

Steel Structure Roof Systems



Reliable, Durable and Engineering-Based Solutions for Industrial and Residential Buildings

Gürtes Construction Engineering Industry and Trade Ltd. Co., we provide high-quality steel structure roof systems for industrial and residential projects, supported by strong engineering expertise and years of industry experience.

All our steel roof solutions are designed in accordance with international standards, seismic regulations, and wind and snow load calculations, ensuring long-term safety, durability, and performance.

Steel Structure Roofing Systems

Steel structure roof systems are roofing solutions where the main load-bearing elements consist of steel columns, beams, trusses, purlins, and arch members. At Gürtes, every steel roof system is designed based on detailed **structural analysis**, ensuring maximum safety and efficiency.

These systems are widely used in:

- Industrial facilities
- Warehouses and logistics centers
- Hangars
- Arched (steel arch) structures
- Residential and light steel buildings

Industrial Roofing Solutions

Industrial and Factory Roof Systems

Steel structure roofs for industrial facilities provide large clear spans, enabling maximum usable space for production areas. Gürtes designs these systems considering crane loads, equipment vibrations, and heavy operational conditions.

Steel Warehouse Roof Systems

Steel warehouse roof solutions offer functional, economical, and durable structures for storage and logistics facilities. Thermal and condensation-controlled roof coverings improve energy efficiency and operational comfort.

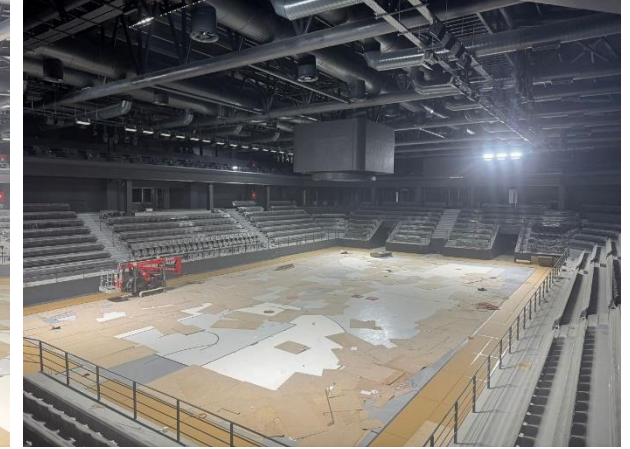
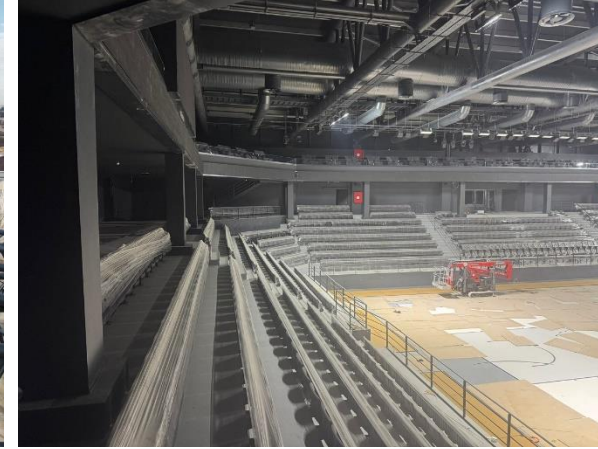
Steel Hangar Roof Systems

Steel hangar roof systems are engineered for large-span structures such as aircraft hangars and heavy-duty facilities. Gürtes designs hangar roofs to withstand high wind loads and harsh environmental conditions.

Steel Arch (Arched) Roof Systems

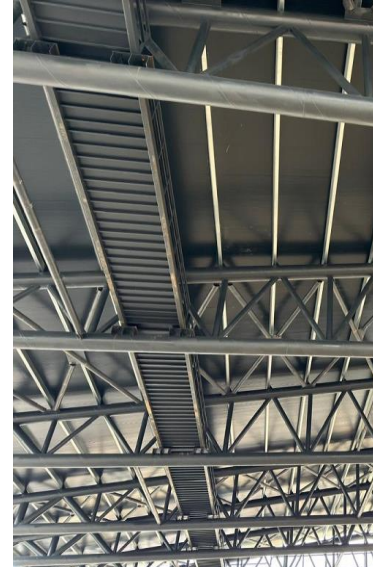
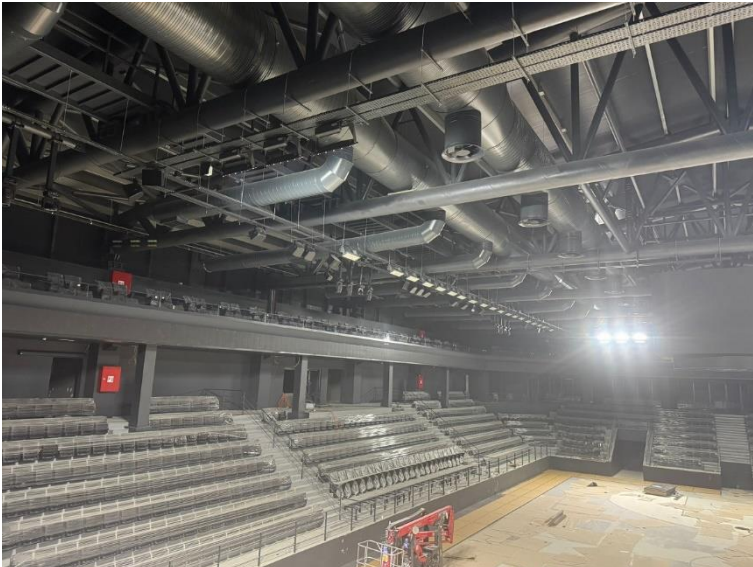
Steel arch roof systems distribute loads efficiently through their curved structural form. They provide column-free large spaces and offer both structural efficiency and architectural aesthetics for industrial and commercial buildings.

Steel Structure Roof Systems



Steel Roof Systems for Residential Buildings

Steel structure roof systems are also highly suitable for **residential buildings, villas, and light steel houses**. Due to their lightweight structure, they reduce the overall load on the building, significantly improving seismic performance while offering long-term durability.



Materials Used and Light Steel Systems

Light Steel Structural Systems

Light steel systems are manufactured from cold-formed, galvanized steel profiles. Gürtes uses high-quality light steel materials that offer excellent strength-to-weight ratios and long service life.

Advantages of light steel systems include:

- High earthquake resistance
- Lightweight yet high structural strength
- Corrosion resistance due to galvanization
- Precision manufacturing and fast installation

Roof Covering Materials

- Sandwich panel roof systems
- Trapezoidal sheet metal roofing
- Standing seam (kenet) roof systems
- Galvanized and painted steel sheets

Roof coverings are selected based on the building's function, ensuring thermal insulation, sound insulation, and fire resistance.

Superior Resistance to Earthquake and Wind Loads

Steel structure roof systems demonstrate excellent seismic performance due to their ductile behavior and lightweight nature. Gürtes applies advanced connection and anchoring details to ensure high resistance against strong winds and storms.