



PRODUCT GUIDE

G-FLEX

UNCOUPLING MEMBRANE



CONTENT

DESCRIPTION

4

- **STRUCTURE AND PROPERTIES**

4

- » Decoupling

4

- » Uncoupling

4

- » Vapour management and moisture

4

- » Load-bearing capacity

4

- » Better heat distribution

4

- » Waterproofing

4

APPLICATIONS

5

INSTALLATION

6

- **ASSEMBLING AND BONDING OF THE G-FLEX FILM TO THE SUBSTRATE**

6

- **TREATMENT OF THE JOINTS BETWEEN THE MEMBRANES**

7

- » Sealing the joints between membranes to waterproofing

7

- » Sealing the intersection joints of the floor with the walls

8

- **LAYING THE CLADDING**

9



DESCRIPTION

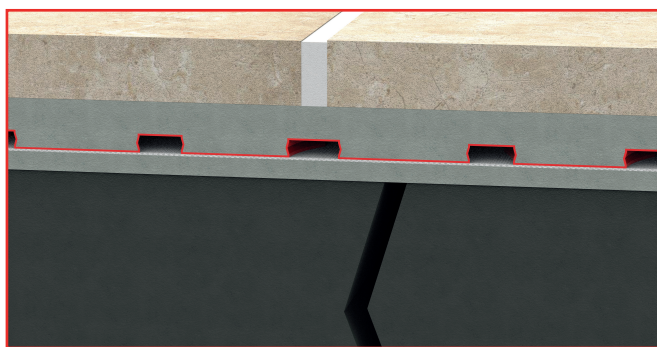
G-FLEX is a waterproof anti-fracture decoupling membrane consisting of a polyethylene membrane bonded to geotextile sheet that leaves air nodules with the shape of circumferences between them. This improves the result of the coating of ceramic tiles and indoors and outdoors natural stones. It is worth highlighting its effectiveness when installed on critical substrates; cracked, with a lot of movement or with possible vapor stresses due to residual humidity.

• STRUCTURE AND PROPERTIES

G-Flex is a multi-layer system with a very low thickness nodular geometric structure. It consists of a 0.5 mm thick high-density polyethylene (HDPE) waterproof membrane with 3 mm high nodules and a non-woven veil of thermo-bonded polypropylene fibres at the base of the nodules.

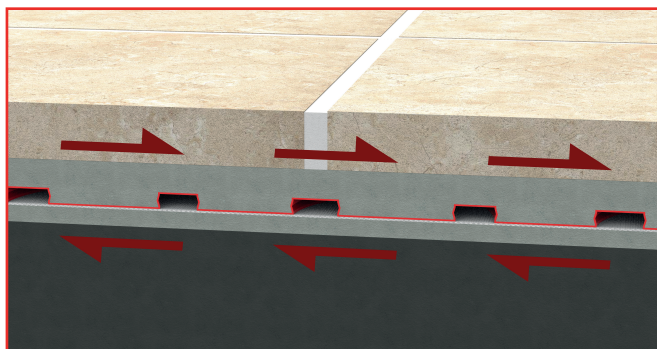
» Decoupling

The design and distribution of the nodules makes possible to articulate deformation in all directions while keeping the point load distribution and cushioning the stress due to horizontal movements and by deflection.



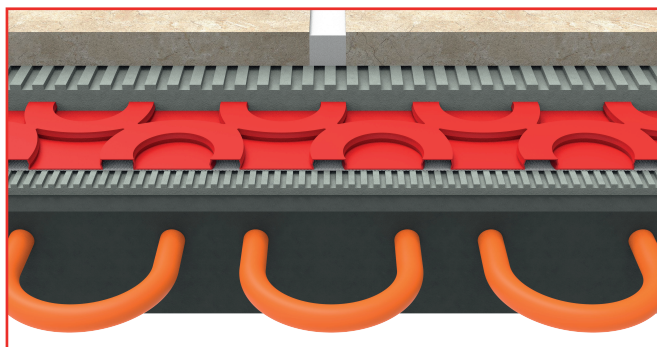
» Uncoupling

HDPE membrane ensures the physical separation between the substrate and the cladding.



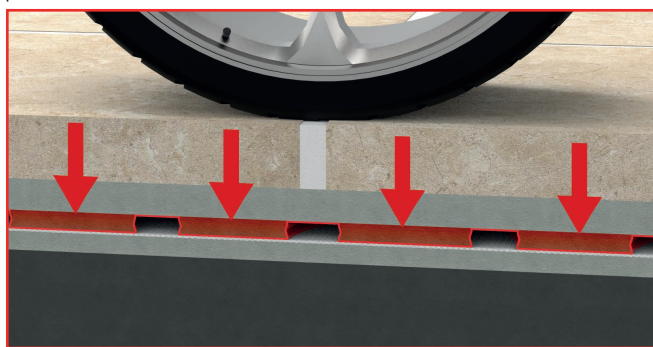
» Better heat distribution

About the radiant heated floors, the duct network allows the heat to be distributed more quickly and evenly.



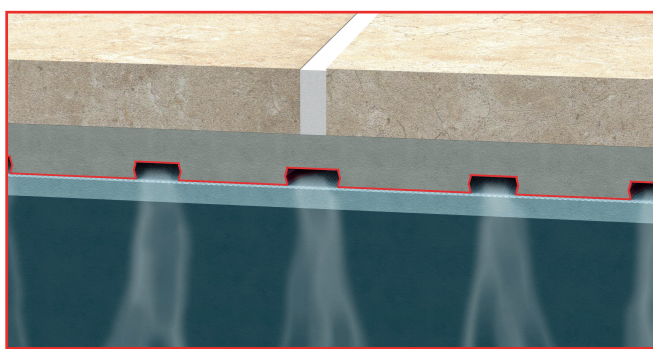
» Load-bearing capacity

When ceramic tile or natural stone flooring is laid on G-Flex membrane the cavities are filled with tile adhesive cement to form small pillars which, when hardened, support the loads and transfer them from the tiling to the firm substrate at multiple points.



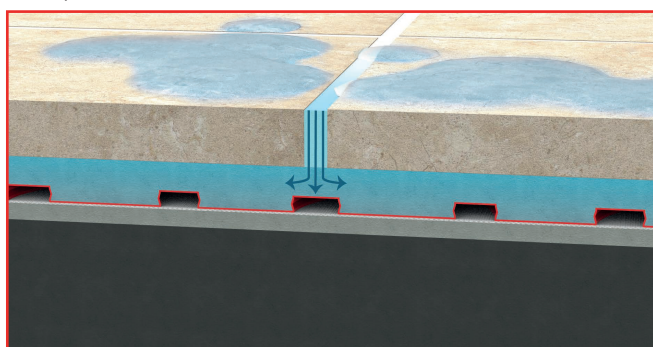
» Vapour management and moisture

Nodules distributions features a ducting network that allows vapor pressure to circulate and dissipate and enables to dry excess moisture.



» Waterproofing

The HDPE polyethylene sheet is completely waterproof, as the joints between sheets and the gaps between the floor and the wall must be sealed with W-S BAND, glued with polymeric waterproof cement such as EASEAL.



APPLICATIONS

G-Flex is used in new construction and also in renovation before the installation of ceramic tiles and natural stone in indoor and outdoor for the following: to separate and prevent fissures and cracks, compensate for vapour stresses on excessively moist substrates, or to form a waterproof protection layer for substrates that are moisture-sensitive against filtrations.

The performance of G-Flex is required when the stresses in the substrate system can be very high due to dimensional changes, usually caused by temperature variations, (expansion or contraction), by higher or lower humidity in the environment and of materials used (swelling or shrinkage) or by the effect of deflection due to loads.

This is particularly the case when laying:

- On subfloors with wooden structure.
- When installed with underfloor heating.
- On anhydrite screeds.
- On immature or damp substrates.
- When using dark tiles outdoors in very sunny areas.
- Particularly in the case of large format tiles or long formats.

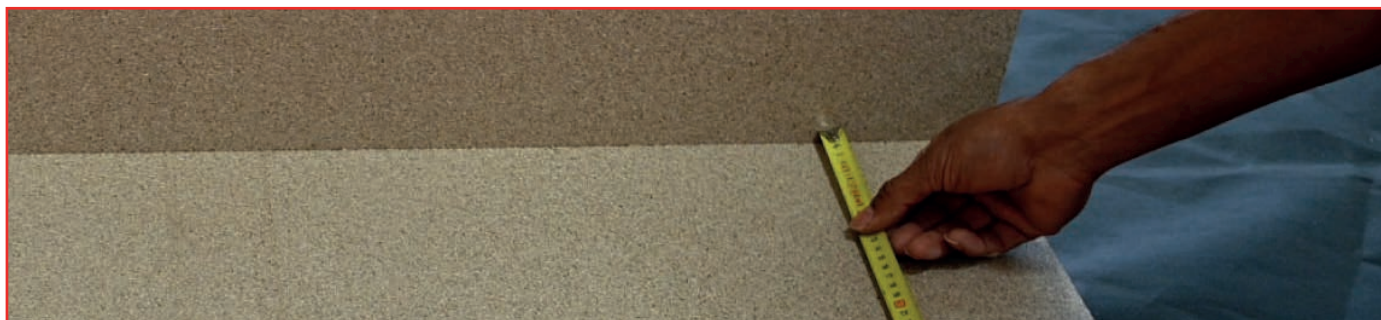
It is suitable for use in residential buildings, commercial establishments, hospitals, hotels, etc. As a waterproof membrane it can be used indoors and outdoors: for balconies, terraces, patios and horizontal surfaces for residential, commercial or industrial use such as bathrooms, industrial kitchens, food industry, etc.



INSTALLATION

• ASSEMBLING AND BONDING OF THE G-FLEX FILM TO THE SUBSTRATE

Check and prepare the substrate, which must be firm, smooth and clean. If necessary, apply a priming coat suitable for the substrate.



1. Cut G-Flex to the required size and shape, leaving a gap of 6 mm (1/4 inch) between the membrane and perimeter walls, columns, architectural elements, structural joints, drains, etc.



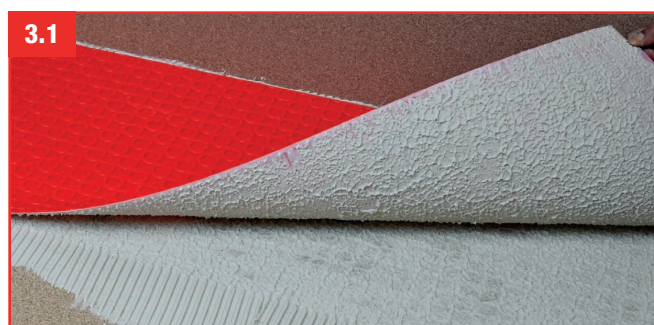
2. Apply a suitable adhesive mortar to the substrate. Mix the mortar to a fairly liquid consistency within the manufacturer's recommended water range. Apply to a surface of a size that allows the sheets to be laid within the open time of the adhesive. Press vigorously with the smooth side to obtain maximum adhesion to the substrate.

2.1. Spread the adhesive mortar in a layer of even thickness using a 4.5 x 4.5 mm or 6 x 6 mm notched trowel in one direction only.

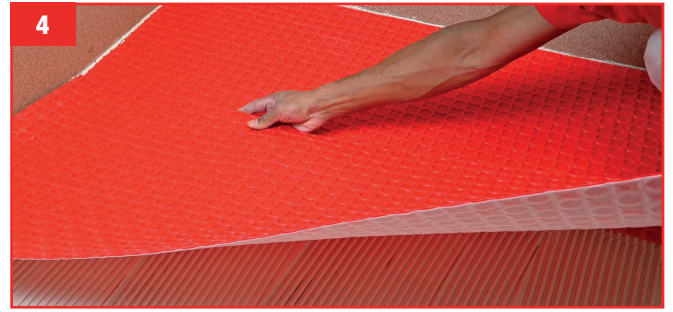
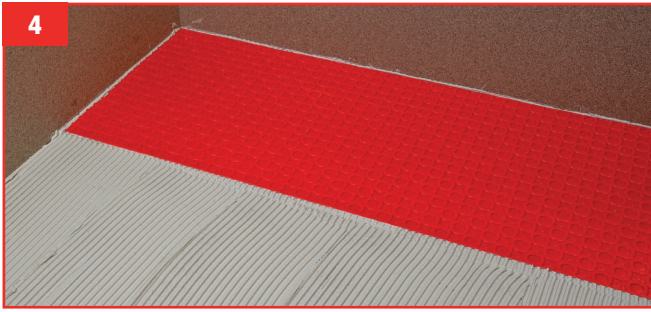


3. Place the G-Flex membrane with the white non-woven side over the glue cement and press down firmly with the smooth side of the trowel, a wooden trowel or a roller to achieve full adhesion.

3.1. Lift a corner to check that the non-woven backing of the membrane is completely covered with adhesive mortar. If necessary, increase the amount of adhesive or correct the pressure.



INSTALLATION



4. Then install the following pieces of G-Flex in the same manner. To ensure a flat surface, do not overlap the edges or ends of one membrane over another. Spread G-Flex edge to edge with adjacent pieces without leaving gaps of more than 3 mm between membranes.

• BEFORE LAYING THE CLADDING, TREATMENT OF THE JOINTS BETWEEN THE MEMBRANES

Instructions on how to treat the joints between membranes and with walls and other fixed elements to form a waterproof protective layer.

If the installation of the G-Flex decoupling film does not require waterproof protection, it is not necessary to seal the joints and the cladding can continue to be installed.

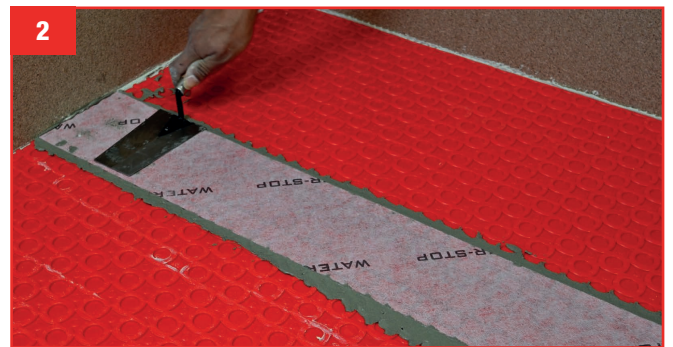
However, in cases where it is necessary to protect the substrate against moisture seepage, the installation with G-Flex film must be waterproof and all joints between the membranes and with the walls and other fixed elements must be sealed using EASEAL polymeric waterproof cement and WATER-STOP waterproofing strips and accessories.

» Sealing the joints between membranes to waterproofing



1. Apply EASEAL polymeric waterproofing cement centred in a 15 to 20 cm (6" to 8") wide strip.

Spread the mortar with a trowel or spatula, completely filling the cavities in the membranes and trowelling a layer at least 1 mm thick.



2. Place the W-S BAND 14 centred on the joint line and press firmly with the smooth side of the trowel to achieve full adhesion.

Lift to check that the strip is completely covered. If necessary, increase the amount of mortar.

The approximate consumption of EASEAL mortar for bonding and sealing the joint between G-Flex membranes with W-S BAND 14 is about 0.3 kg/m (0.2 lbs / ft).

INSTALLATION

» Sealing the intersection joints of the floor with the walls

Use preformed parts and waterproofing reinforcement and WATER-STOP membrane strip. These reinforcements are bonded to the floor by gluing and sealing between them and on the G-Flex membrane with EASEAL polymeric waterproof cement. On the wall they are glued directly to the substrate with the same polymeric cement or with an adhesive suitable for the type of substrate (adhesive mortar type C2, polyurethane or MS polymer sealant adhesive).

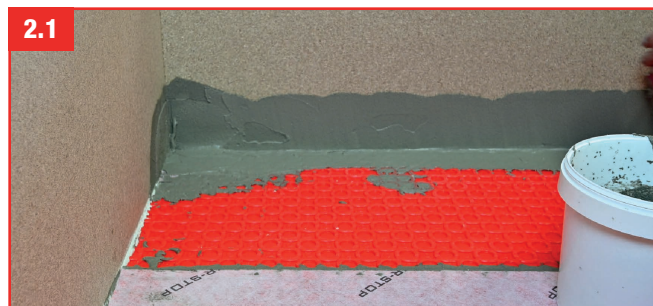


First treat the corners with W-S DIN and W-S DEX inlet and outlet angles.

1. Apply EASEAL polymeric waterproofing cement over G-FLEX in a 8 to 10 (3" to 4 cm wide) strip on each side of the angle, completely filling the cavities, and spreading to form a layer at least 1 mm thick.

1.1. Place the pre-formed angle and press to integrate into the glue layer.

1.2. Press with the smooth side of the trowel or with a spatula to remove air and excess material. First, adjust on the walls and then on G-Flex.



Now treat the floor-wall junction with W-S BAND 14 cm (5-1/2") or 34 cm (13-1/2") depending on the installation requirements.

2. Apply the polymeric waterproof cement EASEAL covering the reinforcements in the corners and on top of the G-FLEX on a strip of 8 to 10 (3" to 4 cm wide) on each side of the angle completely filling the cavities and spread to form a layer at least 1 mm thick.

2.1. Apply a layer of cement at least 1 mm thick or the required amount of an adhesive suitable for the substrate to the walls.



3. Place the W-S BAND on the bonding layer. First on the walls and then overlapping at least 6 cm (2-1/2") over G-Flex. Press with the smooth side of a trowel or spatula to remove air and excess material.

INSTALLATION

• LAYING THE CLADDING

Ceramic or natural stone tile can be installed immediately after the installation of G-Flex without waiting time.

The same adhesive mortar can be used to bond G-Flex to the substrate and to bond the tile over G-Flex. The better the adhesive mortar, the more flexibility it gives to the system.

Use panels as protection when pass through the membrane, especially during the setting of the tile adhesive.

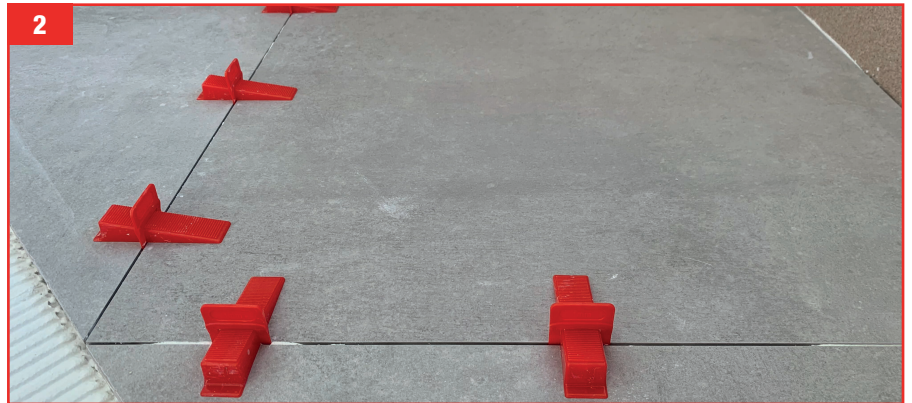
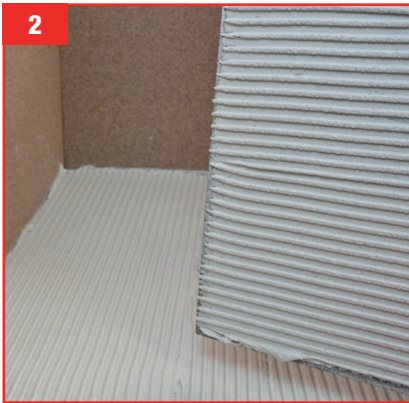
If the flooring is to be laid days after the installation of G-Flex (to protect the membrane), it is advisable to fill and smooth the surface of the membrane with the same adhesive cement that is used for the flooring.



Apply an adhesive mortar suitable for the type of flooring. Use a tile adhesive with a minimum rating of C2 per EN 12004 or ISO 13007 or ANSI A118.4, ANSI A118.11 or ANSI A118.15.

1. First coat and smooth the surface of the membrane using the flat side of the trowel, ensuring that all cavities are completely filled. (The approximate consumption of adhesive mortar to smooth the surface of G-Flex is about 1.5 kg/m² (0.3 lbs / ft²)).

1.1. Next, apply more adhesive mortar and spread using the recommended notched trowel for the size and type of tile being installed.



2. Lay the tiles. Lift a tile frequently to check that the back of the tile is completely covered. Applying a thin layer of adhesive mortar to the back of the tiles is a practical way to achieve adequate coverage. Reproduce the structural joints over their full width.

Grouting can be done when the mortar has cured sufficiently to allow walking on the pavement, that it will depend on the mortar used, the size of the joint, the size and type of tile and the job site conditions.



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