







# FOR WHOM DO WE RECOMMEND **THE ATTA HOME** HOUSES?



For anyone who intends to build an affordable home in a short time and is devoted to explore the possibilities of environmentally friendly, high-quality, controlled manufacturing technologies. It makes no difference if your would-be home is

- a one- or two-storey house,
- built either according to standard designs or tailored to individual needs,
- a simple, small-sized holiday home or a luxury property lying on hundreds of square meters.

OUR MISSION IS TO HELP YOU BUILD THE HOME OF YOUR DREAMS - DESIGNED FOR THE FUTURE!



# WHY CHOOSE **STEEL FRAME** TECHNOLOGY?







### **STEEL FRAME** TECHNOLOGY

- turnkey handover of a typical 100 m2 residential building may take no longer than 4 months
- minimal on-the-spot work
- smooth scheduling of relocation
- predictable budget (neither hidden nor extra costs)
- no need to worry whether craftsmen are available
- removable units, customized design, changeable module sizes, ex post expansion of the floor plan
- in terms of realizing environmental protection:
  - based on the excellent thermal insulation, the energy consumption - consequently, the harmful emission - of ATTA HOUSES is low
    manufacturing, as well as on-site construction are almost totally waste-free: building ATTA HOUSES takes far less

     wood felling,
     concrete,
     water used during construction,
     waste.
    - waste,
    - construction waste

### MORE DETAILS

- As the steel frame developed and manufactured by us is strong, stable and solid, it retains its original mechanical properties almost eternally - provided that the appropriate construction technology is adhered to. In general, steel is not subject to warping, drying or cracking.
- Furthermore, the steel frame of the building is not only fireproof but also highly safe: resistant to disasters (earthquake, storm, etc.).
- We offer a 50-year warranty on the frame of the building.
- In terms of heating and cooling:
  - heating and cooling of the completed building is easy,
  - steady indoor temperature can be managed by low-level maintenance heating,
  - integrated heat pump cooling + heating, optional heating solutions - "H tariff rating" is also available (discounted electricity tariff established for heating systems made from heat pumps and renewable energy sources).

- fulfilment of the highest energy requirements -"almost O" requirement level - even without solar cells,
- set-up of individual technical content, passive house certification,
- healthy indoor air: air handling unit (temperature control, equipped with pollen- and carbon filter)
- smart heating system with remote management,
- Smart Program:

options of smart house- and sprinkle control,o integration of safety systems,

- dry construction technology: construction feasible in any season, no drying time, no wetting, no moulding, zero thermal loss (no "thermal bridges"), no rust,
- automated prefabrication: straight walls (no sloping), millimetre-accurate fit, accurate design of walls and doors, accurate placement of electrical protection tubes.



## TECHNOLOGY

## STRUCTURE

CLASMAN Kft. manufactures modular, self-developed buildings under **ATTA HOME** brand name.

The **ATTA HOME** self-developed steel frame modular houses are "green" buildings: being environmentally friendly and consuming low energy, they embody sustainability. Energy classification has been completed: having reached at least BB, or, higher energy class ranking, these buildings are well in line with the prerequisites of the **Green Home Program**.

The dimensions of the base module: **3x3x6 m**. On demand, however, it is possible to vary the sizes. Arrangement of the modules next to each other is feasible, so that large interiors may be configured: expanding the span up to **6 meters** in one direction and expanding it optionally in the other direction.





The basic ceiling height is **2.7 m**, which is higher than in most of the other modular houses - on request, further heightening is also manageable.

The building items are high-quality hot-dip galvanized (of corrosion protection), as well as stainless steel structures, for which the exterior and interior covering can be selected by individual requirements. The interior cladding layer is covered with building boards. The interior dividing walls are made of plasterboard/gypsum fiber. Exterior cladding: facade plastered, or, fitted with design covers. Both the interior and exterior cladding layers (floor, interior coverings, suspended ceilings) are qualified structures.

The heating of the buildings is based uniformly on heat pump technology. Ventilation is provided by heat recovery ventilation equipment. Hot water is supplied by electric boilers, for which - in larger buildings - heat pump assistance is possible.

The heating, ventilation and domestic hot water supply can be interconnected by smart home systems, and thus, remotely controlled. The high-performance materials, together with the degree of thermal insulation, lead to extremely low heat demand, which not only ensures the necessary comfort level of accommodation but also generates small maintenance costs.





## FLOOR STRUCTURE

#### corrosion protection: active anodic protection

consistence protection for the steel frame structure: multi-layer paint system

parameters of the recommended paint system:

#### in accordance with the expected technical performance

expected corrosion protection performance: over 50 years





## WALL STRUCTURE

The load-bearing structure for the wall frames: load-bearing trapezoidal profiled sheets with a profile height of 35 mm.

The inner curtain wall: of CD60/27 steel profiles | is covered with 15-mm-thick gypsum fiberboards.

On the outer side: EPS thermal insulation - with a standard thickness of 16 cm - is to mount on the load-bearing trapezoidal profiled sheet, | insulation size and quality can be different, according to the Customer's requirements. EPS thermal insulation on the outer side is to supply with: trowel base plaster of adhesive patch, with double-layered glass fabric embedding | is to complement with colored plaster.

### ON REQUEST, DESIGN COVERS ARE ALSO AVAILABLE!

## THERMAL INSULATION

The roof is to insulate by a minimally 30-cm-thick rockwool layer. The side wall is to insulate in accordance with the Customer's requirements – nonetheless, the all-time minimum is EPS 80H material.



## FACADE

The facade can be of plastered surface and also design cover. The side wall is to insulate in accordance with the Customer's requirements – nonetheless, the all-time minimum is EPS 80H material. The XPS thermal insulation of the footing is to mount on a building board. As for the thermal insulation of the floor lying on the ground: a minimally 7-cm-thick XPS sheet above the closed air layer, which is to mount to the ribs of the load-bearing steel. The roof is of low-angle cold roof, covered generally with roof plate. On request, however, both the angle and the cover can be different. Under it, onto the holding structure of the attic slab, a 30-cm-thick mineral wool thermal insulation layer is to set.



## For more information please visit our website attahome.hu