

# Partition wall wood fiber Zell

Building system for partition walls in BetonWood cement bonded particle boards and wood fiber Zell

Complete internal insulating wall systems with high performances



## | DESCRIPTION

The complete construction system for high performance and fire resistant interior walls Partition wall loose wood fiber zell is easy and quick to install, it guarantees maximum comfort and maximum durability over time.

It is the ideal system for the realization of partitions with an excellent thermal-acoustic insulation with high mechanical resistance on wooden dry systems (type X-Lam or Platform Frame).

The building system Partition wall loose wood fiber zell consists in the installation of a FiberTherm zell loose wood fiber filling between the beams of the wooden frame and a coating on both sides with BetonWood N cement bonded particle boards.

The stratigraphy consists in Fibertherm zell loose wood fibers with variable density from 32 to 38 kg/m<sup>3</sup> laid between the wood frame beams to guarantee the thermal insulation; BetonWood N cement bonded particle boards must be fixed to the frame as external covering. These panels has high density (1350 kg/m<sup>3</sup>), high compression (9.000,00 KPa) and fire (classe A2) resistance, CE certified. Fixing is done with auto-countersunk Screws NF 57 directly on the wood frame structure (type X-Lam or Platform Frame). Then, these panels can be finished either with a first layer of BetonAR1 glue-skimming compound, an high density glass fiber net BetonGlass 360 and a second layer of BetonAR1-glue-skimming compound, or with a simple plasterboard paneling also fixed by screws.

### Advantages

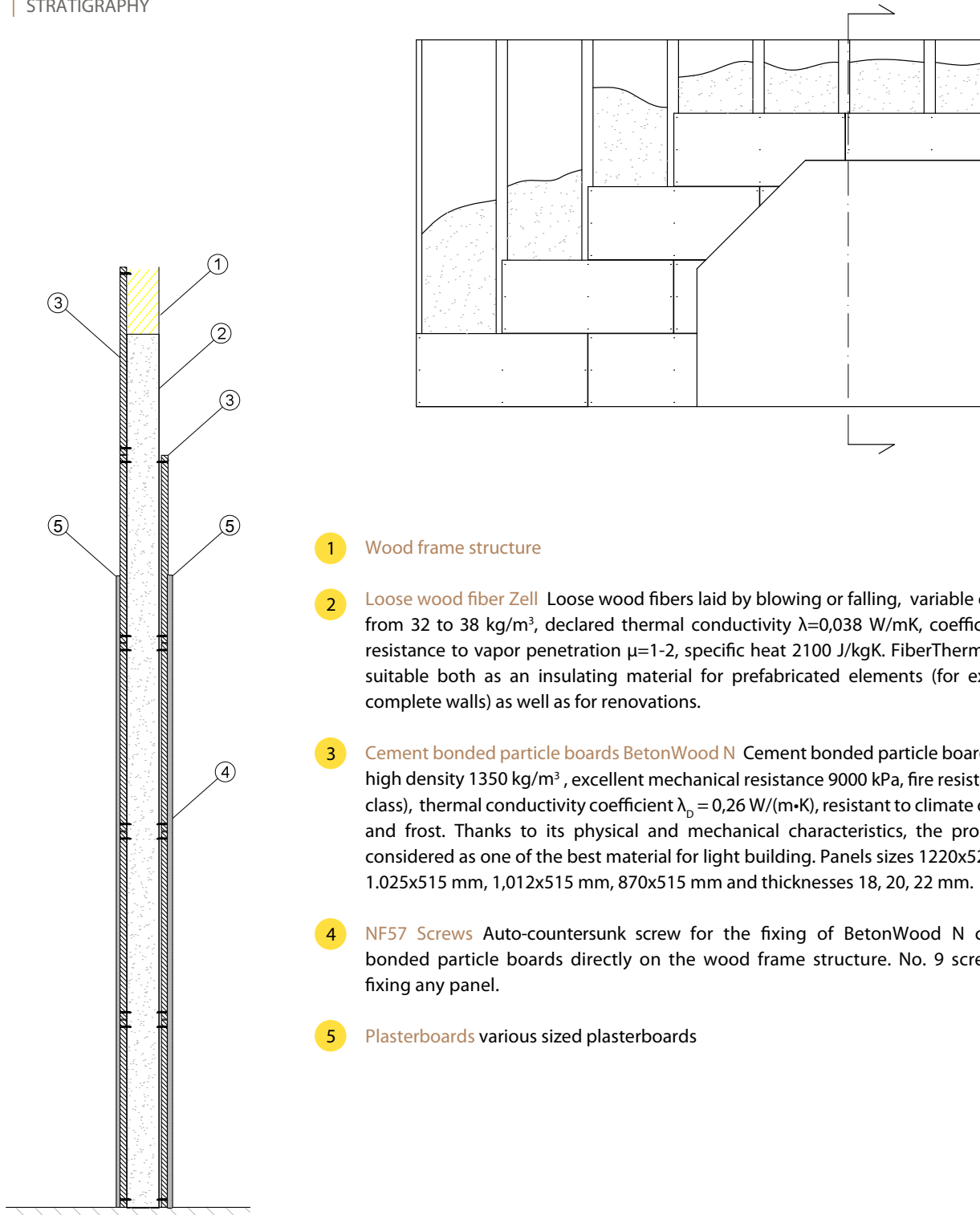
- Approved and secure fixing system.
- Complete system: panels, skimming layers, installation products and accessories
- Easy and quick to install
- For continuous thermal insulation without thermal bridges and condensation
- Excellent thermal and acoustic insulation
- Fire resistance class A2
- Excellent 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 Wood frame structure

2 Loose wood fiber Zell Loose wood fibers laid by blowing or falling, variable density from 32 to 38 kg/m<sup>3</sup>, declared thermal conductivity  $\lambda=0,038$  W/mK, coefficient of resistance to vapor penetration  $\mu=1-2$ , specific heat 2100 J/kgK. FiberTherm Zell is suitable both as an insulating material for prefabricated elements (for example complete walls) as well as for renovations.

3 Cement bonded particle boards BetonWood N Cement bonded particle boards with high density 1350 kg/m<sup>3</sup>, excellent mechanical resistance 9000 kPa, fire resistant (A2 class), thermal conductivity coefficient  $\lambda_D = 0,26$  W/(m·K), resistant to climate change and frost. Thanks to its physical and mechanical characteristics, the product is considered as one of the best material for light building. Panels sizes 1220x520 mm, 1,025x515 mm, 1,012x515 mm, 870x515 mm and thicknesses 18, 20, 22 mm.

4 NF57 Screws Auto-countersunk screw for the fixing of BetonWood N cement bonded particle boards directly on the wood frame structure. No. 9 screws for fixing any panel.

5 Plasterboards various sized plasterboards



## | SYSTEM'S PRODUCTS



### Plasterboards Plasterboards



**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 fins for a perfect housing of the head flush with the slab. Spoon tip (spoon) with very high perforation capacity.



**FiberTherm Zell** The FiberTherm Zell wood fibers are laid by blowing and the density, with its thermo-dynamics characteristics, change in correspondence with the element that is to be filled. It is characterized by the following thermo-dynamics characteristics: density from 32 to 38 kg/m<sup>3</sup>, declared thermal conductivity  $\lambda=0,038$  W/mK, coefficient of resistance to vapor penetration  $\mu=1-2$ , specific heat 2100 J/kgK, fire reaction class E according to UNI EN 13501-1, CE certified and Natureplus branded.



**BetonWood N** The BetonWood N cement bonded particle boards, with high density (1350 Kg/m<sup>3</sup>), made of Portland-type cement conglomerate and debarked Pine wood fiber. These panels have the following 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 reaction to fire class A2-fl-s1, according to the standard EN 13501-1.

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## | CERTIFICATIONS

The insulation system for internal walls Partition wall Betonwood on wood fiber Zell is made with CE certified materials in accordance with current regulations.

The certificates of the individual products are available on request.

**Beton**  **Wood**

