

Elevated floor: betonwood on betonstyr

Elevated floor complete systems on Betonstyr insulating panels, supports and Betonwood cement bonded particle boards

Complete insulating floor system with high performances



| DESCRIPTION

Complete dry building elevated floor system on new and existing grounds with high performances. Elevated floor **betonwood** on **betonstyr** 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 extruded polystyrene **Betonstyr XPS**.

Above an additional layer of high density and high resistant **Betonwood** cement bonded particle boards is laid on adjustable supports.

The stratigraphy consists, in order from bottom to top, of:

- insulating **Betonstyr XPS** cement bonded particle boards coupled with extruded polystyrene, with high compression resistance and high density on the existing ground.
- Supports with adjustable height from 25 to 270 mm;
- **BetonWood Tongue&Groove** suitable to elevated floors thanks to their compression and mechanical resistance, and the thermo-acoustic insulation;
- ultra-rapid hardening self-leveling **Betonultraplan** to level and eliminate thickness differences from 1 to 10 mm.

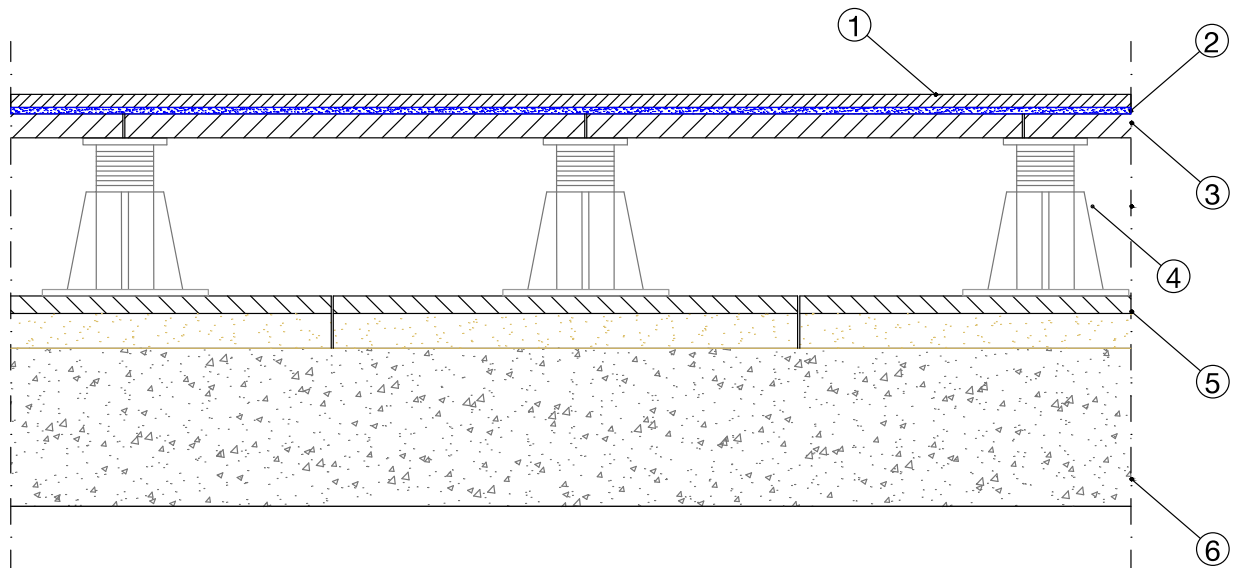
Advantages

- 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;
- Adjustable supports have the advantage of being able to be fixed to the desired height
- 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



- 1 Floor finish surface
- 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/m² per mm of thickness.
- 3 **Cement bonded particle board Betonwood** made by Portland cement and wood fibers, has an high density of 1350 kg/m³ and an excellent compression resistance equal to 9.000,00 Kpa and has the following termo-dynamics characteristics: thermal conductivity coefficient $\lambda=0,26$ W/mK, specific heat $c=1,88$ KJ/Kg K, coefficient of resistance to vapor penetration $\mu=22,6$ and reaction to fire class A2-fl-s1, according to the standard EN 13501-1. These panels have sharp edges.
- 4 **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/m² per mm of thickness.
- 5 **BetonStyr xps** BetonStyr XPS 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 / m³), made of Portland cement mix and barked pine wood fiber thickness ... mm and an insulating layer of extruded 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 extruded polystyrene is characterized by the following thermodynamic characteristics: 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.
- 6 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 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 completion of BetonUltraplan is 1,6 kg/m² per mm of thickness.



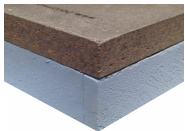
BetonWood The BetonWood cement bonded particle boards, with high density (1350 Kg/m³), made of Portland-type cement conglomerate and debarked Pine wood fiber. These panels have the following termo-dynamics characteristics: thermal conductivity coefficient $\lambda=0,26$ W/mK, specific heat $c=1,88$ KJ/Kg K, coefficient of resistance to vapor penetration $\mu=22,6$ and reaction to fire class A2-fl-s1, according to the standard EN 13501-1.

The panels size is ... mm and the thickness is ... mm.



The wood used in panel processing comes from forests controlled by FSC reforestation cycles and pressed with water and hydraulic binder (Portland cement) with high cold compression ratios.

Adjustable supports SB Adjustable Floor Stands have anti-noise rubber head, specific adjustment key, variable heights, pre-cut base for wall corner cutting. Possibility to adjust the height millimetrically (adjustable from 25 to 270 mm), in favor of a perfect leveling of the flooring.



BetonStyr XPS Beton Styr XPS 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 extruded polystyrene panel characterized by lightness, high insulating capacity and easy processing.

The cement bonded particle board has the following thermodynamic characteristics: density 1350 Kg/m³, 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 extruded polystyrene is characterized by the following thermodynamic characteristics: density 15÷35 Kg/m³, 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 elevated floor system on adjustable supports, BetonStyr XPS panels and BetonWood cement bonded particle boards is produced with CE certified materials in accordance with current regulations.



GENERAL SECURITY INSURANCE GUARANTEE
ON THE PRODUCT WITH CORRECT DOCUMENTED
INSTALLATION WITH PHOTOGRAPHS

Beton Wood

