# Floor betonstyr eps

Complete dry floor system with Betonstyr EPS coupled panels and ultra-rapid hardening self-leveling Betonultraplan



Complete insulating floor system with high performances



#### DESCRIPTION

Complete dry building floor system on new and existing grounds with high performances Floor betonstyr eps guarantees the maximum durability over time is guaranteed, with international ETA certification.

The floor system in new construction or renovations of existing floors consists in a first layer with cement bonded particle boards coupled with insulating expanded polystyrene Betonstyr EPS.

Above one or more layers of self-leveling ultra-fast hardening Betonultraplan are laid to level out and eliminate thickness differences from 1 to 10 mm, and at the same time guarantee high resistance to loads.

Excellent system for excellent thermal and acoustic insulation of walkable floors.

Stratigraphy consists of BetonStyr EPS coupled panels in cement bonded particle boards and highly insulating expanded polystyrene, with an excellent compression resistance, high density (1350 kg/m<sup>3</sup>), and particularly suitable for humid environments.

On top of this stiffening / insulation layer one or more layers of Betonultraplan self-leveling smoothing layer with ultra-rapid hardening is applied, to level and eliminate thickness differences from 1 to 10 mm.

Solution with high thermal performance and simple application.

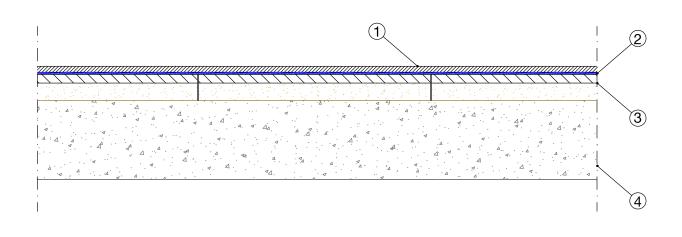
#### Advantages

- Excellent solution even as flat roof (with the addition of further layers, for clarification call our technical office)
- · Excellent protection from summer heat thanks to the high thermal displacement;
- Hygroscopic material, particularly suitable for humid environments;
- Available thicknesses from 18+20 to 20+100 mm;
- Excellent thermal and acoustic insulation;
- Fire resistance class A2
- Excellent mechanical resistance against burglary, antivandalism.

For more informations about the uses and the installation, our offices are ready to answer your questions on www.betowood.com



STRATIGRAPHY



### Floor finish surface

1

2 Self-leveling Beton Ultraplan self-leveling and ultra-rapid hardening agent used in indoor environments to level and eliminate thickness differences from 1 to 10 mm of new or existing substrates, making them suitable for receiving any type of flooring in rooms where high resistance to loads and traffic is required. The consumption of BetonUltraplan is 1.6 kg/m<sup>2</sup> per millimeter of thickness.

**BetonStyr eps** BetonStyr EPS rigid insulating panel, ... mm thick, made up of two layers coupled in the factory consisting of a BetonWood cement bonded particle board, high density (1350Kg / m<sup>3</sup>), made of Portland cement mix and barked pine wood fiber thickness ... mm and an insulating layer of expanded polystyrene with a thickness of ... mm. The cement bonded particle board has the following thermodynamic characteristics: coefficient of thermal conductivity  $\lambda = 0.26$  W / mK, specific heat c = 1.88 KJ / Kg K, coefficient of resistance to vapor penetration  $\mu = 22.6$  and reaction class to A2 fire, according to EN 13501-1. The expanded polystyrene is characterized by the following thermodynamic characteristics: coefficient of resistance to vapor penetration  $\mu = 50 \div 100$ . Both materials are CE certified.

### 4 Ground new building and/or existing grounds





#### SYSTEM'S PRODUCTS



Betonultraplan Self-leveling, ultra-rapid self-leveling smoothing. BetonUltraplan mixed with water gives rise to a very smooth mixture, easy to work, perfectly self-leveling, with high adhesion to the substrate and very quick drying.

It is applicable with pump up to distances of over 100 m.

It is applied in thicknesses up to 10 mm for each single hand, without undergoing any shrinkage, without forming cracks, until it reaches a high resistance to compression, flexion, imprint and abrasion.

The consumption of BetonUltraplan is 1,6 kg/m<sup>2</sup> per millimeter of thickness. BetonUltraplan is available in 23 kg bags.



BetonStyr EPS Beton Styr EPS is an extremely versatile product as it is suitable for many building applications, because the advantages of two materials are combined in one coupled: on one side a material with a high mass and high compressive strength, the BetonWood cement bonded particle boards high density, indispensable for obtaining an adequate thermal displacement and a great noise reduction, on the other an expanded polystyrene panel characterized by lightness, high insulating capacity and easy processing.

The cement bonded particle board has the following thermodynamic characteristics: density 1350 Kg/m<sup>3</sup>, coefficient of thermal conductivity  $\lambda = 0.26$  W / mK, specific heat c = 1.88 KJ / Kg K, coefficient of resistance to vapor penetration  $\mu = 22.6$  and reaction class to A2 fire, according to EN 13501-1. The expanded polystyrene is characterized by the following thermodynamic characteristics: density 15÷35 Kg/m<sup>3</sup>, coefficient of thermal conductivity  $\lambda = 0,026 \div 0,036$  W / mK, specific heat c = 1,450 J / Kg K, coefficient of resistance to vapor penetration  $\mu = 50 \div 100$ . Both materials are CE certified.

#### **BETONWOOD Srl**

Head office : Via Falcone e Borsellino, 58 I-50013 Campi Bisenzio (FI)

> T: +39 055 8953144 F: +39 055 4640609

info@betonwood.com www.betonwood.com

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## CERTIFICATIONS

The BetonStyr EPS and self-leveling BetonUltraplan floor insulation system is produced with CE certified materials in accordance with current regulations.



