

lamitech n



lamitech n is a multilayer polymer sheet, specially designed for outdoor floors decoupling. Protects tiles against substrate tensions, reducing the risk of breakage and piece lifting. Suitable for outdoor waterproofing.

lamitech n is a coextruded HDPE/EVAC membrane, with one side covered with polyester fibers and the other one with polyester entwined felt, that allows laying with cement-based adhesives. Absorbs tensions, reducing their transmission to the ceramic floor. Indoor and outdoor use.

Recommended use:

- Decoupling of balconies and terraces.
- Waterproofing of outdoor floors.
- Laying of ceramics on wood substrates. Specially recommended in floorings on wooden beams structure.
- Laying of floor tiles on cracked substrates. Terrace refurbishing.
- Laying of ceramics on substrates which are not set yet or present residual moisture; mortar or anhydrite substrates.
- We do not recommend the use of **lamitech n** in walls.

Materials

- Absorbent and non-absorbent ceramic tiles. Porcelain tiles with a water absorption < 0.5% as per EN-ISO 10545-3.
- Glass mosaic.
- Natural stone and marble not prone to staining.

Substrates

- Cement or anhydrite covered floors.
- Concrete slabs.
- Existing floor tiles.
- Plywood boards.

Features

- Multilayer HDPE/EVAC polymer membrane covered with polyester fibers.
- Maximum outdoors waterproofing with minimal thickness (3.4 mm).
- It allows for direct laying of ceramic tiles with cement-based adhesive.
- Good chemical resistance.
- Improves impact noise reduction.
- Quick and easy application.

lamitech n main features are the following:

- Decoupling between ceramic floors.
- Waterproofing:
- Vapor pressure balance.
- Soundproofing.

Certifications/Standards:

- ANSI A118.12

Instructions for use

Preparing the substrate.

The substrate or laying base must be dimensionally stable and not deformable, and with no risk of cracking and shrinking because of mortar hardening. In case of substrates more than 40 mm thick and for reducing tensions due to structural movements, we recommend to decouple with a polyethylene sheet and a perimetral joint around the flooring. Otherwise, we recommend to make a fully bonded floor with mortar screed.

Cement-based substrates must have the following features:

- Residual moisture lower than 3%.
- Clean of dust, grease or any other substance which might compromise the effectiveness of the bonding material.
- Substrate must be flat and free of any elements which could tear or pierce the waterproofing sheet.
- Level and flat, deviations under 3 mm every 2 m of surface.

In case of presenting any of the above defects, these must be fully amended before proceeding to laying the tiles.

In highly absorbing or not consistent substrates, we recommend to apply a primer for reinforcing the substrate and reducing water absorption. We recommend the use of uniprim, a synthetic resin primer.

On outdoor floors, make slopes to ensure correct water drainage.

Installing the lamitech n sheet.

lamitech n sheets have two clearly visible layers. Place the black felt-covered layer facing the substrate and the printed blue layer facing up.

The only recommended technique for installing **lamitech n** is doing it with the thin-bed method with notched trowel and type C2 cement-based adhesive as per EN 12004. After several tests, we recommend **maxifluid** from **butech** when laying ceramic floorings on **lamitech n**. Application instructions for this adhesive are as follows:

- Use clean tools and containers.
- Mix the adhesive with the amount of clean water stated by the manufacturer.
- First pour the water into the container, and then add the adhesive slowly.
- Mix with an electric mortar mixer at low speed (500 rpm) until you get a creamy, even and lumpless mass.
- Leave to rest for several minutes.
- Stir with the trowel and apply.
- Spread a thin layer of adhesive on the substrate, with the smooth side of the trowel.
- Apply a second coat and comb with the notched part of the trowel.
- Distribute the grooves of adhesive evenly and perpendicular to the shortest side of the sheet.
- Before laying the sheet, clean any element off the back, that could interfere with the bonding of the mortar.
- Check the wettability of the adhesive, and lay the ceramic on the fresh adhesive.
- Unroll the **lamitech n** reel on the adhesive until you get a uniform and full contact. To avoid the forming of air bubbles, we recommend to press the sheet with a hard rubber trowel parallel to the grooves of adhesive.
- Check that the sheet edges do not lift and that its perimeter is perfectly fixed to the substrate.
- The maximum adhesive thickness should not exceed 3 mm.

In case of applications in which you need to waterproof a surface bigger than the width of a sheet:

- Layout the **lamitech n** sheets side by side, without gaps or overlapping between them.
- Check that no grouting material gets into the tiling joint between sheets.
- Cover the joints with **lami-band 200** waterproof membrane and bond with the same cement-based adhesive used in the installation of **lamitech n**.
- For waterproofings, substitute the cement-based adhesive by a waterproof mortar like **sylastic**.

In all the junctions with vertical elements, take the sheets to the end and cover with **lami-band 200** for sealing the joints between floor and wall. Extend this sheet above the maximum level water might reach. We recommend a minimum height of 10 cm. There are special pieces for reinforcing waterproofing in corners.

In case of joints subject to heavy movement, we recommend to substitute **lami-band 200** by **butech's waterproof band**.

In installations on movement joints, do not overlap the **lamitech n** sheet. Install the sheets on both sides of the joint and cover it with an elastic waterproofing sheet, like a **butech waterproofing sheet**.

Choose outlet systems with connections suitable for **lamitech n** type sheets: wide fixation crown around the outlet and adjustment system with o-rings. Extreme precaution when connecting the outlet and **lamitech n**; if in doubt, seal with an elastic putty.

There is no need to wait until the adhesive is dry for beginning to lay the tiles.

Once the sheet installed, cover with tiles as soon as possible. In any case, protect from direct sunlight and protect from traffic which could damage the sheet.

Laying the ceramic tiles.

- The only recommended technique for laying ceramic tiles on the **lamitech n** sheet is doing it with the thin-bed method with notched trowel and type C2 cement-based adhesive as per EN 12004.
- The application instructions of this adhesive are the usual ones for this method. In case of doubt, refer to the data sheet of the adhesive used.
- Let the mortar set for a minimum of 24 hours before sealing the installation joints or allowing transit on a floor laid with a normal setting adhesive. Adverse environmental factors can delay the hardening of the adhesive, so if in doubt, wait for 36 hours.

Sealing installation joints.

Before starting to seal the installation joints, make sure the adhesive has finished its initial setting and that the moisture on the tile back has been eliminated, especially when it comes to laying mosaics or large format and low absorption tiles with minimal installation joint

For sealing the tiling joints, we recommend the technical mortars professional range **colorstuk** and **epotech**, available in different finishes and colors. Given the importance of the finishing of the installation joints, and the importance that all joints between tiles are sealed, we recommend using extreme care in this work, as well as following scrupulously the joint material manufacturer's instructions.

As a general rule, we do not recommend to leave tiling joints narrower than 1.5 mm indoors and 5 mm outdoors. Currently, there is a wide variety of spacers to ease the tile setter's job, but we specially recommend **butech's self-leveling spacers**, which, apart from marking the joint width, avoid the appearance of hedges between tiles and tiling defects.

Cleaning and maintenance.

Before laying, and in order to avoid later problems, it is recommended to consult the supplier's technical data sheet for the type of floor covering used, and check that it is not sensitive to alkaline products such as cement mortars, or to acid construction cleaners.

- Clean up any remaining adhesive before it hardens. Extreme caution with anti-slip floors, absorbent stones or relieved surface tiles.
- In case of mortar stains, we recommend to use **acid net**, building debris cleaner. We recommend performing a preliminary test.
- Once laid, rinse the tool generously with water before it hardens.
- Refer to the maintenance instructions of the supplier of the flooring used.

Preservation

Store in its original package, closed, in a dry place, covered and protected from moisture and direct sunlight. Storage temperature will be lower than 30°C.

Supplementary Instructions

The only laying technique recommended is the thin-bed method with notched trowel. Do not bond with mortar applied with a trowel.

Only type C2, S1 adhesives as per EN 12004 are recommended.

- **one-flex n**
- **super-one n**
- **maxifluid.**
- Scrupulously follow all the indications about preparation and application of the adhesive.
- The use of water-based dispersion adhesives is not recommended.
- Carry out the laying through the double bonding method on tiles with format greater than 1000 cm² and applications where you need a 100% contact between tile and substrate: outdoors, radiant heating floors, with heavy traffic or overlaying.
- When installing **lamitech n**, use a 6 x 6 or 8 x 8 cm notched trowel.
- Working times depend on wind, moisture and temperature conditions at the work site, so the working times indicated in this sheet can change in relation to those where the laying is being carried out.
- Protect from rain and frost at least during the first 24 hours.
- Do not apply when temperature is below +5°C or above + 35°C.
- On outdoor floors, make slopes to ensure correct water drainage.
- When laying mesh backed glass mosaic, check that the adhesive goes through the mesh and contacts the mosaic pieces.
- Do not use in waterproofings with negative water pressures.
- Before using under floors subject to heavy loads or that demand chemical resistance, check with **butech's Technical Department**.
- The layout, width and constructive details of the perimetral and intermediate movement joints, as well as the materials to be used, must be included in the tile laying project.
- Respect all the structural joints present in the substrate.
- Make perimetral movement joints in corners, level changes in the floor and at the height of changes of material.
- As a general rule, make intermediate movement joints which delimit areas as square as possible of 16-25 m² outdoors and 50-70 m² indoors. They must have a minimum width of 8 mm.
- The technical information included in this data sheet has been gathered from tests at certified laboratories and in the conditions stated by the relevant standards.
- For further information about this product, refer to the **Technical Department at butech**.
- The use of **lamitech n** under ceramic tile or stone floors can affect the acoustics of the system. Pedestrian traffic with hard shoes or heels can produce a different sound than that produced on a flooring directly bonded on the substrate. This physical phenomenon is absolutely normal and associated to the use of this type of sheets under the flooring.

Data Sheet Conditions

- This data sheet does not describe a finished product; it is a waterproofing material which, together with other products and materials, determines a ceramic tiles lying system. Instructions in this technical sheet have been written based on our experience and technical expertise, but they have to be considered as general recommendations, which together with those for the rest of the products in the system, help the tile-laying professionals in the performance of their job.
- As it is not possible to know all the features and conditions of a building job, professionals must consider it and, if deemed appropriate, perform a previous test to confirm whether the product is suitable for the job.
- The technical sheet cannot reflect all the applications and conditions entailed in the use of a material, so, in situations not described in this sheet, we recommend to perform a previous test and refer to our technical department.
- This sheet has been updated in March, 2024.

Technical Data

Features	Testing method	Unit	Value
Watertightness	EN 1928 met. B		Passed
Overlapping watertightness	Water column	1 m / 24 hours	Watertight
Breaking strength	EN 12311-2 met. A	N/50mm	L > 730 T > 1150
Lengthening	EN 12311-2 met. A	%	L > 72 T > 79
Resistance of overlappings (shear)	EN 12317-2	N/50 mm	> 125
Breaking strength with C2 adhesive	CSTB methodology	N / mm ²	0.9
Shear strength with C2 adhesive	CSTB methodology	N / mm ²	1.28
Crack isolation	ANSI A118.12		High performance
Impact noise reduction (ΔL_w)	EN ISO 717-2	dB	10
Resistance to chemicals	EN 1847		> 20
Length	EN 1848-2	M	5
Width	EN 1848-2	M	1
Weight	EN 1849-2	gr/m ²	1100
Effective thickness	EN 1849-2	mm	3.40
Visible defects	EN 1850-2	mm	Passed
Straightness	EN 1848-2	mm	G < 10
Flatness	EN 1848-2	mm	P < 5

References

SAP	Product description	Packaging	Palletising
100286750	lamitech n	5 m reel	200 m ² /pallet
100288347	200 mm lami-band	30 m reel	
100006221	waterproof band	50 m roll	