



## POLIMIN P-27 ULTRAFLEX

### Quick-setting adhesive compound

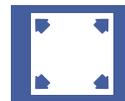
For fixing tiles made of natural and artificial stone in interior and exterior applications

- Colour: white, grey;
- quick-setting (6 hours);
- highly adhesive;
- for ceramic, reconstituted granite, and concrete tiles that are large in size;
- waterproof, frost-resistant.

WHITE / GRAY



quick setting



large-format ceramic, reconstituted granite, and concrete tiles



good adhesion



waterproof, frost-resistant

**PACKAGING 25 kg**

### Product

**POLIMIN P-27 ULTRAFLEX** is a quick-setting adhesive for tiles made of glass, mosaic, natural or artificial stone, marble with maximum dimensions of 800x800 mm for exterior and interior applications; ready for light foot traffic after 6 hours.

The improved product formula ensures the following advantages:

- **reliable bonding of large reconstituted-granite, clinker, and brick tiles, mosaic, and marble;**
- **grouting** of joints on vertical surfaces after 3 hours;
- **readiness for light foot traffic** after 6 hours;
- displacement resistance for top down tile setting;
- wide range of application thickness (2–10 mm), for thin-layer bonding of tiles and use on rough-surfaced bases;

### Usage

Table 1

fixing ceramic and stone facing materials	
compatible tile types	suitability
glazed ceramic tiles	+
brick tiles	+
clinker tiles	+
ceramic and floor decorative elements	+
ceramic mosaic	+
natural stone with high colour fastness	+(white)
glass blocks, mosaic	+(white)
fixing facing materials of different sizes	
for vertical and horizontal surfaces ( $\leq 800 \times 800$ mm)	+
fixing tiles on vertical and horizontal surfaces in interior and exterior applications	
residential housing	+

Table 1 (continued)

kitchens, bathrooms, laundry rooms, garages	+
commercial and office premises, public facilities with low and moderate operating loads	+
fixing facing materials of various sizes	
concrete	+
cement floors	+
anhydrite cement floors	+
cement, cement-lime and anhydrite cement surfaces	+
walls of cellular concrete	+
walls of calcium-silicate brick or hollow blocks	+
walls of ceramic brick or hollow blocks	+
walls of gypsum blocks	+
cement floor lining with electric and water floor heating systems	+
plasters with wall-mounted heating systems	+
gypsum boards, fibre reinforced gypsum boards and fibre reinforced cement boards	+

Table 2

Characteristics	
water ratio	0.2-0.24 l per 1 kg 5-6 l per 25 kg
working time	min. 35 minutes
open time	min. 10 minutes
tile adjusting time	min. 10 minutes
grouting	3–6 hours
substrate adhesion strength in air-dry conditions after 28 days, N/mm <sup>2</sup> , min.:	min. 24 hours
- ceramic tiles;	2.0
- reconstituted granite tiles (water absorption: above 0.2%)	1.2

Table 2 (continued)

foot traffic/ live load	after 6 hours/1 day
max. adhesive layer thickness	10 mm
substrate and ambient temperature during application	from +5°C to +30°C
operation temperature	from -30°C to +70°C
packaging	paper bags: 25 kg

The recommended time values specified in the table are based on application temperature of 20–22°C and humidity of 60%.

## Standards

The product complies with the requirements of EN 12004 for C2F class adhesives. Declaration of Performance No. CPR 1/015.

Table 3

  <small>www.polimin.ua</small>	
fire resistance class	A1
early substrate adhesion strength (6 hours)	≥ 0.5 N/mm <sup>2</sup>
initial substrate adhesion strength	≥ 1.0 N/mm <sup>2</sup>
substrate adhesion strength after curing in air-dry environment	≥ 1.0 N/mm <sup>2</sup>
substrate adhesion strength after curing in warm conditions	≥ 1.0 N/mm <sup>2</sup>
substrate adhesion strength with the base after cyclical freezing-thawing	≥ 1.0 N/mm <sup>2</sup>

## Working surface preparation

The substrate should be:

**Stable** — solid, with sufficient load-bearing capacity, resistant to deformations, cured and cleaned of layers that reduce adhesion.

**Flat** — to follow the maximum adhesive layer thickness of 10 mm, level the substrate by applying floor underlay in case of horizontal surfaces and plasters in case of vertical surfaces, as applicable.

**Cleaned** of layers that reduce adhesion (lime, oil, fat, wax, oil-based and emulsion paints). Pre-treat substrates contaminated with fungi, mould, etc. using special products.

**Dusted** with industrial vacuum cleaners or manually.

**Primed** for additional strengthening of base surface and prolonging adhesive working time. Use Polimin AC-7 for priming standard substrates, and Polimin AC-5 for highly absorbent substrates. Polimin AC-4 is used in case of smooth substrates, low absorbent substrates (concrete), substrates with coatings that limit adhesion, or gypsum substrates.

Table 4

Detailed substrate preparation instructions by substrate type	
substrate type	curing for at least 28 days after installation, optimum moisture content <4%, priming with Polimin AC-7
new cement floor underlayment (Polimin LC-2, LC-4)	optimum moisture content <4%, priming with Polimin AC-7

Table 4 (continued)

Detailed substrate preparation instructions by substrate type	
substrate type	curing for at least 28 days after installation, optimum moisture content <4%, priming with Polimin AC-7
new cement floor underlayment (Polimin LC-2, LC-4)	optimum moisture content <4%, priming with Polimin AC-7
well-cured cement floor lining	curing for at least 28 days, preheating, priming with Polimin AC-7
cement underlayment with water floor heating system	curing for at least 3 months, optimum moisture content <4%, cleaning of residual formwork oil, priming with Polimin AC-4
new concrete substrates	optimum moisture content <4%, cleaning of residual formwork oil, priming with Polimin AC-4
well-cured concrete substrates	degreasing, removal of the upper (polished) layer, priming with Polimin AC-4
concrete (terrazzo) substrates	gluing directly onto unplastered walls is possible if appropriate flatness tolerances (maximum adhesive thickness of 10 mm) are met, otherwise apply a layer of plaster. New walls should be constructed at least 6 months before tile installation using full-joint technique Brick walls: priming with Polimin AC-7 Walls of cellular concrete: priming with Polimin AC-5
walls of bricks, blocks, cellular concrete	curing for at least 7 days, priming with Polimin AC-7
new cement, cement-lime plasters	priming with Polimin AC-7
well-cured cement, cement-lime plasters	priming with Polimin AC-4

## Application procedure

### Preparation of the adhesive

Empty the dry mix from a bag into a container with an accurately metered amount of clean water (please refer to water ratio in Table 2 above) and mix with a low speed mixer to obtain uniform consistency. Allow to stand for 5 minutes and then remix. The ready adhesive should be used within approximately 30 min.

### Application of the adhesive

Apply the adhesive to the substrate with a smooth steel trowel, then evenly distribute and comb it (in a single direction) with a notched trowel. It is recommended that you rub a thin adhesive layer into the substrate first. Then apply a thicker adhesive layer and immediately comb with a notched trowel. Spread the mass by moving the trowel in one direction, holding it at an angle of 50–60° with respect to the surface. Adhesive on walls should be combed in a vertical direction.

### Attaching tiling

The adhesive retains its adhesive performance for about 30 minutes after it has been spread onto the substrate surface (at a temperature of +20 to +22°C and humidity of 60 %). Place and thoroughly press in a tile within this time. The adhesive/

tile interface should be even and as large as possible, but at least 2/3 of the tile surface. Remove excess adhesive in a timely manner that appears in joints when the tiles are pressed in. Applying the adhesive to the entire interface surface is recommended for floor and outdoor tiling applications. Use the combined application method by applying the adhesive mass both to the substrate surface and back of the tile, if necessary. Follow joint width requirements that depend on the size of the tile and operating conditions (please refer to Polimin tile grout data sheets).

### Adjusting tile position

Tile position can be slightly adjusted by carefully moving it over the surface with applied adhesive. The position can be adjusted within approximately 10 min after placing the tile (at a temperature of about +22°C and humidity of 60%).

### Grouting and using the finished coat

Walking on the floor coating is possible after approximately 6 hours. Grouting on vertical surfaces - after 3 hours, on horizontal surfaces - after 6 hours. Grouting with Polimin Fuga Superflex tile grout is possible approx. 3-6 hours after tiling finishing. Fill expansion joints between tiles, seams along the walls, spaces adjacent to sanitary ware with sanitary silicone.

### Rate of consumption

The average rate of consumption for filling the entire space under tiles: about 1.7 kg of dry mix per 1 m<sup>2</sup> for every 1 mm of adhesive thickness. Depends on the flatness and absorbency of both the substrate and the back tile surface.

Table 5

Estimated tile adhesive consumption:			
tile size, mm	trowel teeth spacing, mm	min. application thickness	consumption rate, kg/m <sup>2</sup>
max. 20x20	3-4	2	3 and more
max. 100x100	≥ 4	3	4 and more
max. 400x400	≥ 10	6	7 and more
max. 500x500			
max. 600x600	≥ 12	8	10 and more
max. 800x800			

### Storage conditions

Store tightly closed in the original bags, in a dry environment (preferably on pallets). Protect from moisture. Storage life under the specified conditions is 6 months from the date of manufacture stated on label.

### Additional information

Do not soak tiles before application. When determining the adhesive thickness for certain tiles, always make provision for dimensional deviations of the tile, e. g. flatness deviation. **When attaching tiles to weak substrate surfaces, where it is difficult to determine the bearing capacity (e. g. dusting, hard to clean surfaces), it is recommended that**

**you determine the level of adhesion by testing, i. e. by appropriate substrate preparation, attaching a tile and checking the adhesive strength after 48 hours.**

- Open time, i. e. time during which reliable laying and adjustment of tiles is ensured, is limited to about 20 minutes. Test the applied adhesive with a finger to check whether it is still suitable for bonding tiles. The adhesive is still workable if some adhesive sticks to your finger. If your finger remains clean after the "finger test", remove the old adhesive layer and apply a new one.
- Wash tools with water immediately after use.
- The product contains cement. It is irritating to the respiratory system. Causes eye damage. May cause an allergic skin reaction. Keep out of the reach of children. Do not inhale dust. Wear protective clothing, protective gloves, safety goggles or face shield. In case of skin (or hair) contact, immediately take off contaminated clothing and wash the skin with plenty of running water (take a shower). Seek medical advice in case of skin irritation or rash. In case of eye contact carefully rinse with water for several minutes. Remove contact lenses if worn and easy to do so. Continue rinsing. Follow recommendations provided in the safety data sheet. The content of soluble chromium (VI) in the finished product is ≤ 0.0002%.

### Special Information

The reliability of this data is based on laboratory tests and practical experience, and is relevant for the period specified in the technical specification.

The quality of the material is provided by a proprietary quality system that meets the requirements of the international standard ISO 9001.

The application, performance of work using the material shall be carried out in accordance with current regulatory documentation on the territory of the country.

The manufacturer can not incur liability for damage caused by use of the material not in accordance with the issued specifications for use or when not used for its intended purpose. With the new edition's release, this document will cease to be in force.

*The information contained in the technical card provides basic data relating to the application of the product and does not release from the obligation of performance of works in accordance with building codes and safety regulations. Since the issuance of this technical card, all previous ones have been cancelled. The current technical documentation of the product is available on drive. polimin.ua or polimin.ua in the relevant language section.*

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