

## FASSACOL EASYLIGHT S2

### DATA SHEET

One-component lightweight cement adhesive with very high elasticity, white and grey, for both exterior and interior floors and coatings



Interior/Exterior



Interior/exterior flooring



In pools



Sack



Notched trowel

### Advantages

- Lightweight
- Excellent workability and wetting power
- High yield
- Highly deformable adhesive
- Large format tiles and thin slabs up to 320x160 cm
- Excellent for floors and walls with heating/cooling systems
- Coverings on façades and External Thermal Insulation Composite Systems (ETICS)
- Applications in high-traffic areas
- Ideal for vitreous mosaics
- Suitable in pools
- Adhesive for thicknesses of up to 15 mm

### Composition

FASSACOL EASYLIGHT S2 is a dry premixed adhesive made from white or grey Portland cement, white or grey graded sand, graded lightweight aggregate, a high quantity of synthetic resins and specific additives to improve workability and adhesion.

### Supply

- Special sacks with protection against moisture, approx. 15 kg

### Use

FASSACOL EASYLIGHT S2 is used to bond ceramic tiles of all types, such as clinker, single-fired, double-fired, terracotta and porcelain gres, even for low thickness slabs.

Also suitable for bonding both ceramic and vitreous mosaics (white version), cement and natural stone recomposed tiles that are not sensitive to staining and moisture.

It is suitable for laying coverings of any size and thickness, both indoors and outdoors.

Substrates include: lime, cement and gypsum base coat plaster/render and gauged mortars, well cured and dry cement or anhydrite floor screeds, long-standing concrete floor slabs, plasterboard, cementitious waterproof coatings, existing floors (ceramic, marble, parquet, etc.), marine plywood, plywood and stable wood agglomerates with low moisture absorption.

Suitable for application on plasters and floor screeds with heating/cooling systems, on FASSATHERM external wall thermal insulation systems, in pools, on exterior façades, flat roofs and in places subject to considerable mechanical stress and vibrations.

Given the perfect compatibility of the materials, it is especially suitable for use on SA 500, E 439, FASSAFLOOR LA 8.30, FASSAFLOOR SV 472 PRO, SR 450, LEGEO MIX, FASSAFLOOR THERM screeds, on floor screeds made using FASSACEM binder, on AQUAZIP waterproofers and on GYPSOTECH system plasterboards.

## Substrate preparation

In general, the laying substrate must be cured, sound, compact throughout its thickness and surface, dimensionally regular, with a suitable level of residual moisture, free from contaminants, all in accordance with UNI 11493-1. Any traces of oil, grease, wax, paints, varnishes etc. must be removed beforehand, as well as any crumbling or friable parts. In accordance with UNI 11493-1, for bonding thin tiles ( $\leq 5$  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. Any cracks or recasting on horizontal surfaces will be structurally sealed using FASSAFLOOR EPOXY REPAIR two-component epoxy resin. For cement screeds with insufficient surface strength, evaluate the need to consolidate with PRO-MST, a specific product with high-penetration; in the most extreme situations, mechanical abrasion will be required before treatment with the primer. For restoring levels or dimensional regularity, use specific FASSA BORTOLO products.

### Concrete

The substrate must be prepared beforehand by mechanical abrasion, in order to remove any roughness, traces of dirt, friable parts, encrustations, traces of paint, cement laitance 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 friable parts must be removed beforehand, and the gaps filled with GAPER 3.30. If the substrate is particularly smooth, mechanical abrasion followed by vacuuming and thorough cleaning of the surface is recommended. Depending on substrate conditions, the use of the adhesion promoter FASSAFLOOR PRIMERTEK ULTRA may be considered, following substrate preparation.

### Wood

(only indoors without rising damp)

For laying over existing, stable parquetry, carefully map the area to make sure that the flooring is solidly fixed to the substrate. For laying on marine plywood, chipboard or other types of panels, check the stability and rigidity of the substrate, ensuring suitable mechanical fixing of the panels. Any paints or protective treatments must be removed by mechanical abrasion and vacuuming and the surface cleaned. In all cases, treat the surface with FASSAFLOOR PRIMERTEK ULTRA.

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, homogeneous and lump-free mixture. Then wait for 5 minutes before applying. Adding excess water will not improve adhesive workability, rather may create several different problems and reduce the final performance of the product. The resulting mix will remain workable for the time indicated in the Technical Data; under unfavourable thermo-hygrometric conditions, the pot life may vary. Remix and spread the adhesive using a notched trowel selected according to the type of tile to be bonded; apply an initial thin coat using the smooth side of the trowel, pressing firmly onto the substrate to achieve maximum adhesion, then use the notched side to form straight, parallel ribs aligned with the short side of the tile to facilitate air release. When bonding applying the product on both surfaces, the adhesive ribs must be applied both to the substrate and to the back of the tile, taking care not to cross them. It is not necessary to pre-wet tiles before laying; clean the back using appropriate methods and products only in the presence of very dusty backs (e.g. ceramic dust, slipware, etc.). Tiles must be laid before a skin forms on the adhesive; then compact the adhesive by manual tapping or mechanical vibration applied to the tiled surface. The tiles are laid by applying gentle downward pressure and then tapping them carefully so that the entire surface is in perfect contact with the adhesive. Any re-aligning of the tiles after laying must be carried out within approx. 30 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 (e.g. NEW LEVEL TILE kit). In accordance with UNI 11493-1 installation standard, where required, apply a full adhesive bed; carry out spot checks to ensure correct wetting of the back of the tile.

Provide movement joints in the tiling in accordance with UNI 11493-1.

## 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 movement 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 m<sup>2</sup> and interiors 24-25 m<sup>2</sup>.

## Warnings

- Product recommended for expert users.
- Always read the safety data sheet before use.
- Fresh adhesive should be protected from direct sun, rain and frost for at least 24 hours.
- Do not apply directly over coatings or membranes made from bitumen or tar.
- Verify compatibility of the adhesive with slabs made of stone materials or natural stones, applying reinforcing systems on the rear.
- Comply with national standards in force.
- The ceramic tiling system shall be designed, installed and maintained in accordance with UNI 11493-1.

**The adhesive must only be used in its original state, without the addition of other products.**

## Storage

Keep in a dry place for a period not exceeding 12 months. Once the product has expired, it must be disposed of in accordance with current legislation.

## Quality

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

## Technical Data

|                                              |                                                                          |
|----------------------------------------------|--------------------------------------------------------------------------|
| Appearance                                   | white or grey powder                                                     |
| Maximum adhesive thickness                   | 15 mm                                                                    |
| Granulometry                                 | <0.6mm                                                                   |
| Mixing water                                 | 36-38 %                                                                  |
| Maturing time                                | approx. 5 minutes                                                        |
| Specific weight of wet mix                   | approx. 1,100 kg/m <sup>3</sup>                                          |
| pH                                           | > 12                                                                     |
| Open time at +20 °C / 60% RH                 | approx. 6 hours                                                          |
| Application temperature                      | from +5°C to +35°C                                                       |
| Tile adjustment time +20 °C / 60% RH         | approx. 30 minutes                                                       |
| Waiting time before grouting +20 °C / 60% RH | approx. 1 day                                                            |
| Ready for service                            | 7-14 days<br>(depending on the intended use and the climatic conditions) |
| Compliant with standard EN 12004-1           | C2E S2                                                                   |
| Recycled/recovered/by-product content        | * CERTIFICATION OF RECYCLED/RECOVERED/BY-PRODUCT MATERIAL CONTENT        |
|                                              | CP DOC 262 REGULATION                                                    |
|                                              | CERTIFICATE No. P684                                                     |

| 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 <sup>Plus</sup> - very low emissions       |

| Performance in accordance with EN 12004 C2E S2               |                                                       |
|--------------------------------------------------------------|-------------------------------------------------------|
| Initial tensile adhesion strength (EN 1348)                  | ≥ 1 N/mm <sup>2</sup>                                 |
| Tensile adhesion strength after water immersion (EN 1348)    | ≥ 1 N/mm <sup>2</sup>                                 |
| Tensile adhesion strength after heat ageing (EN 1348)        | ≥ 1 N/mm <sup>2</sup>                                 |
| Tensile adhesion strength after freeze-thaw cycles (EN 1348) | ≥ 1 N/mm <sup>2</sup>                                 |
| Open time: tensile adhesion strength (EN 1346)               | ≥ 0.5 N/mm <sup>2</sup> after no less than 30 minutes |
| Transverse deformation (EN 12002)                            | ≥ 5 mm                                                |

| Do not use for                                                                                                                   | Use instead                          |
|----------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|
| Apply directly on anhydrite screeds                                                                                              | PRIMER DG 74 - FASSACOL EASYLIGHT S2 |
| Apply directly on gypsum plasters                                                                                                | PRIMER DG 74 - FASSACOL EASYLIGHT S2 |
| Work requiring short accessibility times or with natural stones that are stable to moisture and moderately sensitive to staining | RAPID MAXI S1                        |
| Plasterboard surfaces                                                                                                            | PRIMER DG 74 - FASSACOL EASYLIGHT S2 |
| Natural stone that is sensitive to moisture and stains                                                                           | AX 91                                |
| Lay on wooden or metal surfaces or PVC                                                                                           | AX 91                                |

| Type of trowel                                   | Indicative coverage               |
|--------------------------------------------------|-----------------------------------|
| Square notch 6x6 mm                              | approx. 1.6-2.5 kg/m <sup>2</sup> |
| Square notch 10x10 mm                            | approx. 2.7-4 kg/m <sup>2</sup>   |
| 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 verify 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](mailto:area.tecnica@fassabortolo.com), ES: [asistencia.tecnica@fassabortolo.com](mailto:asistencia.tecnica@fassabortolo.com), PT: [assistencia.tecnica@fassabortolo.com](mailto:assistencia.tecnica@fassabortolo.com), FR: [bureau.technique@fassabortolo.fr](mailto:bureau.technique@fassabortolo.fr), UK: [technical.assistance@fassabortolo.com](mailto: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.