



p-404

p-404 is polyurethane putty for sealing joints. Specially recommended for sealing movement joints outdoors. Indoor and outdoor use.

This reticular putty when in contact with dampness does not give off odors, thus becoming an extraordinary adherent, elastic and resistant elastomer to atmospheric agents.

Recommended use

- Sealing joints even between materials sensible to chemical attack.
- Sealing movement joints in floors and walls.
- Bonding of building materials like ceramics, concrete, roof tiles, wood, aluminium, polyester, or PVC.
- Gluing ceramic materials on metal or wood boards.
- Gluing access floor pedestals.
- Gluing ceramic to the butech's ventilated facade system structure: DIT 530/11
- Gluing concept xps panels.

Materials

- Ceramic tiles and glass mosaic.
- Glass.
- Metal.
- Plastic material, PVC.
- Concrete slabs.
- Wood.
- concept xps panels

Before applying the **p-404 putty** on a ceramic wall covering not stated in the previous listing, please perform a test or check with **butech's Technical Department**.

Substrates

All usual substrates for ceramic tiles laying.

Characteristics

- Single-component polyurethane putty.
- High elasticity. Can withstand movements up to 20% of the sealed joint width.
- High adherence.
- Resistant to UV rays.
- Frost-resistant.
- It can be painted with water-based paints.

Instructions for use

Preparing the substrate.

The surfaces on which **p-404** is to be applied shall have the following characteristics:

- Residual humidity under 3%.
- Clean of dust, grease, or any other substance that may compromise the bonding material adherence.
- Compact surface, free of cracks, non-crumbling.
- Smooth texture, efflorescence-free.

In very absorptive or inconsistent substrates, it is recommended to apply a primer to strengthen the substrate cohesion and reduce water absorption. We recommend the use of uniprim . synthetic resin-based primer.

When applying on movement joints, we recommend protecting the sides of the joint with adhesive tape. This will make the cleaning of the joint easier.

When applying on movement joints, the ratio between width and depth will be the following:

- | | | |
|------------------------------|----------|----------|
| - Joint under 10 mm | Width: 1 | Depth: 1 |
| - Joint between 10 and 30 mm | Width: 2 | Depth: 1 |

If the depth is greater than the thickness of the putty seam to apply, we recommend filling the bottom of the joint with closed-cell compressible material such as polyethylene seams or expanded polystyrene.

Applying the putty throughout the joint.

Introduce the **p-404** cartridge into the applicator gun, pierce the end, screw in the nozzle, and cut it at 45 depending on the diameter of the putty seam to apply.

Apply the **p-404** seam on the joint, continuously and uniformly. Avoid forming air bubbles in the seam.

Before the putty hardens, define the shape of the seam with the necessary rounded shape tool for each case. We recommend wetting the defining tool with soap and water.

Applying the putty as an elastic adhesive.

Introduce the **p-404** cartridge into the applicator gun, pierce the end, screw in the nozzle, and cut it at 45 depending on the diameter of the putty seam to apply.

Apply the **p-404** seam on the substrate to bond, with the quantity deemed necessary. Instead of applying dots or blobs, we recommend applying putty seams separated by 10-15 cm.

Press the two surfaces to stick together, in order to distribute the adhesive uniformly. The final putty thickness shall not be greater than 3 mm.

Application of putty as an adhesive in butech's ventilated facade system

1. **p-404** caulk should be applied strictly in accordance with the site work instructions on the relevant product data sheets. For further information contact butech.
2. The installation of porcelain tiles on ventilated façades has to be carried out by trained operatives using safe working methods and where necessary, suitable protective clothing and equipment.
3. Ensure that operatives observe the manufacturer's and statutory requirements for storage and safe usage of caulks. The cartridges or tubes of **p-404** should be in good conditions, free of any damage and before the expiration date printed in the packaging.
4. Use equipment and methods recommended by sealant manufacturer and apply within the recommended air and substrate temperature ranges: do not use **p-404** caulk when temperature is under +5°C (41°F) or above +35°C (95°F). It is recommended to use thermal bags in order to keep **p-404** cartridges in a good temperature to work.
5. Do not apply to damp surfaces, to surfaces affected by ice or snow or during inclement weather. Do not heat the surface of the metal profiles to dry them or raise the temperature.
6. Clean the surface of the ventilated façade metal profiles, from any element that could interfere the contact between the adhesive and the tile. It is recommended to sand the profile by mechanical methods until removing any kind of dirt. After sanding, clean the metal profile with an organic solvent as alcohol 98° or acetone, until they are free from dust.
7. Cut the nozzle of **p-404** cartridge in right-angle in order to produce an adhesive cord of 25/64"(10mm) diameter, approximately.
8. Once the metal profile is perfectly clean, apply one **p-404** cord in zigzag of 25/64"(10mm) diameter over L-shape profiles, but two parallel cords on T-shape ones.
9. Apply the **p-404** caulk in a continuous cord, along all the length of the metal profile, even over the areas where fixing plates are going to be installed.
10. Respect the recommended diameter of the adhesive cord over ventilated façade profiles on the same plane but increase the diameter of the cord, as much as needed, over profiles under the general plane of the façade; for example, sub-frame reinforcing corner profiles. In façades, never apply **p-404** caulk by spots.
11. Proceed to install the porcelain tile over the adhesive cord when it is still fresh. It is recommended to use suction cups for large format porcelain tiles manipulation.
12. Press the porcelain tile over the adhesive cords in order to achieve a total contact between adhesive and tile; the final thickness of **p-404** adhesive bed do not be bigger than 1/8" (3 mm) It is recommended to use butech self levelling spacers in the joints between tiles, keeping them fixed to the porcelain façade tiles as much as possible.

Performance

- 2 x 2 mm Joint	75.0 m	
- 3 x 3 mm Joint	33.3 m	
- 5 x 3 mm Joint	20.0 m	
- 5 x 5 mm Joint	12.0 m	Consumption (ml / cartridge) = $\frac{300}{\text{width joint (mm)} \times \text{depth joint (mm)}}$
- 8 x 4 mm Joint	9.4 m	
- 8 x 6 mm Joint	6.2 m	

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 polyurethane putties.
- Clean up any remaining putty before it hardens. Be extremely cautious with non-slip floors, absorbent stone, or tiles with relief surface.
- Once the laying is carried out, clean the tool with methylated spirit or acetone before the remains harden.
- Check the supplier's maintenance instructions for the type of wall covering used.

Conservation

12 months in its original container and protected from moisture and the weather. Store in a dry place, covered and protected from direct sunlight. Between 5 - 25 °C

Safety and hygiene

- In some cases, there have been allergic reactions from inhaling this putty. It contains isocyanates.
- Please take the usual precautions in the use of chemicals, such as using gloves and safety goggles.
- Safety data sheets available to the professional user who requests them.

Additional instructions

- Do not use on surfaces covered in dust or that disaggregate easily.
- Do not use on dirty surfaces, or surfaces covered with any element that may interfere with the adherence.
- Do not use on wet surfaces. Protect from rain and frost at least during the first 24 h.
- Do not apply when the temperature is below 5 ° C or higher than 35 ° C.

- The layout, width, and construction details of the perimeter and intermediate movement joints, as well as the materials to be used, should be included in the ceramic tile laying design.
- Heed the structural joints present in the substrate.
- Make movement perimeter joints in corners, floor level changes, and height differences in material changes.
- As a general rule, make intermediate movement joints that delimit areas as square as possible, 16-25 m² indoors, and 50-70 m² outdoors. They shall have a minimum width of 8 mm.

- The technical information contained in this technical data sheet has been collected from approved laboratory tests and under the conditions indicated by the corresponding standards.
- For more information about this product, check with butech's Technical Department.

Technical Sheet Conditions

- This is not a finished product technical sheet. It belongs to a laying material which, together with other products and materials, configures a ceramic tile laying system. Instructions in this technical sheet have been written based on our experience and technical expertise, but they have to be only considered as general recommendations which, together with those for the rest of the products in the system, guide the laying professionals in 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 December, 2016.

Technical data

Appearance	Colored thixotropic paste
Smell:	Characteristic
Hazard	Irritant (see material safety data sheet)
Storage time	12 months in a dry place
Specific weight	1.18 g/cm ³
Application temperature	5 ° C to 35 ° C
Initial cross-linking	60 min.
Final hardening	24 h / 3 mm thickness

Shore A Hardness	DIN 53505	40
Elasticity modulus	ISO 8339	0.4 MPa
Elongation	ISO 8339	600 %
Resistance to acids and diluted bases	Medium	
UV light fastness	Good	
Resistance to saline fog	Excellent	
Heat resistance	-30 ° C to 80 ° C	

Data obtained in standard laboratory conditions, at 23 °C and 50% relative humidity.

References

SAP	Product description	Packaging	Palletizing
100005818	p-404 white	300 ml cartridge	25 Cartridge box
100005819	p-404 grey	300 ml cartridge	25 Cartridge box
100005820	p-404 black	300 ml cartridge	25 Cartridge box