

LEVELEX-ECO® DESIGN

DS-65304-1220

Globally Proven Construction Solutions



1. PRODUCT NAME LEVELEX-ECO® DESIGN

2. MANUFACTURER

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3. PRODUCT DESCRIPTION

LEVELEX-ECO[®] DESIGN is an innovative industrialgrade, decorative design self-levelling mortar intended for interior use only. It can be left white or coloured using pigments from PERMACOLOR[®] SELECT COLOR KIT.

Uses

- Interior only
- Can be applied from 2-30 mm in a single lift, up to 40 mm overall thickness
- Ideal for applications with heavy traffic or high mechanical stress, such as garages, warehouses, and production areas
- Decorative finish white or pigmented options

Advantages

- Special LATICRETE® binder virtually cement-free
- VOC and APEO free environmentally friendly
- Fast curing and low shrinkage walkable after 4 hours
- Easy to use pourable and pumpable
- Decorative design finish infinite possibilites
- High abrasion resistance

- Pourable and pumpable
- Resistant against salt water and chemicals

Suitable Substrates

- Concrete
- Cement Mortar
- Cement Mortar Bed
- Cement Render
- Tile

Packaging

25 kg; 1200 kg per pallet

Coverage / Consumption

- 11.7 m² per 25 kg bag
- ~1.8 kg / m² per 1 mm of thickness

Shelf Life

Factory sealed containers of this product are guaranteed to be of first quality for one (1) year if stored off the ground in a dry area.

Limitations

- Prevent rapid curing for at least 24 hours by protecting work area from strong air movement and exposure to direct sunlight.
- When possible conduct a mock up in order to validate performance and appearance related characteristics (including but not limited to color, inherent surface variations, wear, anti-dusting, abrasion resistance, chemical resistance, stain resistance, coefficient of friction, etc.) to ensure system performance as specified for the intended use, and to determine approval of the decorative flooring system.
- Some minor color differences are inevitable due to the mineral nature of the product. If uniform colour is required, it is recommended to work with the same production lot indicated on designated sections in packaging (see label).
- Different water additions during application or working techniques may result in lighter colour shades in the coating surface.
- Note that this coating is a mineral/inorganic product. Product colours are not fully conformed to the RAL-Map and therefore should only be seen as references.
- For interior applications only
- · DO NOT install over painted surfaces

Data Sheets are subject to change without notice. For latest revision, visit <u>laticrete.eu</u>. DS-65304-1220

- DO NOT exceed recommended mixing ratio as indicated in mixing instructions. Over watering will weaken product properties.
- DO NOT install LEVELEX[®]-ECO DESIGN over particleboard, chipboard, hardboard (Masonite[®]), Luan panels, interior glue plywood, asbestos, gypsumbased patching materials, asphalt, coal tar, or lightweight insulating concrete or any other dimensionally unstable materials.
- DO NOT install when surface temperature is below 5°C or above 45°C.
- DO NOT apply LEVELEX[®]-ECO DESIGN over waterproofing membranes.
- DO NOT use for submerged applications.
- Store bags in a cool, dry, shaded location with temperatures between 10 – 25°C prior to installation.

Cautions

Consult SDS for more safety information.

- During cold weather, protect finished work from traffic until fully cured.
- Keep out of reach of children.

4. TECHNICAL DATA

VOC/LEED Product Information

- VOC free
- APEO free

Applicable Standard

• EN 13813 CT-C40-F7-AR0,5

Physical Properties

Strength Class	CT-C40-F7 according to DIN EN 13813
Abrasion Resistance (according to BCA):	AR 0.5
Compressive Strength:	approx. 40 N/mm²
Flexural Strength:	approx. 7.5 N/mm ²
Elastic Modulus (dyn.):	approx. 10.2 kN/mm³
Bulk Density:	approx. 1.1 kg/L

EN 13813 EN 13813 CT-C40-F7-AR 0,5

Fire Behavior:	A1
Compressive Strength:	C40
Flexural Strength:	F7
Release of Corrosive Substances:	СТ

Working Properties

Working Temperature:	from +5 °C to +35 °C
Application Thickness:	2 - 30 mm (Ground depressions up to 40 mm)
Mixing Ratio:	23.2 % 5.8 L water per 25 kg powder
Wet Density:	approx. 2.0 kg/L
Walkable:	4 hours
Light Traffic:	24 hours
Polish and Smooth:	>16 h <24 h
Heavy Traffic:	4 days

(at +23°C, 50% relative humidity)

Specifications subject to change without notification. Results shown are typical but reflect test procedures used. Actual field performance will depend on installation methods and site conditions.

5. INSTALLATION

Surface Preparation

Absorbent substrates such as cement or concrete must be pre-treated with two coats of LEVELEX[®]-ECO PRIMER. Non-absorbent substrates such as ceramic or marble may not require primer application.

For all substrates, clean substrate to eliminate dust, dirt, oil, grease, paint or any contaminants which may inhibit bonding. Do not use chemicals to clean substrate. Inspect for contraction joints, construction joints and cracks in the substrate which may be subject to movement after installation of a self-leveling underlayment. These must be maintained as joints through the LEVELEX[®]-ECO DESIGN self-leveling underlayment.

For problematic substrates, create a 1 m^2 mockup to ensure compatibility or evaluate the need to apply a coat of anti-cracking mortar on the substrate.

Mixing

LEVELEX[®]-ECO DESIGN must be mixed with 5.5 liters of water per 25 kg of powder. If you want to obtain a coloured mixture, proceed by dissolving and dispersing the pigment packs from PERMACOLOR[®] SELECT COLOR KIT in the 5.5 L of water. After the pigment pack has dissolved and dispersed into the water, creating a consistently coloured water, slowly add the powder.

Do not add excessive amounts of water. Mix intensely for 2 minutes using a heavy-duty propeller mixer fitted with a 20 cm diameter double spiral blade. Do not add water if the material appears slightly dense, keep in mind that after resting it will become more fluid. After initial mixing, let stand for approx. 3 minutes, then mix again for another minute.

Note: It is advisable to mix at least 3 bags at a time (75 kg powder, 16.5 L water and, in the case of colour, 3 pigment packs).

For large areas, the use of a continuous mixing pump or a semi-automatic mixer (eg M-Tec Duo-Mix 2000) may be required. The mixing time for the semi-automatic mixer is about 4-6 minutes per 100 kg of powder.

Application

Substrate temperature should be between 5–25°C during application and air temperature maintained between 10–30°C. Protect areas from direct sunlight. Do not use damp curing methods or curing and sealing compounds. If required to meet level tolerances, survey surface using a digital or electronic leveling device and apply level pegs as required. Adequate ventilation should be provided to ensure uniform drying. Pump or pour blended material onto substrate. Immediately following placement lightly smooth the surface and pour lines using a pin leveler, screed rake, or trowel. Use a spiked roller on the freshly laid mortar for better adhesion and texture. When not using elevation pins, the use of a gauge rake will assist in controlling material depth.

Do not expose LEVELEX[®]-ECO DESIGN to rolling dynamic loads, such as forklifts or scissor lifts, for at least 4 days after installation. LEVELEX[®]-ECO DESIGN must be protected from sunlight or extreme ventilation for at least 24 hours, to prevent rapid curing. Do not cover the finished surface.

Note: To obtain greater resistance to abrasion and impacts before sanding, it is possible to apply the

LEVELEX[®]-ECO SEAL surface sealer (refer to product data sheet for more details).

Cleaning

Mixing device (drill mixer or pump), trowel, spiked shoes, spiked roller and screed rake or pin leveler should all be washed clean and dried before and after application.

6. AVAILABILITY AND COST

Availability

LATICRETE® materials are available worldwide. For distributor information, please contact LATICRETE EUROPE S.r.I.:

+39 059557680 info@laticreteeurope.com

For on-line distributor information, visit www.laticrete.eu.

Cost

Contact LATICRETE EUROPE S.r.l to obtain complete information and cost.

7. WARRANTY

The supplier warrants that the product will not deteriorate under normal conditions and use. The warranty validity of one (1) year. Contact Technical Services for further information. See 10. FILING SYSTEM:

• DS230.13EU: 1 Year Product Warranty (EN)

8. MAINTENANCE

LATICRETE[®] and LATAPOXY[®] are products of high quality designed to achieve lasting installations and avoid maintenance, however performance and durability may depend on properly maintaining products, depending on the cleaning products used.

9. TECHNICAL SERVICES

Technical Assistance Information is available by calling or emailing the Technical Service Hotline: +39 059557680

technicalservices@laticreteeurope.com

Technical and Safety Literature

To obtain technical and safety literature, please visit our website at www.laticrete.eu.

Warning

The information and the instructions in the data sheet, although based on knowledge gained through years of applications, are indicative. LATICRETE[®] is unable to directly control the installation methods and conditions of products and does not assume any liability arising from their implementation. Those who want to use LATICRETE[®] products should conduct adequate tests to determine the site specifications. Results shown are typical but reflect test procedures used. Actual field performance will depend on installation method and site conditions.

LATICRETE[®] products are covered by a warranty within the limits of what is established by our general conditions of sale and within the limits of correspondence related to technical specifications and applicable certifications, as expressly indicated in the product data sheets, documentation, or applicable technical documentation.

10. FILING SYSTEM

Additional product information is available on our website at <u>laticrete.eu</u>. The following is a list of related documents:

• DS 230.13EU: 1 Year Product Warranty