Elevated radiant floor on cork

Elevated radiant heating floor complete systems on supports and granulated cork, Betonwood TG and Betonradiant panels

Complete insulating floor system with high performances

DESCRIPTION

Elevated radiant heating floor complete system on X-lam ground. The elevated system is laid on adjustable-height supports type SB and a loose thermo-acoustic insulation in granulated cork type Cork Granules.

The elevated dry system consists in tongue&groove special profiled cement bonded particle boards BetonWood TG which must be arranged in a staggered way.

To guarantee sound insulation, it is advisable to lay a Fibertherm Underfloor thin wood fiber mat.

After this, the radiant heating panels Betonradiant cement bonded particle boards can be laid. Above these panels the installation of the pipes for underfloor heating and, subsequently, of one or more layers of ultra-rapid hardening self-leveling Betonultraplan takes place.

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

- Adjustable supports SB with adjustable height from 25 to 270 mm;
- blond granulated cork Cork granules suitable in elevated or floating floor systems;
- BetonWood Tongue&Groove , with the special tongue&groove profile, are suitable in elevated or floating floor systems thanks to their high compression resistance, mechanical resistance and thermo-acoustic insulation;
- FiberTherm Underfloor wood fiber thin mat for good impact sound insulation;
- Beton Radiant panels for elevated radiant heating floor system;
- Betonultraplan self-leveling agent to eliminate thickness differences from 1 to 10 mm.

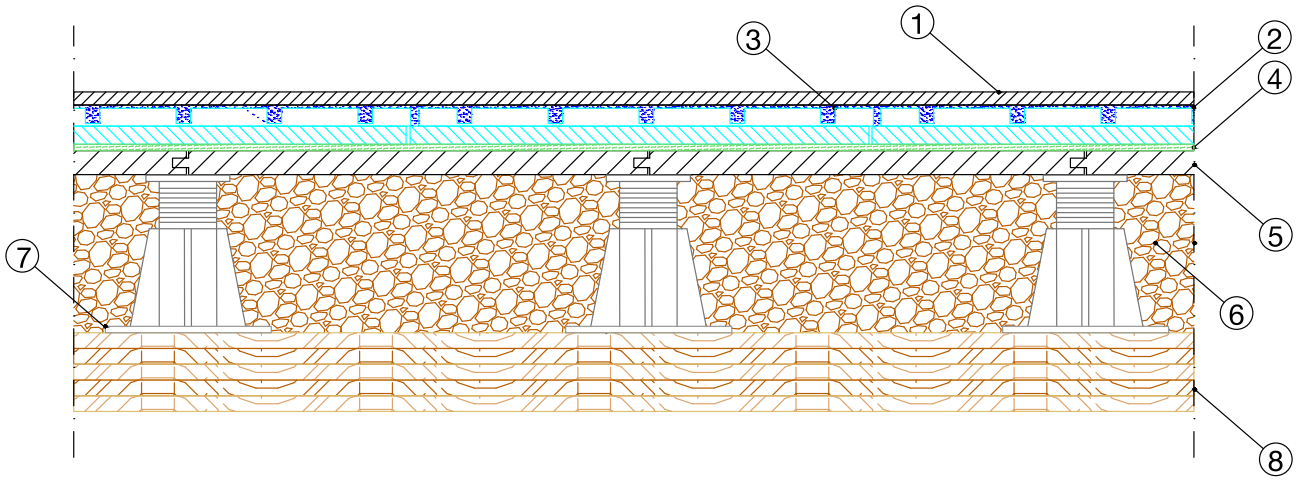
Advantages

- Excellent breathability of the screed
- Possibility to switch the water, gas and electricity systems under the floor
- Significant impact sound insulation
- Adjustable supports have the advantage of being able to be fixed to the desired height
- It creates a comfortable living climate
- Material CE certified
- The modular BetonRadiant system allows to obtain a radiant heating on the whole intervention surface

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/m^2 per mm of thickness.

3 Radiant panel Betonradiant The system is composed of two coupled cement bonded particle boards: one with thickness equal to… mm, is milled for the lodging of the heating pipes with a diameter of ... mm, while the other, with a thickness of… mm, is the lower stiffening layer.The thermo-dynamics characteristics: high density (δ=1350 Kg/m^3), coefficient of thermal conductivity λ=0.26 W / mK, specific heat c=1.88 KJ / Kg K, coefficient of resistance to vapor penetration μ=22.6 and fire reaction class A2, according to EN 13501-1.

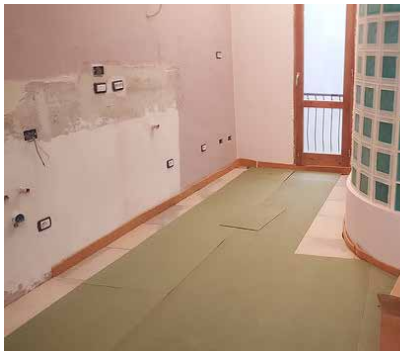
4 Wood fiber Fibertherm Underfloor floor underlay characterized by good impact sound insulation and high improvement of environmental acoustics, excellent insulation characteristics, high resistance to pressure up to 20t/m^2 - important for interlocking systems. Its density is 250 kg/m^3 and the declared thermal conductivity is λ =0,06÷0,1 [W/(m*K)]. This wood fiber panel is produced in wet process, it is recyclable and made with wood from controlled forests in according to the FSC guidelines.

5 Cement bonded particle boards Betonwood TG Every panel is made with in Portland-type concrete conglomerate and high-density debarked Pine wood fiber (δ = 1350Kg/m^3) with the following thermodynamic characteristics: coefficient of thermal conductivity λ= 0.26W/mK, specific heat c=1.88 KJ/Kg K, coefficient of resistance to vapor penetration μ=22.6 and fire reaction class A2-fl-s1, according to EN 13501-1 standard. The panels have a special tongue & groove interlocking profile.

6 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.

7 Blond granulated cork Cork granules The granulate is made of compressed natural blond cork. The material is characterized by the following thermodynamic characteristics: density 200 Kg / m^3, coefficient of thermal conductivity λ = 0.037 W/mK, specific heat c = 1674 J/kgK, coefficient of resistance to vapor penetration μ=10÷13 and class reaction to fire 2, according to the Circ. Min. Internal 14/09/1961, n. 91. The granulometries can be 3/12 mm and 3/5 mm.

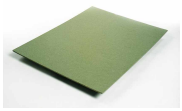
8 Ground X-lam ground



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 comption of BetonUltraplan is 1,6 kg/m^2 per mm of thickness.

BetonRadiant Beton Radiant is a modular radiant heating system for the construction of radiant floors and consists of two cement bonded particle boards, high density (δ=1350 Kg/m^3) and the following termo-dynamics characteristics: thermal conductivity coefficient λ=0,26 W/mK, specific heat c=1,88 KJ/Kg K, coefficient of resistance to vapor penetration μ=22,6 and reaction to fire class A2-fl-s1, according to the standard EN 13501-1.



FiberTherm Underfloor The wood fiber thin mat FiberTherm Underfloor is a thermo-acoustic insulation with which you get a high improvement of acoustics for pre-finished parquet and laminate floors up to 19 dB. Its density is equal to 250 kg/m^3. The material is also recyclable, with relative NaturePlus certification and made exclusively with wood from controlled forests in compliance with the FSC guidelines.

BetonWood Tongue&Groove The cement bonded particle board is made of Portland-type cement conglomerate and debarked Pine wood fiber. These panels have the following termo-dynamics characteristics: high density (1350 Kg/m^3), thermal conductivity coefficient λ=0,26 W/mK, specific heat c=1,88 KJ/Kg K, coefficient of resistance to vapor penetration μ=22,6 and reaction to fire class A2-fl-s1, according to the standard EN 13501-1.

Cork Granules is a completely natural insulating and leveling granulate, produced simply by crushing blond cork: there are no additives. Cork granules is characterized by the following thermodynamic characteristics: density 200 Kg/m^3, coefficient of thermal conductivity λ=0,037 W/mK, specific heat c=1674 J/Kg K, coefficient of resistance to vapor penetration μ=10÷13 and fire reaction class 2, according to the Circ. Min. Interno 14/09/1961, n. 91. The granulometries can be 3/12 mm and 3/5 mm.

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.

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Beton Wood

CERTIFICATIONS

The elevated radiant heating floor system on SB supports and granulated cork, BetonWood TG, wood fiber Underfloor and radiant BetonRadiant panels is produced with CE certified materials in accordance with current regulations.

CE

guaranteed system
WARRANTY 10 YEARS
BetonWood

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