

## 2. ROOFS



## Roof A plus - therm, isorel and cement boards

Ecological roof systems for thermo-acoustic insulation with cement boards density 1350 kg/m $^3$  and wood fibers density 160 kg/m $^3$  and 230 kg/m $^3$  on matchboarding

Complete dry system for high-displacement thermal roofs with BetonWood cement bonded particle boards, Therm and Isorel wood fiber insulation panels on matchboarding. Excellent system for thermo-acoustic insulation of roofs.

STRATIGRAPHY		DESCRIPTION	QUANTITY m²	PRICE €/m²	AMOUNT
1	Roof tiles	Roof tiles			
2	Support-Spacer type Aercoppo	An element, weighing 36 g, made of polypropylene copolymer stabilized to U.V.A. rays, with the function of raising and anchoring, to be applied on the back of each tile roof. It creates a true ventilation chamber of 600 cm $^2$ /m underlay, raising the channel tile only 3.5 cm from the laying surface.			0
3	Anti-steam barrier 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: $75\text{m}^2$ Weight approx.160 g/m <sup>2</sup>			0
4	Cement bonded particle boards BetonWood available thicknesses: 16 mm 22 mm	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 ( $\delta$ =1350 Kg/m³) and 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 $\mu$ =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.			0
5	Wood fiber panels Fibertherm Isorel 230 thicknesses 19 mm	The panels are made of wood ber with density $\sigma$ =230 Kg/m³, 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. $\lambda$ =0,05 W/mK, specific heat c=2100 J/Kg K, resistance to vapor penetration coeff. $\mu$ =5 and reaction to fire class E, according to EN 13501-1 standard. The panel dimensions are mm for a thickness of mm.			0
6	Wood fiber panels Fibertherm 160 (2 layers) available thicknesses: 60+60 mm 80+80 mm 100+100 mm	The panels are made of wood ber with density $\delta$ =160 Kg/m³, 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 $\lambda$ =0.039 W/mK, specific heat c=2100 J/Kg K, coefficient of resistance to vapor penetration $\mu$ =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.			0
7	Steam brake 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.  Size: 1,50 mx50 m Roll surface: 75m² Weight approx.110 g/m²			0
8	Matchboard	Matchboard thickness of 25 mm			
		TAX IVA 22%	0	TAXABLE	0
TOTAL AMOUNT				0	

Beton Wood®

The functionality of the system will be covered by a BetonWood guarantee for the characteristics of air tightness, water proofing and isolation of the technological package. The warranty will be documented with the appropriate Certificate and Certificate of Assurance that will be delivered at the end of the work to the DD.LL. from the same layer. The forms are available on the BetonWood website as well as the technical indications, the application matrix and the exclusion clauses.