LITOKOL
HI-PERFORMANCE BUILDING PRODUCTS

LATEXKOL

HIGH ELASTICITY SYNTHETIC LATEX FOR CEMENTITIOUS ADHESIVES

DESCRIPTION	High-elasticity aqueous-dispersion synthetic latex based on acrylic polymers.
FIELDS OF APPLICATION	Liquid additive for mixing with Cementkol K21 and Cementkol K22 cementitious adhesives as a partial or total substitute for water. The additive gives the adhesive a high degree of deformability and improves its performance, making it suitable for heavy-duty applications (see application chart).
CLASSIFICATION EN 12004	Cementitious adhesives Class 1 + 30% 1:1 water/Latexkol mixture (see K21/K22) Class C2-S1 Deformable enhanced cementitious adhesive Cementitious adhesives Class 1 + 33% LATEXKOL (see K21/K22) Class C2-S2 Highly-deformable enhanced cementitious adhesive

SUBSTRATES

	MINIMUM	MAXIMUM RESIDUAL	GENERAL
Cementitious screeds	28 days	3%	Clean
LITOCEM screeds	24 hours	3%	Solid and compact
Anhydrite screeds*		< 0.5%	Free from cracks
Concrete	4 months		Flat and level
Cementitious plaster	1 week per cm thicknes		Sufficiently cured
Gypsum-based plaster* *Pre-treated with PRIMER X94 or PRIMER		< 0.5%	

MIXING RATIOS	Cementitious adhesives Class 1 25 kg (1 bag) Class C2-S1 WATER 3.75 l (15%) + LATEXKOL 3.75 kg (15%) Class C2-S2 LATEXKOL 8.25 kg (33%)
MIX PREPARATION	Pour the correct quantity of liquid 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 sit 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 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. In the same temperature and moisture conditions, adhesive mixed with LATEXKOL has a shorter open time than adhesive mixed solely with water. It may even be reduced to just a few minutes in very hot or windy weather or with highly absorbent substrates. It is advisable to check frequently that the adhesive has not skinned over.

LAYING THE TILES	Place the tiles on the adhesive and press firmly to assure good contact. In the same temperature and moisture conditions, adhesive mixed with LATEXKOL has a shorter open time than adhesive mixed solely with water. It may even be reduced to just a few minutes in very hot or windy weather or with highly absorbent substrates. 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 movement or control joints during installation. Leave a space of at least 5 mm next to 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 Starlike or EPOXYSTUK X90.
CAUTIONS	•Cementitious adhesive mixed with LATEXCOL has a shorter open time than adhesive mixed solely with water. •Since the additive is a latex in aqueous dispersion, it is susceptible to frost damage. Transport and store the product at temperatures no lower than +5°C. •Do not keep product contained in the cans in direct sunlight or in very hot areas. •Apply at temperatures of between +5°C and +35°C. •Do not use for applications not stated on this technical sheet. •For correct use, refer to the application chart on the technical sheet.
IDENTIFICATION DATA	
Appearance	Liquid
Colour	White
Solids content	34-36%
Viscosity	20-30 mPa s
pH	7-8
Classification to EN 12004	Cementkol K21/K22 + 30% water/Latexkol mixture 1:1 = C2-S1 Cementkol K21/K22 + 33% Latexkol= C2-S2
Customs code	3906 90 00
Shelf life	24 months in original packaging in dry place. Susceptible to frost damage
APPLICATION DATA	
Maturing time	5 minutes
Mix consistency	Very creamy
Pot life	Over 8 hours
Application temperature	From +5°C to +35°C

Consumption	Tile size (cm)	Recommended trowel size (mm)	Consumption (kg/m2)	
			K21/K22	Latexkol (33%)
	10X10 15X15	6	2,5	0,8
	15X20 25X25	6-8	2,5-3	0,8-1
	25X33 33X33	8-10	3,5-4	1,2-1,3
	30X45 45X45	10 back-buttering	4,5-5	1,5-1,7
	50X50 60X60	10 back-buttering	5	1,7
	OLTRE	10 back-buttering	> 5	2,3
Walk on time	24 hours			
Ready for use	14 days			
Ready for grouting	Floor: about 24 hours Wall: about 4-8 hours			
PERFORMANCE	Cementitious adhesives Class 1 + 30% 1:1 water/Latexkol mixture		Cementitious adhesives Class 1 + 33% Latexkol	
Adhesion strength after 28 days EN 1348	> 1 N/mm2		> 1 N/mm2	
Adhesion strength after immersion in water EN 1348	> 1 N/mm2		> 1 N/mm2	
Adhesion strength after action of heat EN 1348	> 1 N/mm2		> 1 N/mm2	
Adhesion strength after freeze-thaw cycles EN 1348	> 1 N/mm2		> 1 N/mm2	
Transverse deformation EN 12002	> 2.5 mm (class S1)		> 5 mm (class S2)	
Temperature of use	From -30°C to +90°C			
Resistance to acids	No			
Resistance to alkalis	Good			
PACKAGING	20 kg cans Standard pallet 720 kg 10 kg cans Standard pallet 600 kg 5 kg cans Standard pallet 600 kg			

Although the information provided on this technical sheet is accurate to 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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SUBSTRATES	TILE SIZES(CM)						
	MOSAIC 1X1 – 5X5	10X10 15X15	15X20 25X25	25X33 33X33	30X45 45X45	50X50 60X60	LARGER
NTERIOR FLOORS	JOINTS (MM)						
	1,5-3	1-4	2-6	3-7	4-10	6-12	10-16
Cured floating or separated cementitious screeds		**X**	**X**	**V**	**V**	**V**	**#**
Dry anhydrite screeds sandpapered and treated with **PRIMER C**		X	X	V	V	V	#
Existing concrete floors (cleaned and degreased)		X	V	V	V	V	#
Ceramic tile, stone or agglomerate floors (cleaned and degreased)		V	V	V	V	V	#
Heated cementitious screeds after pre-heating cycle		V	V	V	V	V	#
Surfaces treated with **HIDROFLEX**		V	V	V	V	#	#
Concrete structures cured for at least 6 months		V	V	V	#	#	#
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
Cementitious plaster on cured masonry		**X**	**X**	**V**	**V**	**V**	**#**
Dry plaster or gypsum panels treated with **PRIMER C** or **PRIMER X94**		X	X	V	V	V	#
Cured light block masonry		X	X	V	V	V	#
Existing solid ceramic walls (cleaned and degreased)		V	V	V	V	V	#
Gypsum board sanded and treated with **PRIMER C** or **PRIMER X94**		V	V	V	V	#	#
Surfaces treated with **HIDROFLEX**		V	V	V	V	#	#
Cast or prefabricated concrete structures cured for at least 6 months		V	V	V	V	#	#
Metal or wood surfaces							
EXTERIOR FLOORS	JOINTS (MM)						
	1,5-3	1-4	2-6	3-7	4-10	6-12	10-16
Cured floating or separated cementitious screeds		**X**	X	V	#	#	#
Existing concrete, ceramic tile or stone floors		V	V	V	#	#	#
Concrete structures cured for at least 6 months		V	V	#	#	#	#
Surfaces treated with **ELASTOCEM**		V	V	V	#	#	#
EXTERIOR WALLS	JOINTS (MM)						
	1,5-3	1-4	2-6	3-7	4-10	6-12	10-16
Cementitious plaster on cured masonry		X	V	#	#	#	#
Cast or prefabricated concrete structures cured for at least 6 months		V	V	#	#	#	#
Surfaces treated with **ELASTOCEM**		V	V	#	#	#	#

KEY: X Application possible with Cementkol K21/K22 + 28% WATER - **V** Application possible with Cementkol K21/K22 + 30% di Latexkol DILUTED 1:1 WITH WATER - **#** Application possible with Cementkol K21/K22 + 33% di Latexkol