

STRATO

Solutions for disconnecting
and waterproofing indoor
floors and outdoor paving



Genesis

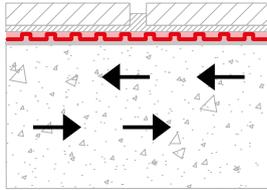
For the Perfect Finish

+44 (0)1642 713000 info@genesis-gs.com

www.genesis-gs.com

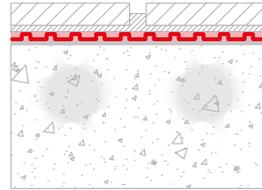


Product Functions



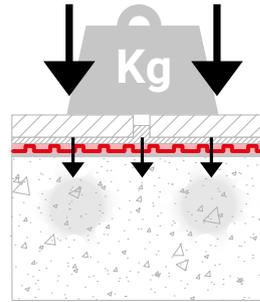
Decoupling (crack bridging)

STRATO MEMBRANE eliminates the most common cause of cracked tiles by neutralising tension between the substrate and tile surface, as well as creating a bridge over existing fractures in the substrate.



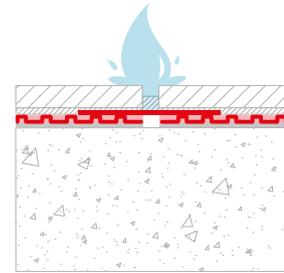
Vapour Vent

The channels between the polypropylene fabric and HDPE Membrane disperse vapour tension from humid substrates. They act as an outlet for excess humidity and vapour.



Load Distribution

The membrane structure aids the distribution loads on the tiled surface that could potentially lead to damages, testing has classified the membrane as "EXTRA-HEAVY".



Waterproofing

The material characteristics of the membrane when combined with **STRATO BAND** provide a waterproof function, protecting the substrate from humidity and harmful substances.



System Advantages



The system is easy and straightforward to install.



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



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.



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



The underlying substrate always remains protected and dry.



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



Suitable for application across all-seasons, including winter.

Substrate Preparation

Substrates must be prepared and pre-treated according to their type before laying **STRATO 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 **STRATO MEMBRANE**.

Laying of **STRATO MEMBRANE** can be done on the following surfaces:

1. Screeds

- a. **Cement screed:** The residual moisture content should be <2cm% 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 **STRATO 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:** **STRATO 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 **STRATO 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 **STRATO 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.

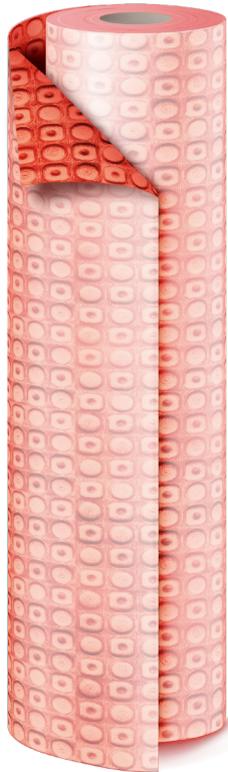
5. Wooden Floors

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.

Terraces, Balconies & Indoor Areas

Technical Data Sheet - STRATO MEMBRANE

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



Composite	Reference Standard	Value	Unit of Measure	Tol.
Weight	EN ISO 9864	625 g/m ²	g/m ²	±10%
Thickness at 2 Kpa	EN ISO 9863-1	3.5	mm	±0.5%
Mechanical Properties				
Robinson Wheel test Test Report # TCNA-0487-18, performed at the TCNA laboratories (USA)	ASTM C 627	Extra Heavy Commercial Rating	W/m K	
Pull-out test (cem. adhesive, 28 days at room temperature)	EN 1348	0.4	N/mm ²	+0.1 / -0.2
MD/CMD breaking strength	EN ISO 10319	> 8/8	kN/m	-2
Elongation at max. load MD/CMD	EN ISO 10319	> 33	%	-3
Dimensions				
Roll				
Length	-	30	m	±0.2
Width	-	1	m	±0.1



Accessories for optimum performance - STRATO BAND

Three-layer waterproof band with internal polyethylene core, coupled on both sides with felted polypropylene fabric.

Disconnecting for Outdoors

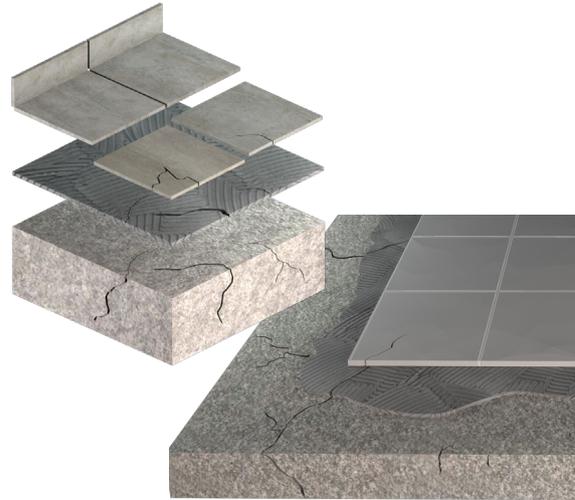
Paving without STRATO MEMBRANE

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.

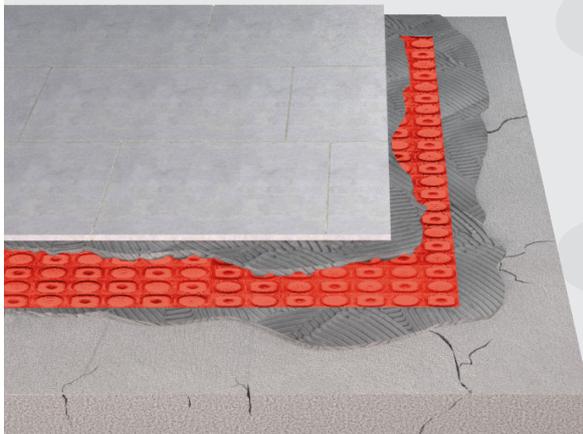
Cracks are caused by:

- 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 bed - both having differing coefficients of expansion, thereby causing tensile stresses at their interface.



Paving with STRATO 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 button-like structure, **STRATO MEMBRANE** adjusts and neutralises the transmission of any underlying tensions, acting as a bridge over any underlying shrinkage crack.

STRATO 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.

STRATO MEMBRANE & BAND
can be used to add the waterproofing
function in outdoor contexts

Under-tile Applications in Indoor Areas

With Disconnecting Function

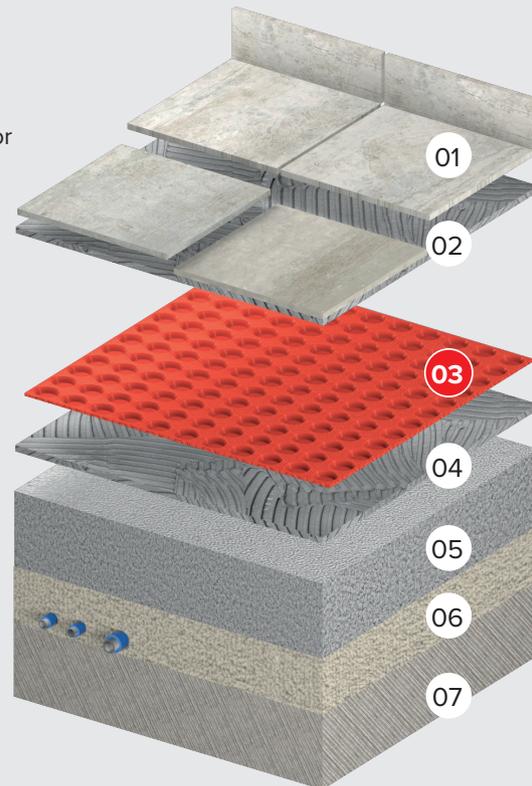
STRATO MEMBRANE

The membrane structure aids the distribution loads on the tiled surface, testing has classified the membrane as “EXTRA-HEAVY”.

With this result we can extend our portfolio of possible applications where **STRATO 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. **STRATO MEMBRANE**
04. Adhesive
05. Screed
06. Systems levelling layer
07. Floor

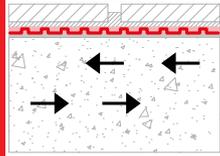


Removal of an existing floor* if renovation is carried out:

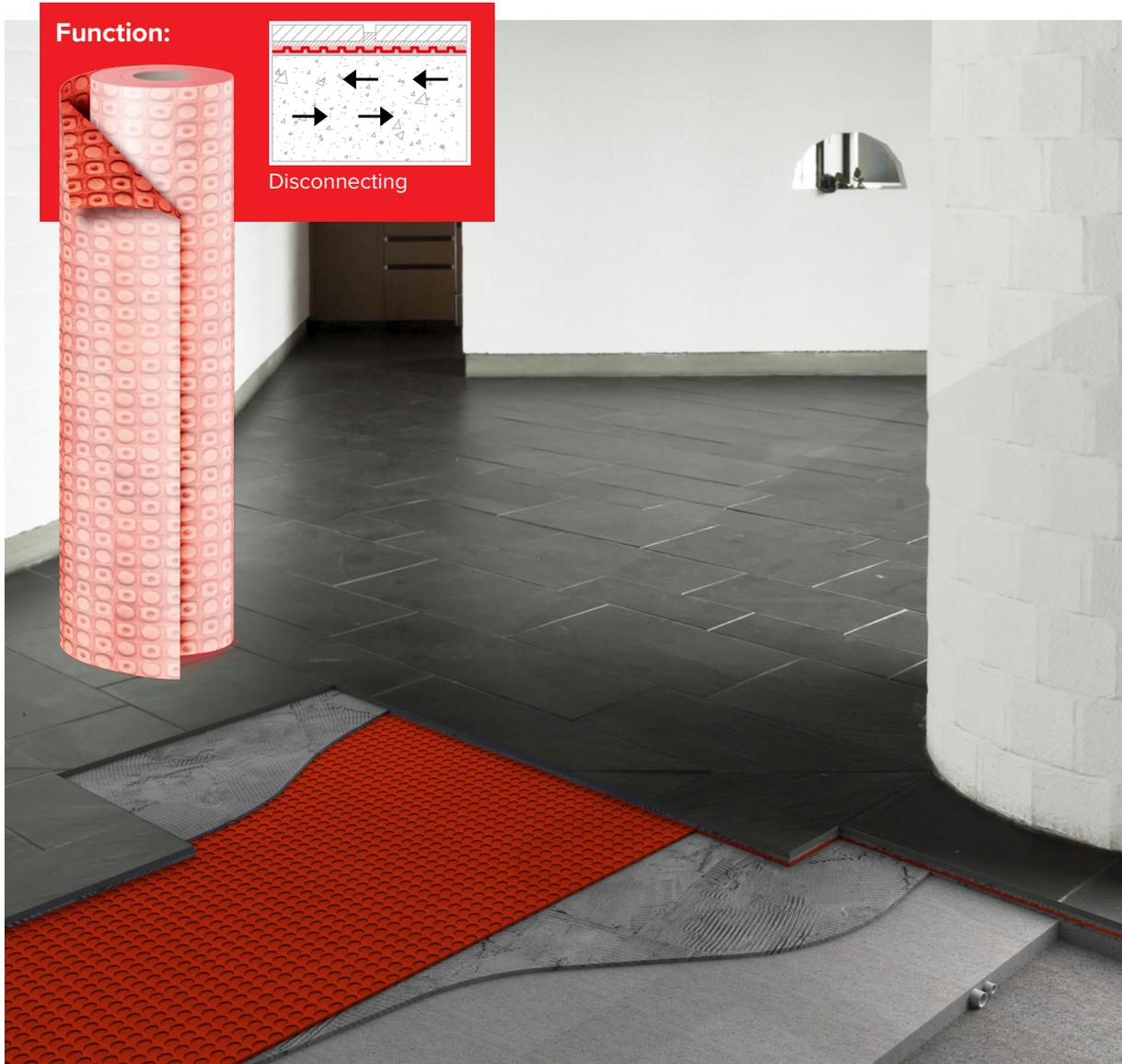
*If it is not applied directly to the screed, the disconnecting application must be implemented using an adhesive agent appropriate for the type of substrate.

Indoor Floor - Residential Type

Function:



Disconnecting



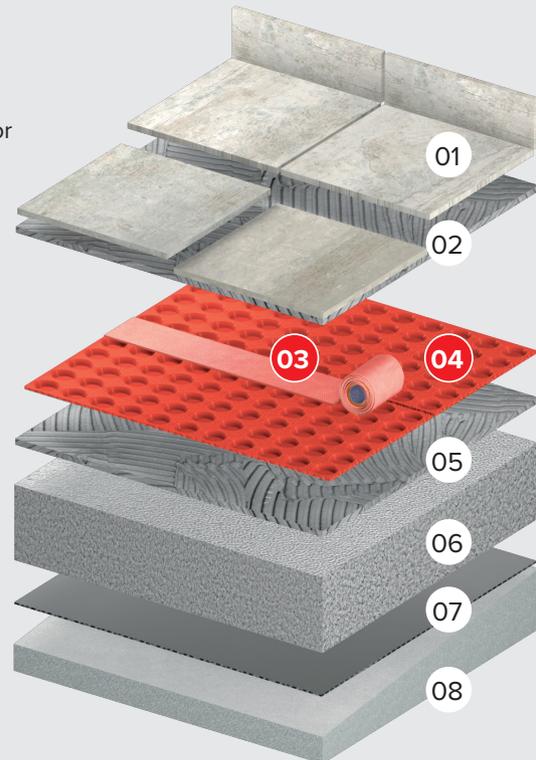
Applications in Outdoor Areas

With Disconnecting & Waterproofing Functions

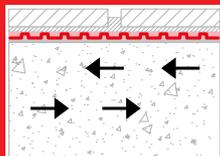
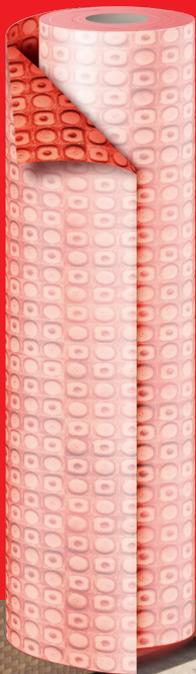
In compliance with the relevant standards the presence of a drainage layer, supported by **STRATO MEMBRANE** appropriately sealed with **STRATO BAND**, creates a layer with double protection against water stagnation and seepage. as well as layer of protection against cracks ensured by the separating element.

New Construction of Balconies and Terraces:

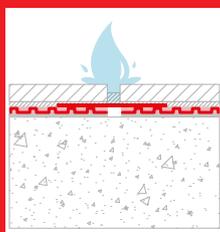
01. Ceramic tile / stoneware / natural or artificial stone floor
02. Class C2 cementitious adhesive
03. **STRATO BAND**
04. **STRATO MEMBRANE**
05. Adhesive
06. Screed
07. Sealing layer
08. Sloping structure



Function:



Disconnecting



Waterproofing



Installation

Before laying STRATO MEMBRANE, the substrate should be firm, sound, clean and be under the recommended moisture content

Inserting **STRATO 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.

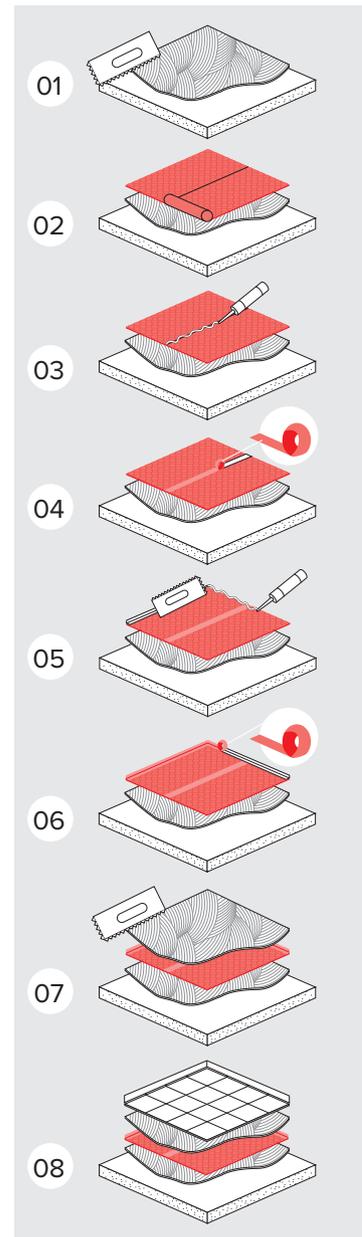
Disconnecting Function

01. Adhesive must be used to lay **STRATO MEMBRANE** over the substrate, using a notched trowel.
02. **STRATO MEMBRANE** must be laid over the designated area, with the spunbonded cladded side facing down. **STRATO MEMBRANE** must then be pressed down into adhesive with the aid of a float, applying pressure to prevent the creation of air pockets. **STRATO MEMBRANE** must then be covered with another layer of class C2 (or greater) cementitious adhesive. 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

Waterproofing Function

03. Other measures are required during the laying stage to provide the additional waterproofing function. After laying **STRATO 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 **STRATO BAND** must be applied.
05. The same procedure must be followed for the perimeter waterproofing, then adhesive is applied.
06. Then **STRATO BAND** must be laid. At the joint, **STRATO BAND** must overlap it by at least 50 mm. The same procedure must be used for the perimeter joints, using **STRATO 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. Then the class C2 (or greater) cementitious adhesive must be spread followed by the laying of the finishing product
08. The plinth/skirting board must be kept detached from the floor, the remaining gap must be sealed with elastic material (silicone or perimeter joint profile).



Installation Tips - Critical Points

Waterproofing the Perimeter of the Terrace

01. Ceramic tile / stoneware / natural or artificial stone floor

02. **STRATO BAND**

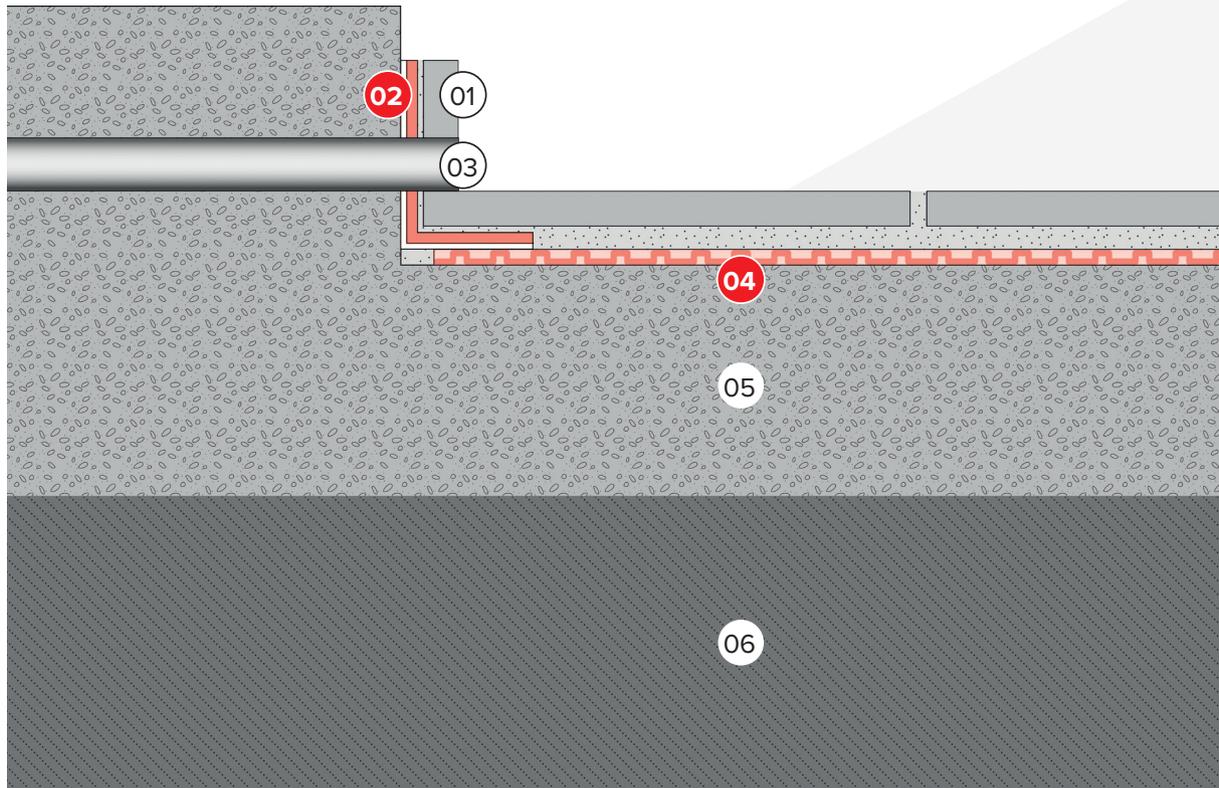
03. Perimeter drainage system

04. **STRATO MEMBRANE**

05. Screed

06. Floor

When balconies or terraces are enclosed by walls, the rainwater run-off pipe must be cladded around the perimeter with **STRATO BAND**.



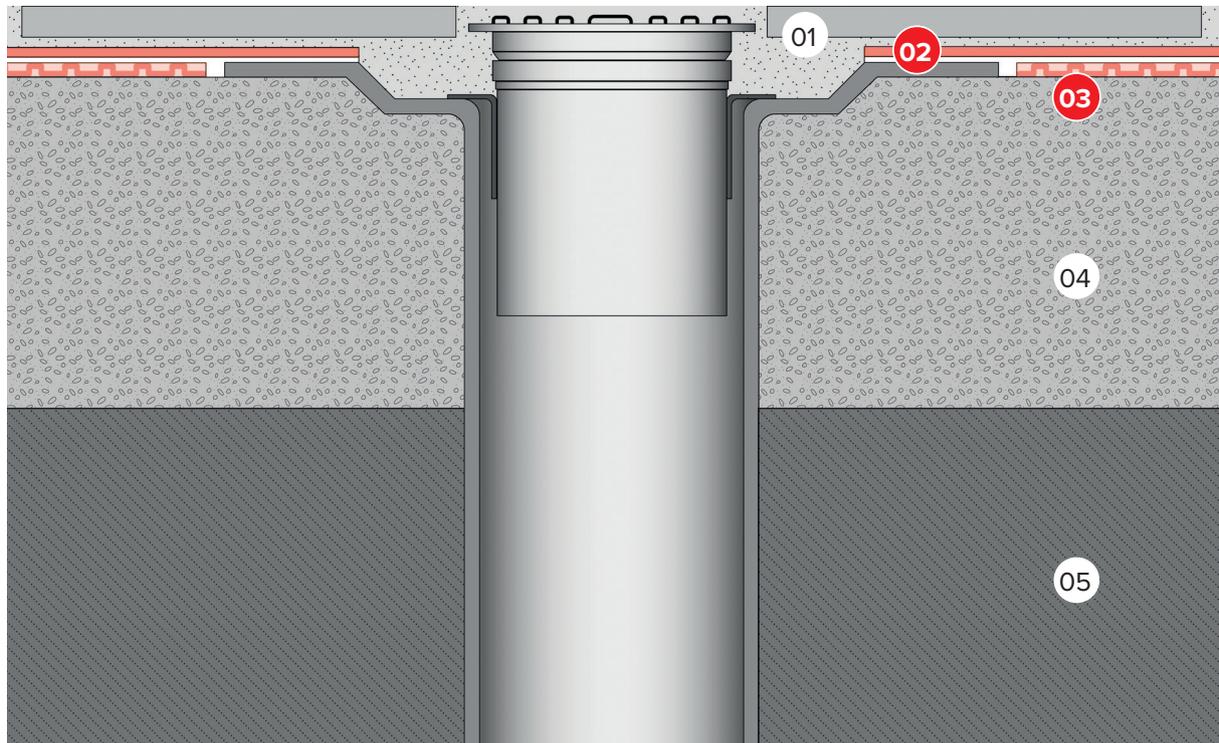
Installation Tips - Critical Points

Waterproofing the Drainage Column

01. Ceramic tile / stoneware / natural or artificial stone floor
02. **STRATO BAND**
03. **STRATO MEMBRANE**
04. Screed
05. Floor

As described in the installation section (page 11) **STRATO MEMBRANE** must be installed up to the edge of the drainage column flange.

STRATO BAND must be applied with adhesive between the drainage flange and **STRATO MEMBRANE** in order to make this critical point waterproof.



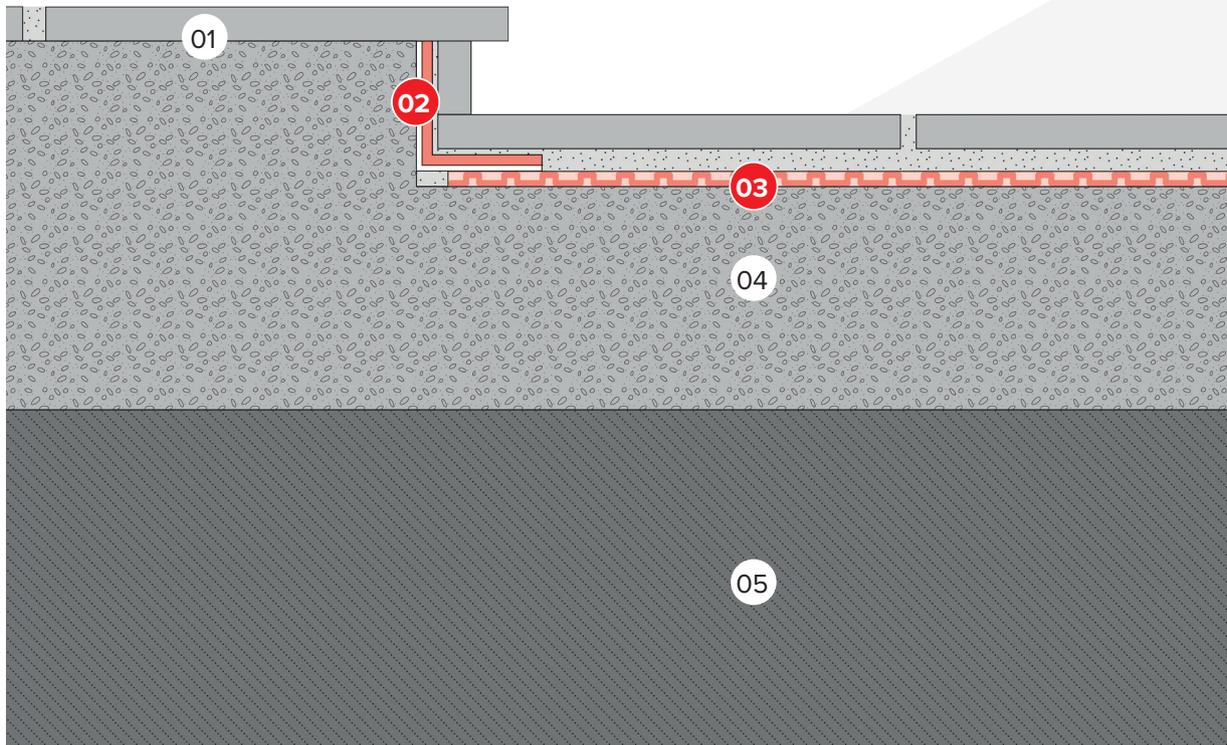
Waterproofing against a doorstep

01. Ceramic tile / stoneware / natural or artificial stone floor
02. **STRATO BAND**
03. **STRATO MEMBRANE**
04. Screed
05. Floor

The first step is to cut a strip of **STRATO BAND** at least 20cm longer than the doorstep.

Adhesive must then be applied under the doorstep for fixing **STRATO BAND**. Special care must be taken when filling the circular cables of the **STRATO MEMBRANE**.

STRATO BAND must then be laid over the adhesive sealant, following the joint between the wall and the floor and taking care to avoid the formation of creases.



Recommended Applications

Outdoors

Areas of application	STRATO MEMBRANE	STRATO BAND
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	STRATO MEMBRANE	STRATO BAND
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.



Art No.: Z621



Genesis

For the Perfect Finish

Tel: +44 (0)1642 713000 Email: info@genesis-gs.com
www.genesis-gs.com

Genesis Global Systems Ltd
Head Office: Stokesley Business Park Stokesley North Yorkshire TS9 5JZ



NBS Source
PARTNER



Colombia

Genesis LatAm SAS

Cavrera 16A, #163A-05,
Bogotá, 110131. Colombia

Tel: +57 (1) 805 1235 Email: ventas@genesis-latam.com

www.genesis-latam.com

India

Genesis Profile Systems India PVT. Limited

SURYA WAREHOUSE, Door Nos. 21/562-B & 21/562-C,
Marathakkara Village, Thrissur, Kerala 680306

Tel: +91 0487 2355 577 Email: sales@genesis-gs.in

www.genesis-gs.in