



# FlexSnap™ Installation Guide for TEC®

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## MANUFACTURER

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## 1. DESCRIPTION

FlexSnap™ is a light plastic mesh used as an installation system for FLEXTHERM's Green Cable Surface heating system, which can replace the second layer of plywood for residential or light commercial interior horizontal applications with ceramic tile [www.flextherm.com](http://www.flextherm.com).

## 2. SURFACE PREPARATION

Flooring should be free from any contaminants that may inhibit bond, including oil, grease, dust, loose or peeling paint, floor finishes, waxes, etc. Minimum tensile bond strength of 72 psi (0.5 MPa) is required. Substrate temperature should be a minimum of 43°F (6°C) during application and air temperature maintained above 50°F (10°C).

Installations over exterior grade plywood or oriented strand board (OSB) require 5/8" (16 mm) single layer minimum thickness of plywood or OSB (APA Rated Sturd-I-Floor OSB, Exposure 1 or better) on bridged floor joists up to 16" on center with a maximum deflection of L/360 of the span under live load. Wood sub-flooring must be structurally sound and securely fastened with screw type or ring shank nails and adhesive. Allow a gap of 1/8" to 1/4" (3-6 mm) between sheets of plywood or OSB. Long edges of sub-floor must be tongue and groove or supported by bridging between floor joists. Refer to the American Plywood Association for industry standards and directives for further details.

Create 1/8" (3mm) wide gaps where self-leveling underlayment abuts walls, columns, and fixtures by installing a self-sticking foam weather stripping tape or damp sand (vacuum up sand after self-leveling underlayment has cured).

Install termination dams, plug all floor openings, to prevent any seepage from occurring. Use suitable TEC® surface preparation products (TEC® Feather Edge Skim Coat 330, TEC® Fast-Set Deep Patch Underlayment 305, TEC® VersaPatch® Latex Modified Floor Patch 327) to plug all floor openings, gaps and cracks.

**Surface must first be primed with TEC® Multipurpose Primer 560 (only applies if installed with Option 1).**

See Primer label for dilution ratio and application instructions. Allow primer to dry to a clear film (forced air may be used in order to speed up the drying process).

### 3. INSTALL FLEXSNAP™

After primer has dried, install FlexSnap™ with FLEXTHERM's Green Surface™ heating cable per manufacturer's instructions. Technical specifications and installation instructions can be found at [www.flextherm.com](http://www.flextherm.com).

### 4. INSTALL UNDERLAYMENT

**Option 1: Install using one of the following TEC® Self Leveling Underlayments:**

#### **Level Set® 300 Self Leveling Underlayment**

Ideal for fast turnarounds, this is a high quality, fiber-reinforced, self-leveling underlayment that provides flat, extremely smooth and durable surfaces that are walkable in 2-3 hours.

- Low shrinkage
- High compressive strength—5,500 psi (38.0 MPa); crack resistant
- Exceptional workability for ultra-smooth surfaces
- Up to 2" neat; can be featheredged to adjoining elevations
- Pourable or pumpable for interior applications
- Accepts non-moisture sensitive tile and stone in 4 hours
- Install moisture sensitive floor coverings in 16-24 hours
- Can be used over green concrete (RH 95% or lower)
- Zero VOC
- Available in 50 lb.(22.68 kg) moisture-resistant bags

#### **Level Set® 200 Self Leveling Underlayment**

This self-leveling underlayment is pourable or pumpable with great flow properties, and provides excellent workability for a flat, smooth surface in single applications from 1/8" to 2" neat. It delivers an extended 25-35 minute working time, without compromising flooring installation time.

- Low shrinkage
- 5,000 psi (34.5 MPa) compressive strength; crack resistant
- Smooth, walkable surface in 3-4 hours
- Accepts non-moisture sensitive tile and stone in 4 hours
- Install moisture sensitive floor covering in 16-24 hours
- Can be used over green concrete (RH 95% or lower)
- Zero VOC
- Available in 50 lb.(22.68 kg) moisture-resistant bags

Install TEC® Level Set 300® or Level Set 200® to fill in the plastic mesh per instructions (see bag information and / or product data sheet for application instructions) at the minimum thickness listed below based upon the joist spacing:

<b>Joist Spacing</b>	<b>Min. SLU Thickness over 5/8" subfloor</b>
16" (40 cm) or less	3/8" (9 mm)

## **Option 2: Fill in and install tiles with 1 step**

After installing FlexSnap™ per number 3 recommendations, with light pressure, spread a layer of TEC® Fast Set Ultimate Large Tile Mortar with the flat side of the trowel onto the mesh to completely fill the mesh. With the appropriate notched trowel, immediately comb in a single direction to achieve recommended mortar coverage. Place tile in the mortar using lateral movements to ensure a good bond.

## **Option 3: Fill in and install tiles with 2 steps**

After installing FlexSnap™ per number 3 recommendations, with light pressure, spread a layer of TEC® Fast Set Ultimate Large Tile Mortar with the flat side of the trowel onto the mesh to completely fill the mesh. Allow the mortar to cure per the PDS before installing the tiles. Once the mortar is cured, use the appropriate notched trowel, immediately comb in a single direction to achieve recommended mortar coverage. Place tile in the mortar using lateral movements to ensure a good bond.

## **5. INSTALL TILE (Options 1 or 3)**

After the required self leveling underlayment or mortar fill cure time, install tile with TEC® Full Flex® Premium Thin Set Mortar 390/391. See mortar bag information and/or product data sheet for application instructions. When installing large format tiles, use a high-performance TEC® non-slump/non-sag premium mortar, such as 3N1® Performance Mortar 384/385 or TEC® Ultimate Large Tile Mortar 382/383.

Movement joints in the tile work should follow TCNA guidelines EJ171 or TTMAC's guide 09 30 00, detail 301 MJ for tile and stone.

## **6. GROUTING**

The use of TEC® Power Grout® is recommended with this system. See Power Grout® bag information and/or product data sheet for application instructions.

**Note:** If a fast setting mortar is used for bonding tile, then grouting can occur after 3 to 4 hours. If a standard setting mortar is used, then one should wait at least 24 hours to grout floor.

For more information about TEC® premium mortars, grouts and self-leveling underlayments, go to [www.tecspecialty.com](http://www.tecspecialty.com).

This **Installation Guide** has been prepared in good faith, on the basis of information available to H.B. Fuller Construction Products Inc., at the time of publication. It is intended to provide users with information about and guidelines for the proper use and application of the covered TEC® product(s), under normal environmental and working conditions. Because each product is different, H.B. Fuller Construction Products Inc. cannot be responsible for the consequences of variances in such conditions, or for conditions not foreseen by H.B. Fuller Construction Products Inc.