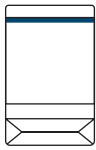


Mineral Terrazzo

- ▶ **Technical Opinion** Système LucemStone® No. 12/20-1799_V2 of December 8, 2022
- ▶ **ATEX Complex** FermaStone® No. 3194_V1 of May 30, 2024
- ▶ Suitable for **reversible underfloor heating**
- ▶ Suitable for premises classified **U₄P₄E₂C₂** according to the current **UPEC** classification

Presentation



Component A	Component B	Component C		LucemStone® 16	LucemStone® 12
Colored powder (cement-based)	Pre-dosed aggregates	Water-based resin	Granulometry	0 - 16 mm	0 - 12 mm
20 kg	33 kg	6.2 kg	Application thickness	15 mm	12 mm
			Finished coating thickness after sanding	12 mm	9 mm

Yield



LucemStone®16 : **36.3 kg / m²** equivalent to **1.63 m²** per kit.
 LucemStone®12 : **29 kg / m²** equivalent to **2.04 m²** per kit.

Equipment



Collomatic type mixer or concrete mixer, trowels and smoothers, spiked screed, spiked roller, wetting broom, flat mop, concrete surface grinder suitable for the site surface, coupled vacuum cleaner.

Conditions of use



Ambient temperature, substrate temperature, and product temperature: **5 à 30 °C**.
 Avoid any drafts.

- ▶ Outside this range, the aesthetic and mechanical properties of the product, as well as its adhesion to the substrate, may be compromised.

Practical working time of the mixture



2 hours (at 20°C)

- ▶ *The working time decreases significantly when the temperature exceeds 20°C.*

Drying time



Before sanding

72 hours*

Before placing furniture and adding water

7 days

Before laying carpets

15 days

*Timing to be adjusted based on temperature, humidity, and ventilation of the space

Tool cleaning



With water before the product dries.

Colors



Consult our collection on the website adlucem-matieres.com

Surface Preparation

Flatness

The maximum deviation in flatness of the substrate should be 5 mm under a 2-meter rule. Beyond this, flatness should be corrected using a concrete surface grinder. In case of significant irregularities, treat with an epoxy mortar mixed with silica sand.

Surface Cohesion

Surface cohesion must meet at least:

- ▶ 0.7 MPa for P2 classified premises;
- ▶ 1 MPa for P3 classified premises;
- ▶ 1.5 MPa for P4 classified premises.

Cracks

Cracks in the substrate must be treated according to best practices.

Joints

Joints in the substrate must be maintained in the new covering and treated according to best practices.

Cleanliness

The substrate must be clean, free from laitance films and curing products, and must not show signs of moisture, mold, efflorescence, or saltpeter.

Perimeter Strip

Always install a perimeter strip at the edges.

Supports based on hydraulic binders

Moisture

The moisture content of the substrate must be less than 4.5% by mass.

▶ Surface Preparation

Surface the substrate with a diamond grinder (grain 50) to remove the glaze and eliminate any impurities. Carefully remove dust with a vacuum cleaner.

▶ Sealer

Apply the LucemBP® sealer in 1 to 2 coats depending on the porosity of the substrate.

Self-leveling screeds based on calcium sulfate

The self-leveling screeds based on calcium sulfate must be sanded and free of any dust. Always retain the compressible perimeter joint strip.

▶ Moisture

The moisture content of the substrate must be less than 0.5%.

▶ Surface Preparation

Surface the substrate with a diamond grinder (grain 50) to remove the glaze and eliminate any impurities. Carefully remove dust with a vacuum cleaner.

▶ Sealer

Apply the LucemBP® sealer in 1 to 2 coats depending on the porosity of the substrate.

Underfloor heating

The natural drying of the substrate must be complemented by starting the heating system before the installation of the covering. The heating should be turned off 48 hours before applying the LucemStone® system and should not be turned back on until at least 48 hours after the installation of the covering and the finishing work of the system.

Old glued tiles

Remove broken or hollow-sounding tiles.

Adhesion

The tiles must have an adhesion of at least:

- ▶ 0.5 MPa for P2 classified premises;
- ▶ 0.7 MPa for P3 classified premises;
- ▶ 1 MPa for P4 classified premises.

▶ Surface Preparation

Grind with a diamond grinder to remove the glaze from ceramic tiles, surface treatments from stones and terracotta (up to the joint, which should also be sanded to remove treatments), and surface irregularities.

Carefully remove dust with a vacuum cleaner.

▶ Epoxy Primer

Apply a layer of epoxy resin. Sprinkle with silica sand, then remove excess sand by vacuuming after drying.

Dry screeds

- ▶ Refer to the l'ATEX FermaStone®.

▶ Consult us in case of doubt or for any other type of substrate.



Implementation

Mixture preparation

- Mix Component A, Component B, and Component C in the following order:
 Introduce Component B (pre-dosed aggregates), add half of Component C (resin), and mix. Then add Component A (colored powder) and the remaining resin (adjust to desired consistency).
- ▶ Mix for 1 minute 30 seconds, let it rest for 30 seconds, then mix again for 1 minute.

Application

- ▶ **Layout**
 Mark a layout corresponding to the surface area covered by one kit to ensure the correct thickness and yield.

 LucemStone®16 : **1.63 m²** per de 59.2 Kg kit.
 LucemStone®12 : **2.04 m²** per de 59.2 Kg kit.

 Apply LucemStone® to the thickness of the grain using a rounded trowel, ensuring there are no holes or segregation of aggregates. Ensure the distribution of aggregates using a rake. As you progress, level the surface using a plastic de-bubbling roller (with 20 mm conical spikes).
- ▶ *To facilitate peripheral pouring stops or color changes, use **AdLucem** straight or bendable PVC profiles.*

Sanding

- ▶ **Roughing**
 After 48 to 72 hours of drying, dry grind with a diamond grinder under vacuum (metal tool MCD Trap 2 GR0 or GR00 depending on the machine weight) to achieve a clean cut and level the flatness. Perform the roughing carefully at the edges using a concrete grinder like the HILTI DGH 130. Cross the passes. Check the decor.
- ▶ **Sanding**
 Dry grind under vacuum with a diamond grinder (metal tool MCD Trap 2 GR0 followed by MCS Trap 2 GR1). Perform edging (metal tool grain 60 - 0125). Continue sanding the rest of the floor with a diamond grinder under vacuum (metal tool MCS Trap 2 GR2 followed by MP GR2 disk). Continue edging (MP GR1 disk - 0125). Wash with water using a scrubber-dryer (with vacuum) or a broom for smaller surfaces.
- ▶ **Grouting**
 On a damp but not dripping substrate, apply LucemPaste® in a zero-application pass, without overloading, using a smoother. Once the section is completed, perform another zero-application pass. After an overnight drying period, dry grind under vacuum (MP GR2 disk) to remove any residue. Also grind the edges (MP GR2 - 0125 disk).
- ▶ **Polishing**
 Moisten the surface with a sprayer and polish (Luxo Grigio 220/5 disk). Vacuum the slurry as you go with a water vacuum. Finish with a flat mop.
- ▶ **If the terrazzo contains glass aggregates, mother-of-pearl, or semi-precious stones:**
 Replace the polishing procedure with the following: Moisten the surface with a sprayer and polish with water (Luxo Grigio 120/4 disk, then 220/5, up to 400/6). Vacuum the slurry as you go with a water vacuum. Finish with a flat mop.

Finishing

- ▶ **Mineralization**
 On a damp substrate, apply LucemSill®.
 The application requires two people. The first person applies LucemSill® with a wetting mop (short-pile microfiber cover), and the second person immediately follows with a flat mop (short-pile microfiber cover). Refill the wetting mop frequently to ensure the entire floor has a wet appearance and is not dry.
- ▶ **If the terrazzo contains glass aggregates, mother-of-pearl, or semi-precious stones:**
 Dilute LucemSill with 50% water before application.
- ▶ **Polishing**
 After 6 to 12 hours of drying, finalize the edging (MP GR3 - 0125 disk). Then dry polish the rest of the floor with a diamond grinder under vacuum (Luxo Grigio 400/6 disk). The grinders can be stored away. Polish with a burnisher (Traxopad 2/800). Clean and dust the surface thoroughly using a vacuum cleaner and mop.
- ▶ **If the terrazzo contains glass aggregates, mother-of-pearl, or semi-precious stones:**
 Use the Luxo Grigio 800/7 disk instead of the 400/6.
- ▶ **Water and Oil Repellent**
 Apply a coat of water- and oil-repellent LucemShield® diluted with 50% water. Apply a second undiluted coat as soon as the first one is dry to the touch.
 The application requires two people. The first person applies LucemShield® with a wetting mop (short-pile microfiber cover), and the second person immediately follows with a flat mop (short-pile microfiber cover), moistened with water and well-wrung (never dry).
- ▶ **Buffing**
 The next day, buff with a burnisher at high speed (natural hard pad - dark gray).



Maintenance

Interior

Surfaces should be cleaned with water using a single-disc scrubber or a scrubber-dryer equipped with a suitable Twister™ diamond pad.

For smaller surfaces, there are compact scrubbers like the I-MOP from I-TEAM or the SCR 350 from AU TOUR DU BETON.

In the absence of a scrubber, for regular cleaning, use TASKI Jontec Asset floor cleaner or a neutral pH cleaner.

Refer to the technical data sheets for the use of cleaning products and the maintenance recommendations sheet for surface care.

► Regardless of the finish, all acidic cleaning products are prohibited.

Precautions for use

Contains cement. Avoid contact with skin and eyes. Do not inhale dust.

Consult the safety data sheet online at www.adlucem-matieres.com for precautions and waste disposal information.

Storage and preservation

Storage

Component A: Store in a dry place

Component B: Store in a dry place

Component C: Store away from freezing temperatures and extreme heat

Preservation

1 year in its original packaging

Architectural elements and furniture

To address elevations, stairs, skirtings, or other architectural elements, contact **AdLucem Création**, which also offers terrazzo furniture and other items.



SYSTÈME LUCEM STONE
n°12/20-1799_V2 publié le 08/12/2022

Fire Reaction

According to EN 13501-1 + A1 : 2013

Slip Resistance

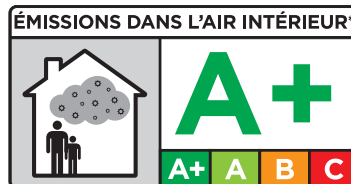
Pendulum method (according to NF EN 13036-4)
Barefoot (according to XP CEN/TS 16165: 2012 Annex A)

Bfl-s1

**VEP = 40
PN24**



n° 3194_V1 Publié le 30/05/2024



*Information sur le niveau d'émissions de substances volatiles dans l'air intérieur présentant un risque de toxicité par inhalation, sur une échelle de classe A+ (très faibles émissions) à C (fortes émissions).