

Radiant **betonradiant** on cork

Complete radiant heating floor system with blond Cork Granules and modular Betonradiant panels on X-lam

Beton Wood

Complete insulating floor system with high performances



| DESCRIPTION

The complete dry construction system for x-lam floors with high performance dry elevated radiant heating system with **BetonRadiant** panels, blond granulated cork **Cork granules** and self-leveling agent **Betonultraplan**. Maximum durability over time is guaranteed.

On an X-lam floor, the system consists in a single layer of radiant heating panels **BetonRadiant** that guarantee the housing of the heating pipes and the trampling. These panels are laid on top of a layer of blond cork granules **Cork granules** which possesses excellent properties of thermo-acoustic insulation and breathability. Above the radiating system one or more **Betonultraplan** self-leveling layers is applied to level and eliminate differences in thickness from 1 to 10 mm, ensuring high resistance to loads.

Stratigraphy consists of radiant **Betonradiant** cement bonded particle boards with high compression resistance and high density (1350 kg/m³) laid on granulated in natural blond cork **Cork granules** which guarantees excellent thermo-acoustic insulation and protection against mold and moisture.

On the top of radiant heating panels 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.

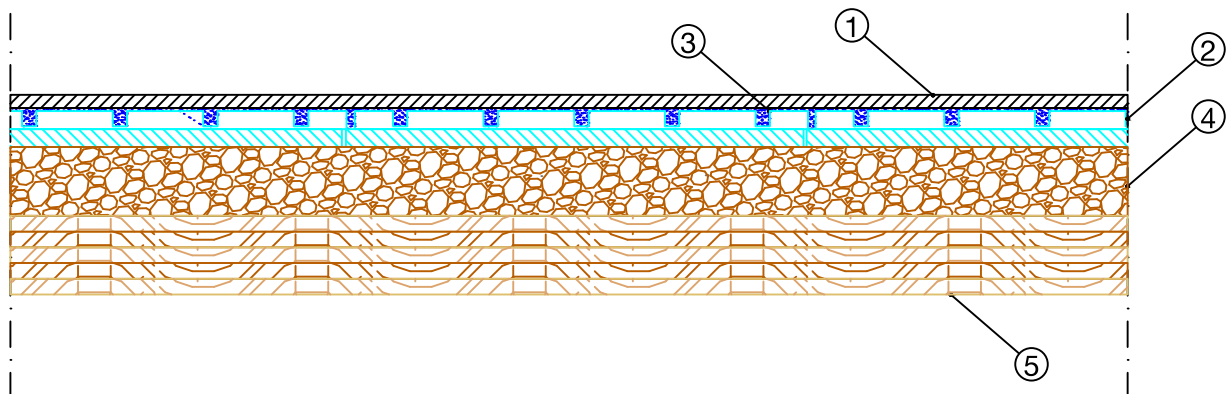
Advantages

- Excellent radiant floor heating on X-lam
- Remarkable acoustic protection thanks to the porosity of the insulating panels
- Available thicknesses of **BetonRadiant** (from 18+18 to 20+20 mm)
- It creates a comfortable living climate
- Material CE certified
- Ecologic material with controlled quality, recommended by Natureplus®;
- Hygroscopic material regulates humidity and gives us security over time.
- Extreme ease of installation

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 millimeter of thickness.
- 3 **Radiant heating panels Betonradiant** The system is composed of two types of panel: the overlying cement bonded particle board, BetonWood type, with thickness equal to... mm, is milled for the lodging of the heating pipes with a diameter of ... mm, while the other, also in BetonWood cement bonded particle board, with a thickness of... mm, is the lower stiffening layer. The panels size is ... mm and the thickness is ... mm.
The two panels are made of Portland-type cement conglomerate and debarked Pine wood fiber with high density ($\delta=1350$ Kg/m³) and with the following thermo-dynamics 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 wood used in the processing of the panel comes from forests controlled and certified FSC.
- 4 **Blond Cork granules** The granulate is made of compressed natural blond cork. The material is characterized by the following thermodynamic characteristics: density 200 Kg/m³, coefficient of thermal conductivity $\lambda=0,037$ W/mK, specific heat $c=1674$ J/Kg K, coefficient of resistance to vapor penetration $\mu=10\div13$ 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.
- 5 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 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 and cracks, until it reaches a high resistance to compression, flexion, imprint and abrasion.

The completion of Betonultraplan is 1,6 kg/m² per millimeter of thickness.

Betonultraplan is available in bags from 23 kg.



BetonRadiant Beton Radiant is a modulare radiant heating system for the construction of radiant floors and consists of two cement bonded particle boards, high density (1350 kg / m³) as per European standard EN 13986.

The two panels are coupled in the factory with a patented system and the wood used in their processing comes from FSC forests controlled by reforestation cycles and pressed with water and hydraulic binder (Portland cement) with high cold compression ratios.

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.



Cork Granules is a completely natural insulating and leveling granulate, produced simply by crushing blond cork: there are no additives. It is characterized by excellent values of thermal insulation and breathability typical of natural cork, which reduce the formation of mold and moisture compared to traditional products; another characteristic of cork is that of guaranteeing an excellent noise reduction, making it an ideal product for the construction of impact sound-proof floors of the inter-floor slabs.

The material is characterized by the following thermodynamic characteristics: density 200 Kg/m³, coefficient of thermal conductivity $\lambda=0,037$ W/mK, specific heat $c=1674$ J/Kg K, coefficient of resistance to vapor penetration $\mu=10\div13$ 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.

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 floor radiant heating system in BetonRadiant modular panels, natural blond cork granules and self-leveling Betonultraplan are 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

