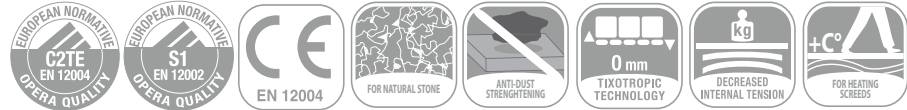




SPM Universal

Semi-rapid one-component, thixotropic and deformable cement-based adhesive with improved adhesion, for high thickness installation indoors/ outdoors and in façades of every type of large sized tiles. Specific for stable natural stones even when overlapped and on heating screeds not subject to stains.



Fields of application:

- to apply floor and wall tiling in solid marbles, granites, solid natural or artificial stones subject to stain and any size of porcelain stoneware tiles 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 wall tiles on traditional render, pre-mixed render, plasterboard, gypsum;
- to apply floor tiling in solid marbles, granites, solid natural or artificial stones subject to stain and any size of porcelain stoneware tiles outdoors on cured cement-based screeds, on screeds made with Basecem or Basecem Pronto;

Characteristics:

SPM Universal is a one-component cement-based adhesive with semi-rapid setting, classified C2TE according to norm EN 12004 and S1 according to norm EN 12002. The formula, made of fine aggregates, 52.5 molten cement, fissionstable polymers with low environmental impact, setting-adjuster 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.

Preparation:

the base must be flat, sound, compact, have no parts coming away, and be free of dust, grease, oil, paint, and wax. The base must be dry and well established. Provide the laying surface with protection from direct sunlight beforehand. When the temperature is above +25°C, we recommend you dampen laying bases with low absorbency beforehand to prevent non-standard drying of the adhesive.

Quality and Environmental Standards:

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

- to apply overlapped solid marbles, granites, solid natural or artificial stones subject to stain and any size of porcelain stoneware tiles indoors and outdoors after cleaning with Detergente Basico;
- to apply floor and wall tiling in solid marbles, granites, solid natural or artificial stones subject to stain and any size of porcelain stoneware tiles indoors and outdoors on waterproofing membranes such as Sanigum, Scudo Revolution and Scudo A+B;
- to apply in outdoor façades;
- professional use only.

Application:

SPM Universal must be mixed with 7 l of water every 25 kg bag with a low speed stirrer. 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 **SPM Universal** I 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 ≥ 60 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 m² outdoors and every 25 m² indoors, every 4 m in sidewalks and skirting boards. In façade applications, comply with norm EN 11493 point 7.13.7 for evaluating the substrate, the installation and the use of anti-overturning hooks. The materials applied with **SPM Universal** must be protected from the rain during the 24 hours following laying and must not be exposed to freezing temperatures or strong sunlight for the first 5 days.

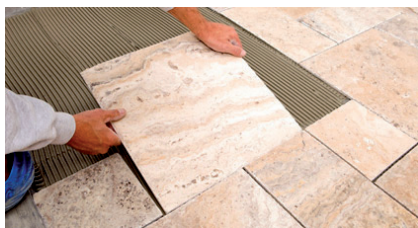
CE	
Opera Srl Via degli Scavi 19/21 47122 Forlì - Italy	
DOP-IT-01-005 SPM GRIGIO EN 12004:2007+A1:2012 Improved cement-based adhesive for tiles with limited slip and extended open time, for indoor and outdoor application.	
Fire reaction	Class A1/A2 fl
Adhesion strength:	
- Initial tensile adhesion	$\geq 1,0$ N/mm ²
Durability:	
- Tensile adhesion after thermal ageing	$\geq 1,0$ N/mm ²
- Tensile adhesion after immersion in water	$\geq 1,0$ N/mm ²
- Tensile adhesion after frost-thaw cycles	$\geq 1,0$ N/mm ²
Release of harmful substances:	See Safety data sheet

Characteristics	Application methods	Consumption
One-component Mixture water: 28% in weight for self-backbuttering installation (7 l/bag) Mixture water: 24% in weight for thixotropic installation (6 l/bag) Open time: > 30 minutes Adjustment time: 60 minutes Waiting time for wall joint grouting: 8 hours / floor joint grouting: 24 hours Frost-proof Deformable class S1 Max. bedding thickness: 15 mm Walk over time: 24 hours	Smooth or toothed trowel	2,5-5 kg/m ²
		Storage
		Shelf life of 12 months in the original packages and in a dry place

Code	Product	Form and color	Packages	Pallet
104025	SPM Universal	Grey powder	25 kg	1500 kg
104125	SPM Universal	White powder	25 kg	1500 kg

Warning

- Do not use with natural or reconstituted marbles with unstable dimensions in a damp environment;
- use white **SPM Universal** only for light coloured marble or stone materials;
- on gypsum or anhydrite bases, use **Primer GS** beforehand;
- do not use on metal, PVC, linoleum, or wooden surfaces;
- do not use on concrete constructions that have been set for less than 3 months;
- do not use where an adhesive layer over 5 mm thick is necessary.



Technical and application specifications

Hazard classification as per Directive 99/45/CE:	grey: irritant - white: none
Mixing water:	30-32% of weight (approx. 7.5 l of water per bag)
Specific weight of mixture:	1.50 g/cm³
Mixture pH:	over 12
Pot life:	over 8 hours
Application temperature:	from +5°C to +35°C
Open time (according to EN 1346):	> 30 minutes
Handling time:	approx. 60 minutes
Joint sealant hardening time on walls:	approx. 4/8 hours (depending on the absorption)
Joint sealant hardening time on floors:	approx. 24 hours
Walk-over time:	24 hours
Ready for use:	7 days

FINAL PERFORMANCES SPECIFICATIONS EN 1348 (N/mm²)

Initial adhesion (after 28 days):	1.90 N/mm²
Adhesion after immersion in water:	1.40 N/mm²
Adhesion after freeze-thaw cycles:	1.40 N/mm²
Adhesion after heat action:	1.80 N/mm²
Acid resistance:	poor
Resistance to damp, solvents, oil, alkalis, and ageing:	excellent
Temperature resistance:	from -40°C to +90°C
Harmonised customs code:	38245090

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