



LITOPLUS K55

HIGH PERFORMANCE NON-SLIP BRILLIANT WHITE CEMENTITIOUS ADHESIVE WITH EXTENDED OPEN TIME
FOR INSTALLING MOSAICS IN INTERIORS AND EXTERIORS



DESCRIPTION

White powder adhesive based on Portland cement, inert fillers of selected particle size and organic additives.

PACKAGING

25 kg bags

Standard pallet 1500 kg

CLASSIFICATION EN 12004

LITOPLUS K55 + 35% WATER

Class C2TE

Enhanced non-slip cementitious adhesive with extended open time

FIELDS OF APPLICATION

Specific for fixing paper or mesh-mounted glass, ceramic and marble mosaic. Also suitable for installing any type of ceramic tiles up to a maximum format of 25x25 cm in interiors and exteriors on floors or walls.

Mixed with LATEXKOL diluted 1:1 with water, the product is suitable for the installation of mosaics in swimming pools. See synoptic table.

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 Crack-free Flat and level Sufficiently cured
LITOCER screeds	24 hours	3%	
Anhydride screeds*	-	< 0,5%	
Concrete	6 months	-	
Cement plaster	1 week per cm of thickness	-	
Gypsum based plaster*	-	< 0,5%	

EXPANSION JOINTS

Expansion joints have the function of interrupting the continuity of the tiled surface, thereby compensating for dimensional changes and deformations affecting the multi-layer system composed of the tiles, adhesive and substrate. The joints must always extend through both the bedding layer and the tiles.

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

MIXING RATIOS

LITOPLUS K55 25 kg. (1 bag)

Water 8.75 L (35%)

Installing mosaics in swimming pools

For this application Litoplus K55 must be mixed with LATEXKOL, a latex admixture that improves elasticity, in the following proportion:

LITOPLUS K55 25 kg (1 bag)

WATER + LATEXKOL 1:1 8.75 L (35%)

MIX PREPARATION

Pour the correct amount of water or water/Latexkol mixture 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 about 1 mm thick. Immediately afterwards comb the surface of the product using the notched part of the trowel.

If the glass mosaics are not very thick, use a trowel with 3.5 mm notches.

The trowel notch size must be chosen based on the size of the tiles. In any case it must ensure 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 also apply the adhesive to the back of the tiles (back-buttering method).

LAYING THE TILES

Place the tiles or the mosaic tile sheets on the adhesive and press firmly to assure good contact. The open time allowed for the product 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 formed a dry skin. 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 expansion or control joints into account during installation. Leave a space of at least 5 mm along 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 the 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 mortar EPOXYSTUK X90 or LITOCHROM STARLIKE®.

WARNINGS

Do not add lime or cement to the product.

Apply the product at temperatures between +5°C and +35°C.

Do not use for applications that are not stated on this technical sheet.

For correct use, refer to the application chart on the technical sheet.

IDENTIFICATION DATA

Appearance	Powder
Colour	White
Classification according to EN 12004	C2TE – Enhanced non-slip cementitious adhesive with extended open time
Customs code	3824 5090
Shelf life	12 months in original packaging in dry place

APPLICATION DATA

Mixing ratios	Water = 35% (8.75 L per 25 kg bag)		
Maturing time	5 minutes		
Consistency of mixture	Creamy thixotropic		
Pot life	Over 8 hours		
Application temperature	From +5°C to +35°C		
Open time (EN 1346)	≥ 0.5 N/mm ² after 30 minutes		
Maximum applicable thickness	5 mm		
Adjustability time	About 30 minutes		
Consumption	Tile size (cm)		Recommended trowel size (mm)
	Mosaic 1x1	5x5	4
	10 x 10	15 x 15	6
	15 x 20	25 x 25	6 - 8
			Consumption (kg/m ²)
			2
			2,5
			2,5 - 3
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)	$\geq 1 \text{ N/mm}^2$
Bonding strength after immersion in water (EN 1348)	$\geq 1 \text{ N/mm}^2$
Bonding strength after exposure to heat (EN 1348)	$\geq 1 \text{ N/mm}^2$
Bonding strength after freeze-thaw cycles (EN 1348)	$\geq 1 \text{ N/mm}^2$
Temperature of use	From -30°C to $+90^{\circ}\text{C}$
Resistance to acids	No
Resistance to alkalis	Good

SAFETY INFORMATION

Consult the Material Safety Data Sheet, available upon request.

PRODUCT FOR PROFESSIONAL USE.

APPLICATION CHART

SUBSTRATES	SIZES (cm)	Mosaic 1 x 1 5 x 5	10x10 15x15	15x20 25x25	25x33 33x33	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 ceramic wall tiling, solid, 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 Litoplus K55 + 35% water

Although the information provided in this technical sheet represents the best of our knowledge and experience, it is intended purely as a guideline.
The user must carry out preliminary practical tests for each specific job and is solely responsible for the final result.

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