

Waterproofing System for Wetroom

tettiⁱ

WETROOM SYSTEM

tettiⁱ

www.tetti-system.com

CATALOGUE 2024

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wetroom and qualified building materials.

About 120 employees and over 30,000 square meters are dedicated to interior and exterior finishing solutions of residential and commercial applications, producing uncoupling membrane, floor heating membrane waterproofing membranes, and membrane boards with different properties. Our products have gained wide praises on all in over 200 countries with excellent quality. With 40pcs modern production machines, extrusion line, injection machines, a tooling factory and R&D department which make us very strong in new product development and production capacity.

Tetti can realize "one -step" service from the new products development, tooling design, package design, material selection, production and installation technical guidance to follow-up service, to be your best building material partners.



Established Years
19+



Factory Area
30,000+



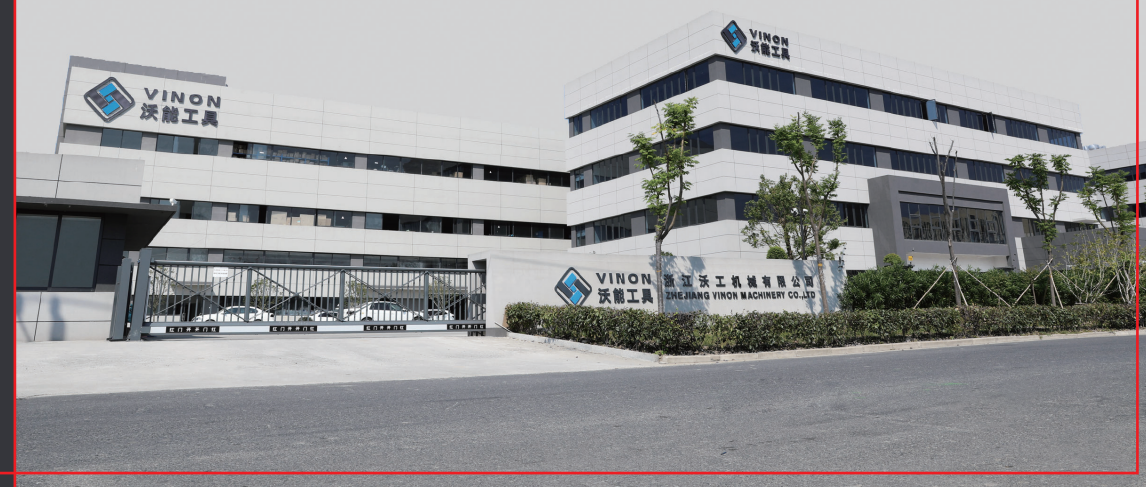
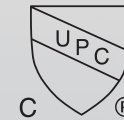
Patents
100+



Modern Machines
50+



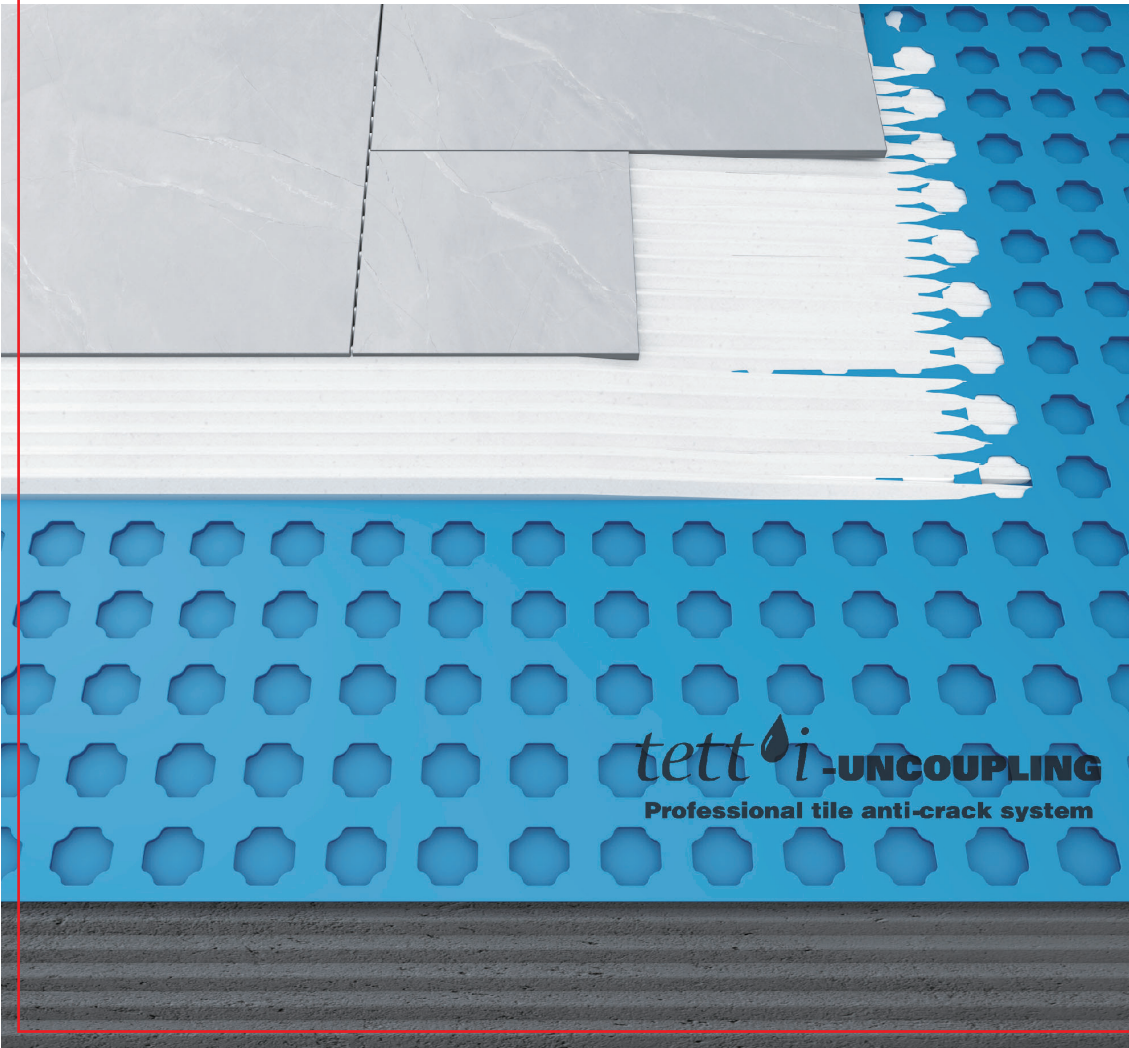
Customers
500+



Tetti TUM3 Uncoupling Membrane

Protecting your tiled floor

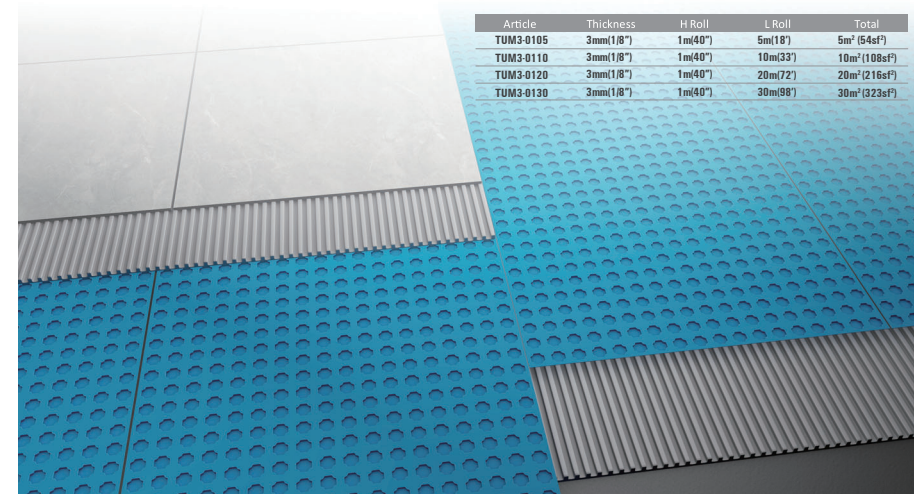
Tile, due to its integrity of durability, beauty and easy maintenance, has been widely used in decoration. It gets more important to make tiled floor correctly installation especially with the vast majority of large format tiles coming out and using of thin-set mortar as a trend. The main problems is tile get cracked and molded during the traditional installation because of the different movement stress between the substrate and tile and the mold growth. Tetti TUM3 uncoupling membrane as a protection membrane installed between tile and the substrate can effectively prevent the tile surface well from cracking and delamination and mold growth.



tetti **UNCOUPLING**
Professional tile anti-crack system

Terraces, Balconies & Indoor Areas

STRUCTURE: A disconnecting membrane comprising an HDPE dimpled membrane layer with a roughened surface and a polypropylene fabric.



Product

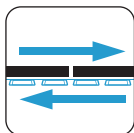
Tetti TUM3 Uncoupling Membrane

Material	Polyethylene (HDPE)film top; polypropylene (PP) nonwoven bottom
Application	Decoupling or sealing, designed for ceramic tiles, floor or stone installation, prevent tile from cracking and floor from moisture.
Weight	650g±20g
Thickness	3.43mm
Installation Temperature	5 C to 40 C, but limited by tile adhesive specification
Storage Temperature	Max. 45 C
Assumed working life	25 years
Waterproofing	Proven (Tested by European professional testing lab)
Crack Bridge	1.58mm, EN-15812, with crack protection (Tested by European professional testing lab)
Tensile Adhesive	425N, ISO10319:2015. (Tested by European professional testing lab)
Straight at Max load	423N, ISO10319:2015 (Tested by European professional testing lab)
High-Low Temperature Test	Test in -30-90 C for 144hours, no melting, no ageing and no cracking
Statement on dangerous Substance	None included

Tetti TUM3 Uncoupling Membrane

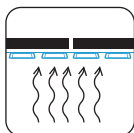
Provide Solutions For These Challenges

1. Uncoupling



Tetti TUM3 uncoupling membrane provides uncoupling through its rib design to compensate the different movements between tiled surface and the substrate, eliminating the major tile cracking and delamination.

2. Vapor Management



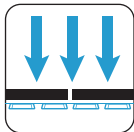
Tetti TUM3 membrane's design offer extra channel and space for the vapor beneath the subfloor allowing it to form a vapor cycling, which can manage the vapor effectively.

3. Waterproofing



Tetti TUM3 made of Polyethylene with strong waterproofing, guards your subfloor from vapor penetration and mold growth especially for the moisture-sensitive areas, such as wet room.

4. Load Distribution



Tetti TUM3 membrane's patent design allows loads to be distributed from tiles to the subfloor. Each round square studs with cavity full filled with mortar become an incompressible structure, act like pillars in a building structure.

System Advantages



The uncoupling membrane is easy to cut, simply install



The underlying substrate always remains protected and dry.



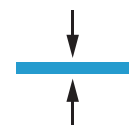
Suitable for application across all-seasons, including winter.



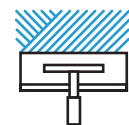
Quick installation; for under-tile application it is a swift process shortening installation times as after laying the membrane no interruptions are necessary in the floor laying as it is not required to wait 28 days for the screed to harden.



Lowers the probability of installation errors or damaging the materials by reducing the risk involved.



The reduced thickness allows for an unobtrusive protective layer with essential features for renovations.



The ceramic tile or stone cladding, both synthetic or natural, can be directly applied to the membrane using standard cementitious adhesive.

Application on Indoor Areas



Application on Outdoor Areas



Substrate Preparation

Substrates must be prepared and pre-treated according to their type before laying **Tetti TUM3** Uncoupling Membrane as well as being free of dust, dirt and anything that could cause separation. Outdoor substrates should have an incline of approximately 2%. If special and countervailing requirements are needed for the substrate, this must be done before laying **Tetti TUM3** Uncoupling Membrane. Laying of **Tetti TUM3** Uncoupling Membrane can be done on the following surfaces:

1. Screeds

- A. Cement screed: The residual moisture content should be <math><2\text{cm}\%</math> and at least 28 days old.
- B. Calcium sulphate (anhydrite) screed: Must be sanded, primed and fully prepared (according to the manufacturers instructions) before laying **Tetti TUM3** Uncoupling Membrane; the residual moisture should not exceed 0.5cm%; recommended tile adhesive is hydraulically setting thin-bed adhesive (DIN EN 12004 C2).
- C. Heating screed: **Tetti TUM3** Uncoupling Membrane can be used with UFH installed according to the manufacturers instruction and with all heating elements/conductors covered by adhesive.
- D. Poured asphalt: must be sanded and prepared before installing **Tetti TUM3** Uncoupling Membrane ensure adhesive used has the adequate strength and flexibility required.

2. Concrete

Tiling can start as soon as the concrete base has reached the correct hardness level according to its class.

3. Resin and Coated Floorings

Make sure the floor can bear the weight of tiling and the correct adhesive is used to bond **Tetti TUM3** Uncoupling Membrane to the relevant coating/substrate

4. Chipboards and Pressed Sheets

Due to the effect of moisture on these substrates it is vital that they are waterproofed and protected from absorption.

5. Wooden Floors

Ensure that the floor is adequately secured and can bear the load of tiling. If the floor is unstable then it is recommended to use Plywood or Chipboard of an appropriate thickness to make the floor sound.

Disconnecting for Outdoors

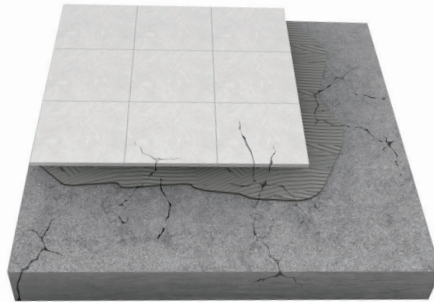
Paving without Tetti TUM3 Membrane

The durability of any ceramic tiling system installed without a disconnection layer can be compromised by both screed shrinkage during curing and the tensions developed between screed and tile.

Cracks are caused by:

- Too much water in the mix (the water / cement ratio)
- Weather conditions
- Application techniques and curing times
- Absence of control joints

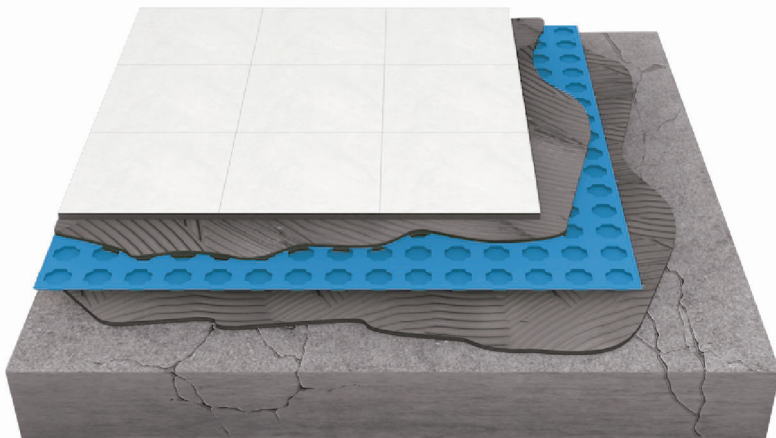
Tension cracks, by contrast, are caused by the differing properties of the ceramic tiles and underlying screed bad - both having differing coefficients of expansion, thereby causing tensile stresses at their interface.



Paving with Tetti TUM3 Membrane

A ceramic tile system can be protected against the emergence of cracks by the simple inclusion of a disconnecting product. This ensures the continued durability of the ceramic tiles over time. Thanks to its flexible plum structure, **Tetti TUM3** Membrane adjusts and neutralises the transmission of any underlying tensions, acting as a bridge over any underlying shrinkage crack.

Tetti TUM3 Membrane prevents the progression of cracks towards the paving, whether caused by screed shrinkage during curing or by the tension stresses generated at any tile screed interface.



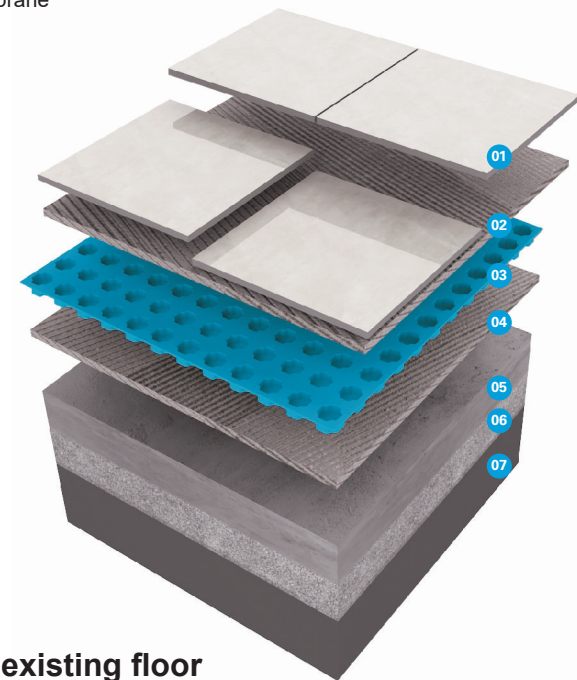
Tetti TUM3 Membrane

Aids the distribution loads on the tiled surface,
USA IPA labs testing has classified the membrane as "EXTRA-HEAVY".

With this result we can extend our portfolio of possible applications where **Tetti TUM3** uncoupling membrane can be applied to residential, commercial and tertiary buildings.

Renovation of indoor areas with removal of an existing floor:

01. Ceramic tile / stoneware / natural or artificial stone floor
02. Class C2 cementitious adhesive
03. **Tetti TUM3** Membrane
04. Adhesive
05. Screed
06. Self-leveling layer
07. Substrate



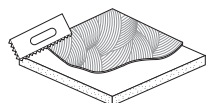
Removal of an existing floor if renovation is carried out:

* If it is not applied directly to the screed, the disconnecting application must be implemented using an adhesive agent appropriate for the type of substrate.

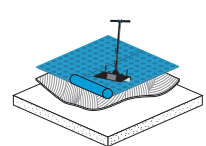
Installation

Before laying Tetti TUM3 Membrane over, the old substrate must be demolished and a new clean flat substrate installed.

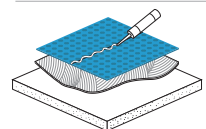
Inserting Tetti TUM3 Membrane does not eliminate the need for expansion and perimeter joints, for which it is necessary to follow the instructions in the standard UNI 11493-1.



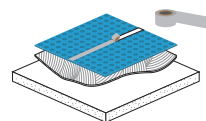
01. Adhesive must be used to lay Tetti TUM3 Membrane over the substrate, using a notched trowel.



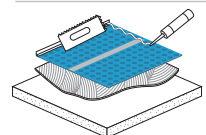
02. Tetti TUM3 Membrane must be laid over the designated area, with the spunbonded cladded side facing down. Tetti TUM3 Membrane must then be pressed down into adhesive with the aid of a float or Tetti Roller UMR-18, applying pressure to Tetti TUM3 Membrane must then be covered with another layer of the class C2 (or greater) cementitious adhesive. Prevent the creation of air pockets. The tiles can then be laid without waiting for it to dry, using a notched trowel of dimensions appropriate for the size of the tiles to be laid. Then proceed with point 7-8.



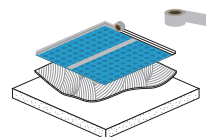
03. Other measures are required during the laying stage to provide the additional waterproofing function. After laying Tetti TUM3 Membrane, it is necessary to seal the joints between the adjacent sheets with adhesive, spreading it with the smooth side of the notched trowel.



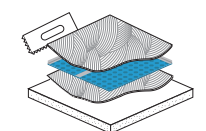
04. Then waterproofing band must be applied.



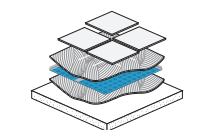
05. The same procedure must be followed for the perimeter waterproofing, then adhesive is applied.



06. Then waterproofing band must be laid. At the joint, waterproofing band must overlap it by at least 50mm. The same procedure must be used for the perimeter joints, using waterproofing band centred in the floor / wall connection with adhesive. (For outdoor applications in particular, it is important to lay the cladding over the entire area, in compliance with the current reference standard 11493-1)



07. The class C2 (or greater) cementitious adhesive must be spread followed by the laying of the finishing product.



08. Embed the tiles upon the adhesive with the help of a rubber float or Tetti roller.

Recommended Applications

Outdoors

Areas of application	TETTI TUM3
Renovation of Balconies, Terraces and Pedestrian Coverings	
Disconnecting and waterproofing functions	✓
New Construction	
Drainage function	-
Disconnecting and waterproofing functions	✓
Disconnecting, waterproofing and sound insulation functions	✓

Indoors

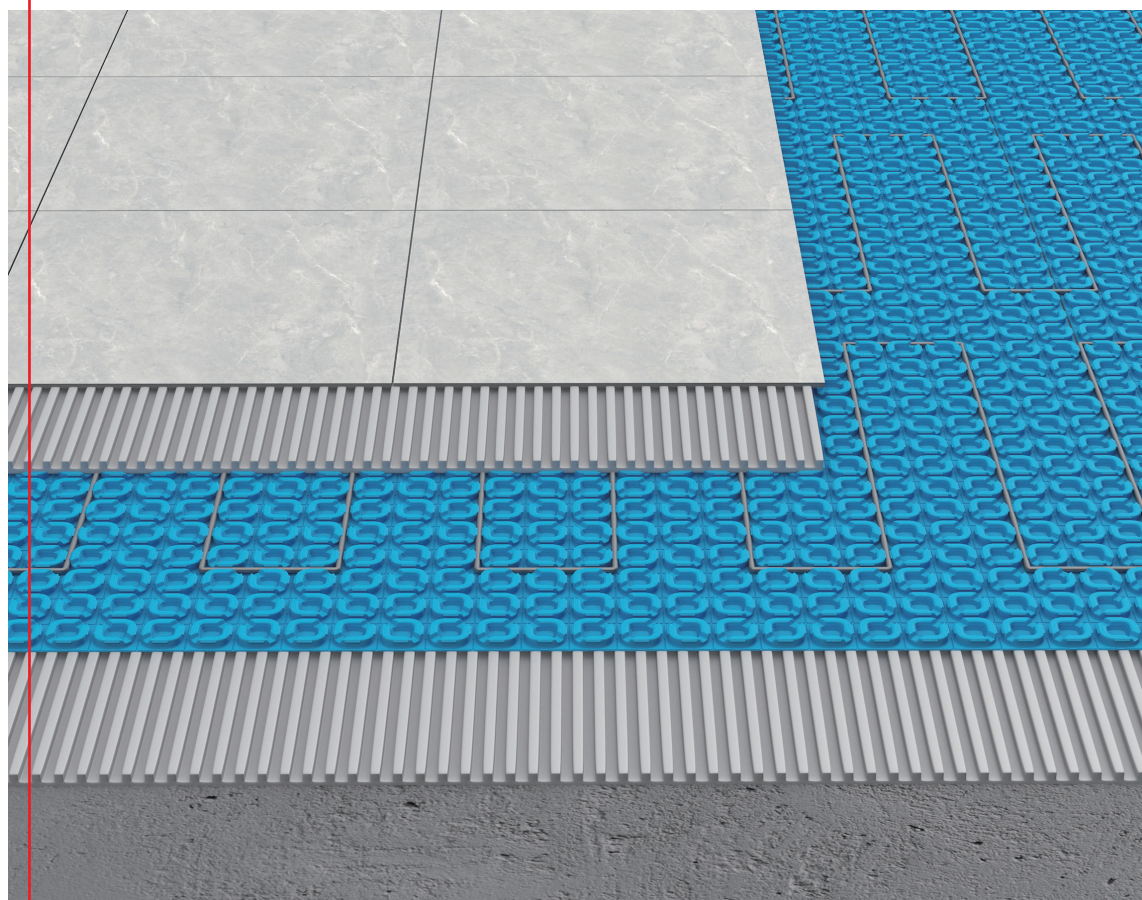
Areas of application	TETTI TUM3
Renovation and New Construction	
Disconnecting function	
Disconnecting and sound insulation functions with underfloor heating	✓
Disconnecting and sound insulation functions	✓

IMPORTANT:

The information in this brochure is based on the know-how acquired and the experience gained to date and only refers to our products and their features at the time of printing this brochure. This information provides no guarantee for legal purposes, nor does it establish product quality agreed upon in the contract. During application, the specific conditions of use must always be taken into account, especially from a physical, technical and legal point of view. All technical drawings are examples that represent a principle and must be adapted to specific cases by the designer or user.

Tetti THM6 Floor Heating Membrane

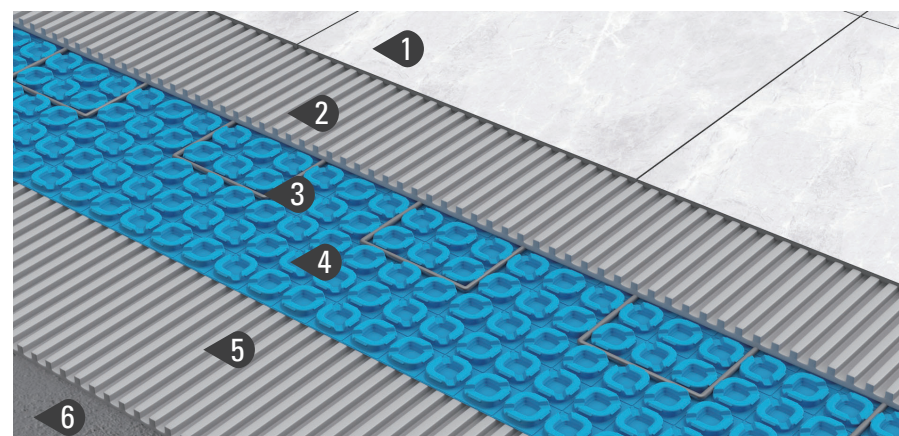
Sound Control and Warm Up Your Tiled Floor



Tetti THM6 Floor Heating Membrane combines the protection benefit of underlay with excellent performance on reducing the impact of sound transmission through floor assembling. It can be installed with heating cables, providing the floor lasting comfortable and warmth. Thanks to **Tetti THM6** Floor Heating Membrane uncoupling and anti-crack technology, it is possible to install a floor heating system and tiles over kinds of subfloors, such as plywood, subfloor cement, OSB, etc. Time saving installation, cost effective, and no repair requirement, coupled with the efficiency and safety of electrical heating system makes the **Tetti THM6** Floor Heating Membrane is the best obvious choice.

Product Specification

Article	Thickness	H Roll	L Roll	Total
THM6-0105	1m(40")	3mm(1/8")	5m(18')	5m ² (54sf ²)
THM6-0110	1m(40")	3mm(1/8")	10m(33')	10m ² (108sf ²)
THM6-0115	1m(40")	3mm(1/8")	15m(49')	15m ² (161sf ²)



- 1) CERAMIC / STONE OR PORCELAIN TILES
- 2) ADHESIVE
- 3) CABLE WIRE

- 4) TETTI THM6
- 5) ADHESIVE
- 6) SCREED / PLYWOOD / OSB

Product	7mm Floor Heating Membrane
Material	Polyethylene (HDPE) film top; polypropylene (PP) nonwoven bottom
Application	Decoupling or sealing, waterproofing and warm your floor.
Roll Size	1x15M, 1x10M, 1mx5M
Weight	1000g/sqm
Thickness	6.5mm
Installation Temperature	5 C to 40 C, but limited by tile adhesive specification
Storage Temperature	Max. 45 C
Assumed working life	25 years