EXTRA 30 POWER S2

Single-component, highly deformable S2 cementitious adhesive with high performance and easy trowelability. Specific for laying large slabs.





Technical specifications

EXTRA 30 POWER S2 is an improved single-component cementitious adhesive with a long open time, highly deformable, high performance and easy trowelability. It comes in the form of a grey or white powder, consisting of synthetic resins, cement, sands of selected grain size and special additives. When mixed with water alone, it turns into an adhesive with the following characteristics:

- Maximum deformability, because it is classified S2 according to European Standard EN 12004, thus an excellent ability to accommodate the deformation of the substrate and tiles.
- Specifically for the laying of large slabs even at low thickness.
- Applicable in thicknesses up to 10 mm.
- Great smoothness and creamy consistency, easy to trowel.
- Excellent distribution and wetting of the back of the tiles even with large format and thin slabs, no danger of voids, no seepage.
- For indoor and outdoor use.
- Single-component: the exceptional characteristics are achieved by mixing it only with water without the addition of resins or liquid additives.

- **Classified according to EN 12004, class C2E-S2.**
- **Very low VOC emission (Class EC1 plus).**

Applications

- Laying of large-format, thin porcelain stoneware slabs without reinforcement mesh.
- Laying of all types of ceramic materials indoors and outdoors (porcelain stoneware, double-fired, single-fired, Klinker).
- Indoor and outdoor installation of stone materials, provided they are dimensionally stable and insensitive to moisture.
- Laying of ceramic tiles on floors with air conditioning system.
- Laying floors subject to heavy traffic.
- Laying of ceramics and stable stone material on balconies, terraces, solar slabs, subject to direct radiation and temperature fluctuations.
- Laying on cured concrete substrates.
- Laying ceramic over ceramic, stone material, marble tiles, suitably prepared.
- Laying on cement and anhydrite screeds, after adequate preparation and application of PRIMER GS.
- Laying floors on substrates waterproofed with ADEPROOF membranes.

Important warnings

Do not use in the following cases:

- On metal, rubber, PVC, linoleum surfaces (use ADEFLEX T).
- With marble slabs and natural stone subject to efflorescence or staining (use ADEFLEX T or EXTRA 40 FAST).
- With slabs of natural or reconstituted stone materials subject to movement due to moisture (use ADEFLEX T).
- Where fast foot traffic is required (use EXTRA 40 FAST mixed with LATEX R 200).
- On concrete with the presence of release agent and subject to strong shrinkage.

For laying on previously prepared anhydrite screeds, apply a coat of PRIMER GS before applying the adhesive. For anything not included in this document, you should consult the UNI 11493 standard and/or contact our Technical Service Department.

Mix preparation

Mix approx. 8.0 - 8.2 litres of clean water with a 25 kg bag of EXTRA 30 POWER S2 white or grey, preferably with a low-speed mechanical mixer, until a homogeneous, lump-free mixture is obtained. Let the mix rest for about 5 minutes and stir it briefly before use. The resulting mix can be used for about 8 hours.

Substrate preparation

The tiling substrate, at the time the adhesive is applied, must comply with the requirements of seasoning, integrity, mechanical and surface resistance, dimensional regularity, humidity and absence of contaminating agents as stated in Standard UNI 11493 section 7.3.

Cementitious screeds: surfaces must be free of water stagnation before installation**.** Traditional cementitious substrates must be suitably cured (28 days at a temperature of +23°C and R.H. 50%). Screeds made with STARCEM or STARCEM PRONTO 2.0 (see technical data sheets) must be made at least 48 hours before laying. Substrates must be flat, dimensionally stable and mechanically resistant, depending on the intended use, free of friable parts and free of oils, paints, waxes and anti-adhesive materials. Substrates must be sufficiently dry: in the presence of humidity, the adhesive may slow down setting.
In any case, these supports must meet the requirements of UNI 11493 point 7.6.

Laying on existing tiles: in case of overlapping of ceramic tiles, it is necessary to check that all the old tiles are well anchored; clean and prepare carefully the surface of the old floor by a first washing with a suitable basic detergent, then wash with ADESIT CLEAN. Perform mechanical action to remove all loose parts and materials that do not allow adhesion. For outdoor laying on an existing ceramic floor, in addition to the prescriptions above, also provide a surface treatment with ADEGRIP ECO.

Laying ceramic tiles on a cementitious screed with heating: for this application, it is important that the screed and the heating and cooling system have been designed, constructed, tested and started up according to the indications given in standard UNI EN 1264. In addition, before starting laying operations with the adhesive, it is necessary to refer to all the prescriptions and verifications reported in the UNI 11493 standard for this particular application.

N.B. Gypsum or anhydrite substrates must be dry (residual moisture less than 0.5%), sufficiently strong, with a suitable surface (otherwise sand/roughen), free of dust and treated with PRIMER GS.

Tile application

For the correct application of EXTRA 30 POWER S2, it is advisable to initially spread a zero coat of the adhesive with a smooth trowel and then to proceed with the application of the adhesive with a notched trowel suitable for the thickness to be obtained, the unevenness of the substrate and the type of tile to be applied. Always check before laying that the adhesive has not filmed, in which case you must re-squeegee the adhesive to reactivate its adhesion. Then apply the tile, exerting good pressure and a slight movement on it at the same time so as to ensure complete wetting of the back of the tile. In the case of indoor or outdoor floors, especially with large-format and/or thin tiles and when the reverse side of the tiles is in relief or dovetailed (clinker, terracotta, etc.), the adhesive must also be spread on the reverse side, using the double-buttering technique, to prevent cavities remaining where water can penetrate or condensation moisture can form, which could cause detachment or cracking in the event of frost. The tiles laid must not be subject to washout or rain for at least 24 hours and must be protected from frost and beating sun for at least 5-7 days from the date of laying.

NB: Special environmental conditions, such as strong wind, high temperatures, beating sun or very absorbent substrates, can reduce the open and registration time even dramatically. To limit this problem, we recommend moistening the substrate before applying the adhesive. If the adhesive has already filmed, do not pour water on the adhesive, as this would create an anti-adhesive film. Installation must always be carried out in accordance with UNI 11493.

Grouting

Tiles can be grouted after 24-36 hours on the floor.
For this purpose and depending on thickness, we recommend using ADESITAL joint sealants:

- FUGAMAGICA 0-4 MATERIA TECH for grouting coatings with joints of less than 4 mm with a fine finish.
- FUGAMAGICA ZEROSEI MATERIA for water-repellent grouting of coatings with joints smaller than 6 mm with a smooth finish.
- FUGAMAGICA 2-12 for grouting floor and wall coverings with joints from 2 to 12 mm with a medium degree of finish.
- FUGAMAGICA MATERIA POWER for the fast, water-repellent and mould-resistant grouting of coatings with joints from 2 to 20 mm with a smooth finish.
- FUGAMAGICA 3-20 BIO MATERIA TECH for grouting floors and walls with joints from 3 to 20 mm with a coarse finish.
- ADEPOXY MATERIA, two-component decorative epoxy grout for grouting floors and walls with joints of at least 2 mm.
- ADEPOXY MATERIA TECH, high-cleanability, two-component epoxy grout for grouting floors and walls with joints of at least 3 mm.
- In applications where greater strength, deformability and impermeability are required, IMPER 21 latex mixed with FUGAMAGICA sealants must be used instead of water.
- Elastic expansion joints must be made with ADESIL MATERIA or ADESIL P MATERIA TECH for ceramics and natural stone (see technical data sheets). Floor expansion joints in areas subject to heavy traffic must be made with SILFLEX P or ADESIL P MATERIA TECH.

Specifications

Indoor and outdoor floors shall be installed with an improved, single-component, long-lasting, highly deformable, high-performance cementitious adhesive with easy trowelability, class C2E-S2 (according to EN 12004), with very low VOC emission (Class EC1 plus), such as white or grey EXTRA 30 POWER S2 by ADESITAL S.p.A.

Technical data (at +23°C and 50% R.H.)	
Appearance	dust
Colour	white and grey
Powder volume mass	1300 kg/cm^3
Conservation	12 months (in original packaging, in a dry place)
Security	Check the information given on the packaging and Safety Data Sheet
Application data	
Mixing ratio	8.0-8.2 liters of water per 25 kg bag (white or grey)
Pot life	8 hours
Mix density	1400 kg/cm^3
Application temperature	from +5°C to +35°C
Mix pH	> 12
Open Time	30 minutes
Adjustment time	45 minutes
Transitability	after 24 hours
Floor grouting	after 24 to 36 hours
Final hardening	14 days
Final performance	
Initial adhesion	2.7 N/mm^2
Adhesion after heating	2.6 N/mm^2
Adhesion after immersion in water	1.1 N/mm^2
Adhesion after frost-thaw cycles	1.4 N/mm^2
Deformability according to EN 12004	> 5 mm (S2, highly deformable)
Resistance to humidity	excellent
Resistance to ageing	excellent
Resistance to solvents and alkalis	good
Resistance to acid	poor
Consumption	1.2 kg/m2 per mm thickness
EXTRA 30 POWER S2 packs	25 kg bag

Warnings: The indications and prescriptions given above, while corresponding to our best experience, are to be considered purely indicative and must be confirmed by exhaustive practical tests; therefore, before using the product, whoever intends to make use of it must establish whether or not it is suitable for the intended use and, in any case, assumes all responsibility that may arise from its use. PRODUCT FOR PROFESSIONAL USE ONLY.

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