Roof therm C plus

Ecological systems for thermo-acoustic insulation of cement bonded particle boards, wood fiber Therm and Isorel roofs

Complete isolation systems for high performance wooden roofs

| DESCRIPTION

The stratigraphy consists of FSC® certified FiberTherm wood fiber panels with a density of 160Kg/m³ and a single layer of FiberTherm Isorel wood fiber panels with a density of 230Kg/m³, between the matchboard and the wood fiber insulation the FiberTherm multi membra5 perfectly airtight steam brake is applied, while on the external side between the roof tile layer and the BetonWood cement bonded particle boards thick 16-22 mm, FiberTherm multi UDB must be installed, a high performance sheath, breathable and UV resistant.
The system is applicable for roofs with a minimum slope of 15° and up to 900 m s.l.m.

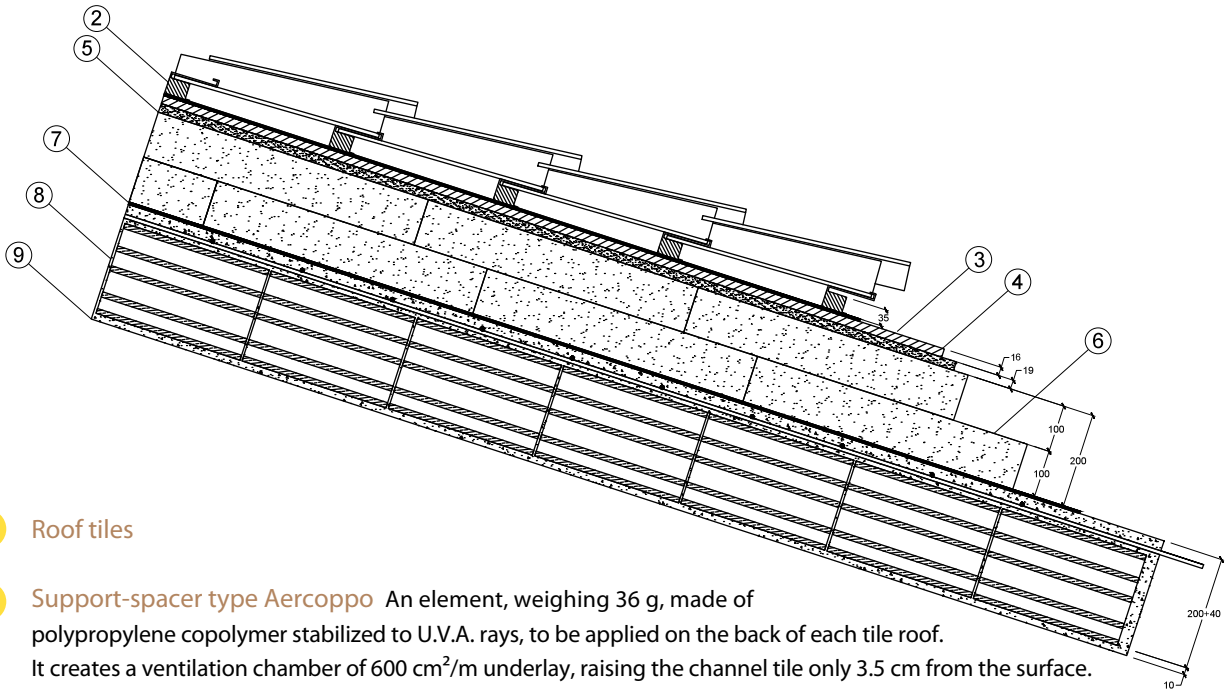
Advantages

- Construction permeable to steam and resistant to driving rain
- For highly inclined roofs with slopes starting at 15 °, resistant to UV rays
- Complete system: insulation, under cloth and waterproofing without condensation
- Excellent protection against cold and summer heat, improved acoustic insulation thanks to the porosity of the panels
- High performance thanks to rational installation and without waste

For more informations about the uses and the installation,
our offices are ready to answer your questions on www.betonwood.com



| STRATIGRAPHY



1 Roof tiles

2 Support-spacer type Aercoppo An element, weighing 36 g, made of polypropylene copolymer stabilized to U.V.A. rays, to be applied on the back of each tile roof. It creates a ventilation chamber of 600 cm^2/m underlay, raising the channel tile only 3.5 cm from the surface.

3 FiberTherm multi UDB High airtight sealant vapor barrier for renovation solutions. Extreme ease of installation for safe and simple use. It has an integrated adhesive strip to secure joints and can be used as a temporary cover.
Size: 1,50 m x 50 m Roll surface: 75m^2 Weight approx.160 g/m^2

4 Cement bonded particle baords BetonWood | thickness 16 mm High density panels (1.350 Kg/m^3), with high compressive strenght (9.000,00 KPa) and A2 fire resistance class. Depending on the needs of thermal displacement, the thickness can be varied with 20 mm thick panels.

5 Wood fiber FiberTherm Isorel 230 | thickness 19 mm Panel in wood fiber density 230 Kg/m^3 with high compressive strenght and excellent insulating properties. Panel dimensions 2500 x 1200 mm. Edge with sharp edge

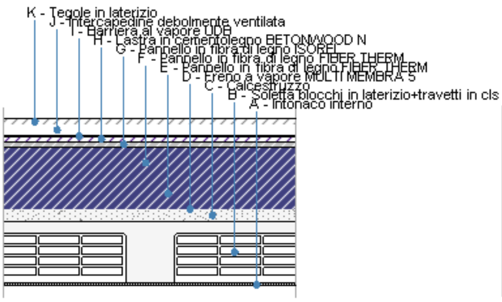
6 Wood fiber FiberTherm 160 | thickness 100+100 mm Panel in wood fiber density 160 Kg/m^3 is offered as an excellent insulation for both the summer heat and the winter frost. Depending on requirements, the thickness can be varied with panels with thickness 80 + 80 mm or 60 + 60 mm. Panel dimensions 1350 x 600 mm. Edge with sharp edge

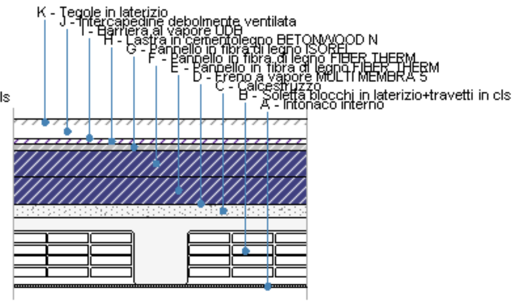
7 FiberTherm multi membra5 Steam brake for better airtightness on the outer side of the roof, resistant to UVrays, excellent adhesion properties and tear resistance. Size: 1,50 mx50 m Roll surface: 75m^2 Weight approx.110 g/m^2

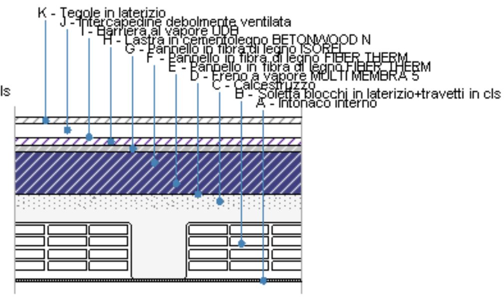
8 Concrete roof structure | thickness 200+40 mm

9 Plaster | thickness 10 mm

Beton Wood







ZONE C

Solution C+ - type C1

FiberTherm 100 + 100 mm
FiberTherm Isorel 19 mm
BetonWood 16 mm

Transmittance	U= 0,156 W / (m²K)
Resistance	R= 6,401 (m²K) / W
Displacement	23,01 hours
Climatic zone	C

Solution C+ - type C2

FiberTherm 80 + 80 mm
FiberTherm Isorel 19 mm
BetonWood 16 mm

Transmittance	U= 0,187 W / (m²K)
Resistance	R= 5,349 (m²K) / W
Displacement	20,17 hours
Climatic zone	C

Solution C+ - type C3

FiberTherm 60 + 60 mm
FiberTherm Isorel 19 mm
BetonWood 22 mm

Transmittance	U= 0,232 W / (m²K)
Resistance	R= 4,310 (m²K) / W
Displacement	17,55 hours
Climatic zone	C

ZONE D

Solution C+ - type D1

FiberTherm 100 + 100 mm
FiberTherm Isorel 19 mm
BetonWood 16 mm

Transmittance	U= 0,156 W / (m²K)
Resistance	R= 6,408 (m²K) / W
Displacement	23,13 hours
Climatic zone	D

Solution C+ - type D2

FiberTherm 80 + 80 mm
FiberTherm Isorel 19 mm
BetonWood 16 mm

Transmittance	U= 0,187 W / (m²K)
Resistance	R= 5,356 (m²K) / W
Displacement	20,29 hours
Climatic zone	D

Solution C+ - type D3

FiberTherm 60 + 60 mm
FiberTherm Isorel 19 mm
BetonWood 22 mm

Transmittance	U= 0,232 W / (m²K)
Resistance	R= 4,317 (m²K) / W
Displacement	18,06 hours
Climatic zone	D

ZONE E

Solution C+ - type E1

FiberTherm 100 + 100 mm
FiberTherm Isorel 19 mm
BetonWood 16 mm

Transmittance	U= 0,156 W / (m²K)
Resistance	R= 6,401 (m²K) / W
Displacement	23,02 hours
Climatic zone	E

Solution C+ - type E2

FiberTherm 80 + 80 mm
FiberTherm Isorel 19 mm
BetonWood 16 mm

Transmittance	U= 0,187 W / (m²K)
Resistance	R= 5,349 (m²K) / W
Displacement	20,17 hours
Climatic zone	E

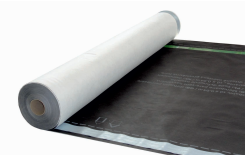
Solution C+ - type E3

FiberTherm 60 + 60 mm
FiberTherm Isorel 19 mm
BetonWood 22 mm

Transmittance	U= 0,232 W / (m²K)
Resistance	R= 4,317 (m²K) / W
Displacement	18,07 hours
Climatic zone	E



| SYSTEM'S PRODUCTS



FiberTherm multiUDB High airtight sealant vapor barrier for renovation solutions. Extreme ease of installation for safe and simple use. It has an integrated adhesive strip to secure joints and can be used as a temporary cover. Density 160 g / m^2.

BetonWood Pressed cement bonded particle boards with high compactness, density and hardness, resistant to fire, to atmospheric agents, with excellent thermal and acoustic insulation characteristics. The panels are made of Portland-type concrete conglomerate and high-density debarked Pine wood fibe (δ=1350 Kg/m^3) and with the following thermodynamic characteristics: coefficient of thermal conductivity λ=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.
The dimensions of the panel correspond to ... mm for a thickness of ... mm. The wood used in panel processing comes from forests controlled by FSC reforestation cycles and pressed with water and hydraulic binder (Portland cement) with high cold compression ratios.

FiberTherm isorel The panels are made of wood ber with density σ=230 Kg/m^3, are produced with a wet system, in compliance with EN 13171 and EN 13986 standards under constant quality control. The material is characterized by the following thermodynamic characteristics: thermal conductivity coeff. λ =0,05 W/mK, specific heat c=2100 J/Kg K, resistance to vapor penetration coeff. μ=5 and reaction to fire class E, according to EN 13501-1 standard. The panel dimensions are ... mm for a thickness of ... mm.

FiberTherm The panels are made of wood ber with density δ=160 Kg/m^3, are produced with a wet system, in compliance with EN 13171 and EN 13986 standards under constant quality control.
The material is characterized by the following thermodynamic characteristics: coefficient of thermal conductivity λ=0.039 W/mK, specific heat c=2100 J/Kg K, coefficient of resistance to vapor penetration μ=5 and reaction to fire class E, according to EN 13501-1 standard.
The dimensions of the panels correspond to ... mm for a thickness of ... mm. The wood used in the processing of the panels comes from forests controlled by FSC reforestation cycles.

FiberTherm multi membra 5 Steam brake for better airtightness on the outer side of the roof, resistant to UVrays, excellent adhesion properties and tear resistance.

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BetonWood

| CERTIFICATIONS

The Solution C plus roof insulation system is produced with CE certified materials in accordance with the regulations in force.
The certificates of the individual products are available on request.

CE