

# LUCEM Star®

Micro-terrazzo for decorative flooring and walls

- Excellent adherence on most substrates, new or old
- Admitted substrates: concrete, mortar, tiles, fiber cement boards
- Fit for floors, elevations, interior furnishing
- Fit for heating floors
- Small thickness (8mm)
- Fast resistance increase



## PRESENTATION



**Component A**  
Coloured cement based powder



**Component B**  
Predosed aggregates



**Component C**  
Water-based resin

**Component A + Component B + Component C**

The coloured mixture obtained is easily applicable with a trowel.

LUCEM Star®	
Granulometry	0 - 6 mm
Application thickness	9 mm
Thickness of the coating finished after sanding it.	7 à 8 mm

## MIXING PROPORTIONS



<b>Component A</b> Coloured powder	20 kg
<b>Component B</b> Predosed aggregates	20 kg
<b>Component C</b> Resin	6 kg

**TOTAL** 46 kg

## DILUTION

None

## SURFACIC DENSITY OF APPLICATION



20,7 kg/m<sup>2</sup>

## TOOLING



Collomatic-type Mixer or equivalent, trowel, rule with picots, roller for bubbles, concrete resurfacer, satellite sander type DURATIC 5 or equivalent, vacuum cleaner.

## OPERATING CONDITIONS



Room temperature: the temperature of the support and the product can range from 5 to 30 °C.  
Avoid air flows.

▲ Outside of this range, esthetic and mechanical properties of the product as well as its adherence to the support might be minimized.

## POT LIFE



2 hours (at 20 °C)

▲ The duration for use decreases greatly once the temperature goes above 20°C

## DRYING TIME



Before sanding	72 hours
Before installing furniture and first exposure to water	7 days
Before installing carpets	15 days

*Delays have to be adapted with respect to temperature, humidity and the ventilating of the room.*

## CLEANING THE TOOLS



With water before the product dries.

## COLORS



Background colors :  
See **LUCEM Choc** color chart with 90 colors  
Aggregates : Ask to us

## PREPARING THE SUBSTRATE

*Refer to the norm « NF DTU 26.1 Travaux d'enduits de mortiers » and « Cahier des Prescriptions Techniques du CSTB n°3634 et n°3635 Exécution des enduits de sol intérieurs pour la pose de revêtements de sol ».*

The substrate should also present a cohesion value greater than 1 MPa for the buildings ranked P3 or 1.5 Mpa for those ranked P4. It should be of course untainted, without parts that lack adherence, clean of oil, grease, laitance, etc...

Cracks and joints shall be taken care according to regulations.

▲ The **LUCEM Star** concrete will crack if the substrate does.

Systematically use a peripheral strip, similar to a waterproof joint 2 in 1 from Sianat.

### CONCRETE SLAB, CEMENT SCREED AND GROUT

Supports should not present spots of humidity, mold, efflorescence or saltpeter. Their relative humidity should be no greater than 4,5%.

#### ① Sanding

Sand concrete slabs and new or old cement screed with diamonds to perfectly prepare them and to remove impurities (grit 50). Remove dust with vacuum cleaner.

#### ② Base coat sealer

Apply the **AD LUCEM Base** coat sealer once or several times depending of the support.

Check the substrate's porosity with the « water drop test »: let a water drop on the substrate's surface and measure the absorption time. Repeat the process in several places on the substrate.

If the water drop disappears in less than 1 minute, the substrate is very porous and should be prepared with several layers of **AD LUCEM Base** coat sealer.

If the drop is absorbed in a time ranging from 1 to 5 minutes, the substrate has an average porosity and only one base coat sealer layer is enough.

*Refer to the detailed technical report for the basecoat sealer on how to apply it.*

→ The base coat sealer prevents concrete surface voids (bugholes), the dehydration of **LUCEM Star**, and enhance adhesion.

### ANHYDRITE SCREED

Anhydrite screeds should present residual humidity below 0,5%. They should be sanded and without dust.

#### ① Base coat sealer

Apply the **AD LUCEM base** coat sealer one or two times depending of the porosity of the support.

In the case of heating floors, a first heating of the floor should have been performed before the coating and must be stopped 2 days minimum before the coating's start. Heating the floor again should not happen in the next 2 days after the end of the finishing touch.

*Refer to the « Cahier des Prescriptions Techniques du CSTB n°3578 Chapes fluides à base de sulfate de calcium. »*

### OLD TILING

#### ① Surface grinding

Remove all broken or hollow-sounding tiles. Surface the tiles with diamond heads to remove surface treatments and irregularities and enamel from stone and clay.

#### ② Epolit® 111-201 S

Apply one layer of epoxy resin Epolit 111-201 S from CEFORA and sprinkle with siliceous sand. Remove then any surplus by vacuum after drying.

### OLD PAINT ON FLOOR

#### ① Sanding

Completely remove the paint by sanding it with a diamond head to get a substrate with an adherence greater than 1 MPa.

### PREFABRICATED PANNELS

It's possible to realise prefabricated panels with molds and formwork systems.

Prefabricated panels will be cut, adjusted and glued on site.

### OUTSIDE

Only perfectly homogeneous mineral coatings can have **LUCEM Star**. Consult us.

## IMPLEMENTATION

### PREPARING THE MIXTURE

Mix with a mechanical mixer similar to Collomatic from COLLOMIX all the component A, B and C together until you obtain a homogeneous mass, without lump and with a uniform color.

<b>Component A</b> Coloured powder	20 kg
<b>Component B</b> Predosed aggregates	20 kg
<b>Component C</b> Resin	6 kg

**TOTAL** 46 kg

### APPLYING THE MIXTURE

Apply 9 mm of thickness of the **LUCEM Star®** with a spiked rake set on 9 mm and a round trowel. Beware of having any holes or lack of or accumulation of aggregates  
Proceed to remove the bubble and arrange the grains on the surface with a metallic-spiked roller.

→ Draw a layout corresponding to the surface with a kit that allows abiding by the thickness and the efficiency.

<b>LUCEM Star®</b>	
Area realized with a 46 kg kit	2,22 m <sup>2</sup>

→ To avoid the peripheral stopping of the casting or the changes of tint, use the profiled PVC straight or bendable **AD LUCEM**.

### SANDING

#### ① First (rough) sanding

After drying, sand dry with diamonds (grain 30-40 then 60-80) to get a plane surface

#### ② Grouting

Apply a layer of base coat sealer **AD LUCEM** then close the surface with Grouting **AD LUCEM**. Continue the diamond sanding (flexible pad **AD LUCEM** grain 60). Sand again to fix all the strips caused by the diamond sanding (flexible pad **AD LUCEM** grain 150). Refer to the technical data of the base coat sealer **AD LUCEM** and the Grouting **AD LUCEM** for the implementation.

→ If a veil of grouting is still remaining, use a diamond pad type 3M with water and take of the mud caused by the sanding to eliminate it.

#### ③ Mineralization

Apply the **LUCEM SIII** then sand with diamond (grain 150 then 200 resin binder type Fénix HTC). Refer to the technical data **LUCEM SIII** For the implementation.

#### ④ Polishing

Polish with diamond (grain 400 then 800 resin binder type Fénix HTC) until you obtain the clarity wished.

Clean the floor to eliminate all the dust.

### PRECAUTIONS FOR USE

Contains cement. Avoid contact with skin and eyes. Do not breathe the dust. Consult the security data on [www.adlucem-matieres.com](http://www.adlucem-matieres.com) for the precautions for use and waste management.

## FINISHING WORK

Apply 2 Layers of water repellent and oil repellent Pentra-Guard™ (HP) from CONVERGENT with a wet broom with a microfiber cover  
Refer to the technical data of the Pentra-Guard™ (HP) for its set up.

After several hours of drying, polish with a burnisher (diamond-based pad grain 1500 type Hiperclean HUSQVARNA) or eventually a high speed monobrush.

## MAINTENANCE

### INSIDE

Surfaces would have to be clean with water with a monobrush or a scrubber provided with the suitable diamond-based pad Twister™.  
For small surfaces, there is small scrubbers type I-MOP from I-TEAM or SCR 350 from AU TOUR DU BETON.

Without a scrubber, for a classic cleaning use the floor cleaner TASKI Jontec Asset or a neutral pH cleaner.

Refer to the technical data for the implementation for the cleaning product and the recommendation for the upkeep of the surfaces.

▲ Whatever is the finishing work, you must not use acid cleaners.

### OUTSIDE

Oil repellent and water repellent have to be renewed regularly for an optimal protection.

## PACKAGING

### LUCEM Star® - 46 kg Kit



### LUCEM Star® - 46 kg splittable kit



## STORAGE AND EXPIRATION DATE

### STORAGE

**Component A** : store away from humidity  
**Component B** : store away from humidity  
**Component C** : store away from freezing and high temperatures

### EXPIRATION DATE

One year later in original packaging

## TECHNICAL DATA

### PHYSICAL AND TECHNICAL PROPERTIES

Density of fresh concrete	2,3
Duration for practical use of the mixed product at 20°C	60 minutes

Adherence on concrete according to NF EN 13892-8	2,4 N / mm <sup>2</sup>
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