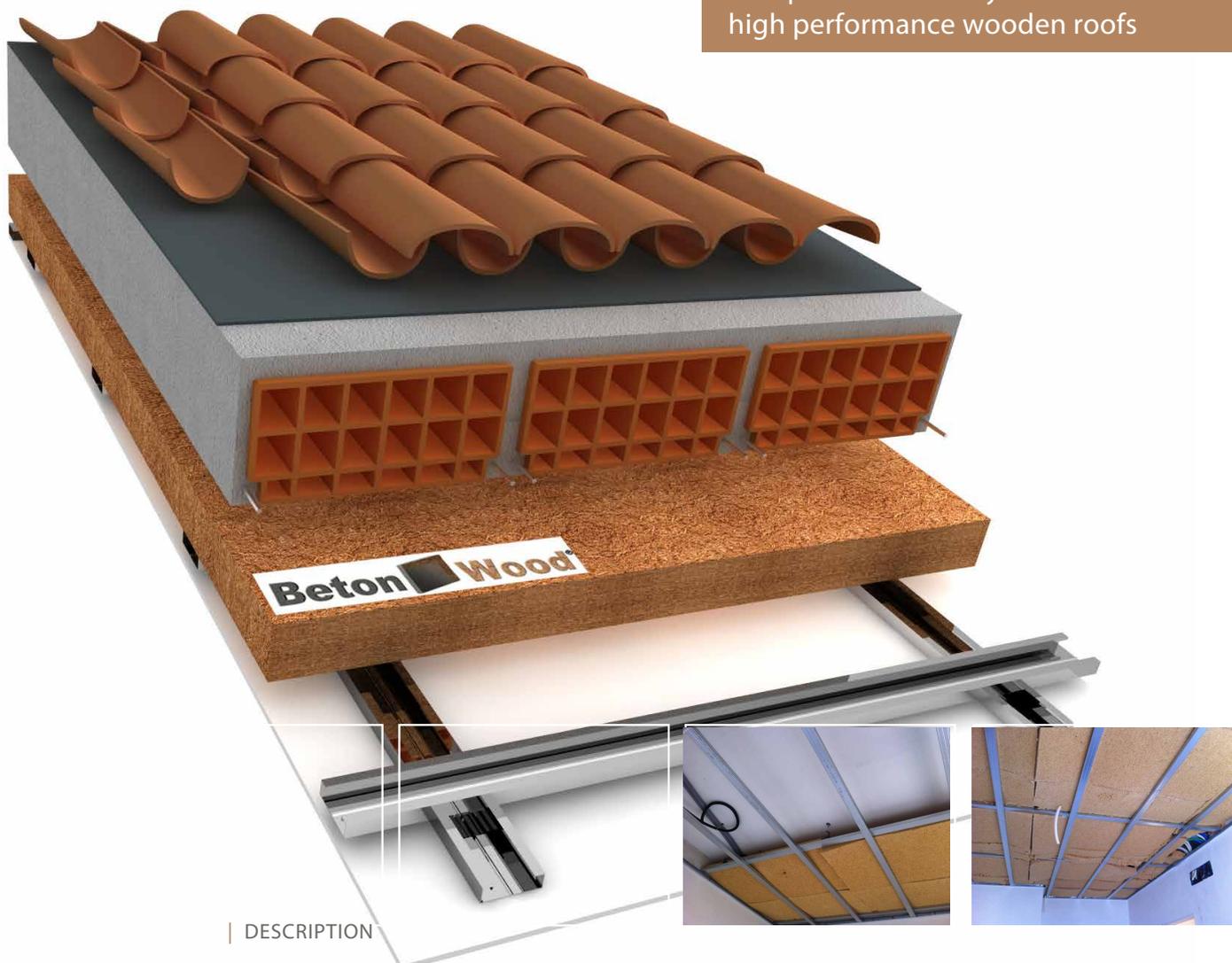


# Roof flex F

Ecological systems for thermo-acoustic insulation of high performance flexible wood fiber countertops

# Beton Wood

Complete isolation systems for high performance wooden roofs



## DESCRIPTION

Complete system of natural insulation for high performance latero cement roofs, Roof Solution flex F is designed to obtain maximum comfort in renovating existing structures with non-breathable sheaths on the outside.

The Roof Solution flex F system is proposed as an internal rehabilitation of an existing roof. It is characterized by excellent values of thermal, acoustic and breathability that reduce the formation of mold and moisture compared to traditional systems.

The insulating materials used are completely natural and made with sustainable raw materials and life cycles.

The stratigraphy consists of high-quality and FSC® certified FiberTherm Flex 50 or FiberTherm Flex 60 wood fiber panels with variable density  $50 \div 60 \text{ Kg/m}^3$ , very low thermal conductivity  $\lambda=0,036 \div 0,038 \text{ W/(mK)}$  and specific heat  $2100 \text{ J/kgK}$ ; these panels are laid on a metal frame supporting the false ceiling, leaving a space between insulating panels and the existing roof, of variable thickness for the passage of cables and systems and to increase the insulating power.

The roof is breathable inward and allows maximum flexibility in renovation.

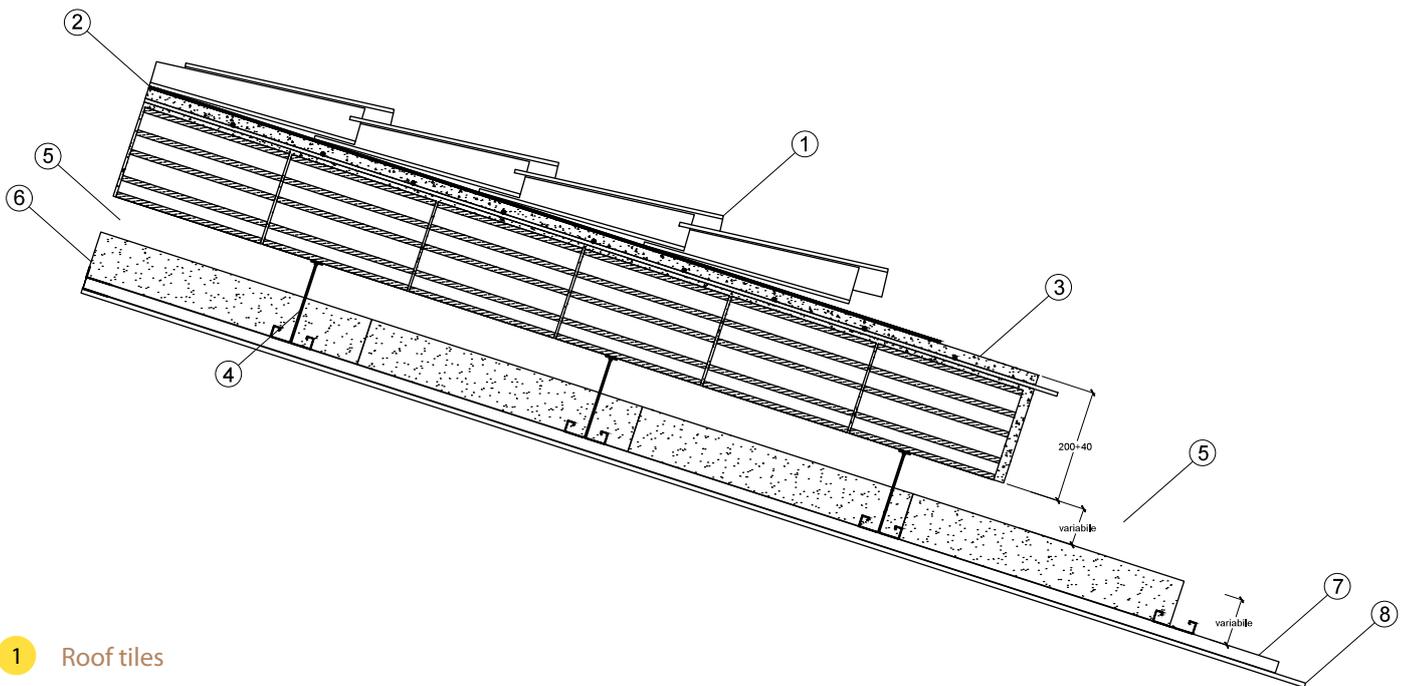
## Advantages

- Ecological recovery of existing sub-layers
- Natural materials for the healthiness of the home
- Important acoustic improvement
- Simple and completely dry solution
- Suitable for all inclines and floor types

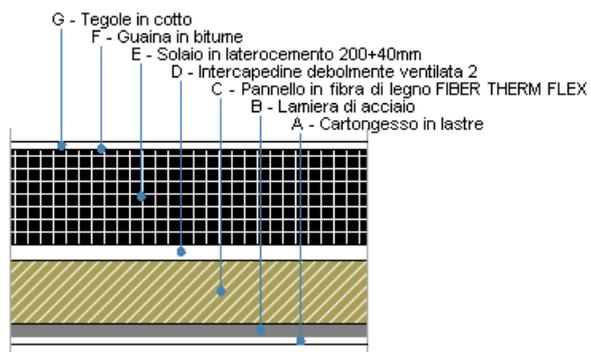
For more informations about the uses and the installation, our offices are ready to answer your questions on [www.betonwood.com](http://www.betonwood.com)



## STRATIGRAPHY



- 1 **Roof tiles**
- 2 **Bituminous sheath** elastoplastomeric compound waterproofing membrane (BPP), characterized by a cold exibility of  $-5^{\circ}\text{C} / -10^{\circ}\text{C} / -15^{\circ}\text{C}$ , reinforced polyester reinforced. The product has a good mechanical strength, considerable dimensional stability and is not sensitive to seasonal climatic variations.
- 3 **Concrete structure roof** | thickness 200+40 mm In the case of a roof with reinforced concrete structure suspensions must be possibly bound to the joists and not to hollow bricks.
- 4 **Hangers** Anti-fire carrier with slots for the pendulum and snap-on coupling + adjustable metal spring.
- 5 **Empty space** | various thickness Empty space of variable thickness (depending on the needs) for the passage of the installations
- 6 **Wood fiber FiberTherm Flex** | various thickness The panels are made of flexible wood fiber with density  $50 \text{ Kg/m}^3$  or  $60 \text{ Kg/m}^3$  with thermal conductivity  $\lambda=0,036 \div 0,038 \text{ W/(mK)}$  and specific heat  $2100 \text{ J/kgK}$ . Thanks to the high flexibility, Fibertherm flex is able to be placed in narrow spaces and to adapt to the geometries of the surrounding elements. The dimensions are ... mm for a thickness of ... mm.
- 7 **Double non-overlapping metal frame** Main supporting pro le in galvanized steel, coated with anti-corrosion pre-painted aluminum foil, suitably hung by a rigid galvanized steel rod and adjustable metal spring, so as to obtain perfect atness and alignment of the suspended ceiling system
- 8 **Counter ceiling** plasterboards or similiar



ZONE C

**Solution FF - type C1**

FiberTherm 160 mm

Transmittance  $U= 0,196 \text{ W} / (\text{m}^2\text{K})$

Resistance  $R= 5,089 (\text{m}^2\text{K}) / \text{W}$

Displacement 18,29 hours

Climatic zone C

ZONE D

**Solution FF - type D1**

FiberTherm 160 mm

Transmittance  $U= 0,196 \text{ W} / (\text{m}^2\text{K})$

Resistance  $R= 5,089 (\text{m}^2\text{K}) / \text{W}$

Displacement 18,29 hours

Climatic zone D

ZONE E

**Solution FF - type E1**

FiberTherm 160 mm

Transmittance  $U= 0,196 \text{ W} / (\text{m}^2\text{K})$

Resistance  $R= 5,089 (\text{m}^2\text{K}) / \text{W}$

Displacement 18,29 hours

Climatic zone E



## | SYSTEM'S PRODUCTS



**FiberTherm Flex** The FiberTherm Flex panel in wood fiber is a flexible insulator, suitable for compression and ideal for insulating roofs, walls and intermediate floors in a completely natural way. FiberTherm Flex presents all the advantages of a natural material such as wood and is also breathable and hygroscopic, thus allowing the realization of isolated environments with high living comfort, where there is a natural regulation of internal humidity. Excellent structural thermal insulation is obtained and the building is provided with the required insulating protection at the level of walls, floors and roof.

Thanks to its low thermal conductivity (from 0,036 to 0,038 W/m·K) and with its high thermal resistance, FiberTherm flex protects your environment from summer heat. The density, approximately 50 or 60 kg/m<sup>3</sup> and the high specific heat, 2100 J/kgK (more than twice the mineral wool), they prevent heat from entering even during the hottest days. In this way you can enjoy a pleasant sleep, even under the roof.

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## | CERTIFICATIONS

The Solution F flex 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.