SUPERFLEX K77

HIGH PERFORMANCE DEFORMABLE NON-SLIP WHITE OR GREY CEMENTITIOUS ADHESIVE WITH EXTENDED OPEN TIME PARTICULARLY SUITABLE FOR LAYING LARGE SIZE PORCELAIN STONE AND NATURAL STONE. SUITABLE FOR INSTALLATION OVER EXISTING TILES AND HEATED FLOORS.

DESCRIPTION
Grey powder adhesive based on Portland cement, inert fillers and organic additives

PACKAGING
25 kg bags - Standard pallet 1500 kg

CLASSIFICATION UNI EN 12004
SUPERFLEX K77 + 32-34% WATER
Class C2TE
Enhanced non-slip cementitious adhesive with extended open time

CLASSIFICATION UNI EN 12002
Class S1 deformable adhesive

FIELDS OF APPLICATION
Suitable for laying any types of ceramic tiles and natural stone in a humidity stable environment for interiors and exteriors, walls and floors. Particularly suitable for laying large size porcelain stone also on uneven surfaces up to a maxium thickness of 15 mm. Thanks to the high content of polymeric resins, this product can be used on heated flooring and for installation over existing tiles. The product also features an extremely high thixotropy which makes it suitable for laying tiles on walls thanks to its non-sag properties and without the need for spacers. The product can also be used for "point-gluing" insulating panels made of polystyrene, aerated polyurethane, cork, rock wool. See application chart.

SUBSTRATES *Pre-treated with PRIMER X94 or PRIMER C.	MINIMUM CURING TIME	MAXIMUM RESIDUAL MOISTURE CONTENT	GENERAL CONDITIONS
Cement-based screeds	28 days	3%	Clean Solid and compact Free from cracks Flat and level Sufficiently cured
LITOCEM screeds	24 hours	3%	
Anhydride screeds*	-	< 0,5%	
Concrete	4 months	-	
Cement-based plaster	1 week per cm thickness	-	
Gypsum based plaster*	-	< 0,5%	

EXPANSION JOINTS
Movement joints have the function of interrupting the continuity of the tiled surface, thereby compensating for dimensional changes and deformations affecting the tiles, adhesive and substrate. The joints must always extend through both the bedding layer and the tiles.

	INTERIORS	EXTERIORS
RECOMMENDED SPACING	Squares from 6x6 m to 10x10 m	Squares from 3x3 m to 5x5
WIDTH OF JOINTS	Floors: ≥ 6 mm Walls: 6 mm (never < 3 mm)	Squares 3x3: 10 mm Squares 5x5: 12-13 mm
SUITABLE SEALING PRODUCTS	PVC, aluminum or steel strips depending on expected traffic. Silicone sealants	Silicone sealants

APPLICATION PHASES

MIXING RATIOS
SUPERFLEX K77 25 kg. (1 bag)
Water 8-8,5 l (32-34%)

MIX PREPARATION
Put the correct quantity of water into a clean container and slowly add the powder. Mix with an electric drill equipped with mixing paddle until a uniform, lump-free mix is obtained. Leave the mix to rest for at least 5 minutes then re-mix briefly for a few seconds.

APPLICATION

Spread the mix onto the substrate using the smooth part of the trowel to create a layer of about 1 mm thickness. Immediately afterwards comb the surface of the product using the notched part of the trowel. The trowel notch size must be chosen according to the size of the tiles. In any case it must assure 65-70% coverage of the back of the tiles for interior installation and 100% for exterior installation or floors subject to intense traffic. In exterior installations or areas subject to high stress, it is advisable to apply the adhesive additionally to the back of the tiles (back-buttering method).

LAYING THE TILES

Place the tiles on the adhesive and press firmly to assure good contact. The product's open time in normal conditions of temperature and humidity is 30 minutes. However, this may be reduced to just a few minutes in very hot or windy weather. It is advisable to check frequently that the adhesive has not skinned over. If it has, comb the surface of the adhesive again using the notched trowel. Tiles must be laid with grout joints of adequate width for their size. Butt-jointing (tiles touching) is not recommended. Take account of expansion or control joints during installation. Leave a space of at least 5 mm in the vicinity of walls or vertical elements. The tiled surface must be protected for at least 24 hours from water and for about 5-7 days from frost and direct sunlight.

GROUTING

The joints between tiles can be grouted after about 6-8 hours in the case of wall tiles or 24 hours in the case of floor tiles. Grouting can be carried out using cementitious grouts LITOCHROM 0-2, LITOCHROM 1-6, LITOCHROM 3-15, LITOCHROM FLEX 3-10. In the case of acid-resistant floors, we recommend using two-part epoxy grout LITOCHROM STARLIKE® or EPOXYSTUK X90.

WARNINGS

- Do not add lime or cement to the product.
- Apply the product at temperatures of between +5°C and +35°C.
- Do not use the product for applications not stated on this technical sheet.
- For a correct choice, refer to the guide chart on the technical sheet.

IDENTIFICATION DATA	
Appearance	Powder
Colour	White and Grey
Classification to EN 12004	C2TE – Enhanced non-slip cementitious adhesive with extended open time
Classification to EN 12002	Class S1 deformable adhesive
Customs code	3824 5090
Shelf life	12 months in original packaging in dry place

APPLICATION DATA				
Mixing ratios	Water = 32-34% (8-8.5 L per 25kg bag)			
Maturing time	5 minutes			
Mix consistency	Very creamy			
Pot life	Over 8 hours			
Application temperature	From +5°C to +35°C			
Open time (EN 1346)	≥ 0.5 N/mm² after 40minutes			
Maximum applicable thickness	15 mm			
Adjustability time	About 40 minutes			
Consumption	**Tile size (cm)**		**Recommended trowel size (mm)**	**Consumption (kg/m²)**
	1x1	5x5	4 - 6	2 - 2,5
	10x10	15x15	6	2,5
	15x20	25x25	6 - 8	2,5 - 3
	25x33	33x33	8 - 10	3,5 - 4
	30x45	45x45	10 - 15	5
	50x50	60x60	15 back-buttering	6,5 - 7
	Over		15 back-buttering	6,5 - 7
Walk on time	24 hours			
Ready for use	14 days			
Ready for grouting	Floor: about 24 hours - Wall: about 6-8 hours			

PERFORMANCE	
Bonding strength after 28 days (EN 1348)	≥ 1 N/mm²
Bonding strength after immersion in water (EN 1348)	≥ 1 N/mm²
Bonding strength after action of heat (EN 1348)	≥ 1 N/mm²
Bonding strength after freeze-thaw cycles (EN 1348)	≥ 1 N/mm²
Trasverse deformation (UNI EN 12002)	≥ 2,5 mm
Temperature of use	From – 30°C to +90°C
Resistance to acids	No
Resistance to alkalis	Good

SAFETY INFORMATION

Consult the Material Safety Data Sheet, available on request.

PRODUCT FOR PROFESSIONAL USE.

APPLICATION CHART

SUBSTRATES	SIZES (cm)	Mosaic 1 x 1 5 x 5	10x10 15x15	15x20 25x25	25x33 33,3x33	30x45 45x45	50x50 60x60	OVER
INTERIOR FLOORS	**JOINTS (mm)**	**1,5 - 3**	**1 - 4**	**2 - 6**	**3 - 7**	**4 - 10**	**6 - 12**	**10 - 16**
Cured floating or separated cement-based screeds		●	●	●	●	●	●	●
Dry anhydride screeds sandpapered and treated with **PRIMER C** or **PRIMER X94**		●	●	●	●	●	●	●
Existing concrete floors (cleaned and degreased)		●	●	●	●	●	●	●
Ceramic tile, stone or agglomerate floors (cleaned and degreased)		●	●	●	●	●	●	●
Heated cement-based screeds after pre-heating cycle		●	●	●	●	●	●	●
Surfaces treated with **HIDROFLEX**		●	●	●	●	●	●	●
Concrete structures cured for at least 6 months		●	●	●	●	●	●	●
Metal or wood surfaces. Existing PVC, rubber or linoleum floors								
INTERIOR WALLS	**JOINTS (mm)**	**1,5 - 3**	**1 - 4**	**2 - 6**	**3 - 7**	**4 - 10**	**6 - 12**	**10 - 16**
Cement-based plaster on cured masonry		●	●	●	●	●	●	●
Dry plaster or gypsum panels treated with **PRIMER C** or **PRIMER X94**		●	●	●	●	●	●	●
Cured light block masonry		●	●	●	●	●	●	●
Existing solid ceramic walls (cleaned and degreased)		●	●	●	●	●	●	●
Gypsum board sandpapered and treated with **PRIMER C** or **PRIMER X94**		●	●	●	●	●	●	●
Surfaces treated with **HIDROFLEX**		●	●	●	●	●	●	●
Cast or prefabricated concrete structures cured for at least 6 months		●	●	●	●	●	●	●
Metal or wood surfaces		●	●	●	●	●	●	●
EXTERIOR FLOORS	**JOINTS (mm)**	**1, 5- 3**	**3 - 6**	**5 - 8**	**7 - 10**	**10 - 12**	**12 - 14**	**> 14**
Cured floating or separated cement-based screeds		●	●	●	●	●	●	●
Existing concrete, ceramic tile or stone floors		●	●	●	●	●	●	●
Concrete structures cured for at least 6 months		●	●	●	●	●	●	●
Surfaces treated with **ELASTOCEM**		●	●	●	●	●	●	●
EXTERIOR WALLS	**JOINTS (mm)**	**1, 5- 3**	**3 - 6**	**5 - 8**	**7 - 10**	**10 - 12**	**12 - 14**	**> 14**
Cement-based plaster on cured masonry		●	●	●	●	●	●	●
Cast or prefabricated concrete structures cured for at least 6 months		●	●	●	●	●	●	●
Surfaces treated with **ELASTOCEM**		●	●	●	●	●	●	●

KEY

● Application possible with SUPERFLEX K77 + 32-34% water

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