

# PERLIBETON

## Description

**PERLIBETON** is made of calibrated and expanded perlite grains, used for lightweight concrete.

Lightweight concrete of **PERLIBETON** can be prepared on worksite (cement mixer) or in concrete mixer plant (pumpable).

## Composition

	<b>PERLIBETON</b>
Expanded perlite	100 %

## Characteristics

		<b>PERLIBETON</b>
Granular class		0.5/5
Reaction to fire		Euroclass A1
<b>Lightweight concrete PERLIBETON cement mixer</b>	Compressive strength at 28 days	3.50 MPa
	Flexural strength at 28 days	0.80 MPa
	Thermal conductivity	0.21 W/(m.K)
	Bulk density	700 kg/m <sup>3</sup>
<b>Lightweight concrete PERLIBETON pumpable</b>	Compressive strength at 28 days	5.20 MPa
	Flexural strength at 28 days	2.70 MPa
	Thermal conductivity	0.30 W/(m.K)
	Bulk density	900 - 1000 kg/m <sup>3</sup>

## Packaging & Storage

	<b>PERLIBETON</b>
Packaging	Printed plastic bag of 100 L Identified by manufacturing date Pallet of 33 bags wrapped and banded with PE foil
Storage	Protected from bad weather and sunshine

## User application

## Installation

**PERLIBETON** is used to make lightweight concrete, for levelling and for thermal insulation of floors.

- **Lightweight concrete PERLIBETON : CEMENT MIXER**

**Step 1:** Clean the floor of all debris, water spots and dusts.

**Step 2:** Place a protection polyethylene film of 150 µm against the laitance penetration on the support. This film can be replaced by a thin acoustic underlayer from the range **VELAPHONE**, in the case of thermo-acoustical floor (refer to the relevant technical datasheet).

**Step 3:** Place a peripheral separation tape along verticals wall and pipes penetrations.

**Step 4:** Lay the welded mesh (mesh size 50 mm x 50 mm, minimum weight 650 g/m<sup>2</sup>) on the floor without perforating the protection film.

**Step 5:** Put wooden wedges on the support to the level to be reached by the lightweight concrete.

**Step 6:** Mix, in the cement mixer, the **PERLIBETON** with sand, cement, water according the following composition:

	<b>Lightweight concrete PERLIBETON (Cement mixer)</b>	
<b>PERLIBETON</b>	1 bag (100 L)	8 bags (800 L)
Cement		
- CEM II / A 32.5	40 kg	320 kg
- CEM II / B 32.5		
- CEM I / A 42.5		
Sand-Granular class 0/4 mm	24 kg	190 kg
Water	20 L	160 L ± 10 L

Nota: 1 m<sup>3</sup> of lightweight concrete equals 800 L of **PERLIBETON**.

**Step 7:** Pour between the wooden wedges the lightweight concrete **PERLIBETON** while positioning the welded mesh in the middle of the concrete. Then level the concrete by using a ruler. Provide expansion joints every 40 m<sup>2</sup> made at least 24 hours after the concrete has been poured.



