

imperband



imperband is a waterproof sheet, specially designed for indoor waterproofing of ceramic wall and floor coverings.

imperband is a 0,5mm thick polymer membrane with a double thermoplastic polyolefin sheet and covered on both sides by non woven polyester fibers that allow it to be bonded to surfaces using cement-based adhesives. Ideal for use in new construction and refurbishment of showers and baths, and any indoor environment permanently affected by damp.

Recommended use:

- Private bathrooms. Built in showers.
- Public toilets and showers.
- Spas and premises in permanently damp environments.
- Balconies and terraces smaller than 10 m².
- Do not use in outdoors surfaces greater than 10 m².

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 covered floors and walls .
- Concrete slabs.
- Plasterboards.
- Plywood boards.
- On anhydrite or plaster substrates apply **uniprim**.

Features

- Double thermoplastic polyolefin membrane covered on both sides by non woven polyester fibers.
- Maximum waterproofing with minimal thickness (0.5 mm).
- It allows for direct laying of ceramic tiles with cement-based adhesive.
- Good chemical resistance.
- Quick and easy application.

Certifications/Standards:

CSTB - Avis technique: 13/16-1319_V1

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.
- Compact, with no cracks, fully hardened.
- Rough texture, efflorescence-free.
- 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.

Installing the imperband sheet.

The only recommended technique for installing **imperband** is doing it with the thin-bed method with notched trowel and type C2 cement-based adhesive as per EN 12004. The following are the instructions for applying this adhesive:

- 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.
- Lay the **imperband** sheet 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.
- 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, overlap to sheets at least 5 cm and bond with the same adhesive used in the installation. The overlapping should always be done following the slope.

In every junction with vertical elements, we recommend to extend the sheet over the maximum level water could reach. We recommend a minimum height of 10 cm. There are special pieces for reinforcing the waterproofing of corners, specially recommended in shower trays.

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

When a pipe goes underneath the waterproofing, cut a piece of **imperband** and cover the joint with a waterproofing sheet patch, wrapping the pipe tightly.

Choose outlet systems with connections suitable for **imperband** type sheets: wide fixation crown around the outlet and adjustment system with o-rings. Extreme precaution when connecting the outlet and **imperband**; 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 **imperband** 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 wall 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 direct sunlight.

Supplementary Instructions

- The only lying technique recommended is the thin-bed method with notched trowel. Do not bond with mortar applied with a trowel.
- When installing **imperband**, use a 6 x 6 or 8 x 8 cm notched trowel.
- The use of water-based dispersion adhesives is not recommended.
- Scrupulously follow all the indications about preparation and application of the adhesive.

- 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 lying 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.
- In shower trays, 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 substrates subject to heavy movement.
- Do not use in waterproofings with negative water pressures.
- Do not use in pools.
- 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.
- 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**.

Technical 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 February, 2024.

Technical Data

| Features | Testing method | Unit | Tolerance | Value |
|---|-------------------|-------------------|--------------------|--------------------|
| Watertightness | EN 1928 met. B | | | Passed |
| Breaking strength | EN 12311-2 met. A | N/50mm | L > 395 T > 130 | L > 425 T > 130 |
| Lengthening | EN 12311-2 met. A | % | L > 23 T > 190 | L > 25 T > 200 |
| Resistance of overlappings (shear) | EN 12317-2 | N/50 mm | > 1110 | > 125 |
| Impact resistance | EN 12691 | mm | | PND |
| Resistance to static loads | EN 12730 met. B | Kg | > 20 | > 20 |
| Foldability at low temperature | EN 495-5 | °C | | PND |
| Flammability | EN 13501-1 | Euroclass | | F |
| Physical stability with working temperature | | | | Softening at 90 °C |
| Length | EN 1848-2 | M | 0% - 5% | 5 / 30 |
| Width | EN 1848-2 | M | 0.5% - 1% | 1 |
| Weight | EN 1849-2 | gr/m ² | 5% - 10% | 350 |
| Effective thickness | EN 1849-2 | mm | 5% - 10% | 0.52 |
| Visible defects | EN 1850-2 | mm | | Passed |
| Straightness | EN 1848-2 | mm | G < 50 | G < 10 |
| Flatness | EN 1848-2 | mm | P < 10 | P < 5 |

References

| SAP | Product description | Packaging | Palletising |
|-----------|---------------------|-----------|--------------|
| 100276193 | imperband | 30 m reel | 720 m/pallet |
| 100276212 | imperband | 5 m reel | 300 m/pallet |