

# Wall **betonwood** on metal sheeting **Beton Wood**

Building system for internal walls with cement bonded particle boards and metal sheeting system fixed on wood frame

Complete internal insulating wall systems with high performances



## | DESCRIPTION

The complete building system for high performances internal walls **betonwood on metal sheeting** is easy and quick to install, guarantees maximum comfort and durability over time, with the international ETA certification.

It is the ideal system to realize light walls with BetonWood cement bonded particle boards with high mechanical resistance, and wood sheeting system fixed on metal frames.

The building system **Wall betonwood on metal sheeting system** consists in installing BetonWood N cement bonded particle boards and Beton metal sheeting system with screws on a metal structure that acts as a high performance building envelope.

The stratigraphy consists in **BetonWood N** cement bonded particle boards with high density ( $1350 \text{ kg/m}^3$ ), horizontally arranged in a staggered manner. These panels are CE certified and are fixed with **NF 57 Screws** directly on the galvanized steel sheet with dovetail profile **Betonmetal sheet** vertically arranged. **Betonmetal sheet** is fixed with our screws to a wood frame structure on masonry wall. We recommend, on the internal side of walls, to install a first layer of glueing/skimming monocomponend cementitious mortar **BetonAR1**, an high density glassfiber net **BetonGlass 360** and a second layer of glueing/skimming monocomponend cementitious mortar **BetonAR1**.

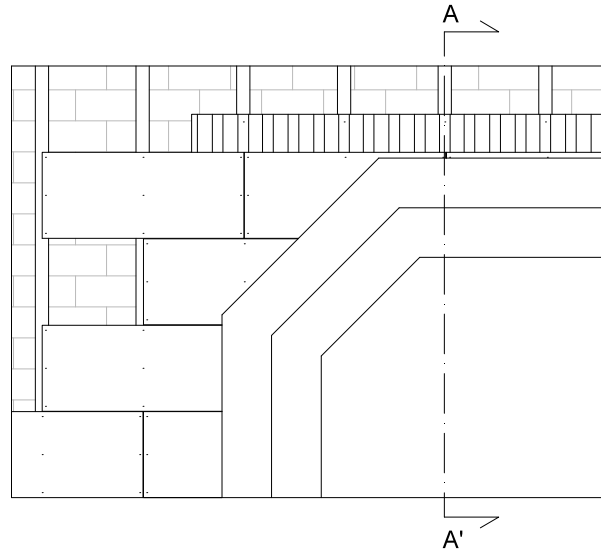
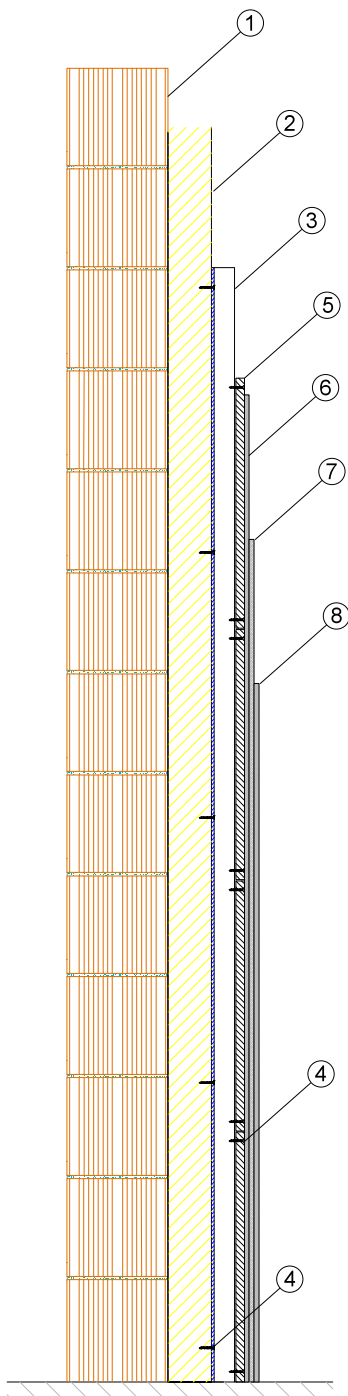
### Advantages

- Approved and secure fixing system.
- Complete system: panels, skimming layers, installation products and accessories
- Easy and quick to install
- The system guarantees the realization of micro-ventilated walls
- Excellent 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](http://www.betowood.com)



STRATIGRAPHY



- 1 Masonry or x-lam wall
- 2 Wood frame structure
- 3 **Beton metal sheet** The metal sheet in galvanized steel with a dovetail profile is a reinforcement plate for screeds and walls. Self-supporting, light, excellent for sound insulation, for micro-ventilation of walls and for fire protection. It has a width of 630 mm and a length varying from 1220 to 2500 mm. Profile height 16 mm.
- 4 **Cement bonded particle boards BetonWood N** Cement bonded particle boards with high density 1350 kg/m<sup>3</sup> and an excellent compressive resistnace 9000 kPa, fire resistant (A2 class). Panel size 1220x520 mm and thickness 18/20/22 mm
- 5 **NF57 Screws** Auto-drilling screws for the fixing of BetonWood N cement bonded particle boards directly on the metal frame structure. No. 9 screws for fixing any panel.
- 6 \* **Beton AR1** Monocomponent cementitious mortar for bonding and smoothing of thermal insulation panels and BetonTherm "reinforced thermal insulation composite systems".
- 7 \* **Glassfiber net BetonGlass 360** Glass fiber net with density 360 g/m<sup>3</sup> warp-proof and alkali-resistant, used in armored thermal insulation systems. Indispensable in BetonTherm systems.
- 8 \* **Beton AR1** Monocomponent cementitious mortar for bonding and smoothing of thermal insulation panels and BetonTherm "reinforced thermal insulation composite systems".

\* the layers n. 6, 7 and 8 can be replaced by a plasterboard layer directly fixed on the Betonwood panels (layer n.5) with the screws NF57 (material n.4)



## | SYSTEM'S PRODUCTS



**BetonGlass 360** The net has density 360 g/m<sup>3</sup> and complies with the ETAG004 Guideline for ETICS (External Thermal Insulation Composite System), as certified by IFBT GmbH-MFPA Leipzig GmbH. It is suitable for internal and external armored thermal insulation (suitable for any type of BetonTherm product). 50 m<sup>2</sup> rolls.



**Recommended - BetonAR1** Monocomponent cementitious mortar for bonding and smoothing of thermal insulation panels and BetonTherm "reinforced thermal insulation composite systems".

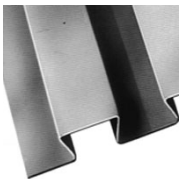
- 4,0 - 6,0kg/m<sup>2</sup> depending on the gluing technique
  - 1,3 - 1,5kg/m<sup>2</sup> per mm of skimming layer thickness (recommended: approx. 4 mm within 2 hands).
- Application: spatula



**Screws NF 57** The screw has a special anti-corrosion coating that guarantees a 1,000-hour salt spray resistance. Under-head with very sharp self-sinking wings for a perfect housing of the head flush with the panel. Drill bit that allows a perfect drilling capacity even on high sheet thicknesses.



**BetonWood N** The Betonwood cement bonded particle board, high density (1350 Kg/m<sup>3</sup>), realized with Portland cement conglomerate and debarked Pine wood fiber. Thermo-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 fire resistant class A2-fl-s1, according to the standard EN 13501-1. The dimensions of the panel correspond to ... mm for a thickness of ... mm. The wood used in processing the panel comes from forests controlled by FSC reforestation cycles.



The dovetail **Beton metal sheet** is a light weight self-supporting galvanized steel reinforcement plate used for formwork and reinforcement of concrete floors, screeds of limited thickness, or self-supporting walls. This sheet offers an excellent solution for acoustics, fire protection and works well with floor heating and cooling systems inside the screed.

## Betonwood srl

Via di Rimaggio, 185  
I-50019 Sesto Fiorentino (FI)

T: +39 055 89 53 144  
F: +39 055 46 40 609

info@betonwood.com  
www.betonwood.com

PIBTWBMS2 - ST R19.10

**Beton Wood**

## | CERTIFICATIONS

The insulation system for external walls Wall Betonwood on sheeting system is made with CE certified materials in accordance with current regulations.

The certificates of the individual products are available on request.



GENERAL WARRANTY FOR 10 YEARS  
ON THE PRODUCT WITH CORRECT INSTALLATION  
DOCUMENTED WITH PHOTOS