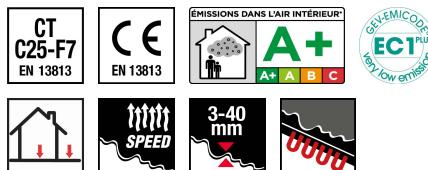


## Substrate preparation

# Litoliv S40 Eco

**QUICK-SETTING AND DRYING CEMENTITIOUS SELF-LEVELLER FOR LEVELLING OF SUBSTRATES WITH THICKNESS BETWEEN 3 AND 40 mm. SUITABLE FOR UNDERFLOOR HEATING. FOR INTERIORS AND EXTERIORS. FIBRE-REINFORCED. PRODUCT WITH VERY LOW VOLATILE ORGANIC COMPOUND EMISSION RATE.**



### DESCRIPTION

Ready-mixed cementitious powder self-leveller made from special hydraulic binders, inert fillers of selected granulometry, organic additives and synthetic fibres.

The product, once mixed with water, is characterised by an excellent self-levelling capacity and ease-of-application by hand or screw-pump plastering machine with variable thickness between 3 and 40 mm.

### ADVANTAGES / FEATURES

- Product with very low volatile organic compound (VOC) emission rate. Complies with class EC1<sup>PLUS</sup> according to the EMICODE protocol and class A+ (Émission dans l'air intérieur - French Regulations)
- High abrasion resistance
- Quick setting and drying
- Development of screeds with incorporated heating coils without the need for fluidifying additives
- Excellent self-levelling effect
- Suitable for interior and exterior applications.
- Suitable for substrate levelling in electric and hot water underfloor heating
- Excellent adhesion on traditional cementitious substrates
- No shrinkage during setting, which prevents cracking phenomena
- Fibre-reinforced product with improved resistance to expansion stresses in the presence of underfloor heating

### PACKAGING

20 kg bags - 1,200 kg standard pallet

### INTENDED USE

Suitable for levelling and evening out interior and exterior horizontal surfaces with thickness between 3 and 40 mm in a single coat.

Typical applications include:

- Levelling of cement screeds in indoor areas, also developed with Litocem or Litocem Pronto
- Levelling on heating screeds
- Levelling on sulphate/anhydrite-based screeds
- Levelling on existing floors made with ceramics, natural stone and agglomerate coverings
- Levelling of concrete slabs

### PREPARATION OF SUBSTRATES

The substrates must be clean, solid, compact, crack-free, properly cured and without rising damp.

#### Use of primer:

- Excessively porous and absorbent or powdery substrates must be treated with the consolidating primer Primer C. The application of Primer C on absorbent surfaces improves the fluid application of the mix while also improving the level of adhesion
- Smooth and compact substrates such as smoothed concrete, existing ceramic or agglomerate coverings, must be treated with the adhesion promoter primer Prepara Fondo EVO after being suitably degreased with specific detergents such as Litoscrub EVO
- In the case of anhydrite screeds, check for the presence of a suitable vapour barrier in order to prevent rising damp. Use a carbide method hygrometer to check that the residual humidity is less than 0.5%. The surface must be sanded and treated with Primer C
- Any cracks must be repaired with Multifondo EVO, sprinkling the fresh surface with sand or dried quartz with granulometry 0.4-1 mm

In any case, the respective technical data sheets must be consulted for correct use of the indicated products.

#### Expansion joints

Check that the perimeter, expansion, divider and structural elastic joints have been correctly designed and prepared. Divider joints are normally required for sections equal to 50 m<sup>2</sup> or 25/30 m<sup>2</sup> in the case of underfloor heating. In areas with surfaces less than 50 m<sup>2</sup> expansion joints must nonetheless be inserted along each of the door thresholds.

## MIX RATIO

20 kg (1 bag) – Water 4.8 l (24%)

## PREPARING THE MIX

Pour the right quantity of water, depending on the application, into a clean container and slowly add the powder, stirring with an electric drill with mixing paddle until a consistent mix is obtained without lumps. Let the mix rest for about 3 minutes and then briefly mix again for a few seconds. The pot life is about 20 minutes at a temperature of +23°C, therefore it is advisable to mix only the quantity of material that can be applied within this period of time. Do not use quantities of mixing water greater than those indicated to avoid product shrinkage during curing and the lowering of the final mechanical properties. Do not add more water to the mix once setting has begun. If the product is applied with a plastering pump with vertical mixer, the quantity of mixing water must be the same as for manual preparation, and mixing must continue until complete homogenisation before spreading the mix.

## APPLICATION

Pour the mix directly onto the substrate. Spread the product using a smooth steel trowel or rubber floor squeegee to obtain the required thickness. The product can also be applied using a plaster pump. Ceramic and porcelain tiles, wood, resilient or textile flooring can then be installed after about 12-24 hours depending on the applied thickness and ambient temperature. When installing wood flooring, apply a minimum thickness of at least 3 mm and check the humidity using a carbide method hygrometer before bonding (maximum humidity = 2%).

## WARNINGS

- Spread the product at temperatures between +5°C and +35°C inclusive
- Do not add lime, cement or other foreign materials to the product
- Do not use the product on damp surfaces or surfaces subject to rising damp
- The pot life is about 20 minutes at a temperature of +23°C. Be sure to mix only the quantity of product that can actually be used within this period of time
- Use the correct amount of water in the mix. Too much water may result in longer setting times and increase the risk of cracks and flaking, powdery and crumbly surfaces
- Do not use the product in the presence of strong air currents
- Do not use the product for applications not stated in this technical sheet
- If in doubt, contact the Litokol S.p.A Technical Help Service.

## SAFETY INFORMATION

Consult the product safety data sheet, available on request.

PRODUCT FOR PROFESSIONAL USE

## ITEM SPECIFICATION

#The certified high-resistance rectification of the substrate with thickness from 3 to 40 mm will be carried out with a mineral fibre-reinforced quick-setting self-leveller compliant with standard EN 13813, class CT-C20-F5, such as Litoliv S40 ECO by Litokol S.p.A., suitable for the subsequent installation of ceramics after 12 hours and of wood flooring after 24 hours from its application at +23 °C 50% R.H. Spread it with a smooth trowel or levelling bar onto the previously prepared, clean and dimensionally stable substrate. Average yield ≈ 1.6 kg/m<sup>2</sup> per mm of thickness developed.

## IDENTIFICATION DATA

Appearance	Powder
Colour	Grey
Customs code	38245090
Shelf life	12 months in original packaging in a dry place.

## APPLICATION DATA

Mix ratio	Water = 22-24% (4,4-4,8 litres of water per 20 kg bag)
Consistency of mix	Self-levelling fluid
Mix curing time	3 minutes
pH of mix	13
Specific gravity of mix	1,60 kg/dm <sup>3</sup>
Pot life	Approx. 20 minutes
Applicable thicknesses	From 3 to 40 mm
Application	Trowel or rubber floor squeegee
Application temperatures	From +5°C to +35°C
Set to light foot traffic	6 hours
Waiting time for installation of ceramic and porcelain tiles and natural stones	12 hours
Waiting time for installation of resilient and wood flooring	24 hours
Temperature of use	From -30°C to +90°C
How to clean equipment	With water when product is fresh. Mechanically when product has set.
Consumption	1,6 kg/m <sup>2</sup> per mm of thickness

## PERFORMANCE

Compliance	EN 13813	CT - C25 - F7
Flexural strength after 28 days	≥ 7.0 N/mm <sup>2</sup>	EN 1348
Compressive strength after 28 days	≥ 25.0 N/mm <sup>2</sup>	EN 1348
Adhesion to concrete after 28 days	≥ 1.0 N/mm <sup>2</sup>	EN 1348

## NOTES

Data detection at temperature +20 °C, R.H. 65% and with no wind. May vary depending on the specific conditions of the installation site.

Sheet **n. 103**  
Revision **n. 7**  
Date: **June 2021**

The information and provisions contained in this technical data sheet reflect our best experience. Given the impossibility of directly intervening on the conditions of the work site and execution of the works, they represent indications of a general nature, which are in no way binding on our Company. It is therefore recommended to perform a spot test in order to check the suitability of the product for the intended use. In any case, those who intend to use the product must establish whether or not it is suitable for the intended use, and in any case assume all liability for any consequences resulting from such use.

Litokol S.p.A.  
Via G. Falcone 13/1  
42048 Rubiera (RE) Italy  
Tel. +39 0522 622811  
Fax +39 0522 620150  
info@litokol.it

[www.litokol.it](http://www.litokol.it)

