

politech *Premium*



politech Premium is a reactive resin adhesive that is super easy to handle and easy to use, especially when we need maximum bonding strength and deformability. It is suitable for most wall coverings and substrates used in construction, ensuring the commissioning of materials such as L'ANTIC COLONIAL's AIRSLATE.

We work with it as a cement-based adhesive, but with the bonding, flexibility, and water resistance capabilities of a reactive resin adhesive. Professional use.

Recommended use

- It replaces all kinds of cement-based adhesives, facilitating installation on most substrates that are commonly used in construction.
- Installation of ceramic tiles in conditions which require high values of adhesion and deformability:
 - Radiant floors
 - High-traffic flooring
 - Wall tiles in direct contact with water; pools
 - Wall coverings in public baths, saunas, and spa-like facilities
 - Outdoor floors; terraces
 - Street furniture
 - Porcelain tiles in exterior walls or facades
- Indoor and outdoor wall coverings with thin stone sheets such as L'ANTIC COLONIAL's AIRSLATE.
- Reconstituted flooring made with resin, quartz, and crystal such as L'ANTIC COLONIAL's DQS.
- Indoor and outdoor wall coverings made with ceramic slabs such as URBATEK's XLIGHT.
- All kinds of mosaics, including wood, glass, and metal, even in shower cabins.
- Laying of slate and other natural stones with risk of deformation by water absorption.

Materials

- Large-format ceramics.
- Porcelain tiles (water absorption < 0.5% as per EN-ISO 10545-3).
- Large-format thin porcelain tiles such as URBATEK's XLIGHT.
- Back-meshed ceramic tiles.
- Glass mosaic.
- Natural stone and marble slabs.
- Back-meshed natural stone slabs: specially recommended for thin stone sheets glued on the back, such as L'ANTIC COLONIAL's AIRSLATE.
- DQS slabs and other kinds of artificial stone that are reconstituted with resin, quartz, and marble crystals.
- Metal slabs

Substrates

- Cement covered floors and walls
- Concrete covered floors and slabs
- Asphalt floors
- Existing wall tiles
- Plasterboards and plaster or anhydrite walls
- Plasterboards
- Wood substrates
- Plywood boards
- Metal sheets
- Rubber or PVC surfaces
- Surfaces painted with epoxy or polyurethane-based resins
- Do not use on any type of polystyrene (EPS, XPS...) substrates or wall coverings

Before applying **politech Premium** on any substrate not stated in the previous list, carry out a test first or check with butech's Technical Department.

Characteristics

- Two-component epoxy adhesive
- Low viscosity, which facilitates its preparation and use; virtually the same as an adhesive
- Excellent adherence
- Maximum deformability
- No water absorption
- Extended working times; setting time higher than 60 min
- Application thickness up to 15 mm
- High wettability
- Quick-drying; admits light traffic 6 hours after installation
- Frost-resistant
- Professional use

Certifications / Standards

EN 12004

R2

Instructions for use

Preparing the substrate

The substrate or laying base must be dimensionally stable, without risk of cracking and shrinkage due to mortar setting. In the case of substrates of over 40 mm, and in order to reduce structural movement tensions, we recommend decoupling the substrate using a polyethylene sheet, and making a joint around the whole floor perimeter. Alternatively, we recommend making a fully bonded base with mortar screed.

Substrates shall meet the appropriate characteristics for laying the tiles on a thin layer with a notched trowel:

- Residual humidity under 3%.
- Clean of dust, grease, or any other substance that may compromise the bonding material adherence.
- Compact and free of cracks, fully set.
- Rough texture, efflorescence-free.
- Level and flat, deviations under 2 mm every 2 m of surface.

In the case that any of the defects listed above are present, they must be fully corrected before starting to lay the ceramic.

Do not use this adhesive in substrates with risk of climbing moisture.

In very absorptive or inconsistent substrates, it is recommended to apply a primer to strengthen the substrate cohesion and reduce water absorption. We recommend using **uniprim**, primer based on synthetic resins.

Preparing the adhesive

politech Premium is a two-component adhesive made up of epoxy putty (component A) and a catalyst (component B). The following are the instructions for preparing this adhesive:

- Use clean containers and tools.
- Mix with a ratio of:

• Component A	8.6 kg	86 %
• Component B	1.4 kg	14 %
- Do not add water or any other kind of solvent.
- Pour component B on component A, and mix manually until the catalyst impregnates the epoxy putty superficially.
- Afterwards, mix with an electric mixer at low rpm (500 rpm) until the mass is creamy, thick, uniform, and without lumps.
- Let stand 5-10 minutes.
- Stir with a hand trowel, and apply.

Applying the adhesive

For laying ceramic tiles or similar, the only recommended technique for **politech Premium** adhesive is laying the tiles on a thin layer with a notched trowel. The notched trowel type will depend on the amount of adhesive to use in laying the tiles which, in turn, depends on the tile size, the characteristics of the tile back, and evenness of the laying surface. The following are the instructions for applying this adhesive:

- 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 the adhesive in a homogeneous and linear way. It is recommended to apply the adhesive perpendicular to the long side of the tile.
- Before laying the tile 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 tile on the adhesive until you get a uniform and full contact. We recommend pressing the tile with a slight back and forth movement, to squash the adhesive groove and cover the back of the tile.
- Check periodically, by removing an already placed tile, the level of adhesive coverage. We recommend a minimum level of 75%
- In the case of large formats, outdoors laying, radiant floors, heavy traffic, or overlappings, there must be 100% contact; therefore we recommend using the double bonding method where, besides applying the adhesive on the substrate as mentioned above, a thin layer is applied with the smooth end of the trowel on the back of the tile.
- The maximum adhesive thickness should not exceed 15 mm.
- Once the setting time has passed, clean the installation joints in their full length, width, and depth.

Commissioning

Observe waiting times before commissioning the flooring or wall covering installed with **politech Premium**:

- Light traffic: 6-20 hours
- Heavy traffic: 12-24 hours
- Pools: 3 days

Hardening of the adhesive is influenced by environmental conditions, so that temperatures above 23 °C speed up its commissioning, while lower temperatures slow it down.

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 installation joints, we recommend the professional line of technical mortars 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 general rule, it is not recommended to leave installation joints smaller than 1.5 mm indoors and 5 mm outdoors. There is currently a wide range of spacers and separators that make the work of the ceramic layer easier, but we highly recommend butech's self-leveling separators which, in addition to marking the joint width, avoid the appearance of ledges between tiles, and laying defects.

Consumption

- 3 x 3 Notched trowel 1-2 kg / m²
- 4 x 4 Notched trowel 2-3 kg / m²
- 6 x 6 Notched trowel 3-4 kg / m²
- 8 x 8 Notched trowel 4-5 kg / m²

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 epoxy adhesives.
- Clean up any remaining adhesive with clean water, before it hardens. Once the **politech Premium** has hardened, remove mechanically or check with **butech's Technical Department**
- Once the laying is carried out, clean the tool with plenty of water before the remains harden. In the case that it is not completely clean, use abundant methylated spirit or acetone before it hardens
- Check the supplier's maintenance instructions for the type of wall covering used
- Before using any solvent, consult its safety sheet and take the recommended safety measures

Storage

- 24 months in its original container and protected from moisture, the weather, and frost. Store in a dry place, covered and protected from direct sunlight
- Before using, keep **politech Premium** at a temperature of 20 °C for 2-3 days prior to application

Safety and hygiene

- **politech Premium** is a corrosive chemical that can also cause an irritant effect on the skin and mucous membranes. Safety data sheets available to the professional user who requests them

Warnings

- The only recommended laying technique is laying the tiles on a thin layer with a notched trowel.
- Choose the notched trowel depending on the size of the wall covering slab or tile.
- Carry out the laying through the double bonding method on tiles with format greater than 1000 cm², and applications where you need 100% contact between the ceramic and the substrate: outdoor settings, radiant floors, with heavy traffic, or overlappings.
- **politech Premium** is an adhesive for professional use. Follow scrupulously all instructions for preparing and applying the adhesive.
- Using **politech Premium** with a thickness of less than 2 mm and more than 15 mm reduces its overall performance as an adhesive.
- Working times depend on the wind, humidity, and room temperature workplace conditions, so the working times specified on this sheet may vary regarding those of the place where the work is being carried out.

Technical data

Appearance of Component A	Dense beige colored paste
Appearance of Component B	Grey-colored liquid
Hazard	Irritant and corrosive (see material safety data sheet)
Flammability	No
Storage time	24 months in a dry place
Proportion of component A	86 %
Proportion of component B	14 %
Specific weight of the mixture	1.45 g/cm ³
Viscosity of the mixture	7 Pa .S
Application temperature	from 5 °C to 35 °C
Durability	< 100 min.
Wait for grouting	4 h.
Trafficability	6 h.
Final commissioning	
- Light traffic	6 hours
- Heavy traffic	12 hours
- Pools	3 days

Data obtained in standard laboratory conditions, at 20 °C and 50% relative moisture.

Adherence as per EN 1348:	
- 28 days	≥ 4 N/mm ²
Action of heat	≥ 4 N/mm ²
- Immersion	≥ 2 N/mm ²
- Freeze/thaw cycles	≥ 2.0 N/mm ²
Deformability as per EN 12002	≥ 50 mm
Heat resistance	-35 °C to 90 °C

Data obtained in standard laboratory conditions of at 23° C.

References

SAP	Product description	Packaging	Palletizing
100217753	politech Premium 10 kg comp. a+b	10 kg can	33 cans / 330 kg