



Lightweight Leca Screed

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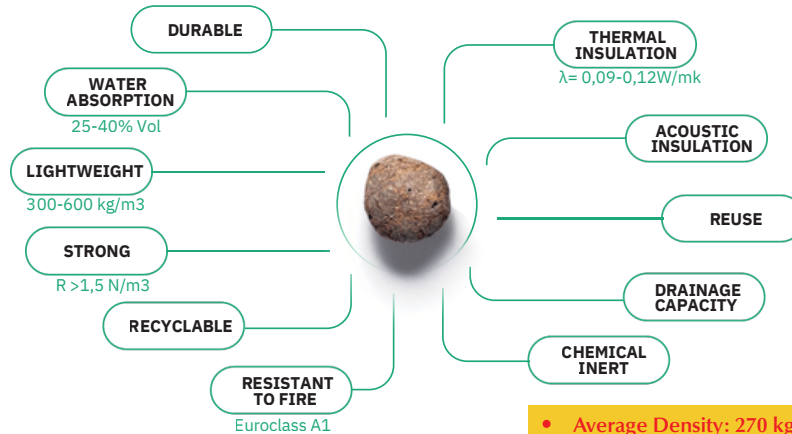
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About Leca

Leca is the initial letters for **light-expanded clay aggregate**. Expanded clay aggregates are porous ceramic products with a uniform pore structure of closed cells and with a densely sintered, firm external skin. It is manufactured in rotary kilns from raw materials containing clay minerals. The raw material is prepared, molded, and then subjected to a firing process at temperatures of between 1,100 to 1,200 °C, resulting in a significant increase in volume due to explosion. the LECA grains' internal cellular structure with thousands of air-filled cavities gives thermal and sound insulation properties.

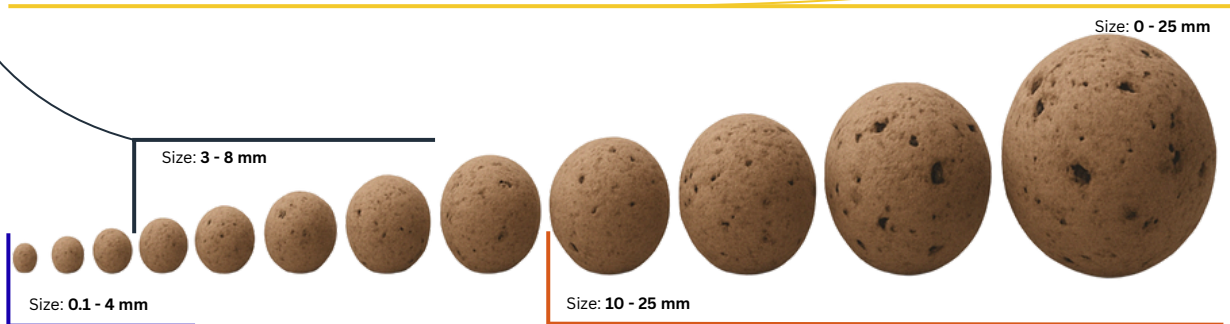


- Average Density: 380 kg/m³
- Maximum Density: 400 kg/m³
- Applications
 - Lightweight concrete production
 - Manufacturing of lightweight blocks
 - Precast concrete elements
 - Hydroponic cultivation
 - Decorative applications in landscaping and indoor planters

Size: 3 - 8 mm

- Average Density: 270 kg/m³
- Maximum Density: 320 kg/m³
- Applications
 - Lightweight infill concrete
 - Water and wastewater filtration systems
 - Drainage solutions in construction
 - Agricultural use, including hydroponics, greenhouse crops, and decorative plant pots

Size: 0 - 25 mm



- Average Density: 510 kg/m³
- Maximum Density: 560 kg/m³
- Applications
 - Lightweight concrete production
 - Manufacturing of lightweight blocks
 - Precast concrete elements
 - Lightweight fill material
 - Leca Readymix masonry mortar
 - Agricultural water treatment, including hydroponic systems

Size: 0.1 - 4 mm

- Average Density: 250 kg/m³
- Maximum Density: 300 kg/m³
- Applications
 - Lightweight infill concrete
 - Water and wastewater filtration systems
 - Drainage solutions in construction
 - Agricultural use, including hydroponics, greenhouse crops, and decorative plant pots

Size: 10 - 25 mm



Improving Living Conditions and Protecting the Environment

Our Values

Together we build for the future, working closely with suppliers, partners and customers. We are committed to protect the environment. Leca® LWA is a natural product, with a number of environmental benefits in the complete project life cycle from transport, application, "living" and reuse. While Leca® LWA is a simple product, our solutions are innovative and sustainable. LECA has been around for a long time, so we know that our product works – and lasts. And with experienced knowledge of our production process, focus on innovation and a strong commitment to our customers we know our values.

Our Mission

Our mission is to reduce our carbon footprint focusing on our industrial processes, knowing the values of the product when applied in housing, infrastructure and water management projects.

Our innovative products and solutions will positively contribute to the challenges of climate change emphasizing the future living conditions.

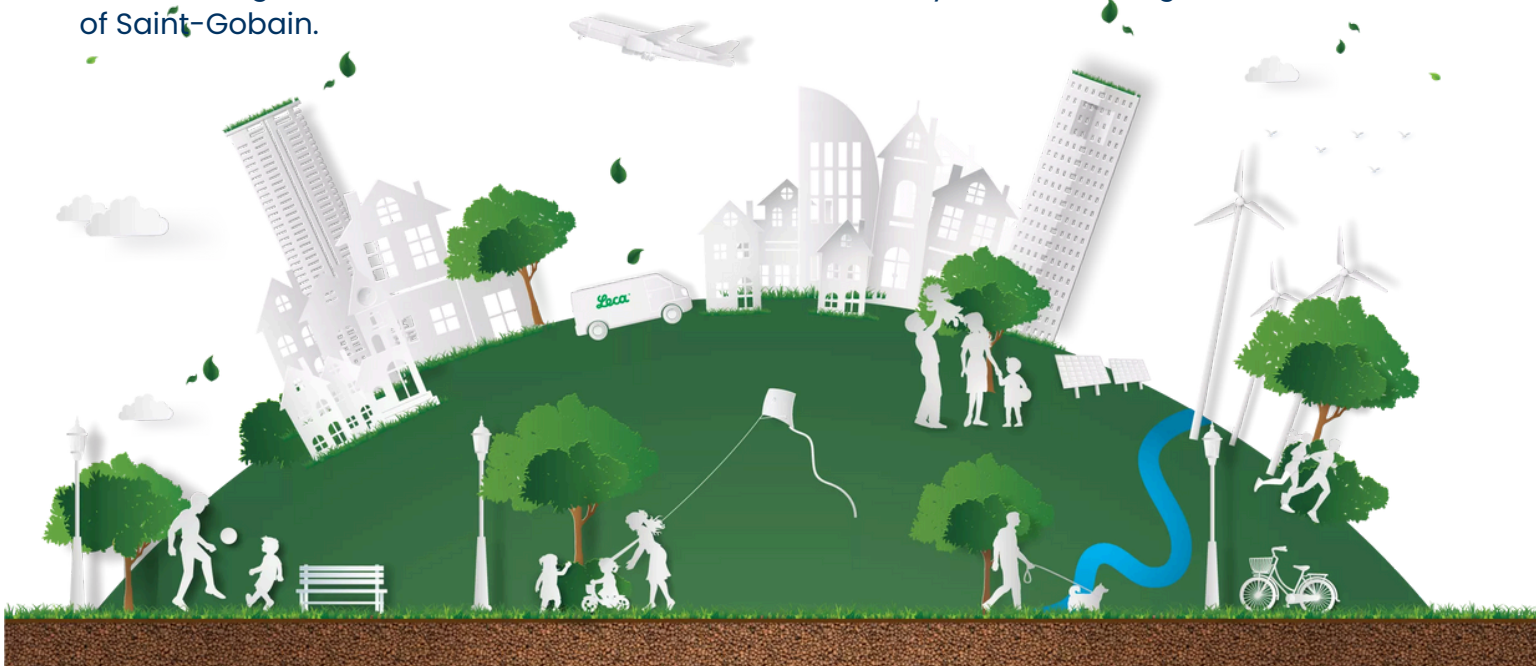
For the benefit of the environment and for everyone, everywhere.

Our Vision

We actively take responsibility in protecting the environment, producing and delivering resource efficient products with a specific focus on our sustainable footprint.

Our products positively contribute to our living conditions by reducing the negative impact from climate change and will also clean and filter the water of tomorrow.

Our challenge is to become net-zero carbon emissions by 2050, following the commitments of Saint-Gobain.



Ultra Super Lightweight Insulating Permeable Concrete

For use (including in thick screeds) as base or backfill, a substrate, for creating falls and for insulation and drainage.

Ultra Super light weight insulating permeable concrete screed based on light expanded clay aggregate (leca) size of granular from (0.10mm to 6.00 mm) use after mixing with cement and water in special pump

Characteristics

- **Multipurpose:**
- Can be used as substrate for incorporating services in floors, as a base or top screed or creating fall on flat roof, can be laid ceramic and stone paving directly on it.
- **Lightweight:**
- Weight approx. 600kg/m³ less than one third the weight of a traditional or flowing screed and less than a quarter of that of structural concrete, reduces dead loading and is particularly suitable for reconstructing existing floor slab, and vaults, or roofs, or to prevent excessive loading in seismic zones.
- **Strong, stable and durable:**
- It has high compressive strength (3 Mpa), is dimensionally stable and non-deformable, and retains its properties unaltered over time it is the ideal support to take top screed layer.
- **Insulating characteristics:**
- More insulating than traditional concrete products, it can be used to supplement or replace the insulation in flat or pitched roofs, floor slabs, and vault, and reduces thermal bridging, its porosity improves acoustic insulation.
- **Non-combustible and fire-resistance:**
- There is 100% mineral non-combustible product (Euro class fire rating-A1) that is fire-resistance and safe, including in presence of fire.
- **High drainage capacity:**
- Thanks to its network of intergranular voids, it is extremely permeable to water and can also be used as support, backfill, or as a layer of draining ballast on a roof or on the ground.
- **Suitable for sustainable construction:**
- The natural raw material used in Leca screed its manufacturing process, which respect the environment, and the absence of harmful emissions

Application

- As thermal insulation and for creating falls on flat roofs (an impermeable layer can be laid directly on the surface)
- As a lightweight insulating substrate or base screed on top of a floor slab (Including the incorporation of services and leveling them)
- As lightweight insulating screed to take a ceramic or stone floor finish



Technical Characteristics

Apparent Density	650 Kg/m ³
In Place Density	750 Kg/m ³
Avg Compressive Strength	3 N/mm ²
Thermal Conductivity	0.071 W/mk
Suggested Thickness	≥ 10 cm
CE Marking	EN 13813 CT-C5-F1



Super Lightweight Multipurpose Insulating Screed

For creating sloped surfaces, base and top screeds, and roof screeds with directly bonded top layer and suitable to take all types of adhesive and floating flooring for internal uses

Super lightweight multipurpose-insulating concrete screed based on light expanded clay aggregate (Leca) size of granular from (0.10 mm to 4.00 mm) use after mixing with cement and water in special pump

Characteristics

- **Multipurpose for interior and exterior use:**
- It can be used in screeds and to create falls internally or externally, including for the application of "wet -on-wet" flooring, it is ideal for use on roofs, sloping roofs where its very smooth pore-free surface enables impermeable layers or paving to be directly applied.
- **Lightweight:**
- Weight approx. 850kg/m³ less than half as much the weight of a traditional or flowing screed and less than a third of that of structural concrete, reduces dead loading and is particularly suitable for reconstructing existing floor slab, and vaults, or roofs, or to prevent excessive loading in seismic zones.
- **Strong, stable and durable:**
- It has high compressive strength (5 Mpa), is dimensionally stable and non-deformable, and retains its properties unaltered over time it is the ideal support to take top screed layer, it extremely low shrinkage enables large areas to be laid without joints (100m²)
- **Insulating characteristics:**
- More insulating than traditional concrete products, it can be used to supplement or replace the insulation in flat or pitched roofs, floor slabs, and vault, and reduces thermal bridging, its porosity improves acoustic insulation.
- **Non-combustible and fire-resistance:**
- There is 100% mineral non-combustible product (Euro class fire rating-A1) that is fire-resistance and safe, including in presence of fire.
- **High drainage capacity:**
- Thanks to its network of intergranular voids, it is extremely permeable to water and can also be used as support, backfill, or as a layer of draining ballast on a roof or on the ground.
- **Suitable for sustainable construction:**
- The natural raw material used in Leca screed its manufacturing process, which respect the environment, and the absence of harmful emissions, make it suitable for sustainable construction.

Application

- As lightweight insulating screed to take all types of flooring, including moisture-sensitive finishes.
- As a lightweight insulating screed to cover large areas.
- For internal and external use
- As thermal insulation and for creating falls including on flat or pitched roofs



Technical Characteristics

Apparent Density	850 Kg/m ³
In Place Density	1000 Kg/m ³
Avg Compressive Strength	5.0 N/mm ²
Thermal Conductivity	0.071 W/mk
Suggested Thickness	≥ 3 cm
CE Marking	EN 13813 CT-C5-F1
Laying of Ceramic Finishes	After 5 Days



Fast – Drying Lightweight Fiber – Reinforced Insulation Screed

Suitable to take all types of adhesive and floating flooring

Lightweight screed mortar-MI is a bagged premixed lightweight insulating screed mortar, consistency based on expanded clay aggregate, it is ready to use after mixing with only water.

Characteristics

- **Fast-drying:**
- It is special formulation makes possible rapid drying times that enable ceramics or stone to be fixed with adhesive after only 24 hour and moisture-sensitive types of flooring (parquet, carpet, vinyl, etc.) to be laid after 5 days (on thickness of 50 mm).
- **Reduced thickness:**
- Can be used in thickness of 1cm or above if bonded to a supporting layer, does not require mesh reinforcement.
- **Strong, stable and durable:**
- It has high compressive strength (12 Mpa), is dimensionally stable and non-deformable, and retains its properties unaltered over time it is the ideal support to take top screed layer, it extremely lows shrinkage.
- **Insulating characteristics:**
- More insulating than traditional concrete products, it can be used to supplement or replace the insulation in flat or pitched roofs, floor slabs, and vault, and reduces thermal bridging, its porosity improves acoustic insulation.
- **Non-combustible and fire-resistance:**
- There is 100% mineral non-combustible product (Euro class fire rating-A1) that is fire-resistance and safe, including in presence of fire.
- **For interior and exterior use:**
- It can be used in screeds internally and externally.
- **Suitable for sustainable construction:**
- The natural raw material used in Leca screed its manufacturing process, which respect the environment, and the absence of harmful emissions, make it suitable for sustainable construction.

Application

- As a light weight insulating screed for moisture sensitive flooring and all other types of floors.



Technical Characteristics

Apparent Packed Density	1,200 Kg/m ³
In Place Density	1,350 Kg/m ³
Avg Compressive Strength	12.0 N/mm ²
Thermal Conductivity	0.071 W/mk
Suggested Thickness	≥ 1 cm
CE Marking	EN 13813 CT-C16-F4
Laying of Ceramic Finishes	After 1 Day
Consumption area per bag	2.50 m ²
Storage from date of packaging	12 months
Package	1 bag = 25 kg 1 pallet = 60 bags



Asiacell HQ - Baghdad

Total working area: 11,000 m²



Qrga Mosque - Sulaymaniyah

Total working area: 6,000 m²



(Shary Mamostayan) Bardaswr - Kalar

Total working area: 10,500 m² with 2 towers



Asud Babil Project - Baghdad

Total working area:



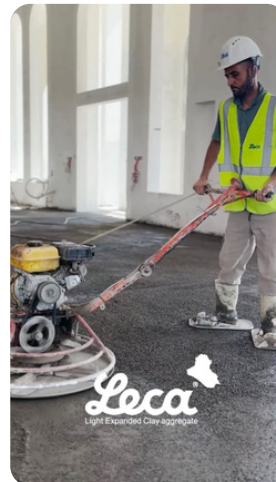
City Center Mall Roof - Sulaymaniyah

Total working area:



Brayati Mosque - Sulaymaniyah

Total working area: 1,700 m²



We strive for more sustainability

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Lecapon



Dry Leca Ready Mix

