortolo.com, FR: bureau.technique@fassabortolo.fr, UK: technical.assistance@fassabortolo.com).

Please note that for the aforementioned products, the assessment is required by the appointed professional, in accordance with regulations in force.