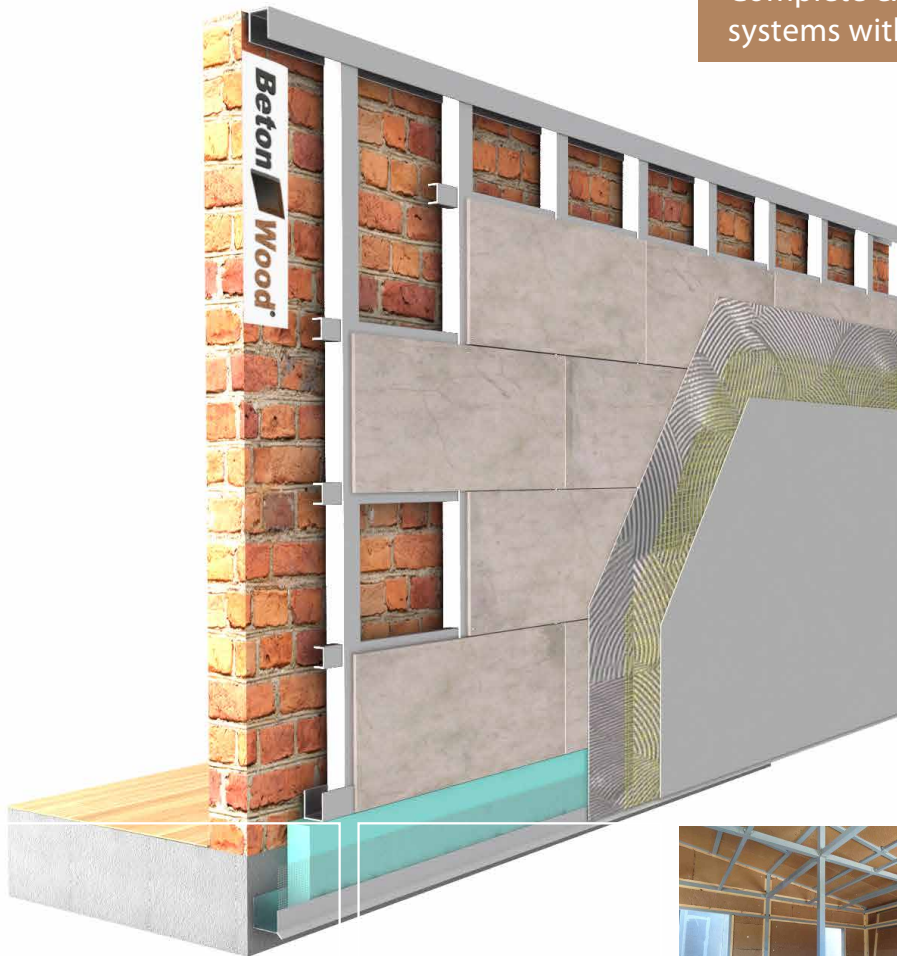


# Wall Betonwood on metal

# Beton Wood

Building system for external walls in BetonWood cement bonded particle boards fixed on metal frame

Complete external insulating wall systems with high performances



## | DESCRIPTION

The complete building system for high performances external wall Wall Betonwood on metal 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 in BetonWood cement bonded particle boards with high mechanical resistance for the thermal and acoustic insulation, both internal and external, of the dry systems in wood and masonry.

The building system Wall Betonwood on metal consists in laying a covering on the external part of the metal frame with panels with high mechanical resistance in BetonWood N cement bonded particle boards that acts as a high performance building envelope.

The stratigraphy consists in BetonWood N cement bonded particle boards with high density (1350 kg/m<sup>3</sup>), an excellent compressive resistance (9.000,00 KPa) and fire resistance (A2 class), CE certified. These panels are fixed with auto-drilling Screws NF 60 directly on the metal frame structure. It is recommended base the wall on a starting profile Beton DripStarter PVC and an anti-humidity panel in extruded polystyrene of 30 cm Styr XPS which guarantees an excellent protection against rising damp. On the external side, we recommend to lay a first skimming and bonding layer BetonAR1, the glass fiber net with high density for thermal insulation composite system BetonGlass 360 and then, a second skimming layer BetonAR1.

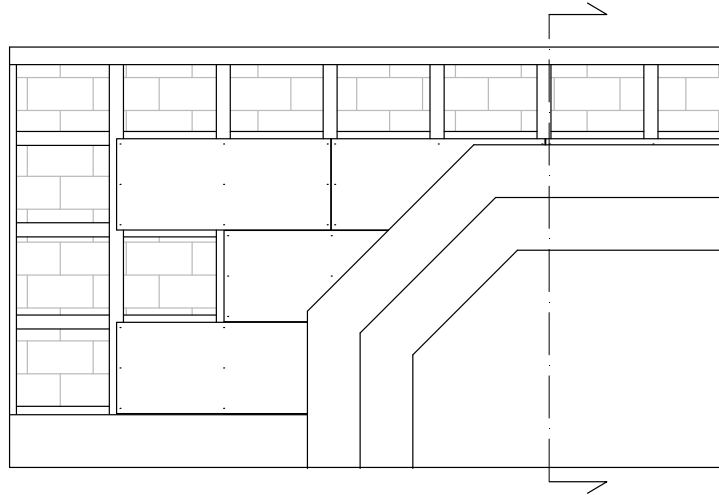
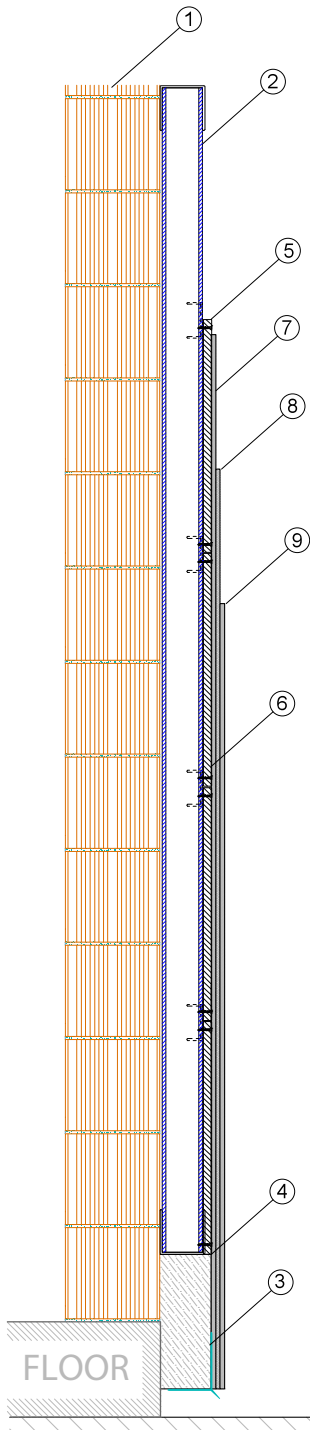
### Advantages

- Approved and secure fixing system.
- Complete system: panels, skimming layers, installation products and accessories
- Easy and quick to install
- For continuous thermal insulation without thermal bridges and condensation
- Excellent thermal and acoustic insulation (with the addition of insulating panels)
- 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)



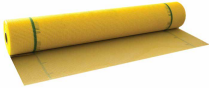
## STRATIGRAPHY



- 1 Masonry or x-lam wall
- 2 Metal frame structure
- 3 Angular starter base **Beton DripStarter PVC** PVC profile with thermosealed glass fiber mesh 165 gr / mq certified ETAG004. Sealed connection between the starting base and the armed skimming layer. It interrupts the flow of water avoiding infiltrations. Prevents cracking in the plinth area.
- 4 **Styr XPS panel h30 cm** Starting panel in Styr XPS extruded polystyrene that protects the panels from rising damp coming from the bottom.
- 5 **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 mm
- 6 **NF60 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.
- 7 **Beton AR1** Monocomponent cementitious mortar for bonding and smoothing of thermal insulation panels and BetonTherm "reinforced thermal insulation composite systems".
- 8 **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 Beton-Therm systems.
- 9 **Beton AR1** Monocomponent cementitious mortar for bonding and smoothing of thermal insulation panels and BetonTherm "reinforced thermal insulation composite systems".



## | SYSTEM'S PRODUCTS



**BetonGlass 360** The net has density  $360 \text{ g/m}^3$  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



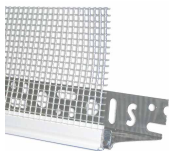
**Screws NF 60** The screw has a special anti-corrosion coating that guarantees a 1,000-hour salt spray resistance. Under-head with very sharp self-sinking wings for a perfect housing of the head flush with the panel. Drill bit that allows a perfect drilling capacity even on high sheet thicknesses.



**BetonWood N** The Betonwood cement bonded particle board, high density ( $1350 \text{ Kg/m}^3$ ), realized with Portland cement conglomerate and debarked Pine wood fiber. Thermo-dynamics characteristics: thermal conductivity coefficient  $\lambda=0,26 \text{ W/mK}$ , specific heat  $c=1,88 \text{ KJ/Kg K}$ , coefficient of resistance to vapor penetration  $\mu=22,6$  and fire resistant class A2-fl-s1, according to the standard EN 13501-1.



**Styr XPS** Starting panel in Styr XPS extruded polystyrene that protects the panels from rising damp coming from the bottom.



**BetonDripStarter PVC** PVC profile with thermosealed glass fiber mesh 165 gr / mq certified ETAG004. Sealed connection between the starting base and the armed skimming layer. It interrupts the flow of water avoiding infiltrations. Prevents cracking in the plinth area. Size 2,5x0,125 m. 25 pieces/package.

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## | CERTIFICATIONS

The insulation system for external walls Wall Betonwood on metal is made with CE certified materials in accordance with current regulations. The certificates of the individual products are available on request.

**Beton Wood**

