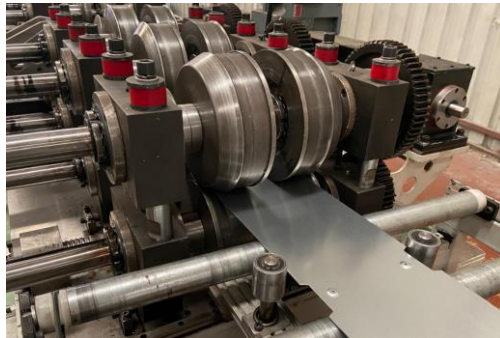


Light Steel Production Details..



- Light steel prefabricated houses are among the most innovative solutions in the modern construction sector, combining speed, durability, and sustainability. The steel production process for light steel structures plays a critical role in ensuring structural safety, long service life, and high installation quality. This article examines the steel production process for light steel prefabricated houses, the materials used, quality standards, and the impact of production quality on building performance.



- Light steel refers to high-strength structural elements generally produced from cold-formed galvanized steel sheets and used in load-bearing building systems. Compared to reinforced concrete and heavy steel structures, light steel systems offer significantly lower weight while maintaining high load-bearing capacity. These characteristics make light steel an economical and safe solution for prefabricated housing.

- Materials Used in Light Steel Production

The following materials are commonly used in steel production for light steel prefabricated houses:

- Galvanized Steel Sheets: Provide excellent corrosion resistance. Z275 galvanization is widely preferred.
 - High-Strength Structural Steel (S350 – S550): Enhances the load-bearing capacity of the structural system.
 - Cold-Rolled Steel Sheets: Offer high dimensional accuracy and smooth surface quality.
- These materials enable the production of long-lasting prefabricated houses with minimal maintenance requirements.



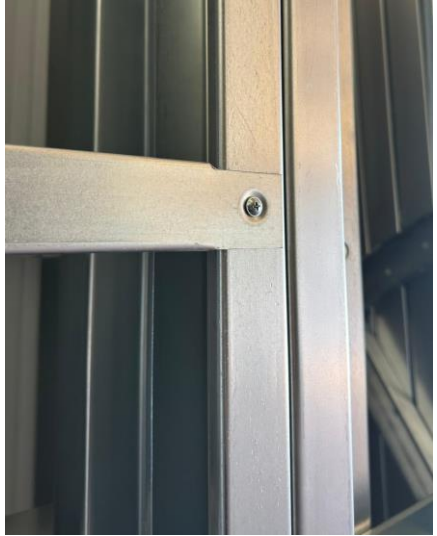
- Quality Standards and Certification

Quality in light steel production is ensured through compliance with national and international standards, including:

- EN 1993 (Eurocode 3) – Design of steel structures
- EN 10346 – Continuously hot-dip coated steel flat products
- ISO 9001 – Quality management systems

Production in accordance with these standards guarantees the safety and durability of prefabricated houses.

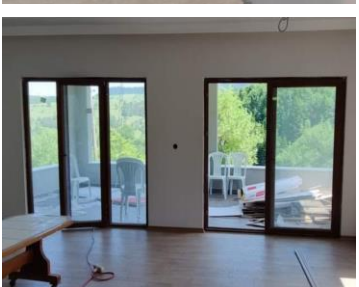
Packaging and Installation..



Light Steel Structures and Installation Details



Light Steel Structures – Finishing (Completion) Details



Light Steel Prefabricated Building – Different Models



Light steel house projects offer exceptional flexibility to meet diverse architectural and functional requirements. Thanks to the project-specific production of light steel structural systems, building models can be fully customized in terms of **layout, number of floors, façade design, and structural configuration**. Precisely engineered components and CNC-controlled manufacturing ensure high quality, fast installation, and reliable structural performance. This adaptable construction approach provides clients with **cost-effective, durable, and modern housing solutions** tailored exactly to their expectations.

Why Light Steel Prefabricated Houses?

Light steel prefabricated houses offer **fast construction, high durability, and flexible design options**. Engineered steel structures provide excellent resistance to earthquakes and harsh weather conditions. Factory-made components ensure **precise quality, quick installation, and cost efficiency**, while the recyclable steel system delivers a **long-lasting and sustainable housing solution**.

Superior Performance Against Earthquakes and Storms

Light steel prefabricated buildings are engineered to deliver **exceptional resistance to earthquakes and strong winds**. Their lightweight yet high-strength structural system reduces seismic loads while maintaining structural stability. Precisely designed steel connections and factory-controlled manufacturing ensure reliable performance under extreme weather conditions, making light steel prefabricated structures a **safe and dependable solution** in seismic and storm-prone regions.

Why Choose Gürtes for Your Light Steel House Project?

At Gürtes, we focus on **your needs, your design, and your expectations**. Each light steel house is engineered and manufactured specifically for your project, ensuring **perfect compatibility, safety, and long-term reliability**. From design to installation, our precision manufacturing, fast delivery, and responsive support provide a **smooth, transparent, and cost-effective building experience**. Choosing Gürtes means choosing a trusted partner for modern, durable, and customized light steel homes.

