

EFIPERL

Description

EFIPERL is a mix of calibrated exfoliated vermiculite grains and calibrated expanded perlite grains, used for lightweight concrete or for floor thermal insulation of lost attics.

Composition

	EFIPERL
Expanded vermiculite	Granular class 1/5
Expanded perlite	Granular class 0.5/5

Characteristics

		EFIPERL
Granular class		0.5/5
Lightweight concrete EFIPERL	Compressive strength at 28 days	0.13 MPa
	Thermal conductivity	0.15 W/(m.K)
	Bulk density	300 kg/m ³
Thermal insulation EFIPERL	Thermal conductivity	0.056 W/(m.K)
	Bulk density	105 kg/m ³ ± 15 kg/m ³
	Reaction to fire	A1
	Consumption	1 bag for 10 cm thick / m ²

Packaging & Storage

	PERLIBETON
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

EFIPERL is used as light aggregate for concrete and mortar.

EFIPERL is also used as bulk thermal insulation to pour on floor or for ceiling of lost attics.

Installation

- **Light aggregates for concrete and mortar :**

Wooden wedges are installed on the support and levelled to define the thickness and the level to be reached.

EFIPERL is mixed with cement and water in cement mixer according to one of the following compositions below :

	Lightweight concrete EFIPERL	
EFIPERL	1 bag	12 to 13 bags
Cement		
- CEM II / A 32.5		
- CEM II / B 32.5		
- CEM I / A 42.5		
Water		
	20 kg	250 kg
	30 L	355 - 365 L

Lightweight concrete **EFIPERL** is poured on the support between the wooden wedges. Then the concrete is levelled by using a ruler.

After levelling the concrete, wooden wedges are removed and their place are filled with lightweight concrete **EFIPERL**.

- **Thermal insulation for floor or lost attics :**

For main surface :

EFIPERL is poured either between ceiling joists either on the existing floor.

The thickness of **EFIPERL** is equalized by using a ruler or a wooden scantlings.

In case of floor refurbishment in lost attics, wooden panels are disposed over the **EFIPERL** while ensuring keep a ventilated air space (outside air) of at least 2 cm between the surface of **EFIPERL** and the underside of wooden panel.

Special case for the periphery of the flues :

Near the flues, **EFIPERL**, minimizes thermal losses caused by the safety distance required between the flue and the thermal insulation of main surface.

For this, **EFIPERL** is poured manually into the volume defined by the flue and the trimmer (assembly of plasterboard or wood panel) positioned at safe distance from the flue and whose height is 20% higher than the insulation provided.

