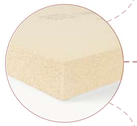
EXPLODED PROACTIVE ENVELOPE

FACADE



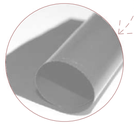
VAPOR BARRIER / ACUSTIC IMPACT
Material: POLIETILEN
e: 3mm

In the Interior oof the layer



INSULATION
Material: GUTEX THERMOWALL
e: 80 mm

In the exterior of the layer



WATERPROOF LAYER
Material: POLIOPROPILEN
e: 2 mm



SUPPORT STICK
Material: PINE WOOD
e: 80 x 40 mm / 40 x 40mm



SKIN
Material: CEDAR WOOD
e: 100 x 20 mm



HEMP ROPES
CLIMBING PLANTS



OPENINGS

SLIDING WINDOWS
Material: PINE WOOD
Hided frame



OPERATIONAL WINDOWS
COVERINGS
Material: Textil
e: 1 mm



INTERIOR PAVIMENT

VIROC
Material: FIBROCIMENT
e: 32 mm



BEAMS
Material: OCB
e: 4 mm



INERTIA/ ISOLATION
Material: SAND
e: 10 cm

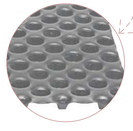


GREEN ROOF



VEGETAL SUBSTRACT
Material: Earth
e: 25mm

Under the layer



DRENAGE LAYER
Material: GEOTEXTIL
e: 3 mm



INSOLATION
Material: GUTEX THERMOFLAT
e: 120 mm
Below the Waterproof layer and over the pavor barrier layer *



STRUCTURAL SUPPORT
Cross laminated timber
e: 20 cm.

FACADE THERMIC TRANSMITENCE

· INSULATION GUTEX
Conductivity (λ) : 0,039 (W/mK)
Thikness : 0,08 m
Resistence: 2,05 K · m2/W

· CROSS LAMINATED TIMBER PANEL
Conductivity (λ) : 0,13 W/mK
Thikness : 0,2 m
Resisence: 1,53 K · m2/W

· POLIPROPILEN
Conductivity (λ) : 0,5W/mK
Thinknesss : 0,006 m
Resistence: 0,012 K · m2/W

$$U = \frac{1}{Rsi + \Sigma R + Rse}$$

$$U = \frac{1}{0,04 + 3,33 + 0,13}$$

U = 0,277 W/m2

ROOF THERMIC TRANSMITENCE

· INSULATION GUTEX
Conductivity (λ) : 0,039 (W/mK)
Thikness : 0,12 m
Resistence: 3,07 K · m2/W

· CROSS LAMINATED TIMBER PANEL
Conductivity (λ) : 0,13 W/mK
Thikness : 0,2 m
Resisence: 1,53 K · m2/W

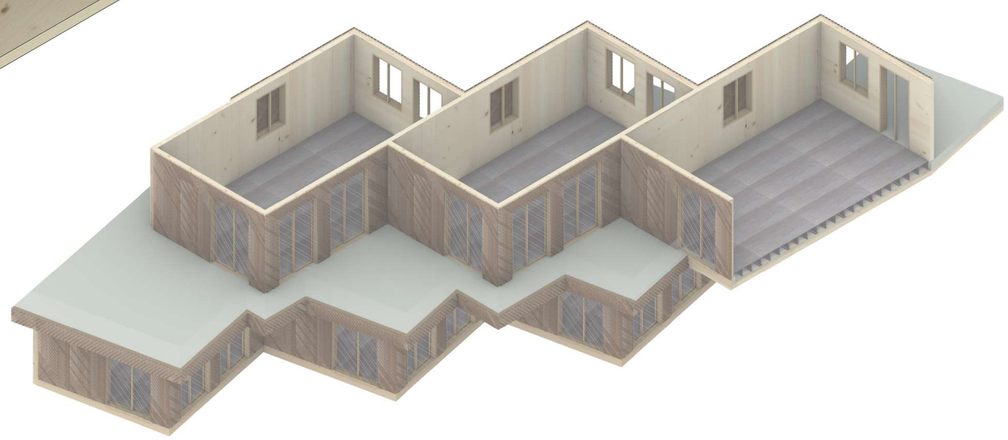
· POLIPROPILEN
Conductivity (λ) : 0,5W/mK
Thinknesss : 0,006 m
Resistence: 0,012 K · m2/W

· GROUND
Conductivity (λ) : 0,52 W/mK
Thinkess : 0,22 m
Resistence: 0,42 K · m2/W

$$U = \frac{1}{Rsi + \Sigma R + Rse}$$

$$U = \frac{1}{0,04 + 5,03 + 0,1}$$

U = 0,197 W/m2



[Exclusivamente para uso académico]