



Floor Warming and Heating Systems



COMPATIBILITY OF MAPEI MORTARS WITH THE FLEXSNAP™ INSTALLATION SYSTEM BY FLEXTHERM (Version 1.0)

NOTE TO READER: Although we believe that the information and suggestions included herein represent the means to achieve quality results, this document represents an information guide for the owner, designer, prescriber and tiling contractor. Therefore, the designer(s) and prescriber(s) remain solely responsible with regards to the state of the subfloor, the details and requirements of the specifications, the choice of materials and work practices.

1. DESCRIPTION

FLEXSnap is a light plastic mesh used as an installation system for FLEXTHERM's Green Cable *Surface*, which can replace the second layer of plywood when a ceramic floor covering is used.

2. USE

For residential or light commercial interior horizontal installation

Official statement from the Tile Council of North America (TCNA) on standards relating to deflection

Floor covering systems, including the framework and panels of the underlayment on which tiles are to be installed, must satisfy the standards of the IRC (*International Residential Code*) for residential installations, the IBC (*International Building Code*) for commercial installations, or the building standards and regulations in operation at the time of the project. Note: the owner must inform the project designer and general contractor, in writing, of the 'anticipated use' of the tile installation, so that the necessary tolerances for the live, concentrated, dynamic and static loads anticipated, including tile and tile bed weight, can be included in their planning. The floor covering installer cannot be held responsible for any problem relating to the unsuitability of the building or the underlayment of the installation according to the building standards and regulations in operation at the time of the project unless he has also been responsible for its design.

3. TECHNICAL REMARKS

- FLEXSnap must be used with Ultracontact™ mortar, Ultracontact RS rapid set mortar or in two steps with Ultracontact/Ultraflex LFT for the installation of certain large format tiles. For additional details refer to the directions in this document or contact MAPEI's technical service.
- Leave sufficient expansion space around walls, stairs, doors, baseboards, entrance ways and other areas where FLEXSnap is adjacent to a change in level. The interstice must be open and filled with a flexible sealing agent, such as Keracaulk™ S.
- When installing large format or porcelain tiles, or working in cold temperatures, allow for a longer drying and protection time before grouting and allowing circulation.
- Not designed for use as a fire barrier system.

Notice: The wood subfloors must dry as per industry standards for moisture content. Refer to the APA (American Plywood Association) directives for further details. A high level of humidity in the subfloors will reduce the resistance of the anchors and generate elevated tensions due to the movement of the plywood as it dries.

Contact the FLEXTHERM customer service department for written recommendations relating to installation on other supports or in conditions that are not described, such as installations where joist spacing is greater than 41cm (16").

4. DIRECTIONS

4.1 Preparation

- Install the plywood according to the regulations in effect for the installation of subfloor materials. The plywood subfloor must be 16mm (5/8") exterior type tongue-and-groove, with spacing between the panels up to 3mm (1/8"). The support surfaces will be appropriate, solid, stable, square and level with a maximum variation of 6 mm over 3 m (1/4" over 10 ft) according to industry norms.
- The surface of the plywood must be clean and free from dust, dirt, paint and grease or other contaminating agent that could reduce the performance or the adhesive capabilities of the mortar.

4.2 Installation

- Install FLEX*Snap* on the plywood. The mesh should be screwed flat with one screw (wood, #8 x 5/8" or 3/4" long) per foot or more as required.
- For optimal results, use Mapelastic 315 or Mapeguard™ SM as a crack-isolation membrane.

Applying the mortar in one step

Using the flat side of the trowel, spread a layer of Ultracontact or Ultracontact RS with light pressure on the mesh to fill it in and allow installation of the tiles. Groove immediately with an appropriate notched trowel to achieve the recommended mortar coverage. Use lateral movements to properly settle the tile in the mortar and ensure good adhesion.

Applying the mortar in multiple steps

For the installation of large format tiles with Ultraflex LFT.

- Step 1: Using the flat side of a trowel spread a sufficient amount of Ultracontact RS to fill in the mesh.
- Step 2: Allow the Ultracontact RS anchoring layer to dry at least 3 to 4 hours before installing the tiles with the Ultraflex LFT mortar using the back buttering method. *If the installer is not familiar with this method, he must obtain the method in writing from the MAPEI technical service.*

Support leveling

The wood support might require corrections due to height variations before the tiles are installed. Support variations up to 6 mm over 3 m (1/4" over 10'-0") can be corrected. Contact the MAPEI technical service for recommendations.

4.3 Movement joints

Plan for a perimeter joint around the room where tile work will abut any restraining vertical services (such as but not limited to walls, counters, columns, etc) and also movement joints throughout the fieldwork as per TCNA detail EJ 171 or TTMAC's guide 09 30 00, detail 301 MJ for tile and stone.

4.4 Grouting

Use any MAPEI recommended grout. Refer to the specific technical information on www.mapei.com for details.

4.5 Protection

- Let dry for at least 24 hours when using Ultracontact, and at least 4 hours with Ultracontact RS, before grouting and allowing circulation.
- Let dry for at least 24 hours when using Ultraflex LFT before grouting and allowing circulation.
- Since temperature and humidity (before and after installation) affect the final drying time of all mortars, allow for a longer drying and protection time when temperature is below 16°C (60°F) or when ambient humidity is greater than 60%.

5. TECHNICAL SPECIFICATIONS

FLEXSnap size

- 31.4 cm x 31.4 cm (12-3/8" x 12-3/8")
 - 30.5 cm x 30.5 cm (12" x 12") assembled
- 20 units per box – covers 1.86 m² (20 ft²) / box

Approximate coverage*

For Ultracontact™ and Ultracontact RS (per 22.7 kg (50 lb) bag) to completely cover FLEXSnap:
1.8 m² (19 ft²)

* These coverage numbers are provided only as an approximation.

6. NOTICE

Before using said products, the user must inquire and ensure that they are suitable for the ends to which he intends to use them and is solely liable for all related risks and responsibilities. **ANY CLAIM IS DEEMED ABANDONED UNLESS WRITTEN NOTICE IS RECEIVED WITHIN FIFTEEN (15) DAYS FOLLOWING THE DISCOVERY OF THE DEFECT OR THE DATE AT WHICH SAID DEFECT COULD HAVE REASONABLY BEEN DISCOVERED.**