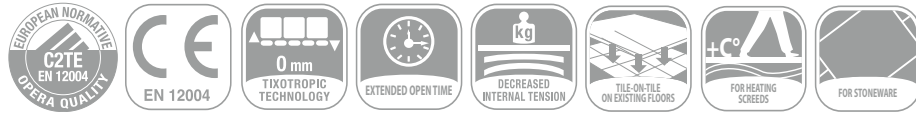




# S1 Fibrorinforzato

**One-component thixotropic cement-based adhesive, with improved adhesion and extended open time for the installation of medium sized porcelain stoneware indoors and outdoors, even for tile over tile application, and on heating screeds.**



## Fields of application:

- to apply floor tiles of any size in porcelain stoneware, single and double fired material, ceramic mosaic indoors on cured cement-based screeds, on screeds made with Basecem or Basecem Pronto, on self-levelling products such as Planirapid Autolivellante or Planirapid Autolivellante Maxi, on smoothing plasters such as Rasoplan Tixo, on anhydrite screeds and on radiating floors;
- to apply floor tiles in porcelain stoneware, single and double fired material outdoors on cured cement-based screeds, on screeds made with Basecem or Basecem Pronto;
- tile over tile application with size  $\leq 900 \text{ cm}^2$  in porcelain stoneware, single and double fired material and ceramic mosaic indoors after cleaning with Detergente Basico and applying Primer Tack;

## Characteristics:

**S1 Fibrorinforzato** is a one-component cement-based adhesive with standard setting classified C2TE according to norm EN 12004. The formula of **S1 Fibrorinforzato** made up of selected aggregates, high performance 52.5 Portland cements, polymers with low environmental impact, synthetic microfibers and celluloses, gives the adhesive an open time of 30 minutes, making it ready for walk over after 24 hours and ready for use in 7 days, guaranteeing easy and safe installation of floor and wall tiling. Indicated for indoor and outdoor civil, commercial and industrial applications.

## Quality and Environmental Standards:

**S1 Ultrawhite** undergoes constant, careful testing at our laboratories, in compliance with the legislation in force -UNI EN ISO 9001/2015.

- to apply wall tiles of any size in porcelain stoneware, single and double fired material, ceramic mosaic, stable natural stones indoors on traditional render, pre-mixed render, plasterboard, gypsum;
- to spot-bond insulating materials such as foam polyurethane and polystyrene, rock or glass wool on walls or ceilings;
- to apply floor and wall tiles in porcelain stoneware, single and double fired material, ceramic mosaic indoors on waterproofing membranes such as Sanigum, Scudo Revolution and Scudo A+B;
- professional use only.

## Application:

**S1 Fibrorinforzato** must be mixed with 6.5 l of water every 25 kg bag with a low speed stirrer, till getting a smooth mixture free of lumps. Do not add other hydraulic binders or aggregates. Check that the substrate complies with norm EN 11493 point 7.3 as for the requirements of curing, integrity, surface sturdiness, dimensional regularity, residual humidity and rising damp. In very absorbing substrates, gypsum, anhydrite or with minor crumbling pre-treat with **Primer GS**. Apply **S1 Fibrorinforzato** creating an adhesive layer of max. 10 mm, so as to coat the tile back side completely. Follow the norm EN 11493 point 7.9/7.11 for outdoor applications, in sizes with side  $\geq 60 \text{ cm}$  and in low thickness tiles. Apply a layer of adhesive on the tile back side (backbuttering) in case of strong stresses or when required by the ceramic manufacturer. Create elastic expansion joints every 10 m<sup>2</sup> outdoors and every 25 m<sup>2</sup> indoors, every 4 m in sidewalks and skirting boards. The materials applied with S1 Fibrorinforzato must be protected from the rain during the 24 hours following laying and must not be exposed to freezing temperatures for the first 5 days. Remember to realize and respect the fractioning and perimeter joints. These joints must be made every 3x3 meters outdoors and 4x4 meters indoors.

<b>CE</b>	
Opera Srl Via degli Scavi 19/21 47122 Forlì - Italy	
<b>DOP-IT-01-015</b> <b>S1 FIBRORINFORZATO GRIGIO</b> <b>EN 12004:2007+A1:2012</b>	
Improved cement-based adhesive for tiles with limited slip and extended open time, for indoor and outdoor application	
Fire reaction	Class A1/A1 fl
Adhesion strength:	
- Initial tensile adhesion	$\geq 1.0 \text{ N/mm}^2$
Durability:	
- Tensile adhesion after thermal ageing	$\geq 1.0 \text{ N/mm}^2$
- Tensile adhesion after immersion in water	$\geq 1.0 \text{ N/mm}^2$
- Tensile adhesion after frost-thaw cycles	$\geq 1.0 \text{ N/mm}^2$
Release of harmful substances	See Safety data sheet

Characteristics	Application methods	Consumption
One-component Mixture water: 26-28% in weight Open time: 30 minutes Adjustment time: 60 minutes Waiting time for wall joint grouting: 3/6 hours Waiting time for floor joint grouting: 24 hours Frost-proof Elastic Max. bedding thickness: 10 mm Walk over time: 24 hours Ready for use: 7 days	Smooth or toothed trowel	2.5-5 kg/m <sup>2</sup>
		<b>Storage</b> Shelf life of 12 months the original packages and in a dry place

Code	Product	Form and color	Packages	Pallet
I02025	S1 Fibrorinforzato	Grey powder	25 kg	1500 kg
I02125	S1 Fibrorinforzato	White powder	25 kg	1500 kg

### Warning:

- do not use for laying non-absorbent and large-size tiles outdoors;
- do not use for laying glass mosaic tiles or suchlike;
- do not use on prefabricated or cast-in-situ concrete constructions;
- on gypsum or anhydrite bases, use Primer GS beforehand;
- do not use where adhesive layer over 5 mm thick is necessary;
- do not use on wooden bases or plasterboard walls;
- do not use on metal, rubber, PVC or linoleum surfaces;
- do not use on surfaces which need to be treadable in a short space of time.



### Technical and application specifications

Hazard classification as per Directive 99/45/CE:	<b>grey: irritant</b> <b>white: none</b>
Mixing water:	<b>26-28% (weight)</b> <b>(i.e. approx. 6.5 l per 25 kg bag)</b>
Specific weight of mixture:	<b>1.50 g/cm<sup>3</sup></b>
Mixture pH:	<b>over 12</b>
Pot life:	<b>6/8 hours</b>
Application temperature:	<b>from +5°C to +35°C</b>
Open time (according to EN 1346):	<b>approx. 30 minutes</b>
Handling time:	<b>approx. 60 minutes</b>
Joint sealant hardening time on walls:	<b>3/6 hours (depending on the absorption)</b>
Joint sealant hardening time on floors:	<b>approx. 24 hours</b>
Walk-over time:	<b>24 hours</b>
Ready for use:	<b>7 days</b>

### FINAL PERFORMANCES SPECIFICATIONS EN 1348 (N/mm<sup>2</sup>)

Initial adhesion (after 28 days):	<b>1.80 N/mm<sup>2</sup></b>
Adhesion after immersion in water:	<b>1.40 N/mm<sup>2</sup></b>
Adhesion after freeze-thaw cycles:	<b>1.70 N/mm<sup>2</sup></b>
Adhesion after heat action:	<b>1.50 N/mm<sup>2</sup></b>
Resistance to acids and alkalis:	<b>poor</b>
Resistance to damp, solvents, oil, and ageing:	<b>excellent</b>
Temperature resistance:	<b>from -30°C to +90°C</b>
Deformability:	<b>none</b>
Harmonised customs code:	<b>38245090</b>

Measurement of data at 23°C/50% Residual Humidity and no ventilation. The data may be considerably modified by the conditions of use.