

THRAKON GEL

Gel-type cement based tile adhesive

THRAKON GEL, a gel-type, cement-based tile adhesive, is suitable for each demanding tile application. It consists of cement, siliceous sand and THRAKON technology's special gel improver additives. The gel additives react as setting regulator, storing the excess water, and releasing it at the appropriate time during mixing. Thus, the extra addition of water does not affect the final result. The combination of extended open time (up to 30 min) and zero vertical slip of adhesive increase productivity. It provides strong adhesion on all standard substrates and high resistance against weather conditions (Rain-Heat Wave-Frost). According to the European Norms, EN 12004-1:2017 and EN 12004-2:2017. It is classified as a C2TE type adhesive for indoor and outdoor use.



Advantages:

- Entire tile wetting.
- Constant application thickness with no shrinkage under the tile.
- Allows a significant increase in water addition, improving fluidity without affecting workability.
- Controlled setting time due to GEL technology.
- Extension of the open time when compared to conventional C2TE adhesives.
- Extension of correction time.
- More elasticity when compared to conventional C2TE class adhesives.
- Greater tolerance to temperature variations.
- High thixotropy (sag resistance even to large tiles).



TECHNICAL CHARACTERISTICS



Packaging:

Paper bags
• 25kg



Application:

For interior and exterior use. For both absorbent and non-absorbent tiles, of all size, types.



Color:

White.



Storage:

Stored in wooden pallets at temperatures higher than +0°C for 12 months from production date.



Consumption:

~ 2,0 – 4,0 kg/m².

FIELDS OF APPLICATION

THRAKON GEL is suitable for the adhesion of both absorbent and non-absorbent tiles, small or large ceramic tiles of all types, thin tiles, stone tiles, marble tiles, granite tiles, cotto, klinker, gres, porcellanato smaltato, decorative elements and glass mosaic tiles on building facades and on substrates requiring high adhesion strength, elasticity and resistance to climate conditions.

It is recommended for laying tiles on conventional substrates, as well as high requirement substrates such as gypsum boards, cementitious mortars, cement plasters, underfloor heating, concrete, YTONG (autoclaved aerated concrete), cement boards, bricks. It is ideal for laying tiles on swimming pools, W.C., baths, changing rooms, saunas, hammam, fountains, waterproof plasterboard etc.

It is suitable for both indoor and outdoor use on floors, walls, terraces and balconies. It is also recommended for laying large tiles, as well as in areas with high humidity. Proper for urban, industrial and commercial use, as well as for urban architecture.

SUBSTRATE PREPARATION

The substrate should be dry (without a trace of moisture), flat, clean from loose and foreign matter such as plaster residues, paints and oils. Be stable, free from shrinkage/deformation tendencies and without vibrations.

The absorbent substrates should be wetted with water, while for optimal results, they should be primed with GLX 290 or GLX 292 primer before application. In special cases of substrates, such as YTONG (aerated autoclaved concrete), the use of GLX 292 is considered necessary.

The same treatment should be followed in the case of natural stones after contacting the technical department.

We always advise before application on standard substrate to make a trial application on the same type of substrate.

In case of waterproofing products, such as liquid bitumen and tar-based sheets or membranes, the application of a fixing screed is required on top.

In case of façade cladding, the substrate should have tensile strength equal to or more than 1 N/mm².

For façade tiling with tile more than 30 cm, mechanical support should be considered, always according to the designer's technical specification. Additionally, for tiling with tiles with a side more than 60 cm, add an amount of LATEX 296 in the water mixture. It is necessary to apply the adhesive on the back surface of the tile (back butter).

APPLICATION

1. In a clean container, add 7.50-7.75 liters of clean water and gradually empty the content of a 25 kg bag of product THRAKON GEL. Mix with an electric stirrer until the mixture becomes homogenous.
2. Let the mixture rest for 5 minutes and stir again for a while. The mixture is ready for use for at least 1.5-2 hours. After the mixture preparation, no extra water should be added for increased mortar workability. That could lead to reduced strengths and increased shrinkage.
3. Spread the adhesive on the surface and then comb the adhesive layer using a special teeth spatula. The thickness of the adhesive should be considered satisfactory for the specific coverage.
4. Within 30 minutes from the adhesive layering, place the tiles at their location, pressuring firmly to ensure full contact. The tiles' laying on the wall may be performed starting from the upper part with the entire tile without slipping. Any excess adhesive should be removed from the joints. On outdoor surfaces, elastic expansion joints are created per ~10 m², while indoors, they are created per ~25 m². All existing joints on the substrate by the manufacturer must be followed. Connections between floors and walls should be filled with suitable silicone mastic sealants.
5. During the laying and next 24 hours, the environment and substrate's temperature must be between 5°C and 35°C. While the adhesive is still fresh, it can be cleaned with water. When it hardens, it can be removed only with mechanical means. Access is allowed after 24 hours.

GROUTING

Floor grouting can be carried out after 24 hours and wall grouting after 12 hours. Grouting and walking are allowed after 24 hours. THRAKON FMF 150 and FMF 160 LUX grouts (cement-based) or, if necessary, FMF 155 epoxy grouts are used for grouting.

PRECAUTIONS

THRAKON GEL contains cement that reacts with water to produce an alkaline solution. Therefore, eyes and skin should be protected. In case, of contact, wash with plenty of water. In case of eye contact, immediately seek medical advice. Read the information on the label and the Product Technical Sheet before use. Wear the appropriate protective clothes and gloves. The MSDS of the product is available upon request to professionals.

WARNINGS

The THRAKON GEL cement-based gel tile adhesive is suitable for underfloor heating as long as the EN 1264-4:2009 standard is met. In case of gypsum boards and cement boards, rigidity through proper metal support is mandatory. For the installation of large surface tiles (>900 cm²) the double spread is considered necessary (back butter).

Do not use the THRAKON GEL cement-based gel tile adhesive on timber, metal, plastic or resilient materials. Do not use it on screeds, plasters/renders, not cured concrete and organic-based waterproofing products (such as RM according to EN 14891:2006). The THRAKON GEL cement-based gel tile adhesive should not be used as repair mortar to cover discontinuities (cracks) in the substrate. After use, protect from direct rainfall/snowfall for at least 24 hours.

Technical characteristics	Units	Standard	Value
Form			Dry powder
Color			White/grey
Application thickness	mm		10,0 – 15,0
Resistance to temperature	°C		-30 to +90
Application temperature	°C		5 to 35
Maximum grain size	mm		0.8
Working time	h	EN 1015-9	≥2,0
Correction time	min	EN 1015-9	≥ 30,0
Open time (30min)	N/mm ²	EN 12004-2	≥ 0.5
Initial tensile adhesion strength	N/mm ²	EN 12004-2	≥ 1,0
Tensile adhesion strength after water immersion	N/mm ²	EN 12004-2	≥ 1,0
Tensile adhesion strength after heat ageing	N/mm ²	EN 12004-2	≥ 1,0
Tensile adhesion strength after freeze-thaw cycles	N/mm ²	EN 12004-2	≥ 1,0
Substrate movement	mm	EN 12004-2	≤0,5
Walking	h		~24
Light foot traffic 23°C/5°C	d		1/3
Heavy traffic 23°C/5°C	d		3/7
Swimming pools	d		14
Wall grouting	h		~12
Floor grouting	h		~24
Consumption	kg/m ²		2,0 – 4,0

*Note: The measurements were taken in laboratory environment under a temperature of +23°C, Relative humidity 50% and without ventilation. It is possible for them to vary depending on the conditions prevailing at the worksite, such as temperature, humidity, ventilation, absorbability of the substrate.

The technical information and instructions contained in the present brochure and referring to the application and end use of Thrakon products are based on the up to now know-how and experience of the Company with regards to the products and are provided in good faith as long as such products are stored, used and applied as per Thrakon recommendations. Due to the inability, on our part, to directly inspect the conditions prevailing at the worksite as well as the application procedures of the product, the Company does not provide any guarantee with regards to the adequacy of its products for specific purpose while the Company shall not bear any legal responsibility based on the information stated in the present brochure or any other written, oral, or otherwise provided recommendations and instructions. The users of the products are advised to perform a limited surface testing of the products adequacy for the eventual application and use intentions. Thrakon reserves the right to modify the features of its products without prior notification. All orders shall be approved only following acceptance of the above and under the eventual Commercial Policy terms of the Company. The issuance of the present brochure voids any prior version.

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