

## **Galvanized Steel Lightweight Construction Technology:**

Metals, including aluminum, copper, steel, and iron, are highly recyclable. Producing products from recycled metals consumes less energy, reduces carbon dioxide emissions, and uses less water compared to manufacturing from raw materials.

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## **WELCOME**





Every project is preceded by meticulous 3D technical modeling and design work, allowing you to visualize your home's structure and its surroundings before construction begins. The entire building frame can be assembled in as little as six days using prefabricated elements.

This construction method minimizes environmental impact on the surrounding area, with the process generating only minimal waste.

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**This is how the structure will look before engineering 3D modeling and design, and after assembly.**



## ADVANTAGES AND FEATURES 1:

The understanding and application of this technology offer numerous benefits. Metal recycling not only creates jobs but also provides much more:

**Consistent Quality Control:** Continuous quality checks of structural elements ensure high construction quality.

**Modularity and Versatility:** The structure's modularity allows integration with other materials, such as wood, stone cladding, or decorative finishes.

**Ease of Assembly:** Lightweight structural elements simplify the assembly process.

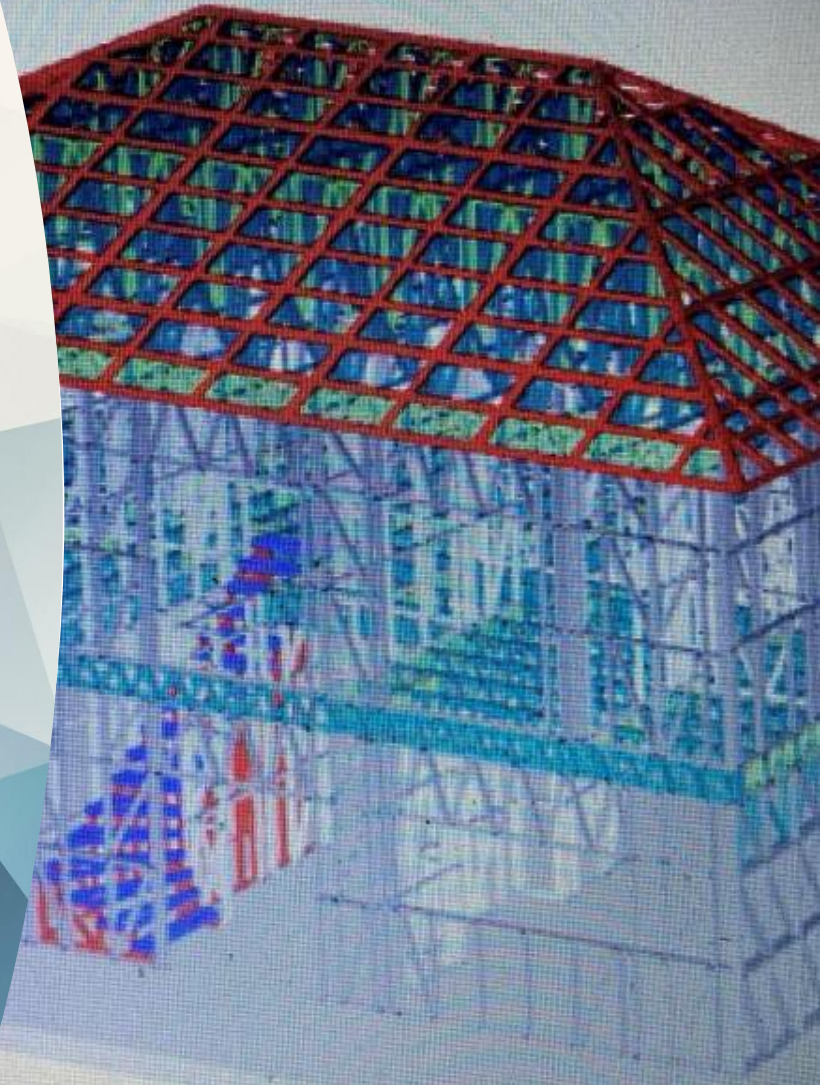
**No Need for Heavy Machinery:** The lightweight components eliminate or significantly reduce the need for cranes or lifting equipment.

**Detailed Technical and 3D Plans:** These plans are easy to read and interpret, enabling cost-effective construction with familiar building practices.

**Efficient Construction Processes:** The construction and finishing phases are straightforward, following well-established methods in the construction industry.

**Continuous Workflow:** Unlike traditional construction methods, this system avoids interruptions in workflow.

**Minimal Environmental Impact:** The construction process causes less deformation to the surrounding environment compared to conventional building methods.





## ADVANTAGES AND FEATURES 2:

**Reduced Material Waste:** This approach significantly reduces material waste, resulting in lower overall costs.

**Superior Insulation and Energy Efficiency:** The buildings achieve higher insulation performance and energy security.

**Exceptional Structural Durability:** The robust, stable structure offers outstanding resistance to earthquakes, wind, and storms. For residential-scale buildings, lightning protection is typically unnecessary.

**Low Ecological Footprint:** According to the University of Bath's ICE study, the carbon emissions for lightweight steel-framed houses amount to 7.1 tons, compared to 21.85 tons for traditional materials. This includes only the production of materials. Additionally, lightweight steel structures require 66% less transportation energy and significantly lower installation energy compared to heavy traditional systems.

**Compliance with the Highest Energy Standards:** In Hungary, as in other EU countries, buildings must have Energy Certificates. With this technology, it is possible to construct buildings with the highest "A" and "A+" ratings. With proper planning, this lightweight construction technology is also suitable for building passive houses.

