



LITOCEM

NORMAL-SETTING AND FAST-DRYING HIDRAULIC BINDER FOR INTERIOR AND EXTERIOR USE

DESCRIPTION

Special hydraulic binder to be mixed with assorted aggregates of particle size from 0 to 8 mm and water. Hardens after about 24 hours and dries completely after 2 weeks.

FIELDS OF APPLICATION

Suitable for floating or bonded screeds in both interiors and exteriors. Ideal for fast laying of:

- Ceramic tiles after 24 hours
- Natural stone after 3 days
- Parquet, PVC, linoleum, carpet after 2 weeks

Also suitable for screeds with incorporated heating coils.

PACKAGING

25 kg. bags- Standard pallet 1.500 kg.

MIXING RATIOS

LITOCEM	FINE GRAVEL 0/8 mm	WATER
25 kg (1 bag)	170-210 kg	0-13 litres (depending on moisture content of aggregate)
200-250 kg	1 m ³	0-130 litres (depending on moisture content of aggregate)

SUBSTRATE PREPARATION

LITOCEM screeds can be applied to any substrate.

FLOATING SCREEDS WITH THICKNESS FROM 40 TO 80 mm

Separate the subfloor from the screed by laying polyethylene or similar membranes with an overlap of at least 20 cm. Place polystyrene strips of thickness about 1 cm (LITOSIDE) along the perimeter walls and against all vertical elements (columns, stairs, etc.). Make sure that the polyethylene sheets seal the entire thickness of screed. The sheets serve as a cleavage membrane and provide a barrier against rising moisture, which would lengthen drying times.

BONDED SCREEDS WITH THICKNESS FROM 10 TO 40 mm

In this case the old substrate (cement slab, ceramic tiles or stone) must be clean, free of dust, oil, wax, loose material or anything else liable to prevent effective bonding .

It must also have adequate compressive strength. Place the polystyrene strip of thickness of about 1 cm (LITOSIDE) around the perimeter walls and against vertical elements.

Immediately before spreading LITOCEM onto the substrate, use a brush or mop to apply a layer of liquid mortar consisting of equal parts of LITOCEM-IDROKOL X20 and WATER to promote adhesion between the screed and the substrate. Spread the LITOCEM based mix onto the mortar before it dries (wet on wet).

MIX PREPARATION

The mix can be prepared using a concrete mixer, a horizontal screw type mixer or a TURBOSOL type automatic pressure pump. Manual mixing with a shovel is not recommended as a uniform mix cannot be guaranteed.

Mix thoroughly for at least 5-10 minutes. Batch the water with great care to obtain a mix with a moist, plastic consistency. Water should not appear on the surface during the consolidation and smoothing stages.

APPLICATION

Place screed rails, then pour the mix in the same way as a normal cementitious screed .

Compact and smooth so as to obtain a smooth, closed surface finish without surface water.

In the case of sudden changes in thickness due to the presence of pipes, ducts, etc., install a metal hexagonal mesh net inside the screed to reinforce it and limit the formation of cracks.

In any case the thickness of screed above the pipes must be no less than 2 cm.

If installation work is interrupted at a position other than a joint, the slab must be cut perpendicularly to the surface and sections of iron bars of diameter 3-6 mm and length 20-30 cm inserted at distances of about 20-30 cm in order to increase construction joint adhesion and avoid problems of cracking and lippage.

When used over compressible substrates (e.g. thermal and acoustic insulating panels), the screed must be reinforced with electro welded metal net.

MEASURING RESIDUALMOISTURE CONTENT

Due to the special composition of LITOCEM, conductivity hygrometers may give unreliable readings, so a carbide hygrometer must be used. The following are the maximum percentages of residual moisture content in the cement screed that are acceptable for installation of various kinds of floors.

Ceramic tiles and natural stone	3%
Parquet - linoleum	2%
PVC - rubber	2%
Carpet	3%

CAUTION

- Do not add lime, other cement or gypsum to the product.
- Apply the product at temperatures of between +5°C and +35°C.
- Do not use excessively fine or unwashed sand.
- LITOCEM based screeds installed without insulation barriers (membrane or polyethylene) will be affected by the hygrometric state of the subfloor.
- Do not mix with excess water. The mix must have a moist and almost plastic consistency.
- Do not wet the surface of the screed.
- Do not add water to the screed after it has begun to set.

- The ambient temperature affects setting and drying times.
- Always check the residual moisture content before installing the floor covering.
- Do not use for applications not stated on this technical sheet.

SAFETY DATA SHEET

Consult the Material Safety Data Sheet, available on request.

PRODUCT FOR PROFESSIONAL USE.

APPLICATION DATA

	LITOCEM	FINE GRAVEL 0/8 mm	WATER
Mixing ratios	25 kg (1 bag)	170-210 kg	0-13 litres (depending on moisture content of aggregate)
	200-250 kg	1 m ³	0-130 litres (depending on moisture content of aggregate)
Mixing time	5-10 minutes		
Mix consistency	Moist, almost plastic		
Pot life	About 1 hour		
Application temperature	From +5°C to +35°C		
Walk on time	12 hours		
Ready for use	7 days		
Ready for cementitious leveller	After 5-7 days		
Ready for floor covering	Ceramics tiles: 24 hours Natural stone: 3 days Parquet, PVC, linoleum, carpet: 2 weeks		
Consumption	2-2,5 kg/m ² per cm thickness		

IDENTIFICATION DATA

Appearance	Powder
Colour	Grey
Customs code	3824 5090
Shelf life	12 months in original packaging in dry place

PERFORMANCE

Mechanical compressive strength after 28 days	30 N/mm ²
Moisture resistance	Excellent
Resistance to oil and solvents	Good
Resistance to acid	Poor
Temperature of use	From -30°C to +90°C

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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