

RAPID MAXI S1

DATA SHEET

One-component fast-setting adhesive with good elasticity, extra-white and grey, for both exterior and interior floors and coverings



Interior/Exterior



Interior/exterior flooring



In pools



Sack



Notched trowel

Advantages

- Fast-setting, usable after a short time
- For laying natural stone, marble and recomposed tiles
- Extra-white
- Excellent for floors and walls with heating/cooling systems
- Excellent workability
- Deformable
- Resistant to vertical slippage

Composition

RAPID MAXI S1 is a fast-setting dry premixed adhesive made up of special white and grey binders, graded sand, synthetic resins and specific additives to guarantee optimum workability and ensure strong adhesion in a short time.

Supply

- Special bags with moisture protection from approx. 25kg

Use

Thanks to its special formulation, RAPID MAXI S1 is especially suitable for laying natural stone and artificial materials that are moderately sensitive to staining and stable to moisture. Ideal for reconstruction work, repairs and applications in which the spaces need to be used very soon after the work has been completed, for any purpose. Moreover, the adhesive can be used for bonding ceramic, mosaic, clinker, gres, porcelain gres and terracotta tiles on both interior and exterior walls and floors. 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 or in swimming pools.

Given the perfect compatibility of the materials, it is especially suitable for use on SA 500, E 439, SV 472, SV 472 P, SR 450, LEGEO MIX or FASSAFLOOR THERM floor screeds, on floor screeds made using FASSACEM binder, on AQUAZIP line waterproofing products and on GYPSOTECH system plasterboards.

Substrate preparation

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

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; in the most extreme situations, mechanical abrasion will be required before treatment with the primer.

Concrete

The substrate must be prepared beforehand by mechanical abrasion, in order to remove any roughness, traces of dirt, loose parts, encrustations, traces of paint, cement crusts or other contaminants, so as to make the substrate slightly rough and absorbent. 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.

For correct application, please see the technical documents for each individual product described above.

Mixing

Pour the contents of a sack into a bucket containing the amount of clean water 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. The mix obtained can be worked for 30 minutes in normal temperature and humidity conditions; if conditions are unfavourable, pot life may vary. 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. Any re-aligning of the tiles after laying must be carried out within approx. 15 minutes. If the adhesive forms a film or "skin" on the surface, do not moisten it but rather go over it again with the notched trowel. 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.
- 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 recomposed materials or slabs made from stone or natural stones, applying reinforcing systems on the rear.
- Comply with national standards in force.
- Do not use directly on plasterboard walls, rather use DG 74 PRIMER in accordance with the legislation in force in the place where the product is used.

RAPID MAXI S1 it must be used in its original state without the addition of foreign materials.

Storage

Store in a dry place for no longer than 6 months. Once the product has expired, it must be disposed of in accordance with current legislation.

Quality

RAPID MAXI S1 is subjected to accurate and constant checks in our laboratories. The raw materials used are rigorously selected and controlled.

Technical Data

Appearance	extra-white or grey powder
Maximum thickness	10 mm
Granulometry	<0.6mm
Mixing water	22-24%
Maturing time	approx. 5 minutes
Specific weight of wet mix	approx. 1,550 kg/m ³
Density of hardened adhesive	approx. 1,500 kg/m ³
pH	> 12
Duration of the mix at +20°C	30 minutes
Application temperature	from +5°C to +35°C
Tile adjustment time	approx. 15 minutes
Waiting time before sealing the joints	2-3 hours
Allowing foot traffic	2-3 hours
Ready for normal use	after 24 hours
Compliant with standard EN 12004	C2FT S1
Recycled/recovered/by-product content	The product contains some recycled/recovered/by-product. The relevant declaration is available on request.

Environmental sustainability certifications and protocols

LEED V4.1 protocol	MR Credit – Construction and Demolition Waste Management
	EQ Credit – Low-Emitting Materials
	EQ Credit – Construction Indoor Air Quality Management Plan
BREEAM protocol	HEA 02 – Indoor Air Quality
WELL v2 protocol	X01 – Material Restrictions
	X06 – Voc Restrictions
CAM protocol	2.5.1/3.2.8 – Indoor Emissions
GEV Classification	GEV EMICODE EC 1 ^{Plus} - very low emission

Performance in accordance with EN 12004 C2FT S1

Early tensile adhesion strength (6 hours) (EN 1348)	$\geq 0.5 \text{ N/mm}^2$
Initial tensile adhesion strength (EN 1348)	$\geq 1 \text{ N/mm}^2$
Tensile adhesion strength after water immersion (EN 1348)	$\geq 1 \text{ N/mm}^2$
Tensile adhesion strength after heating (EN 1348)	$\geq 1 \text{ N/mm}^2$
Tensile adhesion strength after freeze-thaw cycles (EN 1348)	$\geq 1 \text{ N/mm}^2$
Open time: tensile adhesion strength (EN 1346)	$\geq 0.5 \text{ N/mm}^2$ after no less than 10 minutes
Vertical slippage (EN 1308)	$\leq 0.5 \text{ mm}$
Transverse deformation (EN 12002)	$\geq 2.5 \text{ mm}$ and $< 5 \text{ mm}$

Do not use for	Use instead
Apply directly on anhydrite screeds	PRIMER DG 74 - RAPID MAXI S1
Apply directly on gypsum plasters	PRIMER DG 74 - RAPID MAXI S1
Large size ceramic tiles or slabs of natural stone	RAPID MAXI S1 + FASSACOL LATEX S2 or FASSACOL EASYLIGHT S2
Laying on floors or walls affected by strong movements or vibrations	RAPID MAXI S1 + FASSACOL LATEX S2 or FASSACOL EASYLIGHT S2
Natural stone that is sensitive to moisture and stains	AX 91
Lay on wooden or metal surfaces	AX 91

Type of trowel	Estimated consumption
Square notch 6x6 mm	3-4 kg/m ²
Square notch 10x10 mm	5-6 kg/m ²
(*) 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: asistencia.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.