floortec

Floortec is an installation membrane for ceramic or stone tile based on uncoupling technology. It is placed between the tile and the substrate. Tile and membrane are bonded using appropriate mortar-based adhesives.

FLOORTEC installation advantages:

- PREVENTS CRACKS

The FLOORTEC membrane neutralizes inevitable stress build-up due to differential movement in the substrate, changes in temperature and humidity. Cracks remain beneath the matting and prevent damage to the tile surface.

- VAPOR MANAGEMENT

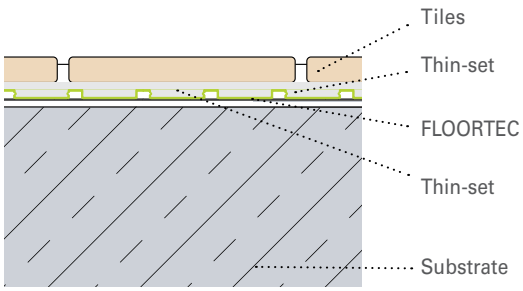
FLOORTEC's cylindrical grid structure, concave on the underside, allows the evaporation of water from the substrate, compensating and releasing vapor tension.

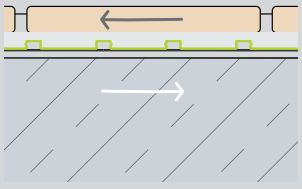
- ENABLES THE INSTALLATION ON DIFFERENT SUBSTRATES

Using FLOORTEC allows tile flooring to be installed onto different types of substrates, including concrete and anhydride slabs, radiant heating, drywall and even wood. In some particular cases, the compatibility of the adhesive used between the substrate and the FLOORTEC membrane must be verified.

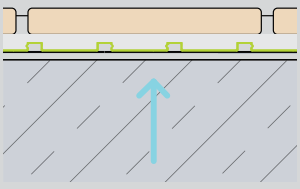
The membrane is 3 mm - 1/8" in total thickness and composed of high density polyethylene laminated with Spunbond non-woven fabric on the underside. The geometric configuration of the membrane is designed as circular cavities 3 mm - 1/8" in depth arranged at regular horizontal and vertical intervals. During the installation process, the circular cavities are filled with the mortar-based adhesive to form a solid column structure.

Certifications	
Robinson Wheel test 14 cycles (Extra-heavy commercial)	ASTM C627
Certification	ANSI A118.12
Exceeds requirements	ANSI A118.10

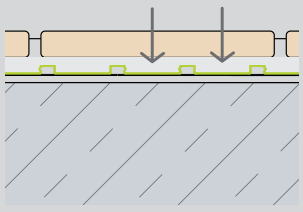




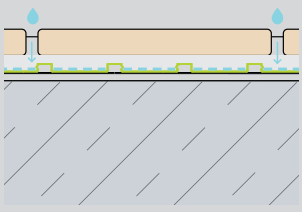
TENSION COMPENSATION (uncoupling)
The membrane is able to compensate for differential movement in all directions, neutralizing tension between the substrate (concrete or wood structures) and tile, hence preventing stress build-up and damages to the tile layer.



VAPOR MANAGEMENT
The open cavities on the underside of the membrane provide pressure relief for moisture rising from the substrate allowing the tile flooring to be installed without waiting the usual curing time for concrete (28 days). The humidity evaporates through the interstitial spacing between the waterproof membrane and the non-woven fabric.



LOAD RESISTANCE
The circular column support structure on the surface of the membrane provides increased load resistance compared to other-shaped columns: the mortar-based adhesive on the surface of the mat fills the circular cavities forming a solid column support structure. FLOORTEC has been tested by TCNA and passed all 14 cycles (Extra-HeavyCommercial) on the Robinson Wheel Test (ASTMC627) over 19.2" wood frame construction.



WATERPROOFING*
The membrane material, HDPE (high density polyethylene), is waterproof.

* The Floortec membrane is composed of a plastic material that is waterproof, but the complete waterproofing of the application must be carried out by using Foiltec strips and corner joints. The incorrect application of these accessories may compromise waterproofing. Additionally, please note that the FLOORTEC membrane cannot be used as a primary waterproofing system, for which a bituminous membrane or similar product must be used.

Installation

1. The base must be level, smooth and clean. The membrane must be cut prior to installation.
Use a mortar-based adhesive (thin-set) and notched trowel appropriate for the installation.

2. Make sure the cavities of the membrane are entirely filled with adhesive, leveling them off, firstly with the flat side of the trowel, and then with the notched side.

3. Install the tile. The size of the tile must be at least 2"x2" - 5x5 cm.
For complete waterproofing use FOILTEC accessories. Floortec does not eliminate the need for movement joints. Please follow normal industry requirements for movement joint placement.
When bonding Floortec to a concrete substrate, ANSI A118.1 mortar-based adhesive (thin-set) is recommended.
When bonding Floortec to a wood substrate, ANSI A118.4 mortar-based adhesive (thin-set) is recommended.

1.

2.

3.

FLOORTEC: Uncoupling Membrane		
TECHNICAL CHARACTERISTICS		
Central layer of the membrane:	Virgin polyethylene (PE HD)	
Color of the membrane:	Profilitec Green	
Underlayer of the membrane:	Spunbond non-woven fabric	
Color of the non-woven fabric:	White	
Total density of the surface:	+/- 700 g/m^2 (+/- 50 g)	EN ISO 9864
Thickness at 2KPA:	3,25 mm (+/- 1 mm)	EN ISO 9863-1
Tensile strength MD/CMD kN/m	8,8 (+/- 2 kN/m)	EN ISO 10319
Elongation with maximum load MD/CMD	33% (+/-3) EN ISO 10319	
Tensile strength test:	0,4 N/mm^2 (+0.1/-0.2) EN 1348	
Storage instructions:	Protect the product from UV exposure	
Format:	1,00 m x 30,00 m rolls	
Pallet:	12 rolls (360 m^2) / pallet	
Additional characteristics:	- Inert to potable water - Resistant to a vast range of chemical products - Resistant to fungi and bacteria - Resistant to root penetration L-Longitudinal / T-Transversal Test Test Method MD: Machine Direction / CMD Cross Machine Direction	

+ **TEXTURED SURFACE**
The unique textured surface, obtained through an exclusive production process, allows increased bond strength between mortar-based adhesive, the membrane and the tile.

+ **LAY-FLAT**
The composition of the plastic material is the result of innovative technology which limits "curling" of the membrane allowing faster and easier installation.

+ **TRANSLUCENCY**
The color was specifically developed to be translucent to allow the installer the ability to verify mortar coverage on the underside of the membrane eliminating the potentially harmful action of occasionally pealing back the membrane.

+ **CYLINDERS**
The small circular cylinders of the membrane provide increased load resistance due to the fact that a circular column does not contain two breakage axes as does a square column. A circular column distributes the load in a uniform manner along the entire perimeter instead of concentrating the load on four corners, as in a square column.

The product is ready-to-use, supplied in 98'5" - 30 meter rolls. Instructions are included.