

# Technical Data Sheet

Release 2: 12/02/2020

# KP600 ultra flex

# highly elastic polymer-modified tile adhesive

## C2 TE S2 type

- Highly suitable for large format tiles
- Suitable for substrates subject to movements and contraction-expansions
- Resistance to permanent moisture, frost and temperature changes
- Extended open time for tile application
- Strongly thixotropic: prevents vertical sliding of the tiles during application
- C2 TE S2 highly deformable adhesive certified according to EN 12004-1















### **KP 600 ULTRA FLEX**

highly elastic polymer-modified tile adhesive

#### DESCRIPTION

Highly-deformable, polymer-modified, cement-based tile adhesive, for highly demanding applications.

It exhibits exceptional all-around performance with very high adhesion strength, no vertical slip, extended open time and remarkable resistance to moisture, frost and temperature changes.

Classified as C2 TE S2 type cementitious adhesive according to European standard EN 12004-1.

#### APPLICATIONS

Suitable for the installation of large-format tiles (indicatively 3.0x1.6m), sensitive natural or artificial tiles treated with epoxy-based reinforcing back-coat, but also any other type and size of absorbent and non-absorbent tiles, glass mosaics, etc.

It is applied on walls and floors, on concrete, floor screeds, masonry, render and over existing floors (old tile layers, terrazzo, etc.).

Ideal for applications in permanently moist areas and on substrates subject to contraction-expansions, heavy traffic and thus with high demands for adhesion, flexibility and watertightness (e.g. metallic surfaces, swimming pools, underfloor heating installations, terraces, balconies, shopping centers, hotels, etc.).

Also, on gypsum, cement or fiber boards provided they are treated with suitable primer.

For indoor and outdoor applications.

#### **PROPERTIES / ADVANTAGES**

- Highly deformable cementitious adhesive mortar type S2, for applications on substrates subject to movements and contraction-expansions.
- High adhesive strength. Excellent workability.
- Strongly thixotropic. Zero vertical slip of the tiles during application.
- Extended open time for tile application.
- Resistance to moisture, frost and temperature changes.
- Suitable for indoor and outdoor applications.

#### HARMONIZED STANDARDS / REGULATIONS

• EN 12004-1: Improved highly deformable cementitious adhesive with reduced slip and extended open time, type C2 TE S2.

 Regulation (EE) No. 305/2011: CE marked product with Declaration of Performance (DoP): KP600/CPR-7-13/025/10-2013.

#### APPLICATION INSTRUCTIONS

- The substrate must be clean from dust, grease, subtle materials, etc., prior to application.
- In case of weak, very absorbent substrates, prime the surface with the micromolecular, deep-penetrating primer ACRYLIC PRIMER.
- **KP 600** can be applied on existing floors and nonabsorbent surfaces without the need for an adhesion promoting primer.
- For the application of the adhesive on cement boards, gypsum boards and gypsum plaster the surface must be pre-treated with ACRYLIC PRIMER or FINO•CONTACT.
- The content of the bag (25kg) is gradually added into 7.00-7.25 kg of clean water under continuous stirring, until a homogenous mixture without lumps is formed, having the desired workability. It is recommended to use a low speed electric mixer (~300rpm).
- The mixture should be left to settle for about 5 minutes and then be slightly stirred again.
- The adhesive is applied on the substrate with a notched trowel and then the tiles are pressed gently in the desired position.
- If the mixture starts to stiffen, it should be stirred again without adding extra water, in order to regain its workability.
- The tiles should be placed within 30 minutes from the application of the adhesive, depending on the environmental temperature and moisture, in order to avoid "film" formation on the surface of the adhesive.
- The surfaces can be grouted after 12 hours for walls and 24 hours for floors. Final strength is achieved after 14 days.

#### **CLEANING OF EQUIPMENT**

Clean all tools and application equipment with water immediately after use. Hardened material can only be mechanically removed.

#### RECOMMENDATIONS

- Temperature during application should be between +5°C and +35°C.
- Do not mix the product with dirty or salty water.
- Don't use excess water for mixing as it will affect the properties of the product.
- Do not add water after the mix has started to set.
- Do not apply the product outdoors when rain or frost is imminent in the next 24 hours.

TECHNICAL CHARACTERISTICS		
PRODUCT CHARACTERISTICS		
Appearance		cementitious powder
Colour		white
Bulk density		1.40 ±0.05 kg/lt
APPLICATION CHARACTERISTICS (+23°C / 50% R.H.)		
Mixing ratio		28-29% b.w. (7.00-7.25 kg of water/25kg bag)
рН		> 11
Density		1.60 ±0.05 kg/lt
Pot life		3-4 hours (22°C)
Application temperature		minimum: +5°C / maximum: +35°C
Application thickness		≤ 10 mm
Consumption		approximately 2-5 kg/m <sup>2</sup> depending on the substrate's roughness and the dimensions of the tiles
Open time (EN 12004-2, 8.1)		30 minutes (22°C)
Vertical slip (EN 12004-2, 8.2)		< 0.4 mm
Ready for grouting on wall		after 10-12 hours
Ready for grouting on floor		after 24 hours
Surfaces ready for light foot traffic		after 24 hours
Surfaces ready for use		after 14 days
PERFORMANCE CHARACTERISTICS		
Tensile adhesion strength (EN 12004-2, 8.3)	initial, after 28 days	> 2.00 N/mm <sup>2</sup>
	after heat ageing	> 2.50 N/mm <sup>2</sup>
	after thermal ageing (70°C)	> 1.30 N/mm <sup>2</sup>
	after freeze-thaw cycles	> 1.60 N/mm <sup>2</sup>
Deformability (EN 12004-2, 8.6)		S2 - highly deformable (S $\ge$ 5.00 mm)
Resistance to alkalis		excellent
In use temperature		from -30°C to +90°C

**Note:** Measurements were conducted in a laboratory environment. The varying conditions present on-site (temperature, humidity, ventilation, substrate absorbency) may affect the material's properties.

#### SAFETY PRECAUTIONS

- The product contains cement which has an alkaline reaction with water and is classified as irritant.
- Always wear appropriate personal protective equipment for eyes and skin (protective clothing, gloves and goggles).
- If skin contact occurs, rinse well with plenty of clean water.
- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

- Consult product's Safety Data Sheet for further instructions on safety handling.
- PRODUCT FOR PROFESSIONAL USE.

#### PACKAGING - STORAGE

Available in:

25kg paper bags.

**Storage:** 12 months from production date, if stored in original, sealed packaging, protected from direct sunlight and moisture.

#### LEGAL NOTICE

The technical characteristics and recommendations for the use and application of the **FINOMIX** range of products are based on the knowledge and experience of the company. The above information shall be considered merely indicative and subject to confirmation after long-term practical application. For this reason, anyone who intends to use the product must ensure that it is suitable for the envisaged application. Since the specific site conditions during the applications are beyond the control of our company, the user alone is fully responsible for any consequences deriving from the use of the product. **FINOBETON S.A.** (**FINOMIX**) has the right to modify the properties of its products without prior notice. This release voids any previous publications issued for this technical specifications sheet.





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