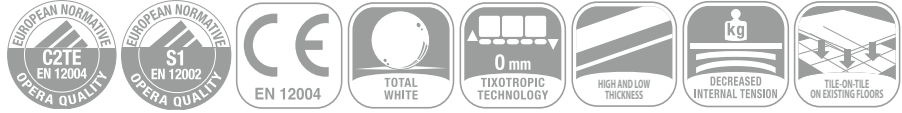




RT Hi-Tech

One-component, thixotropic and deformable cement-based adhesive with extended open time and improved adhesion, for high thickness installation indoors/outdoors and in façades of every type of large sized tiles and stable natural stones, even for tile over tile application, and on heating screeds.



Fields of application:

- to apply floor and wall tiles of any size in porcelain stoneware, low thickness stoneware, single and double fired material, glass mosaic, ceramic mosaic, solid natural or artificial stones 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 tiles of any size in porcelain stoneware, low thickness stoneware, single and double fired material, ceramic mosaic, stable natural stones outdoors on cured cement-based screeds, on screeds made with Basecem or Basecem Pronto;

- for tile over tile application of any size in porcelain stoneware, single and double fired material and ceramic mosaic indoors and outdoors after cleaning with Detergente Basico;
- 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 of any size in porcelain stoneware, single and double fired material, glass mosaic, ceramic mosaic and stable natural stones indoors and outdoors on waterproofing membranes such as Sanigum, Scudo Revolution and Scudo A+B;
- to apply in outdoor façades;

Characteristics:

RT Hi Tech is a one-component cement-based adhesive with standard setting, classified C2TE according to norm EN 12004 and S1 according to norm EN12002. The formula, made of fine aggregates, 52.5 Portland cement, fissionstable polymers with low environmental impact, water-retaining 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 and compact, have no parts coming away, free of dust, grease, oil, paint and wax; it must also be dry and well established. Provide the laying surface with protection from direct sunlight beforehand. When the temperature is above +25°C or if the substrate is highly absorbent, before tile laying, we recommend to pre-treat the surface with **Primer GS** with one or two applications in order to prevent non-standard drying of the adhesive. The non-absorbent substrates must be degreased beforehand with **Detergente Basico** or prepared by mechanical abrasion like shot-blasting or grinding.

Application:

RT Hi Tech must be mixed with 8 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 **RT Hi Tech** creating an adhesive layer of max. 15 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 **RT Hi-Tech** 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.

Quality and Environmental Standards:

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

Opera Srl Via degli Scavi 19/21 47122 Forlì - Italy	
DOP-IT-01-023 RT HI TECH 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 Adhesion strength: - Initial tensile adhesion Durability - Tensile adhesion after thermal ageing - Tensile adhesion after immersion in water - Tensile adhesion after frost-thaw cycles Release of harmful substances	Class A1/A1 fl ≥ 1.0 N/mm ² ≥ 1.0 N/mm ² ≥ 1.0 N/mm ² ≥ 1.0 N/mm ² See Safety data sheet

Characteristics	Application methods	Consumption
One-component Mixture water: 27-29% in weight Open time: > 30 minutes Adjustment time: 60 minutes Waiting time for wall joint grouting: 4/8 hours Waiting time for floor joint grouting: 24 hours Frost-proof Deformable class S1 Max. bedding thickness: 15 mm Walk over time: 24 hours Ready for use: 7 days	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
103225	RT Hi-Tech	Grey powder	25 kg	1500 kg
103226	RT Hi-Tech	Total white powder	25 kg	1500 kg
103227	RT Hi-Tech	Grey powder	4x5 kg bundle	480 kg
103228	RT Hi-Tech	Total white powder	4x5 kg bundle	480 kg

Warning

- do not use on concrete constructions that have been set for less than 3 months;
- on gypsum or anhydrite bases, use **Primer GS** beforehand;
- do not use on surfaces which need to be treadable in a short space of time;
- do not use on wooden, metal rubber, PVC or linoleum surfaces;
- do not use on surfaces if a bed thickness of more than 15 mm is required;
- do not use with marbles with unstable dimensions in a damp environment.



Technical and application specifications

Hazard classification as per Directive 99/45/CE:	irritant
Mixing water:	27-29% of weight (approx. 7,5 l per 25 kg bag)
Specific weight of the mixture:	1.50 g/cm³
pH of mixture:	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
Time to cure prior to grouting on walls:	approx. 4/8 hours (depending on the absorption)
Time to cure prior to grouting on floors:	approx. 24 hours
Walk-on time:	24 hours
Ready for use:	7 days

FINAL PERFORMANCE SPECIFICATIONS EN 1348 (N/mm²)

Initial adhesion (after 28 days):	2.60 N/mm²
Adhesion after immersion in water:	1.20 N/mm²
Adhesion after freeze-thaw cycles:	1.30 N/mm²
Adhesion after heat action:	2.50 N/mm²
Resistance to acids and alkali:	poor
Resistance to moisture, solvents, oils and ageing:	excellent
Resistance to temperature:	from -40°C to +90°C
Deformability according to EN 120022:	S1-deformable
Harmonised costumes 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.