



FUNCTIONAL BARN-TYPE HOUSE

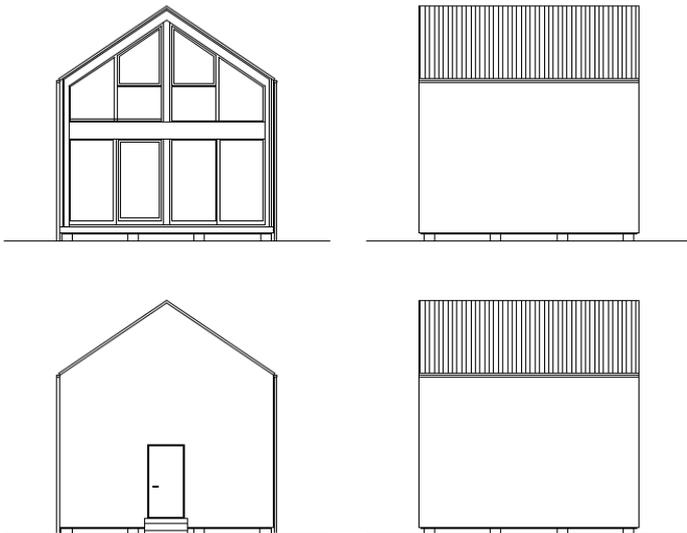
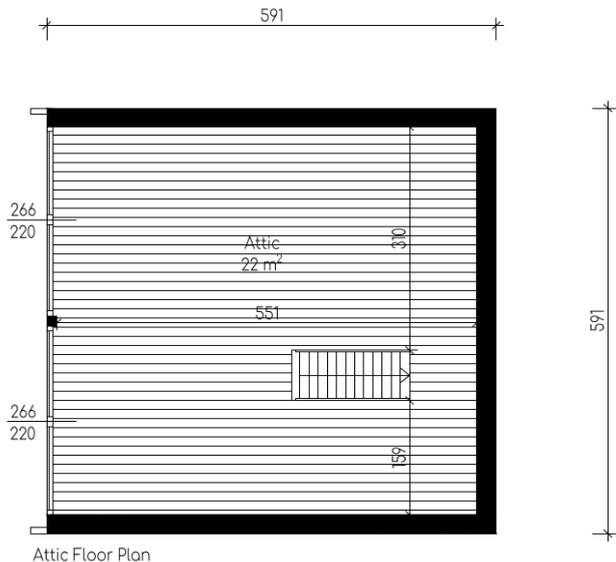
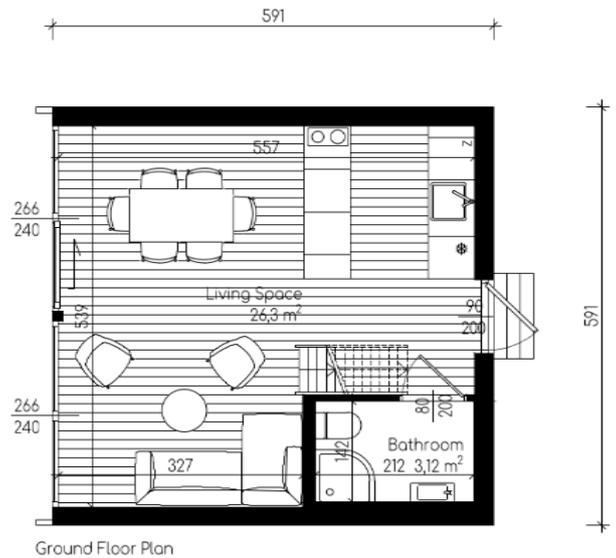
## Hauk

The profile of this house is inspired by the classic form of single-family houses, i.e. a compact body covered with a gable roof, adding idyllicity to any place. The glass gable wall creates a contemporary character, creating a transparent partition in the living room and in the attic. Thanks to its floor-to-ceiling windows, Hyta offers a one-sided view of the landscape.

BUILDING AREA	35 m <sup>2</sup>
NET AREA	56,76 m <sup>2</sup>
HEIGHT	6,73 m
ANGLE OF GABLE ROOF	35°

## Allow yourself to rest, like never before.

An extremely spacious house, with its simplicity resembling a classic barn. Thanks to the glass gable wall and the open form of the interior, both the ground floor and the attic remain filled with daylight. The exceptionally large area of the building gives many development opportunities, and the square plan allows for a functional layout of the rooms. The building has an entrance area with a wardrobe, a spacious living room with a kitchen and a dining area, and a bathroom - where an open space in the large attic is tucked in beneath the roof. The possibility of adding a terrace allows you to extend the relaxation area by additional square meters.



# Technological standards \*

## WALL CONSTRUCTION

frame technology, heat transfer coefficient  $U = 0.20 \text{ W / m}^2\text{K}$

### ELEVATION

Bare (larch) cladding board; 22 mm thick	Bare (larch) cladding board; 22 mm thick
Larch cladding board, painted with impregnation; 22 mm thick	Larch cladding board, painted with impregnation; 22 mm thick
Impregnated square (spruce) timber; 25x50 mm	Impregnated square (spruce) timber; 25x50 mm
Impregnated square (spruce) timber; 25x50 mm	Impregnated square (spruce) timber; 25x50 mm
Highly vapor-permeable membrane; weight: 233 g / m <sup>2</sup>	Highly vapor-permeable membrane; weight: 233 g / m <sup>2</sup>
(C24) Spruce wood; 45x120 mm	(C24) Spruce wood; 45x120 mm
Mineral wool; 12 cm thick; $\lambda = 0.035 \text{ W / mK}$	Mineral wool; 12 cm thick; $\lambda = 0.035 \text{ W / mK}$
OSB board; 12 mm thick	OSB board; 12 mm thick
Activated foil; weight: 77 g / m <sup>2</sup>	Activated foil; weight: 77 g / m <sup>2</sup>
(C24) Spruce wood; 45x45 mm	(C24) Spruce wood; 45x45 mm
Mineral wool; 5 cm thick; $\lambda = 0.033 \text{ W / mK}$	Mineral wool; 5 cm thick; $\lambda = 0.033 \text{ W / mK}$
Drywall; 12.5mm thick	Drywall; 12.5mm thick
Spruce panel boards; 12.5 mm thick	Spruce panel boards; 12.5 mm thick

## ROOF

wooden structure with a suspended ceiling; heat transfer coefficient;  $U = 0.15 \text{ W / m}^2\text{K}$

Includes steel guttering and flanges

### COVERING

Seam sheet; color RAL 7016

Trapezoidal sheet; color RAL 9007

### RAFTER

Impregnated square (spruce) timber; 40x60 mm

### BATTEN

Impregnated square (spruce) timber; 25x50 mm

### INITIAL COVERING

Highly vapor-permeable membrane; weight: 233 g / m<sup>2</sup>

### CONSTRUCTION

(C24) Spruce wood; 22x4.5 cm

### THERMAL INSULATION WITHIN THE STRUCTURE

Mineral wool; 20 cm thick;  $\lambda = 0.033 \text{ W / mK}$

### VAPOR INSULATION

Activated foil; weight: 77 g / m<sup>2</sup>

### INSTALLATION GRID

(C24) Spruce wood; 45x45 mm

### THERMAL INSULATION WITHIN GRID

Mineral wool; 20 cm thick;  $\lambda = 0.033 \text{ W / mK}$

### FINISH

Drywall; 12.5mm thick

Spruce board panels; 12.5 mm thick

Complete set of steel guttering; color of the roof

### GUTTERING, FEATHERING

## GROUND FLOOR

wooden structure; heat transfer coefficient  $U = 0.15 \text{ W / m}^2\text{K}$

### FINISH

Spruce floor boards; 28 mm thick

3-layered oak boards; 14 mm thick

Cork; 2 mm thick

### UNDERLAY

OSB board; 22 mm thick

### SHEATHING

Activated foil; weight: 77 g / m<sup>2</sup>

### VAPOR INSULATION

### GRATE

Impregnated square (spruce) timber; 45x45 mm

### THERMAL INSULATION WITHIN GRID

Mineral wool; 5 cm thick;  $\lambda = 0.033 \text{ W / mK}$

### CONSTRUCTION

(C24) Spruce wood; 22x4.5 cm

### THERMAL INSULATION WITHIN THE STRUCTURE

Mineral wool; 20 cm thick;  $\lambda = 0.033 \text{ W / mK}$

### RODENT PROTECTION SEAL

Bitumised OSB board; 12 mm thick

## CEILING

### FINISH

Spruce board panels; 12.5 mm thick

### SHEATHING

OSB board; 22 mm thick

### CONSTRUCTION

(C24) Spruce wood; 22x4.5 cm

### FINISH

Drywall; 12.5mm thick

Spruce board panels; 12.5 mm thick

## PARTITION WALL

light technology on a structure made of CW steel profiles

### FINISH

Drywall; 12.5mm thick

### CONSTRUCTION

(C24) Spruce wood; 45x95 cm

## JOINERY

### WINDOWS

Pine wood; double glazed;  $U_w = \text{max. } 1.22 \text{ W / m}^2\text{K}$

Pine wood; triple glazed;  $U_w = \text{max. } 0.9 \text{ W / m}^2\text{K}$

### PATIO DOORS

Pine wood; double-glazed; tilted & sliding;  $U_w = \text{max. } 1.19 \text{ W / m}^2\text{K}$

Pine wood, triple-glazed, tilted & sliding;  $U_w = \text{max. } 0.9 \text{ W / m}^2\text{K}$

Metal & wood;  $U_d = \text{max. } 0.96 \text{ W / m}^2\text{K}$

### EXTERIOR DOORS

## CARPENTRY PACKAGE

### INTERIOR DOORS

Knotless, ground, pine door with a fixed door frame; unpainted

### SCHODY

Unpainted pine milling stairs

### RAILING

(C24) Wood; 4.5x4.5 cm

### FINISHING STRIPS

Quarter-round corner finishing strip; wooden angle

## INTERNAL INSTALLATIONS

### VENTILATION

PVC ventilation ducts with fireplace & sewage exhaust

mechanical ventilation fan

### SEWEGE

Complete system of polypropylene (PP) pipes for fittings & venting;

assortment to be hooked-up by yourself

### WATER

Push-in polybutylene piping system, complete installation from cold water valve

connector pipe, including but not limited to: manifolds, couplings, pipes and approaches

### ELECTRIC

Boxless installation; including: switchgear, plug-in sockets,

connectors, wires run in conduits

# Materials used

## C24 WOOD

All construction elements are made of certified wood (high strength class C24) from Scandinavian forests which, due to severe weather conditions and long winters, are characterized by slow growth, which makes the wood hard and durable. Chamber drying to a humidity of 15-18% additionally makes it free from all fungi and insects.



## HIGHLY PERMEABLE MEMBRANE

To protect the surface against moisture, a top-class, diffusion, 3-layer, highly vapor-permeable membrane with a grammage of 233 g / m<sup>2</sup> is used. It can act as a roof and facade for up to 6 months, due to the guaranteed resistance to UV radiation during this time.



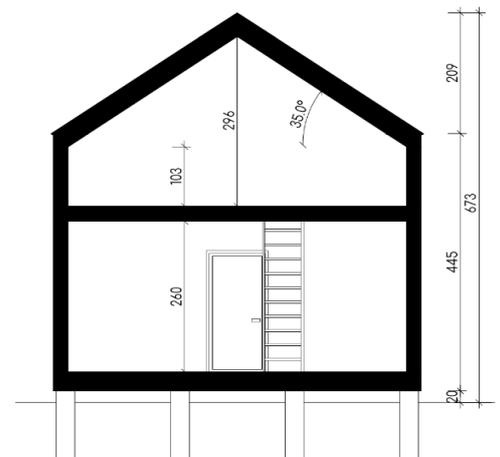
## MINERAL WOOL

All partitions are insulated with mineral wool. Vertical partitions are insulated with wool of increased stiffness to prevent the wool from collapsing by gravity. HYTA houses meet the requirements for thermal transmittance of partitions, set for all-year-round buildings for 2021.



## WOODEN WINDOW JOINERY

The houses are equipped with very high-quality wooden windows. Window joinery made of natural material is an ecological solution that allows for large glazing.



\* Certain specifications may vary, depending on the country and its building regulations, in which the project takes place.