

MODERN GROUND FLOOR HOUSE

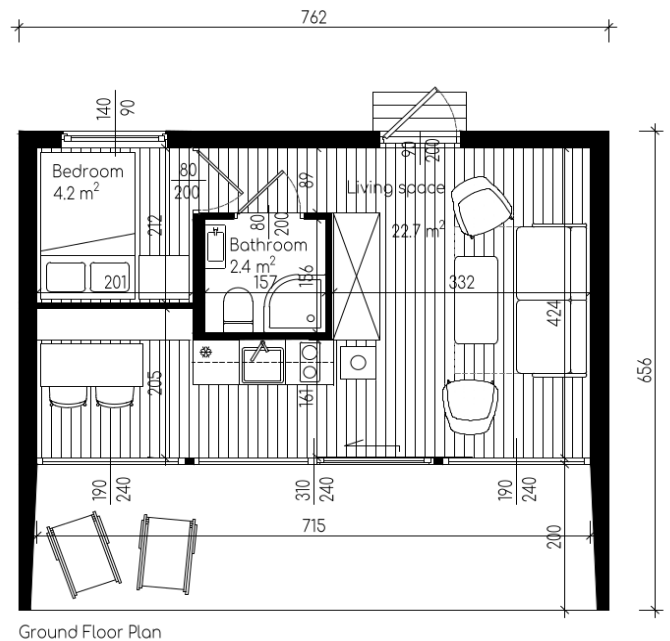
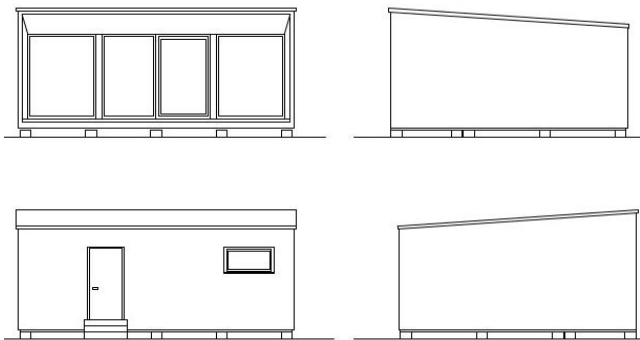
Hegre

If you like to feel the ground under your feet, the design of a cozy, one-story "Hegre" can steal your heart. The horizontal, glass-fronted minimalist block allows you to admire the landscape and opens up a completely new perspective for residents. The house, extended with a terrace, will connect you even more with the surroundings and will allow you to return to the womb of mother nature.

BUILDING AREA	35 m ²
NET AREA	29,10 m ²
HEIGHT	3,61 m
ROOF TYPE	FLAT

A calm spirit & an open mind

A simple, horizontal shape with a glass wall fits the building into the standards of modern design. A characteristic feature of the house is a completely glazed wall and a large covered terrace which is an extension of the living space. All this naturally connects the interior of the house with its surroundings. The glass façade lets the sun's rays into the interior, while the roofing and covering of the terrace protect against rain and excessive overheating of the rooms in the summer. Natural finishing materials and a spacious and bright living room are Hyta's features resulting from the Hygge philosophy. The rectangular projection allows for functional arrangement of the rooms and gives freedom of arrangement. A comfortable living room, a kitchen with a dining area, a bathroom and a separate bedroom have been designed.



Technological standards *

WALL CONSTRUCTION

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

ELEVATION

	Bare (larch) cladding board; 22 mm thick
	Larch cladding board, painted with impregnation; 22 mm thick
HORIZONTAL GRATE	Impregnated square (spruce) timber; 25x50 mm
VERTICAL GRATE	Impregnated square (spruce) timber; 25x50 mm
WIND BARRIER	Highly vapor-permeable membrane; weight: 233 g / m ²
CONSTRUCTION	(C24) Spruce wood; 45x120 mm
THERMAL INSULATION WITHIN THE STRUCTURE	Mineral wool; 12 cm thick; $\lambda = 0.035 \text{ W} / \text{mK}$
SHEATHING	OSB board; 12 mm thick
VAPOR INSULATION	Activated foil; weight: 77 g / m ²
INSTALLATION GRID	(C24) Spruce wood; 45x45 mm
THERMAL INSULATION WITHIN THE GRID	Mineral wool; 5 cm thick; $\lambda = 0.033 \text{ W} / \text{mK}$
FINISH	Drywall; 12.5mm thick Spruce panel boards; 12.5 mm thick

ROOF

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

Includes steel guttering and flanges

COVERING	Seam sheet; color RAL 7016
RAFTER	Impregnated square (spruce) timber; 40x60 mm
BATTEN	Impregnated square (spruce) timber; 25x50 mm
INITIAL COVERING	Highly vapor-permeable membrane; weight: 233 g / m ²
CONSTRUCTION	(C24) Spruce wood; 22x4.5 cm
THERMAL INSULATION WITHIN THE STRUCTURE	Mineral wool; 20 cm thick; $\lambda = 0.033 \text{ W} / \text{mK}$
VAPOR INSULATION	Activated foil; weight: 77 g / m ²
INSTALLATION GRID	(C24) Spruce wood; 45x45 mm
THERMAL INSULATION WITHIN GRID	Mineral wool; 20 cm thick; $\lambda = 0.033 \text{ W} / \text{mK}$
FINISH	Drywall; 12.5mm thick Spruce board panels; 12.5 mm thick Complete set of steel guttering; color of the roof

GUTTERING, FLOORING

GROUND FLOOR

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

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 ²
VAPOR INSULATION	Impregnated square (spruce) timber; 45x45 mm
GRATE	Mineral wool; 5 cm thick; $\lambda = 0.033 \text{ W} / \text{mK}$
THERMAL INSULATION WITHIN GRID	(C24) Spruce wood; 22x4.5 cm
CONSTRUCTION	Mineral wool; 20 cm thick; $\lambda = 0.033 \text{ W} / \text{mK}$
THERMAL INSULATION WITHIN THE STRUCTURE	Bitumised OSB board; 12 mm thick
RODENT PROTECTION SEAL	

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; $U_w = \text{max. } 1.22 \text{ W} / \text{m}^2\text{K}$ Pine wood; triple glazed; $U_w = \text{max. } 0.9 \text{ W} / \text{m}^2\text{K}$
PATIO DOORS	Pine wood; double-glazed; tilted & sliding; $U_w = \text{max. } 1.19 \text{ W} / \text{m}^2\text{K}$ Pine wood, triple-glazed, tilted & sliding; $U_w = \text{max. } 0.9 \text{ W} / \text{m}^2\text{K}$ Metal & wood; $U_d = \text{max. } 0.96 \text{ W} / \text{m}^2\text{K}$

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

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

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 / m² 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.

