

Heated floors



We know the problems

- Screeds unsuitable for incorporating coils
- Inconsistent screeds
- Sudden temperature changes and material expansion
- Material to be laid is unsuitable in size or nature
- Laying without gaps
- Unsuitable bonding agents and grouts
- Absence of expansion joints

And we can solve them

- The screed mixture must ensure perfect coil coverage to prevent any heat dispersion
- The substrate must guarantee excellent mechanical performance
- It is very important to follow the procedure to turn the system on (described below) before laying the floor
- Joints are essential and must be made in accordance with the positioning of coils
- Low-modulus deformable bonding agents and grouts, able to bear size variations of materials
- Reading the data sheets regarding the material to be laid in order to verify its limitations of use
- The laying must include a grout line of at least 4 mm and be carried out according to specific timing
- Certified high performance adhesives

Project

- SCREED

Screed in cement-based mortar, minimum thickness depending on radiating system chosen, used on radiating panels for underfloor heating with quick hydration and normal setting binder of type **KRONOS** by Technokolla and silica aggregates of continuous grain size from 0 to 8 mm, reinforced with synthetic fibres and/or wire netting. The screed should have a resistance of 25 N/mm² after 28 days and allow the laying procedure to be started 3 days after casting. Screed reinforced with synthetic fibres and/or zinc-coated wire netting, 5x5 cm Ø 2 mm mesh placed at 1/3 of the screed thickness. Dosage for 1 m³ of aggregates from 0 to 8 mm: 250 kg of **KRONOS**; 150 l of water, 1 kg of synthetic fibres.

- FLOORING

Flooring and skirting board base in ceramic tile, up to a maximum size of 3600 cm², laid on screed in **KRONOS** with cement-based adhesive of type **TECHNOSTAR** by Technokolla, compliant with European standard **EN 12004 C2TE, S1**, or **TECHNOS+** with **TC-LASTIC** compliant with European standard **EN 12004 C2, S2**. A grout line of 4-5 mm sealed with low modulus cement-based grout of type **TECHNOCOLORS** by Technokolla compliant with European standard **EN 13888 CG2 WA** or with two-component epoxy grout of type **SKYCOLORS EVOLUTION** by Technokolla, compliant with European standard **EN 13888 RG**.

Joints sealed with **ACESIL-310** by Technokolla following the positioning of a synthetic cord.

The correct procedure involves sealing with silicone before grouting with cement-based products.

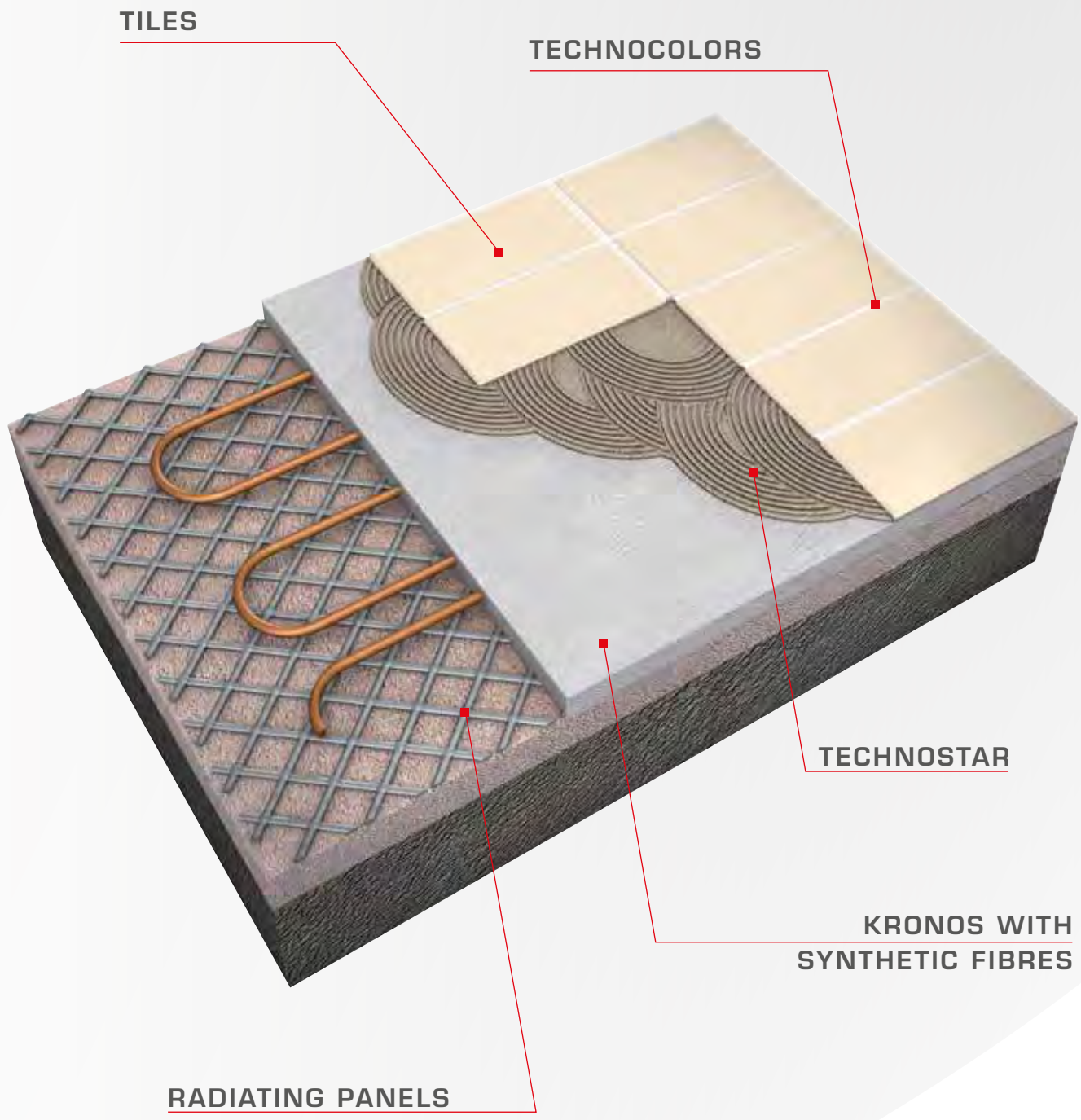
Adhesive consumption: 5/7 kg/m².

Grout consumption: 0.35 kg/m² (30x30 cm size, 4 mm grout line).

FLOOR LAYING PROCEDURE ON HEATED FLOORS:

- 1** - 3 days after casting **KRONOS**, turn the heating on;
- 2** - the initial heating starts at a temperature between 20 and 25°C and must be kept like this for 3 days;
- 3** - then, set the maximum design temperature and maintain this for at least 4 more days;
- 4** - turn the heating off for 3 days;
- 5** - turn the heating on again and bring it to 50% of its working capacity with increases of 5°C per day;
- 6** - lay the flooring.

Heated floors





screed

Kronos

The binder to be used in place of cement when making the screed. It ensures a compression strength > 25 MPa. It features controlled shrinkage and laying can begin just 3 days after casting. It can be reinforced with synthetic fibres and/or electrowelded netting to further increase its compressive and flexural strength. Recommended thickness min. 3, max. 6 cm.



Technostar

The highly flexible single-component thickness adhesive, suitable for the outdoor laying of non-absorbent materials such as porcelain tile of up to 3600 cm² on floors and walls.

TECHNOSTAR is compliant with European standard **EN 12004 C2TE, S1**.

It is a **LOW-VOC** product tested by **EUROFINS**.



Technos+ with Tc-Lastic

The highly flexible two-component adhesive, applicable in this system for the laying of sizes up to 10,000 cm².

TECHNOS+ with **TC-LASTIC** is compliant with European standard **EN 12004 C2, S2**.



Technocolors

The revolutionary cement-based sealant for building. This new concept of grout stands out for its extraordinary velvety finish, exceptional gloss and high water repellency. Its extraordinary characteristics make it suitable for any type of ceramic, ideal also for heating screed and marble.

TECHNOCOLORS is compliant with European standard **EN 13888 CG2 WA**.

It is a **LOW-VOC** product tested by **EUROFINS**.



Skycolors Evolution

SKYCOLORS EVOLUTION is a very versatile sealant, perfect for the sealing of grout lines in floor and wall tiling in different materials: mosaics of any type, porcelain stoneware and clinker. **SKYCOLORS EVOLUTION** is suitable for environments such as spas, wellness centres, thermal baths, swimming pools and bathrooms. Its bright finishes make it an essential furnishing accessory in spaces where particular attention is paid to aesthetic values.

Compliant with **EN 13888** cat. **RG**.



Acesil-310

The elastomeric silicone sealant for the filling of expansion joints.

The associated product is the cord to be positioned on the bottom of the joint before **ACESIL-310**.

The complete COLOUR RANGE of Technokolla grouts can be found in the cover appendix.

Technical drawings

