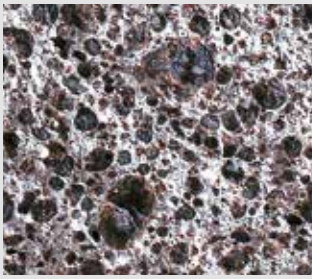
Latermix Béton 1600



HIGH-STRENGTH LIGHTWEIGHT INSULATING STRUCTURAL CONCRETE

FOR STRENGTHENING FLOOR SLABS, CONSTRUCTING COMPOSITE SLABS, REDUCING THERMAL BRIDGING, AND FOR ALL TYPES OF MASONRY CONSTRUCTION

Latermix Beton is a bagged pre-mixed lightweight insulating structural concrete based on Laterlite Structural special expanded clay, and is ready for use after mixing with only water.

CHARACTERISTICS

High structural strength

Latermix Beton 1600 is a genuine high-strength class LC 30/33 (Rck 35 MPa – 350 kg/cm^2) structural concrete that can be used for loadbearing structures in compliance with EN 206 and Eurocode 2.

Lightweight

Latermix Beton 1600 contains Laterlite Structural Expanded Clay as a replacement for traditional aggregates that significantly reduces weight by at least 800 kg (0.8 tonne) per m^3. With a density of 1600 kg/m^3 (as opposed to 2400/2500 kg/m^3 of an ordinary concrete), it is classified as an LWAC (lightweight aggregate concrete) and is particularly suitable for reconstruction work, for strengthening existing structures, or to prevent excessive loading in seismic zones.

Insulating characteristics

Thanks to its lambda (λ -thermal conductivity) approx. 3 times lower than that of an ordinary concrete (λ = 0.55 W/mK as opposed to 1.9 W/mK), it reduces thermal bridging, increases the energy efficiency of buildings, and prevents the development of building pathologies such as condensation and mould.

Reliable performance

The binder dosage and grading curve of the components is factory checked and maintained constant. Using only water for the mix means that the performance of the completed component can be controlled effectively; this is particularly important for guaranteeing strength in structural applications and eliminates the risk and inaccuracy associated with products mixed on site.

Multipurpose

Can be used as a replacement for traditional concrete in any external or internal application including where a fair-faced finish is required, or for industrial floors.

Non-combustible

This is a 100% mineral non-combustible product (Euroclass fire rating – A1) that is safe, including in the presence of fire.

APPLICATIONS

- Structurally strengthening existing floors (timber, steel, or concrete) using composite floor construction
- New structural floors (mixed floors in steel + concrete, timber + concrete, concrete floor slabs, etc.)
- Improving the strength of loadbearing masonry (edge beams, columns, etc.)
- Industrial floors
- Reducing thermal bridging in the structural elements of a building envelope
- As a replacement for concrete in all situations where traditional concrete is ordinarily used.

TECHNICAL CHARACTERISTICS

Apparent packed density (approx.)	1.300 kg/m^3
Density (UNI EN 206-1) (approx.)	1.600 kg/m^3 (classe D 1,5)
Average compressive strength (certified)	35 N/mm^2 (350 kg/cm^2)
Modulus of elasticity (certified)	E = 20.000 N/mm^2
Thermal conductivity λ (certified)	0,55 W/mK
Bags required per 1m^2 of floor area	0,47 bags per 10 mm depth
Reaction to fire	Euroclass fire rating A1
Package: bags each of 25 litres. on non-returnable wooden pallets, 48 bags/pallet for 1,2 m^3/pallet.	
Storage life: 12 months from date of packaging.	

For further information consult the Technical Data Sheet, the Safety Sheet, and our website at www.laterlite.com.