



## FLEX 104 Elastyczny klej do płytek

Flexible, universal tile adhesive

**Areas of application:** Professional adhesive mortar designed for gluing ceramic and terracotta tiles, wall and floor tiles with absorbability > 3% to rigid, non-deformable substrates inside and - in the case of using frost-resistant tiles - outdoors. For use in places not exposed to significant deformations due to temperature changes (occurrence of thermal stress).  
It is characterised by very high flexibility, excellent adhesion, and reduced slip.  
Meant for tiling difficult surfaces: on balconies and terraces, in places of high level of moisture (bathroom, kitchens, laundry rooms), on jointless cement and anhydrite floors, also with underfloor heating systems.  
Can be also used for applying natural stone tiles (with the exception of marble), after verifying their possible discoloring.  
Indoor and outdoor use

- Properties:**
- Flexible
  - Frost-resistant
  - C2TE class
  - On the balconies and terraces
  - For floor heating systems
  - For old ceramic tiles
  - For wet rooms
  - Long open and correction time
  - Very high adhesion
  - Easy to process

**Application procedure:**



Technical data	
Packaging type	
Quantity per unit	20 kg/unit
Unit per pallet	64 Pcs/pallet
Density	approx. 1.4 g/cm <sup>3</sup>
Drying time	from 24 to 48 hours
Application time	max. 3 h
Layer thickness	2 - 10 mm
Soluble chromium VI content	≤ 0.0002 %
Amount of water required	5.1 L/bag
Reaction to fire	A1/A1fl
Possibilities to enter	approx. 24 h
Stressable	7 d
Groutable	after 48 hours
Adhesive group (EN 12004+A1)	C2 TE
Adhesion to (Concrete)	≥ 1 N/mm <sup>2</sup>
Correction possibility	approx. 20 min
Adhesive open time	30 min
Surface temperature	> 5 - < 30 °C

**The product conforms to:** • EN 12004+A1



## FLEX 104 Elastyczny klej do płytek

Flexible, universal tile adhesive

---

<b>Material base:</b>	<ul style="list-style-type: none"><li>• Mineral fillers</li><li>• Modifying supplements</li><li>• Polymers</li><li>• Portland cement</li></ul>
<b>Surface:</b>	<p>Remove all unstable grouts and coats. Plasters and cement screeds must be at least 4 weeks old, gypsum plasters and anhydrite screeds must be at least 2 weeks old. Grind and vacuum anhydrite screed. Concrete groundwork must be at least 6 months old.</p> <p>Level all groundwork irregularities with the 428 leveling grout. Irregular cement and concrete floor surfaces should be leveled with the EXTRA FLOOR 418, QUICK-SETTING SELF LEVELING GROUT 417 or EXPERS 419 self-leveling grout.</p> <p>Clean all old, well-gripping ceramic tiles and oil wainscot and execute a contact layer using a class C2, S1 or S2 adhesive or the GRUNTOBET 310 primer. Remove all bituminous mass residues (left after removed parquets) from the groundwork.</p>
<b>Types of substrate:</b>	<p><b>Concrete, reinforced concrete:</b> Prime with CONTACT GRUNT 307</p> <p><b>Gypsum, gypsum-lime, cement, cement-lime and lime cement:</b> Prime with GRUNTOLIT-B 300 or GRUNTOLIT-W 301 or EXPERT 6.</p> <p><b>Gypsum plasterboards:</b> Prime with GRUNTOLIT-B 300 or GRUNTOLIT-W 301 or EXPERT 6.</p> <p><b>Cement screed:</b> Prime with GRUNTOLIT-B 300 or GRUNTOLIT-W 301 or EXPERT 6.</p> <p><b>Anhydrite screed:</b> Grind, clean and prime with GRUNTOLIT-SG 302 or EXPERT 5</p> <p><b>Liquid foil, polymer-cement sealants:</b> Do not prime</p> <p><b>Autoclaved aerated concrete elements:</b> Prime with GRUNTOLIT-B 300 or GRUNTOLIT-W 301 or EXPERT 6.</p> <p><b>Bricks and ceramic CMUs, silicate:</b> Prime with GRUNTOLIT-B 300 or GRUNTOLIT-W 301 or EXPERT 6.</p> <p><b>Old ceramic tiles and oil wainscot:</b> Degrease, clean, and execute a contact layer made of elastic tile adhesive or prime CONTACT GRUNT 307.</p> <p><b>Terrazzo:</b> Degrease, clean, and execute a contact layer made of elastic tile adhesive or prime CONTACT GRUNT 307.</p>
<b>Preparation:</b>	<p>Pour the dry mix gradually to a container with a sufficient amount of clean, cool water. Mix manually or using a low-speed mixer to produce a homogeneous mass without lumps. Leave to mature for 5 minutes and mix again. The mass should be thick enough not to slide from a trowel when set at an angle.</p> <p>If there is a need to use a part of the packaging, the entire dry compound must be carefully stirred because during transport components could be separated.</p> <p>Do not mix the hardened grouting mixture again.</p> <p>If needed, correct the amount of added water based on the application location (wall, floor).</p>

---



## FLEX 104 Elastyczny klej do płytek

Flexible, universal tile adhesive

<b>Application procedure:</b>	<p>Apply the prepared mortar onto the steel trowel and firmly spread a thin layer across the bed using the straight edge. The next step is to apply a thicker mortar layer and spread it using the notched edge of the trowel at an angle of 45-60 degrees to the bed. The area covered with the mortar should be adjusted to the tiles laying abilities not to exceed the open drying time of the adhesive. It can be verified by touching the grout with a finger, if no adhesion occurs, the open drying time was exceeded and the grout should be removed from the surface and replaced with a fresh layer. The tiles should be laid by placing the second one as close to the first one and moving it to receive a joint of proper width. The tiles should not be wet before laying! Press tiles and if need be strike with a rubber hammer against the bed so that the adhesive will adhere to at least 70% of surface of a tile. Tiles bigger than 30x30 cm, all tiles laid outside and in permanently wet and intensively used places should be laid so that the adhesive will adhere to the entire tile surface. In order to meet these requirements the adhesive should be also applied to the entire back of the tile with a thin layer of equal thickness, covering the concavities and convexities.</p> <p>The joint width should be chosen based on the tile size. Internal floors adopt the following: minimum 2mm - at the tile side length up to 10 cm, 2-6mm - using tiles of 10-25cm, 4-8 mm - using tiles of 25-30 cm. Before the adhesive dries, the possible grout residue should be removed from the joints, and the tiles should be washed with water. For the external floors, depending on the tile colour and sunlight, the provided values should be increased by 50-80%. In case of clinker tiles, the floor should be coated with HYDROMUR-W 1010, but not sooner than 4 days after pointing. Facades exposed to precipitation should be protected from rainfall until the moment of impregnation.</p>
<b>Application conditions:</b>	<p>Apply in temperatures from +5 °C to +30 °C, these temperatures refer to air, groundwork and product temperature.</p> <p>Groundwork must be cleared from dust, grease, anti-adhesive solutions, paint residue, mold, algae, moss, etc., free from cracks and saline efflorescence.</p>
<b>Instructions:</b>	<p>Avoid contact with skin and protect eyes. Detailed guidelines are included in the material safety data sheet.</p>
<b>Storage:</b>	<p>Up to 12 months from the date of manufacture, in dry places and in intact packaging</p>
<b>General information:</b>	<p>This product data sheet replaces all its previous versions. The information, included in this technical card, represents our current knowledge and practical experience. This is general information only which shall not obligate the manufacturer to take any responsibility either for workmanship or for the manner of use. For there may be differences and specific execution conditions. The product shall be applied in accordance with required technical knowledge and OHS rules. Avoid contact with skin and protect eyes. In case of contact with eyes, rinse them up with a large quantity of clean water and consult a doctor. It shall be recommended to use gloves, safety goggles and protective clothing.</p> <p>All technical data is given for a temperature of +20 °C and a humidity of 60 %. In the case of drying times, binding, pointing, open, correction, water resistance, etc., these values are given for a typical layer thickness of the product, which for the tile adhesive is about 5mm, primer and self-leveling screed of about 10mm, screeds about 25mm. In special cases, they may deviate from this accepted average and should be determined experimentally. In case of doubts and not included in this record, it is recommended to contact the technical department of KREISEL.</p>