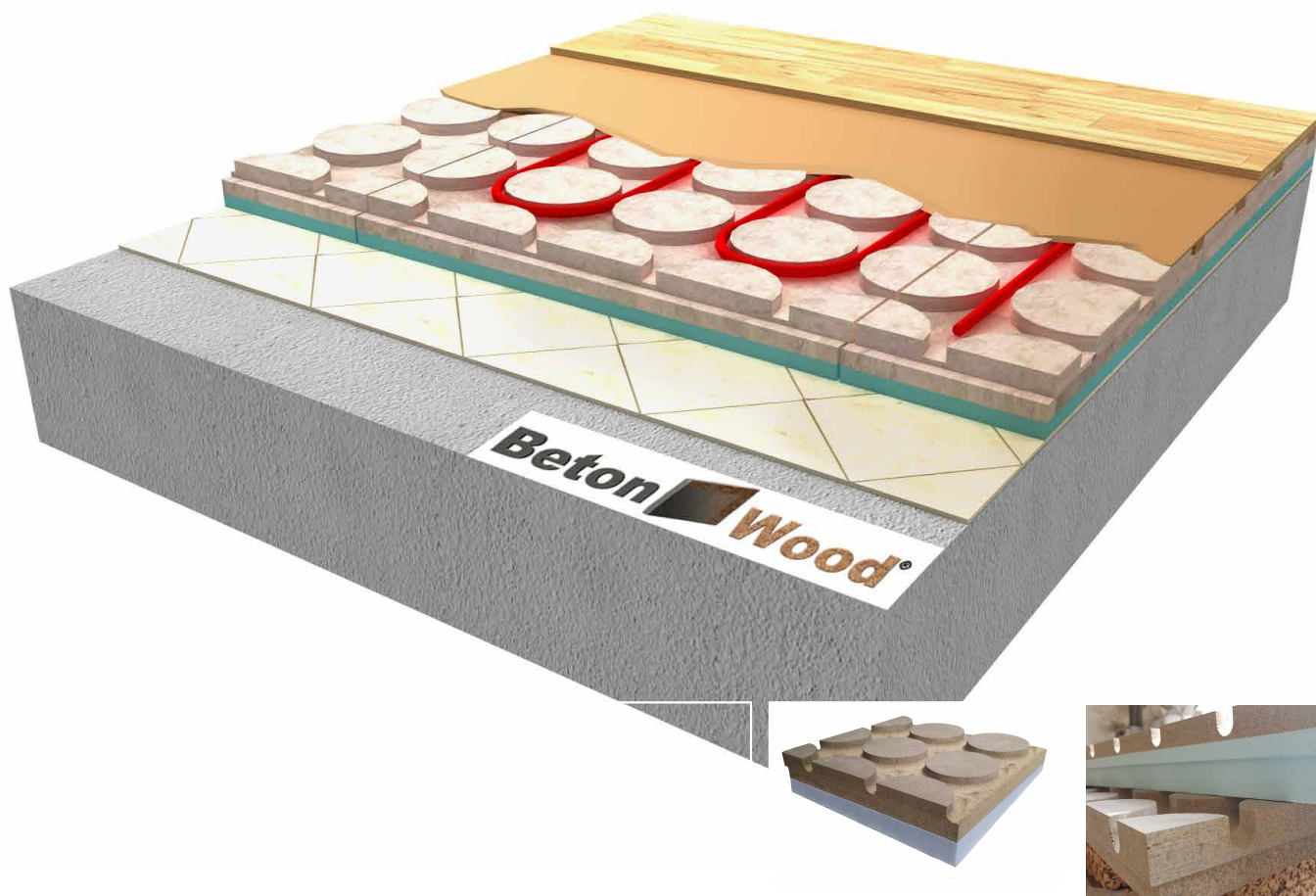


# Radiant **betonradiant styr xps**

Complete radiant floor system with Betonradiant styr xps panels and ultra-fast self-leveling Betonultraplan

# Beton Wood

Complete insulating floor system with high performances



## | DESCRIPTION

The complete dry construction system for floors with high performance radiant heating **Radiant betonradiant styr xps** guarantees the maximum comfort and the maximum durability over time.

The heating floor system in new construction or renovations of existing floors consists in heating radiant cement bonded particle boards and extruded polystyrene **Betonradiant styr xps** which guarantee the thermal and acoustic insulation from the floors below and at the same time form the housing of the heating pipes.

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.

Stratigraphy consists of modular radiant heating panels **Betonradiant styr XPS** made by cement bonded particle boards and extruded polystyrene, with an excellent compression resistance, high density (1350 kg/m<sup>3</sup>).

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.

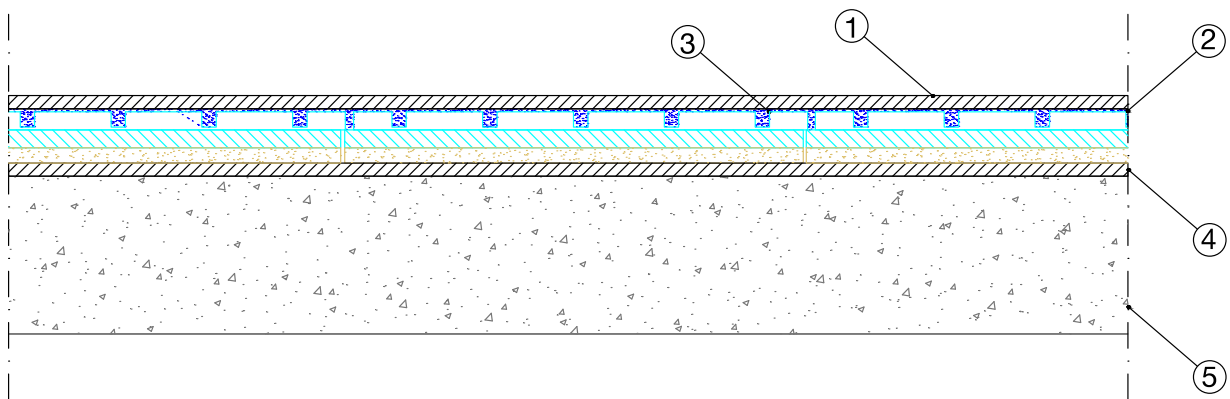
### Advantages

- Excellent radiant floor heating
- Remarkable acoustic protection thanks to the porosity of the insulating panels
- Available thicknesses of BetonRadiant Styr XPS (from 38+10 to 40+40 mm)
- Material CE certified
- 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](http://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<sup>2</sup> per millimeter of thickness.

3 Radiant heating panels BetonRadiant Styr XPS 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, a panel made by extruded polystyrene Styr XPS, with thickness ... mm, is the lower layer of thermal and acoustic insulation.

The cement bonded particle board has the following thermodynamic characteristics: density 1350 Kg/m<sup>3</sup>, coefficient of thermal conductivity  $\lambda = 0.26 \text{ W / mK}$ , specific heat  $c = 1.88 \text{ KJ / Kg K}$ , 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/m<sup>3</sup>, coefficient of thermal conductivity  $\lambda = 0,026 \div 0,036 \text{ W / mK}$ , specific heat  $c = 1,450 \text{ J / Kg K}$ , coefficient of resistance to vapor penetration  $\mu = 50 \div 100$ . Both materials are CE certified.

4 Existing panels possibility to lay the system even on existing flooring

5 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.



**BetonRadiant Styr XPS** Beton Radiant styr XPS is a modular system for the construction of radiant floors and consists of a cement bonded particle board, high density (1350 kg / m<sup>3</sup>) as per European EN 13986, and one of extruded polystyrene particularly suitable for humid environments.

Modular panel suitable for any finish, ensuring excellent ease of installation and flexibility, which makes it ideal for the construction of radiant floor heating systems.

One of the panels is milled to house pipes for radiant floor heating systems, while the other forms the underlying layer. After laying the pipes and filling the milling, the radiant panel is suitable for any surface finish coating.

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.

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

PBTRSTXAUTO - ST R.18.5

## | CERTIFICATIONS

The radiant floor panel Betonradiant styr XPS and self-leveling BetonUltraplan floor insulation system 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**

