Metal floor btwtg + btw + cork3



Floor system with cement bonded particle boards BetonWood Tongue&Groove and BetonWood on Cork Panels plus on dovetailed sheeting

Complete insulating screed system with high performances



Complete system for dry floor supported by a dovetailed sheeting system. In this solution we'll have a layer of cement bonded particle boards BetonWood Tongue&Groove density 1350 kg/m³ installed in staggered manner than the cement bonded particle boards BetonWood. Below there is an insulating layer of super-compressed blond cork panels Cork Panels plus. Maximum durability over time is guaranteed, with international ETA certification.

The system consists in cement bonded particle boards BetonWood with available thicknesses 18/20/22 mm, and BetonWood Tongue&Groove with a thickness of 22 mm, fixed with screws type NF57 to the dovetailed sheet Beton metal sheet. Beetween the metal sheet and the cement bonded particle boards is installed a thin layer of insulating blond Cork Panels plus. The stratigraphy consists in a dovetailed sheeting system with a thickness of 16mm type Betonmetal sheet; above the dovetailed sheeting it must be installed an insulating layer of CorkPanels plus with a thickness of 3mm to guarantee greater thermal and acoustic insulation.

Above the insulating layer is fixed a stiffening layer which consists in cement bonded particle boards BetonWood. These panels, according to construction needs, might have thickness of 18, 20 or 22 mm. In turn these panels are surmounted by other cement bonded particle boards BetonWood Tongue&Groove with a thickness of 22 mm and installed in staggered manner.

The screws must be type NF57 and anchored near the corners and the middle of the edges of the panels.

High acoustic performance, naturalness and simplicity of execution.

Advatages

• Excellent mechanical resistance

Beton Wood

- Excellent compression strenght
- Fire reaction class A2-fl-s1
- · 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 Cement bonded particle boards Betonwood Tongue&Groove thickness 22mm each panel is made with in Portland-type concrete conglomerate and high-density debarked Pine wood fiber ($\delta = 1350$ Kg/m³) with the following thermodynamic characteristics: coefficient of thermal conductivity $\lambda = 0.26$ W/mK, specific heat c=1.88 KJ/Kg K, coefficient of resistance to vapor penetration μ =22.6 and fire reaction class A2-fl-s1, according to EN 13501-1 standard. The panels have a special tongue & groove interlocking profile.
- 2 Screws type NF57 Self-drilling screws for fixing BetonWood Tongue&Groove cement bonded particle boards directly to the second layer of BetonWood. 9 screws are necessary for fixing each panel.
- **3** Cement bonded particle boards Betonwood thicknesses 18/20/22mm each panel is made of Portland-type concrete conglomerate and debarked pine wood fiber with the same thermodynamic characteristics of BetonWood Tongue&Groove (above, voice n. "1"). The wood used in the processing of the panel comes from forests controlled and certified FSC.
- 4 Cork Panels plus thickness 3mm the insulating panel between metal sheet and cement bonded particle boards is made by blond cork panels which have a thin thickness of 3 mm type Cork Panels plus. Blond cork is a very insulating and sound-absorbing material, then we'll have a significant improvement of the thermal and acoustic insulation. In addiction, it don't generate mold and it is suitable for particularly humid environments.
- 5 Beton Metal Sheet thickness 16mm dovetailed sheeting has a unique S-shaped geometry as a result of which the highest possible load bearing capacity of the floor is ensured by the composite action between the sheet and the fine grade aggregate concrete or self-levelling liquid screed.



Ground new building and/or existing grounds





PRODUCTS USED IN THIS SYSTEM



BetonWood Tongue&Groove The cement bonded particle board is made of Portland-type cement conglomerate and debarked Pine wood fiber. These panels have the following termo-dynamics characteristics: high density (1350 Kg/m³), thermal conductivity coefficient λ =0,26 W/mK, specific heat c=1,88 KJ/Kg K, coefficient of resistance to vapor penetration µ=22,6 and reaction to fire class A2-fl-s1, according to the standard EN 13501-1.



BetonWood The BetonWood cement bonded particle boards, with high density (1350 Kg/m³), made of Portland-type cement conglomerate and debarked Pine wood fiber. These panels have the following termo-dynamics characteristics: thermal conductivity coefficient λ =0,26 W/mK, specific heat c=1,88 KJ/Kg K, coefficient of resistance to vapor penetration μ =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. The wood used in panel processing comes from forests controlled by FSC.



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. Drill bit that allows a perfect drilling capacity even on high sheet thicknesses.



Cork Panels plus is an insulating panel in blond cork characterized by excellent thermal insulation and breathability values typical of natural cork, which reduce the formation of mold and moisture compared to traditional products; Another characteristic characteristic of cork is that of guaranteeing an excellent noise reduction, making it an ideal product for the construction of impact soundproofing floors of the inter-floor slabs, thanks also to its high compressive strength.



The profile of the Beton metal sheet Dovetailed sheeting has a unique S-shaped geometry. The dimensionally stable profiling ensures an exact fit between the sheets. Leakage between the overlapping seams will not occur even when high slump concrete or a self-levelling liquid screed is used. An optimal filling load can also be realised with the special S-shaped geometry and the dovetailed sheet can be safely walked upon during the implementation phase.

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

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CERTIFICATIONS

The complete solution for dry floors with dovetailed sheeting system, cement bonded particle boards BetonWood Tongue&Groove and BetonWood and insulating cork panels, is produced with certified materials with CE mark according to current regulations.



