

## Technical Specifications-K-Span Structures



### Canopy Applications

- **Panel Type:** Corrugated, self-supporting galvanized steel panels.
- **Thickness:** 0.7 mm.
- **Span Capacity:** Designed for unsupported spans up to 12 m.
- **Load Resistance:** Withstands structural loads up to 50 kg without the need for purlins or rafters.

- **Key Advantage: Lightweight, self-supporting structure ideal for small canopies, vehicle shelters, and open storage covers.**
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### **General Building Applications (Warehouses, Barns, Industrial Units, Storage, Offices)**

- **System: ABM-120 structural system, ground-to-ground or elevated on walls.**
- **Steel Specification:**
  - **Galvanized steel coils conforming to ASTM A653, structural quality (SS).**
  - **Grades available: Grade 40 (Yield Strength 40,000 psi) or Grade 50 Class 1 (Yield Strength 50,000 psi).**
  - **Hardness 70–78 Rb, elongation minimum 22% (25–30% preferred).**
- **Panel Thickness Range: 0.66 – 1.0 mm (0.026 – 0.040 in).**
- **Protective Coatings:**
  - **Galvanizing: Class G-90 (Z-275) preferred; chemical treated, lightly oiled.**

- **Topside: Polyester, 25  $\mu\text{m}$  total dry thickness, roll-forming grade.**
  - **Backside: Epoxy primer + polyester wash coat, 12  $\mu\text{m}$  dry thickness.**
  - **Applications: Suitable for warehouses, barns, workshops, industrial units, agricultural storage, and office extensions.**
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### **Span Guidance**

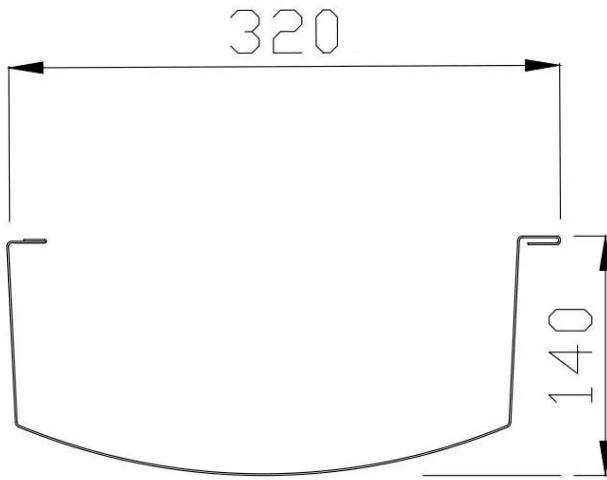
- **Minimum Span: 5 m (structural limitation due to panel curvature).**
  - **Maximum Span: 24 m (depending on project design, loading, and compliance checks).**
  - ***Note:* The 5 m minimum curvature limit does not apply to canopies.**
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## Structural Calculations

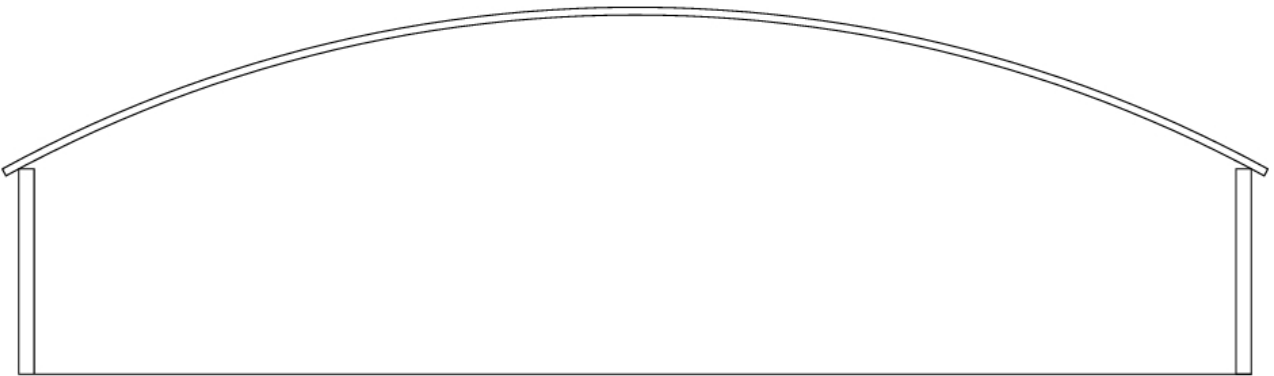
- **Every structure is validated using COSMIC Structural Calculation Software by M.I.C. Industries.**
  - **Structural analysis ensures compliance with load, wind, and snow requirements for each individual project.**
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## Assembly Guidance

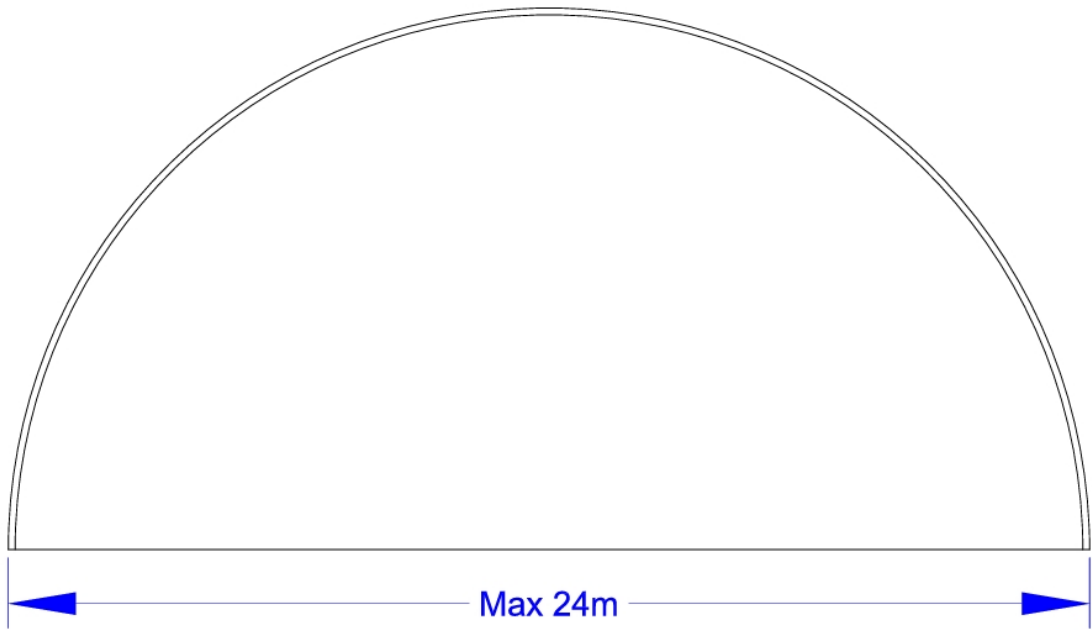
- **Panels are secured with two self-drilling TEK screws at each end, fixed to upright connection points.**
- **Panel-to-panel joints: 10 mm self-drilling screws with bonded washers for watertightness.**
- **Optional: Seam-joining with a dedicated seaming machine (no screws required).**



**Panel Cross Section**



**Elevated on other Structure**



Ground to Ground Structure

