

LicaPlan

Pre-mixed, ready-to-use mortar with medium-fast drying and controlled shrinkage, based on high-strength hydraulic binders, selected sands and specific additives. Suitable for creating internal and external screeds on which to glue floors.

LicaPlan is a pre-mixed, medium-fast drying mortar, based on high-resistance hydraulic binders, selected sands and specific additives for creating traditional screeds, inside and outside, both floating and glued. **LicaPlan** complies with classes **CT – C25 – F4** of the standard **UNI EN 13813**. Its dimensional stability is guaranteed by a controlled hygrometric shrinkage which reduces cracking through the product life cycle (plastic phase and curing).



MAIN FIELDS OF USE

Creation of indoor and outdoor screeds in thicknesses from 3 to 6 cm which can be covered with tiles, parquet, resilient materials and natural stone, as well as for repairing portions of existing screed, underfloor heated screeds by burying heating coils.

For the application of different substrates (e.g. compact magnesium and anhydrite concrete), please contact the technical department. Not suitable for substrates subject to flexion.

LicaPlan allows the subsequent laying of:

Ceramic tiles	24 hours* (after checking residual moisture)
Natural stone and marble	72 hours** (after checking residual moisture)
Parquet	7 days*** (after checking residual moisture)

* The values were measured at room temperature conditions of +23 °C, R.H. of 50% and a thickness of ≈ 4 cm. Different ambient temperatures and R.H. will significantly alter the waiting times, so it is advisable to carry out a humidity test before laying the coating using suitable tools, e.g. carbide hygrometer .

** Wait 7 days before laying stone or marble that is sensitive to humidity.

*** The times refer to a screed thickness of ≈ 4 cm, at an ambient temperature of 23 °C and R.H. of 50% with ventilation of ≥ 2 m/sec.

CHARACTERISTICS

- Ready to use: **LicaPlan** substitutes traditional sand or cement screed. It is simply mixed with water, taking care not to use incorrect amounts of binder/inert materials which could compromise the final characteristics of the hardened screed.
- Medium-fast drying: the use of special additives allows the formation of screeds that can be walked on after 24-48 hours.
- High mechanical strength: the high-performance hydraulic binders and selected inert materials creating high mechanical resistance and allowing **LicaPlan** to be classified in classes **CT – C25 – F4** of the standard **UNI EN 13813**.
- Excellent dimensional stability: its dimensional stability is guaranteed by a controlled hygrometric shrinkage which reduces cracking throughout the product life cycles (plastic phase and curing).

APPLICATION METHOD

Preparation of the substrate

Mechanically remove any flaking or easily detached parts. Thoroughly clean the application area so that it is free of dust, residue from surface treatments, such as detergents, oily substances, mineral or organic grease, wax, traces of chalk or salt. Before laying, fix compressible desolarising material (polystyrene, tape, cork) along the outer walls and pillars with a thickness of no less than 5 mm. If rising damp is present, a vapour barrier must be inserted. If there are cracks or splits on the substrate, repair it beforehand with **Repair 450** or **Repair 250**.

Wet the substrate until saturated and in SSD conditions (Saturated-surface-dry).

Anchored or glued screeds

Screeds with thicknesses of 2 to 3 cm can be created to bind to the substrate. To do this, prepare a bonding slurry **LicaLatex** (1 part latex, 1 part water and 2 parts **LicaPlan**, measured in volume). Spread the slurry on the substrate, applying it evenly with a fine brush, broom or float, then lay **LicaPlan** whilst it is still fresh.

Floating screeds

LicaPlan can be applied floating with a minimum thickness of 4 cm. To do this, spread a desolarising layer on the substrate (sheet of polyethylene, PVC or similar), taking care to overlap the edges by at least 20 cm and seal the joins to prevent any possible damp rising up from the substrate. The sheets must be turned up on the walls, pillars or any vertical surface above the thickness of the screed.

Preparing the mixture

You need 2.1-2.4 litres of clean water (UNI EN 1008) for every 30-kg bag (or 7-8% density). Pour the product into a clean container containing $\frac{3}{4}$ of the mixing water. Mix for about 3 minutes, gradually adding the remaining water until you obtain a "wet earth" consistency. Alternatively, it can be prepared in a concrete mixer, planetary mixer, screw mixer or with a pressure pump, i.e. "TurboSol".

Do not divide the packages up into partial mixtures.

If the product is stored in open, partially used sacks, it may not meet the technical characteristics outlined in this document.

Application

Spread evenly on the bonding slurry or desolarising material (depending on the type of screed to create), then compact and float-finish until you obtain a sealed and smooth surface. Any areas crossed by ducts must be reinforced with lightweight reinforced mesh (e.g. fine galvanised mesh) and over pipes, a minimum screed thickness of 2, preferably 3 cm must be guaranteed. In the event of joint repairs, insert electrowelded mesh or iron rods measuring 60 cm in length with a gap of about 20-25 cm between them, in the screed which will be interrupted at 90°, burying them half in the finished screed and half in the new screed.

LicaPlan can be laid with ceramic, natural stone and marble floors, even after only 24 hours from installation, after 72 hours from installation, for wood, rubber, PVC floors, the waiting time will be about one week (in any case, it is always advisable to check the residual humidity with a carbide hygrometer). Do not apply **LicaPlan** on substrates that have a film of water on the surface, are completely dry or in extreme conditions, such as walls exposed to full sun or frozen.

Make sure that the ambient temperature, that of the substrate and product during application, is between +5 °C and +35 °C.

PRODUCT INFORMATION

Appearance	Grey powder
Particle size	<2.5 mm
Powder consumption	17-18 kg/m ² every 10 mm of thickness
Optimal application thicknesses	3-6 cm
Thicknesses recommended over the underfloor heating panel castellations.	≥3 cm
Mixing water	7%-8% of weight of powder
Workability time at 20 °C	= 40 minutes
Application thickness per coat	3-6 cm
Application temperature	From +5 °C to +35 °C
Storage	12 months in cool, dry place in unopened container
Can be walked on after	≈ 18 h
Packaging	30 kg
Density	1900-1950 kg/m ³
pH of mixture	approx. 11

PERFORMANCE

Characteristic	Test method	Legal requirement	Performance
Compressive strength 4 hours	prEN 13892-2		> 3 MPa
Compressive strength 28 days	prEN 13892-2	Declared performance	> 25 MPa
Compressive strength 28 days	prEN 13892-2	Declared performance	> 4 MPa
Binding to standard-compliant concrete			> 1.5 MPa
Setting time	EN 12706		90-120 min
Fire resistance	prEN 13454-2		A1

WARNINGS

- Product for professional use.
- Do not add water or more powder to the product once mixed.
- Alkaline material: protect eyes and skin during application.
- After use, wash tools with water while the mixture is still fresh.
- The ambient temperature and humidity rate influence the workability, setting and drying times.
- Take care of the product's curing period for at least 24 hours after applying, protect the fresh mortar from rapid drying, direct sunlight, strong wind and heavy rain.

SAFETY

Please consult the safety data sheet for information about product disposal, storage and usage.

NOTES

This data sheet replaces and voids all previous versions.

The indications and specifications given in this document are based on our current technical and scientific knowledge. They should, however, be considered as purely indicative because we have no control over the conditions in which the product will be used. The purchaser must, therefore, check that the product is suitable for his specific requirements. Our sales and technical network guarantees rapid consultancy services and is at your disposal for any clarifications and questions you may have about the use and application of **Licata SpA** products.

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