



### **PROJECT COORDINATOR**

Kraus-Kam, Warsaw

### **CONTACT PERSON:**

arch. Zuzanna Myszker biuro@dalarnahus.com

#### ARCHITECTURAL DESIGN

arch. Zuzanna Myszker zuzannamyszker@gmail.com





Dalarna Hus is a wooden, pro-climate energy-saving house that **guarantees living in harmony with nature**. It is not just a building - it is an answer to the climate challenges of the 21st century.

According to research, home is the most important factor in determining our happiness. Dalarna Hus is a comfortable and convenient home, which was created with a cozy atmosphere and the warmth of a family hearth in mind, with reference to the Scandinavian philosophy of life called "Hygge" and the "Lagom" lifestyle, meaning: "just right, not too much, not too little accouterments, as much as necessary".

Build your dream home with us and receive your very own key to happiness!







Dalarna Hus house was designed by a Polish architect in Sweden, in cooperation with the general distributor and project coordinator Kraus-Kam.

The vision behind our work on the Dalarna Hus project is to build **responsible** and environmentally friendly houses for our times. This is in response to the energy crisis and the ecological challenges of today's world.









## ····· Why is it unique? ·····



An innovative, environmentally friendly house construction system based on **STEICO technology**.

High-quality materials from reputable manufacturers.

Natural thermal insulation from wood fibres offering excellent protection against cooling in winter and overheating in summer.

Certified wood - a renewable resource without harmful additives.

A straightforward shape and a diffusively open structure.



Excellent thermal parameters of the building, meeting values for passive houses.

**Exceptionally low energy demand of the building**: the maximum value by law is 70 kWh/m2/year, while Dalarna Hus requires less than 40 kWh/m2/year.



### A healthy, human-friendly microclimate.

Elimination of materials with synthetic additives, such as OSB boards (glue), and those requiring a lot of energy for production (mineral wool).



Safety of the construction system based on complete design documentation and continuous quality control.

Quick construction process and experienced staff.

A partnership approach to a common task, transparency.





## ·Material solutions .....

Roof covering made of **SunRoof** solar tiles or Swedish SSAB **Greencoat** standing seam metal roofing.

Roof in a wooden frame construction using **STEICO technology** 

- STEICOjoist I-beams
- STEICOflex thermal insulation made from wood fibres
- Fermacell finishing boards

.. Decentralised wall-mounted mechanical ventilation with heat recovery from **Stiebel Eltron** 

Facade made of Scandinavian spruce wooden boards charred using the Shou Sugi Ban method by **Wood of Fire**, or **Thermory**'s Thermo Pine boards

-External walls in a wooden frame construction

- STEICOflex thermal insulation made from wood fibres
- KVH structural timber

Intermediate floor in STEICO technology

- STEICOjoist I-beams
- STEICOflex thermal insulation made from wood fibres
- Fermacell finishing boards
- PFLEIDERER's MFP boards bonded with natural resin

Triple-glazed windows with low heat transfer coefficients U < 0.9 W/m²K

Floor-to-ground in the Parati Passive30 system

- Reinforced concrete foundation slab
- XPS300 thermal insulation

	Maximum U value for energy efficiency	<b>Dalarna Hus</b> , a low-energy house	Passive house
External walls	0,20	0,12	<0,15 (0,12)
Floor-to-ground	0,20	0,11	<0,15 (0,12)
Roof	0,15	0,12	<0,15 (0,12)
Windows (roof wind.)	0,90 (1,10)	<0,90	<0,80
Exterior doors	1,00	0,80-0,90	<0,80

Requirements for a passive building according to the Polish Passive House Institute. Values in brackets provided by other, unverified sources.











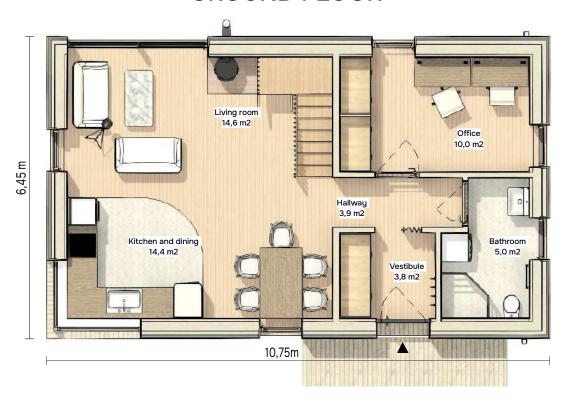




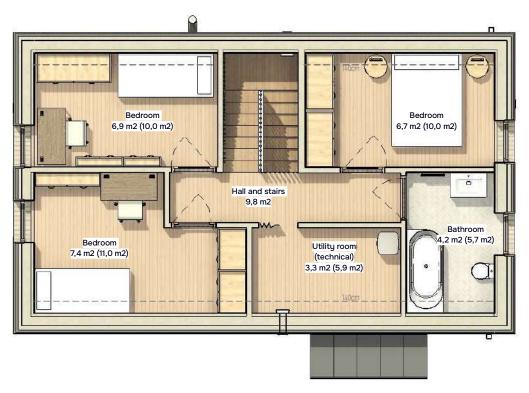


Built-up area: 69,13 m2 Usable area: 89.97 m2 (104 m2 with slopes)

# **GROUND FLOOR**



# **FIRST FLOOR**









- Parati passive 30 foundation slab with the lowest passive heat transfer coefficients (30cm of thermal insulation from the
- "Ready to finish" surface, meaning a slab smoothed out ready to serve as flooring; prepared for the installation of floor finishes (wood, tiles)
- Average construction time of 4-6 working days
- Absence of thermal bridges causing cold floors
- Highest quality materials, concrete minimum C25/30





- Pre-design analysis of the plot conducted by the local architect
- Project adaptation to the Investor's needs
- Preparation of complete project documentation architectural and construction project
- Energy performance assessment
- Site preparation for construction
- Erection of a frame structure with thermal insulation using STEICO technology
- Construction of partition walls from C24 wood and ceiling with STEICO I-beams
- Construction of a roof structure in STEICOjoist technology with guttering and SSAB Swedish metal roofing in GreenCoat technology - organically coated steel (the only such coating on the market!)
- Triple-glazed, energy-efficient windows U<0.9 W/m²K
- Entrance doors from reputable companies like Gerda
- Electrical installation with building grounding and lightning protection
- Water and sewage installation according to the project
- Ceiling finish with PFLEIDERER'S MFP eco-friendly boards
- Wall and ceiling finishes with Fermacell or MFP boards depending on the finish concept
- Decentralised ventilation with a control module and the possibility to change STIBEL ELTRON brand filters
- Building facade with Thermory's Thermo Pine or Wood of Fire's charred Shou Sugi Ban boards
- Optionally nanosilicon plaster



#### **OPTIMUM** AND:

- HITZE CANE S free-standing fireplace with energy class A dedicated to passive buildings; 6.5 kW with accumulation properties and safe external chimney
- Energy-efficient heating with infrared heaters that do not cause air movement and with it the raising of dust
- Outdoor wooden terrace
- Platform in front of the entrance to the house wooden
- Canopy over the main entrance to the building



#### PREMIUM AND:

- SunRoof solar roof in Swedish technology
- Meranti wooden windows
- Terrace awning or pergola

- Project management in terms of contact with authorities (applications, maps)
  Necessary maps, utility connection projects, geological surveys, geodetic measurements
  Plot development external connections and their projects, including sewage disposal and land drainage
- Landscaping elements outside the building's footprint (optional terrace/platform)
- Personal hygiene protection and facilities on the construction site
- Hiring a construction manager

#### OFFER DOES NOT INCLUDE:



# WOODEN FACADE

### Wood of Fire - board charred using the Shou Sugi Ban method



Scandinavian spruce Karpatia 1



Scandinavian spruce Karpatia 3



Scandinavian spruce Karpatia 2



Scandinavian spruce Baltica 1



Scandinavian spruce Baltica 2



Scandinavian spruce Baltica 3



Scandinavian spruce Falun red

## Thermory - Thermo Pine



Colour "clear"



Colour "larch"



Colour "graphite"



Colour "black"





## ··WOOD - WARMTH - ENVIRONMENT·········

The STEICO construction system is a perfect blend of technologically advanced products with the benefits of natural wood. STEICO products are environmentally friendly, using renewable resources in their production. The wood used as a natural building material is known for its exceptional stability and properties that ensure a healthy indoor climate in your home. This resource is created through a natural process, and its procurement requires low energy input, minimally impacting the environment compared to other construction methods.

Constructing wooden walls for a single-storey house measuring 7 x 10 m requires 3.5 times less energy than erecting similar-sized masonry walls. At the same time, almost three times less CO2 is released into the atmosphere, water usage is significantly lower, and there are no troublesome effluents during construction.

A wooden house better accumulates heat than a building made of solid brick or concrete. For the homeowner, this means higher comfort in summer (the rooms in the building heat up less) and lower heating costs in winter. All this translates into lower carbon dioxide emissions into the atmosphere.

A solar roof from the Swedish company Sun Roof will allow for the production of your own energy, which, combined with STEICO technology and infrared heating, will minimize the operating costs of the house. All other materials have also been selected in such a way as to serve you and your loved ones for many years - we only use the highest quality products.

A future addition to the project will be a version with finishing. Among other things, we will use innovative products made from wood by NOVATOP. These wooden boards will ensure that the interior of your home is enveloped in wood and natural beauty.

A version of the Dalarna house with a smaller footprint is also in development, built as an Individual Recreation Building - single-storey with an optional mezzanine.

In Dalarna Hus, nothing is left to chance, and every client who decides to proceed is unique. Welcome to our Scandinavian world with Dalarna Hus!





### **PROJECT COORDINATOR**

Kraus-Kam, Warsaw

#### **CONTACT PERSON:**

arch. Zuzanna Myszker biuro@dalarnahus.com

#### ARCHITECTURAL DESIGN

arch. Zuzanna Myszker zuzannamyszker@gmail.com