



INFLATABLE AIRCRAFT HANGAR

Revolutionising Aviation Infrastructure

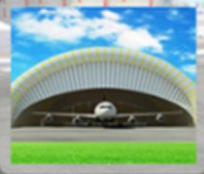
Smart Solutions for Modern Aviation Challenges



INFLATABLE HANGAR

ODM & OEM

Providing quick-build temporary hangar solutions for the aviation industry suitable for aircraft parking, repair and maintenance



Four Key Challenges of Traditional Hangars



Extended Construction Time

Traditional steel hangars require 12-24 months to build, delaying maintenance operations and business expansion



High Construction Costs

\$60-\$120 per square foot, with large hangars often exceeding several million dollars in total investment



Expensive Maintenance

Costly ongoing maintenance for metal structure corrosion prevention and roof repairs



Lack of Flexibility

Fixed structures difficult to expand or redeploy, unable to adapt to business changes

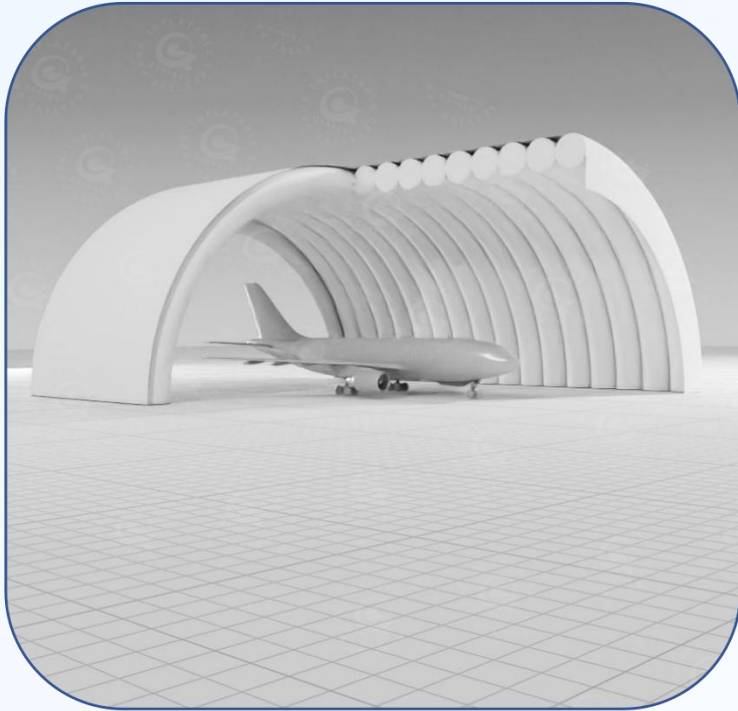


Average construction time: **12-24 months**

Unit cost: **\$60-\$120/ft²**

Source: ROI Metal Buildings, 2024

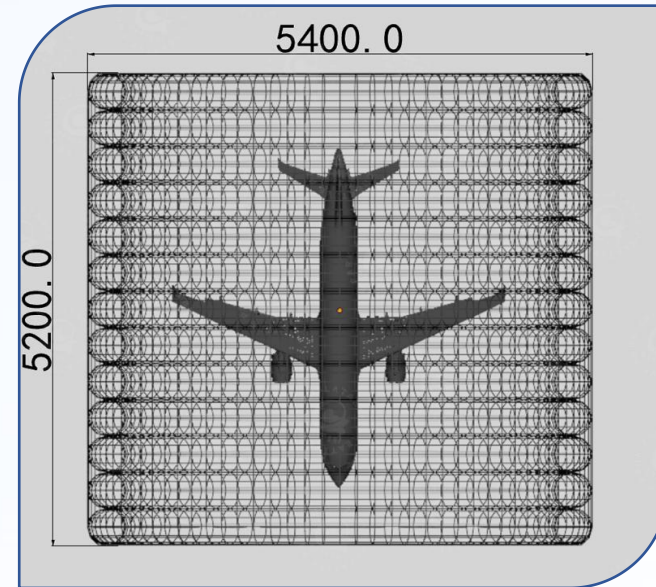
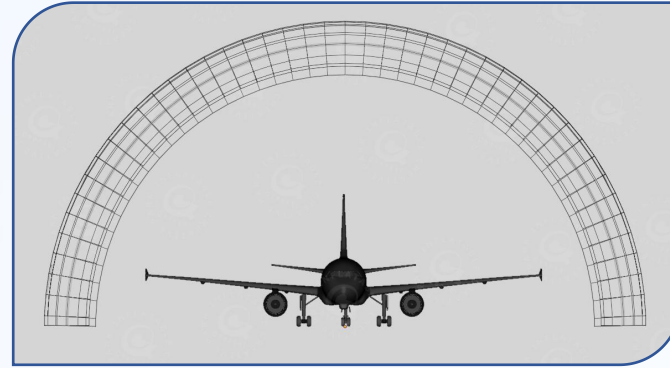
Hangar A320



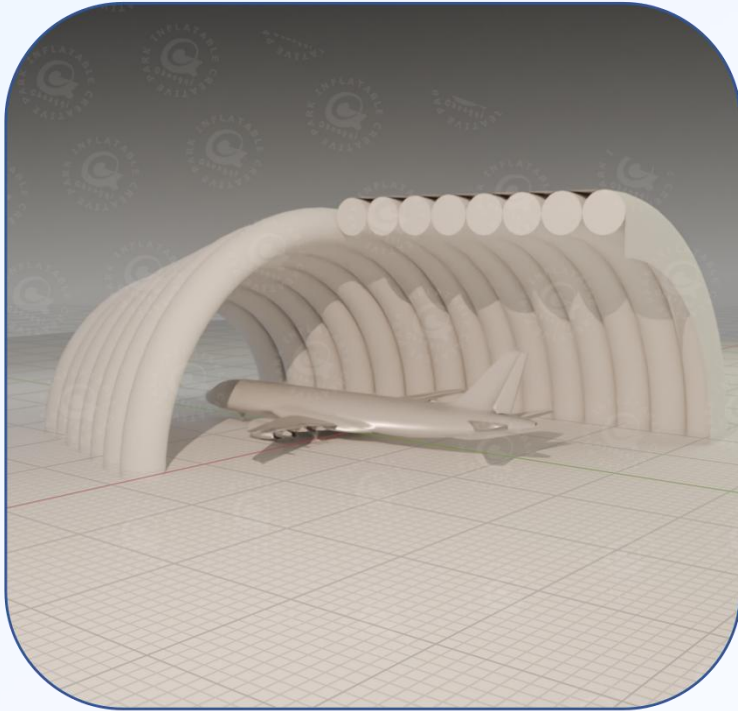
MAIN CHARACTERISTICS

Aircraft Type: A320

Hangar Size: 54M×52M×27M



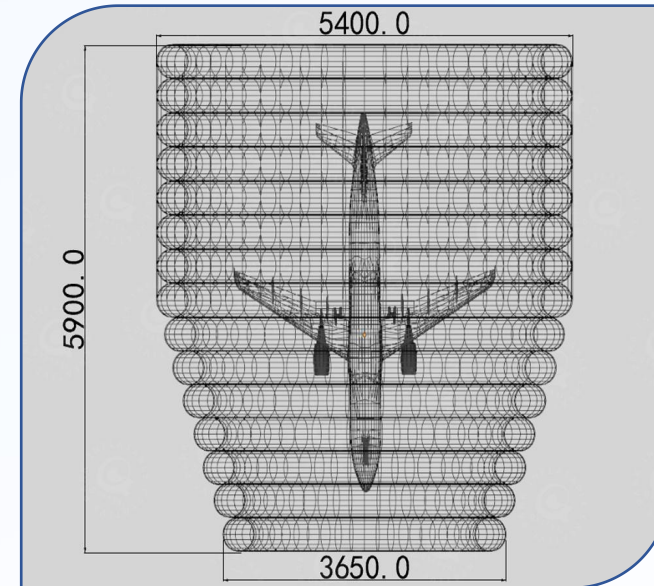
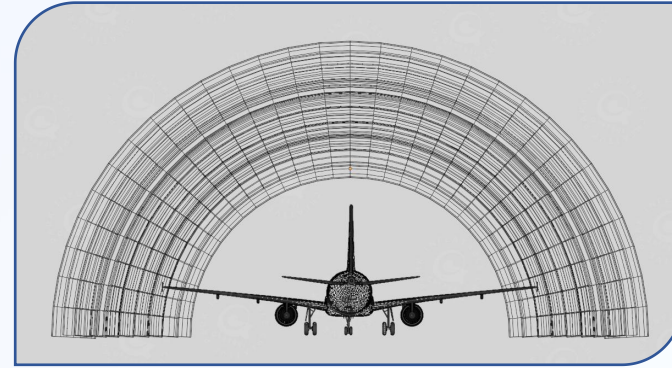
Hangar A321



MAIN CHARACTERISTICS

Aircraft Type: A321

Hangar Size: 54M×59M×27M



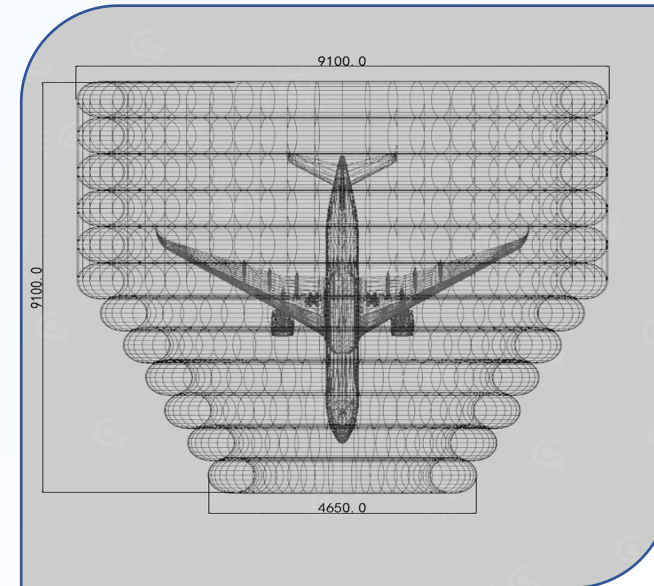
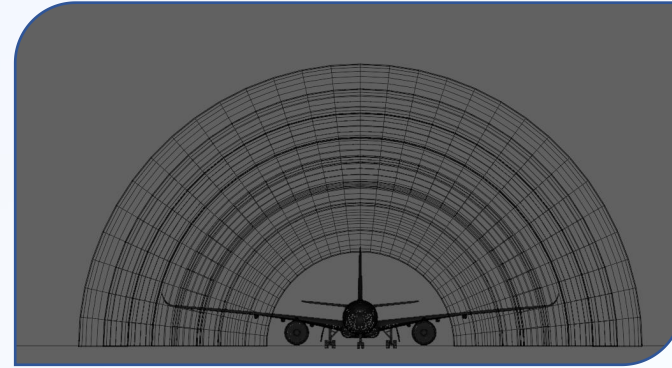
Hangar A330



MAIN CHARACTERISTICS

Aircraft Type: A330

Hangar Size: 91M×91M×45.5M



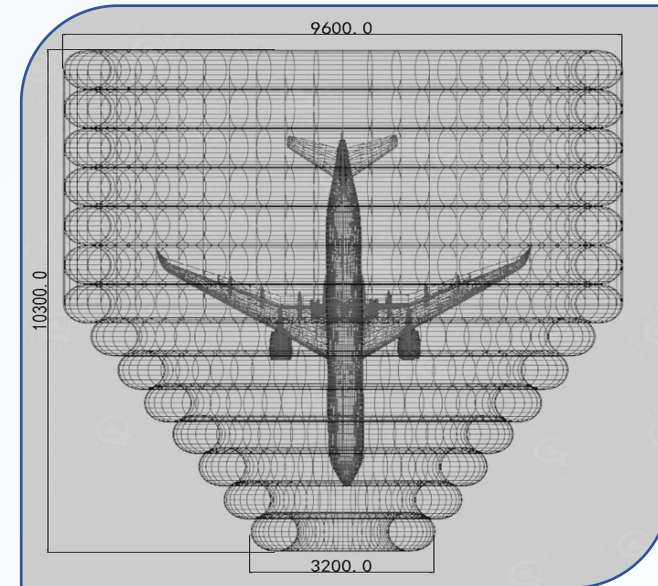
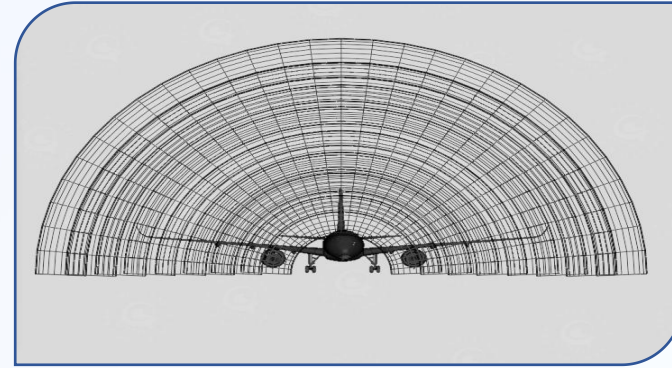
Hangar A350



MAIN CHARACTERISTICS

Aircraft Type: A350

Hangar Size: 96M×103M×48M



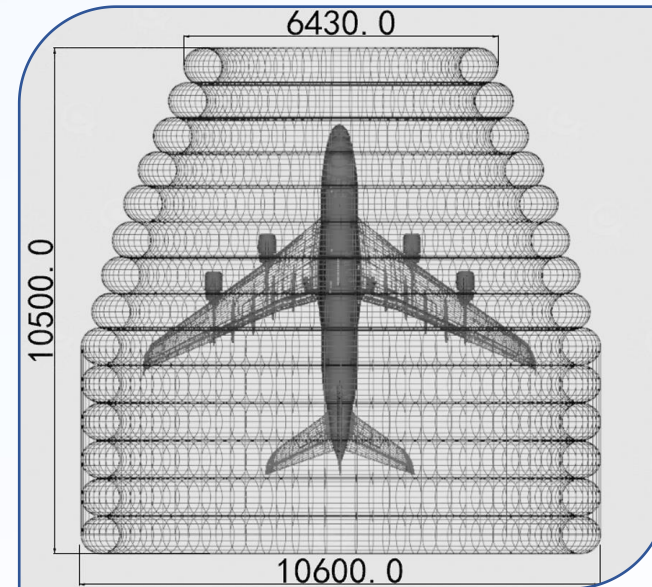
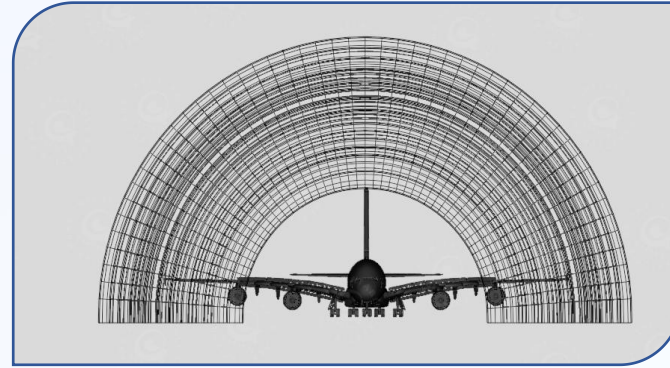
Hangar A380



MAIN CHARACTERISTICS

Aircraft Type: A380

Hangar Size: 106M×105M×53M



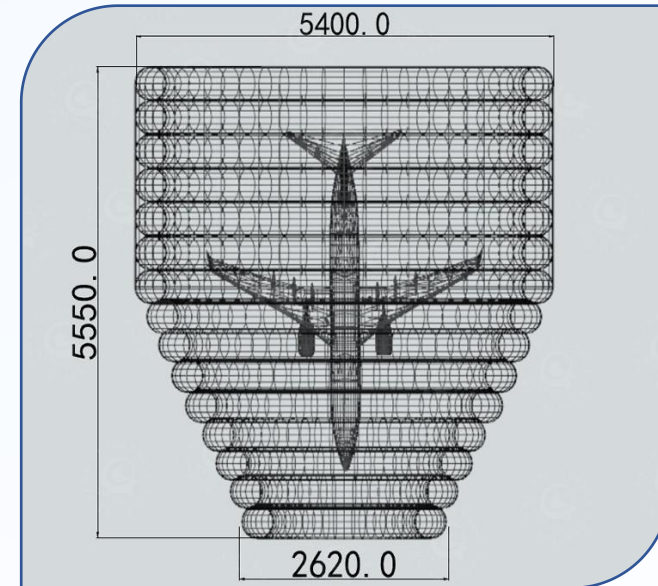
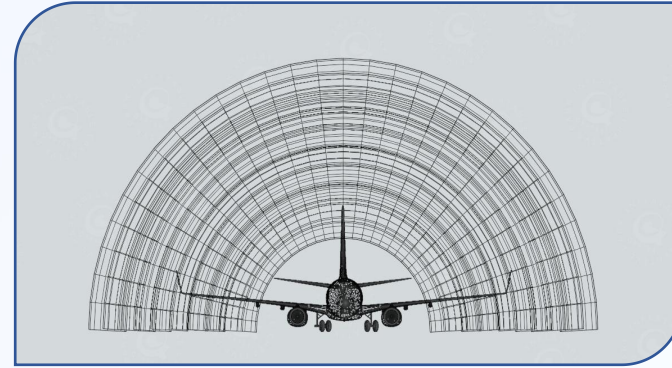
Hangar 737



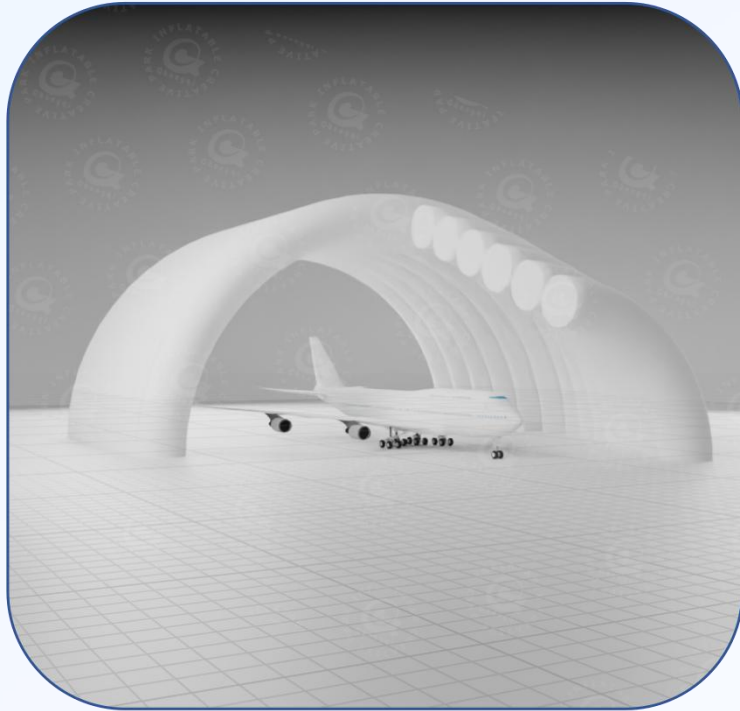
MAIN CHARACTERISTICS

Aircraft Type: 737

Hangar Size: 54M×55.5M×27M



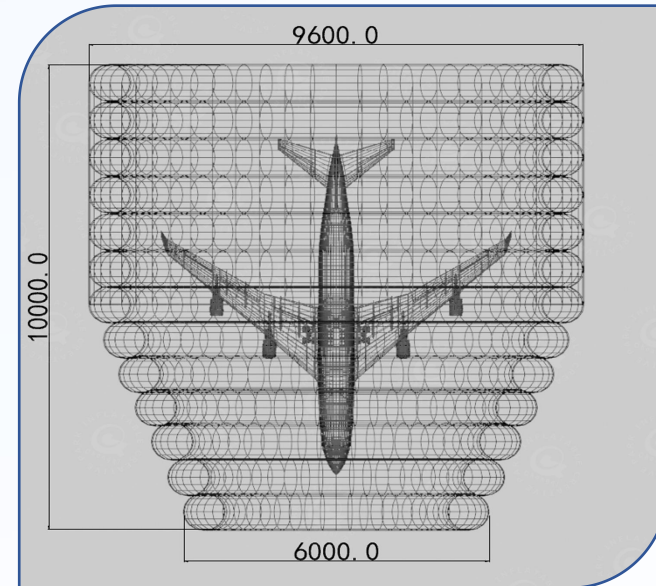
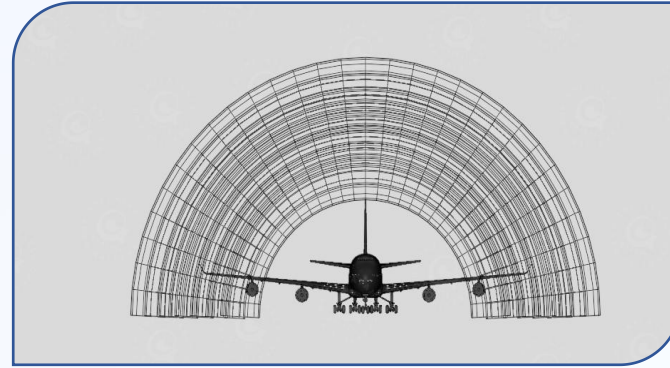
Hangar 747



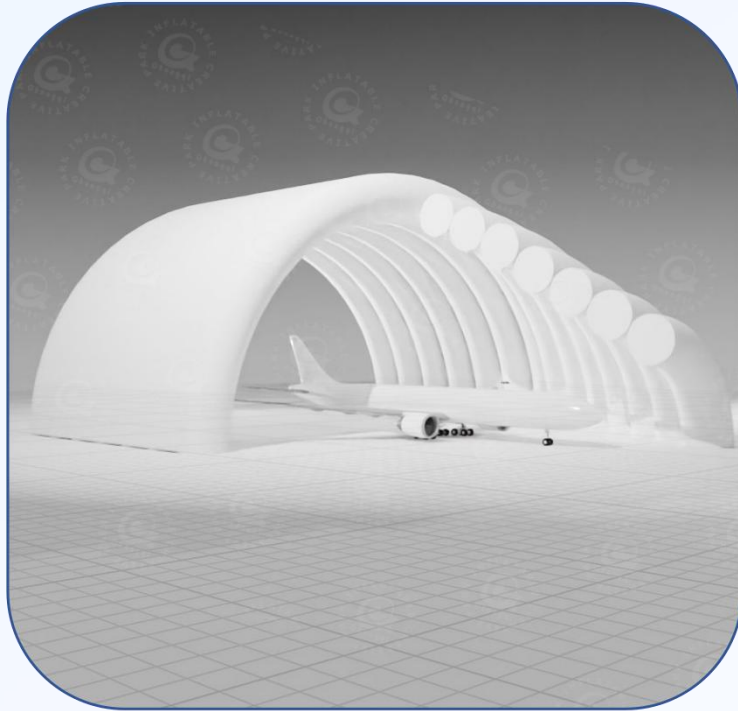
MAIN CHARACTERISTICS

Aircraft Type: 747

Hangar Size: 96M×100M×48M



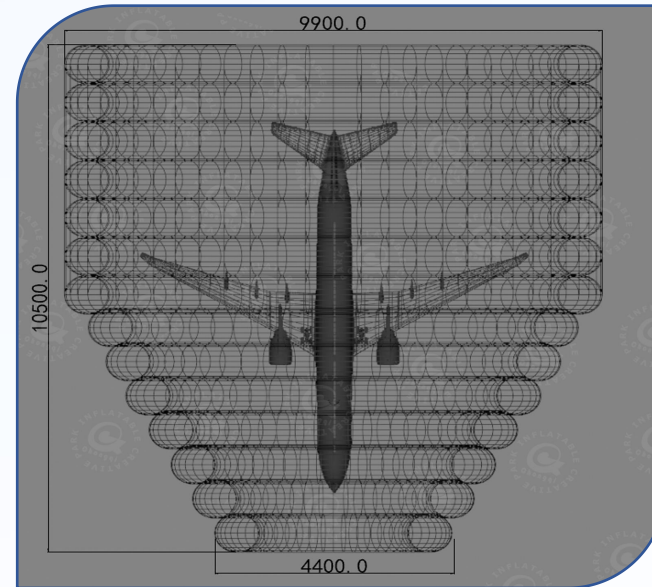
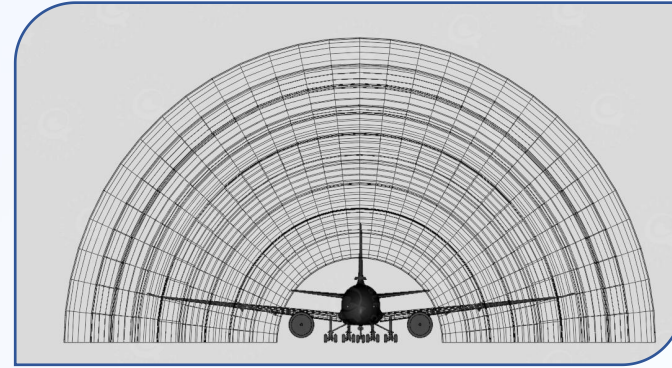
Hangar 777



MAIN CHARACTERISTICS

Aircraft Type: 777

Hangar Size: 99M×105M×49.5M



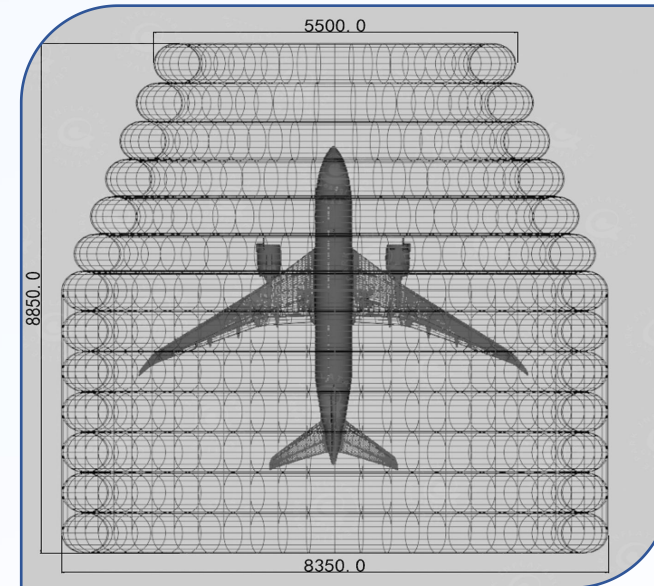
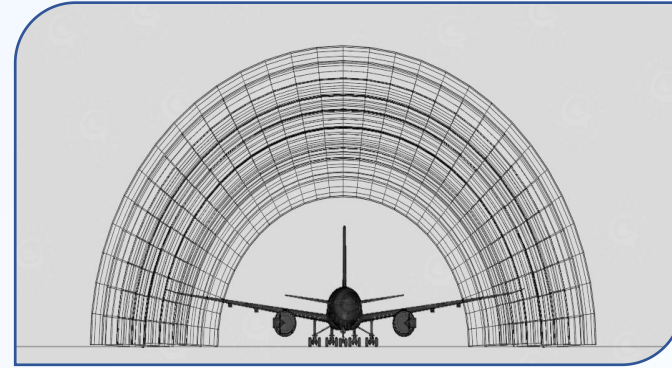
Hangar 787



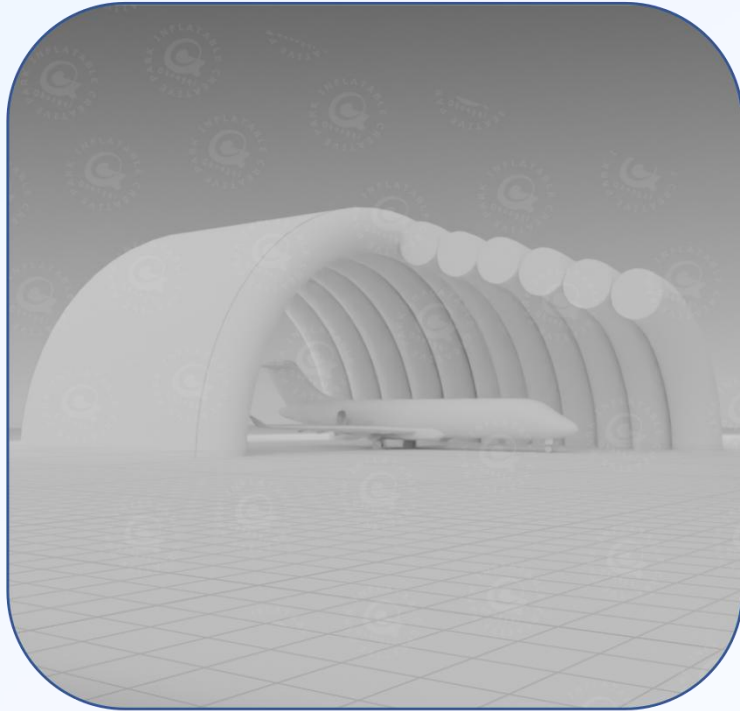
MAIN CHARACTERISTICS

Aircraft Type: 787

Hangar Size: 55M×88.5M×27.5M



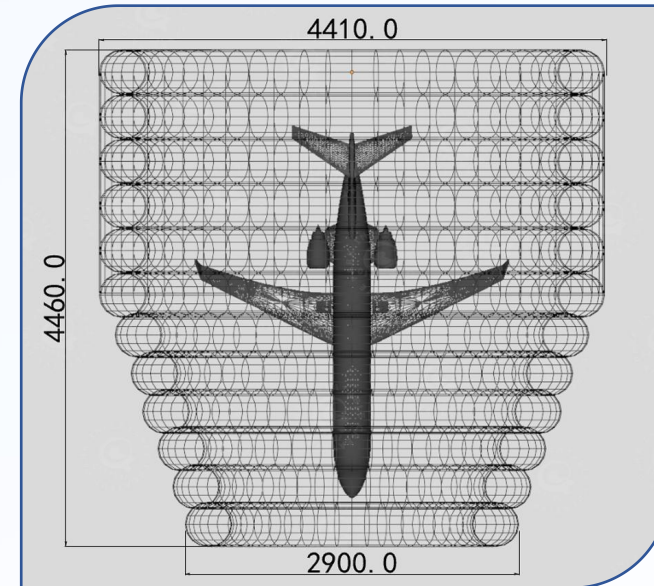
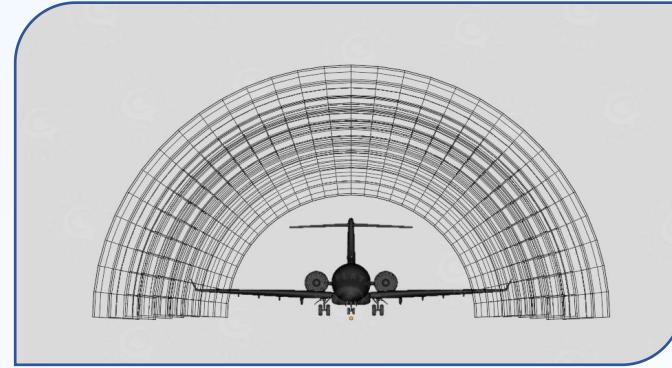
Hangar ARJ21



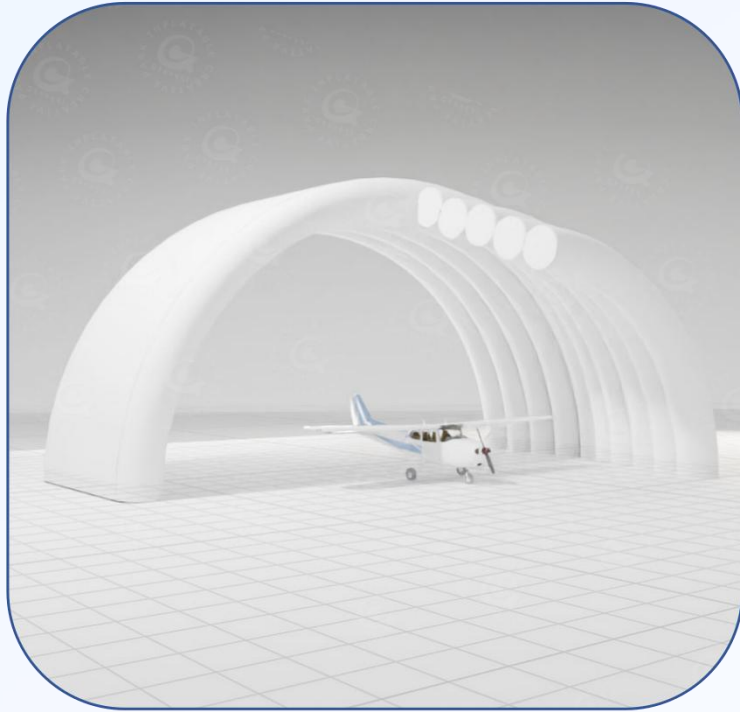
MAIN CHARACTERISTICS

Aircraft Type: ARJ21

Hangar Size: 44.1M×44.6M×22M



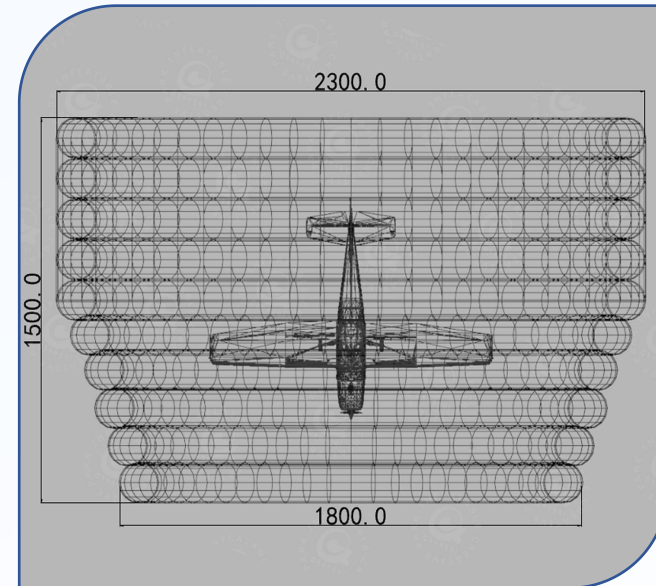
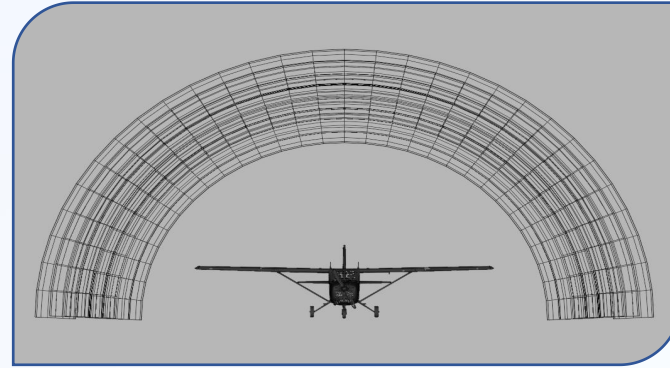
Hangar C172



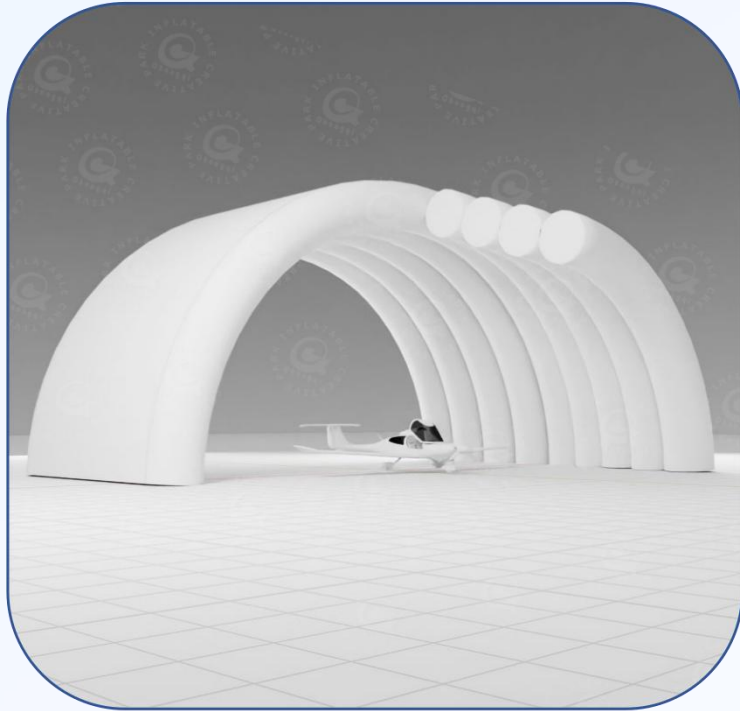
MAIN CHARACTERISTICS

Aircraft Type: C172

Hangar Size: 23M×15M×11.5M



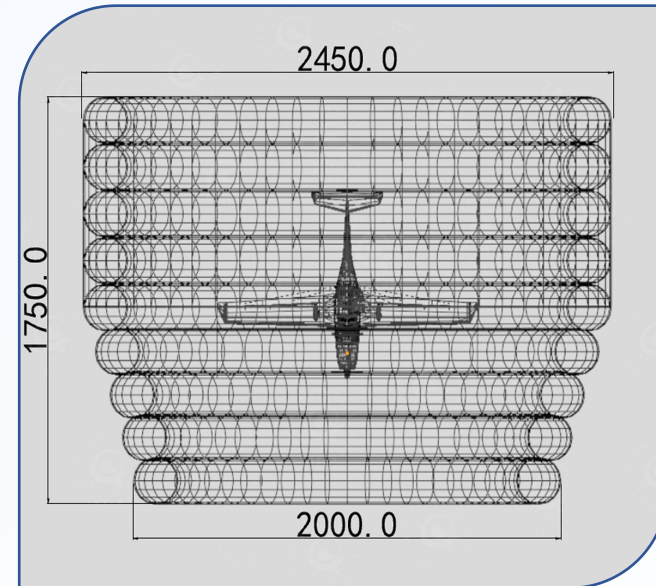
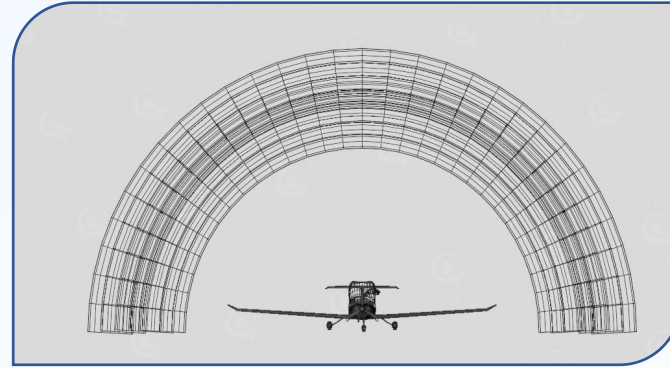
Hangar DA40



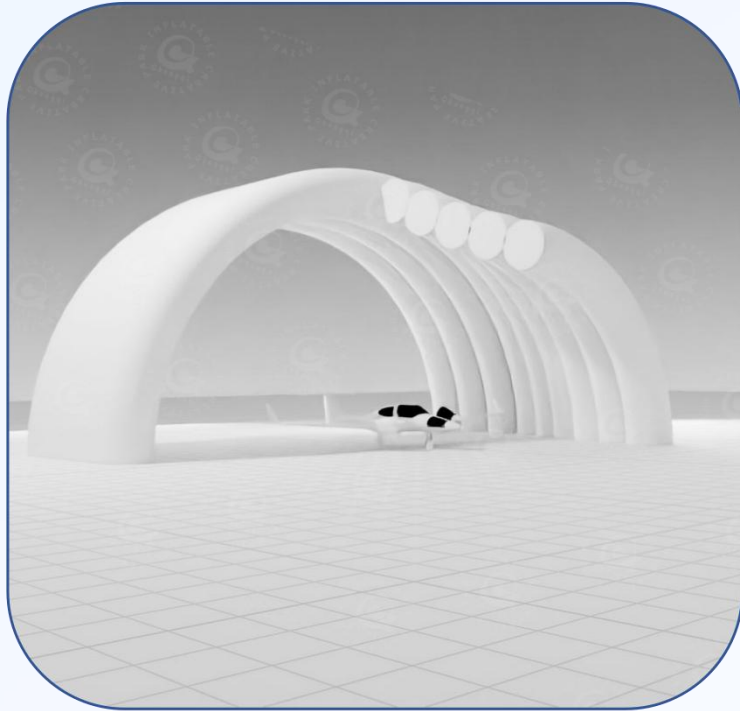
MAIN CHARACTERISTICS

Aircraft Type: DA40

Hangar Size: 24.5M×17.5M×12.25M



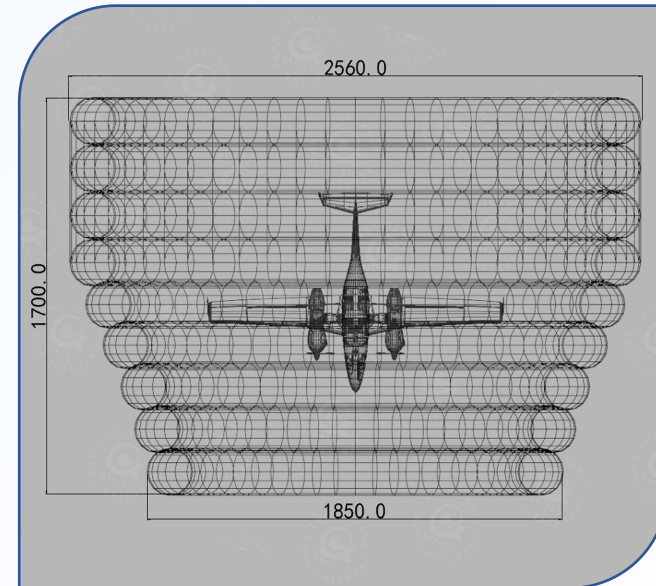
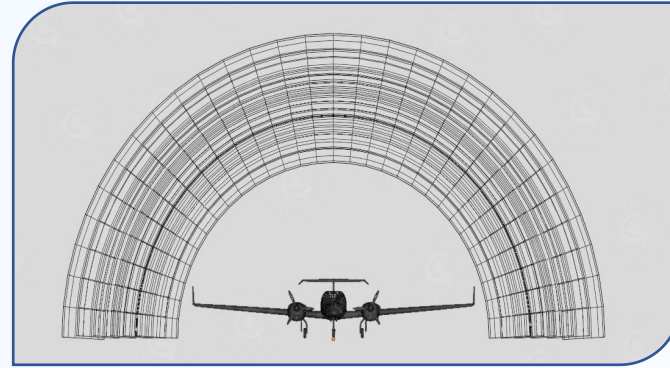
Hangar DA42



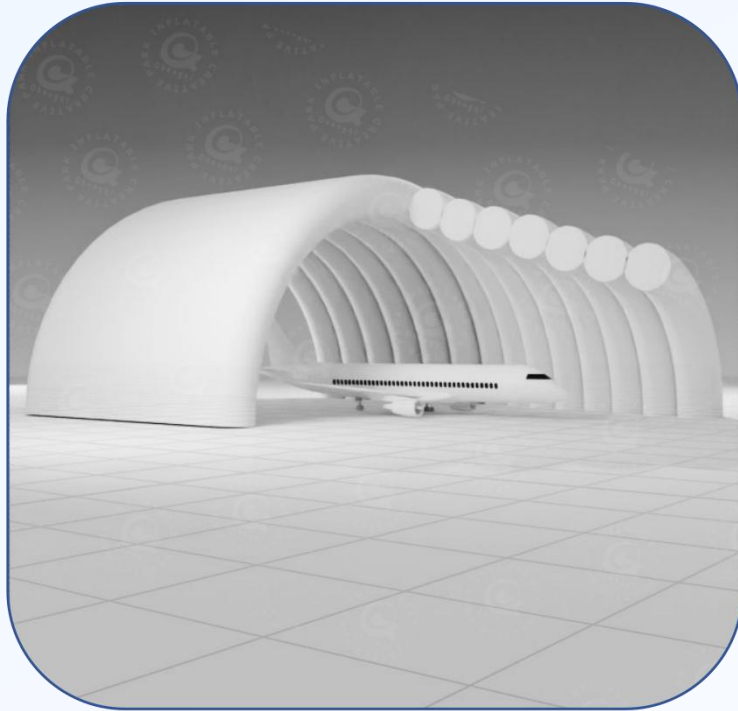
MAIN CHARACTERISTICS

Aircraft Type: DA42

Hangar Size: 25.6M×17M×12.8M



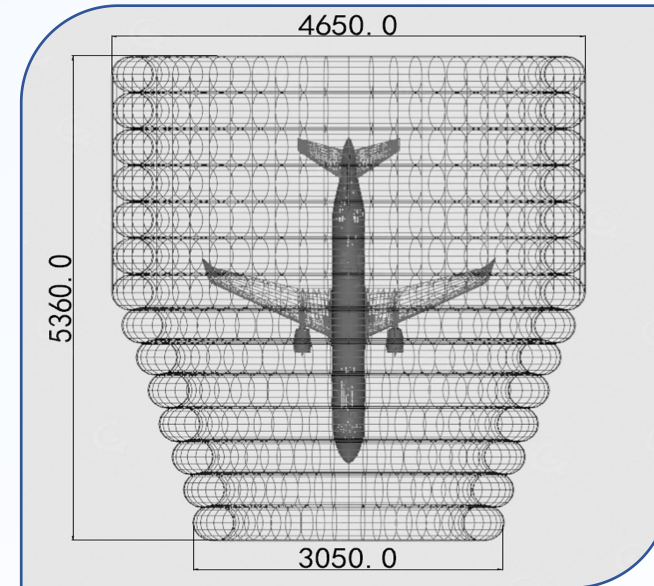
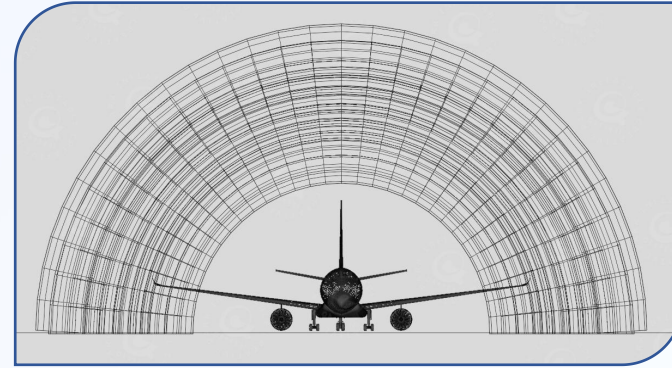
Hangar E-190



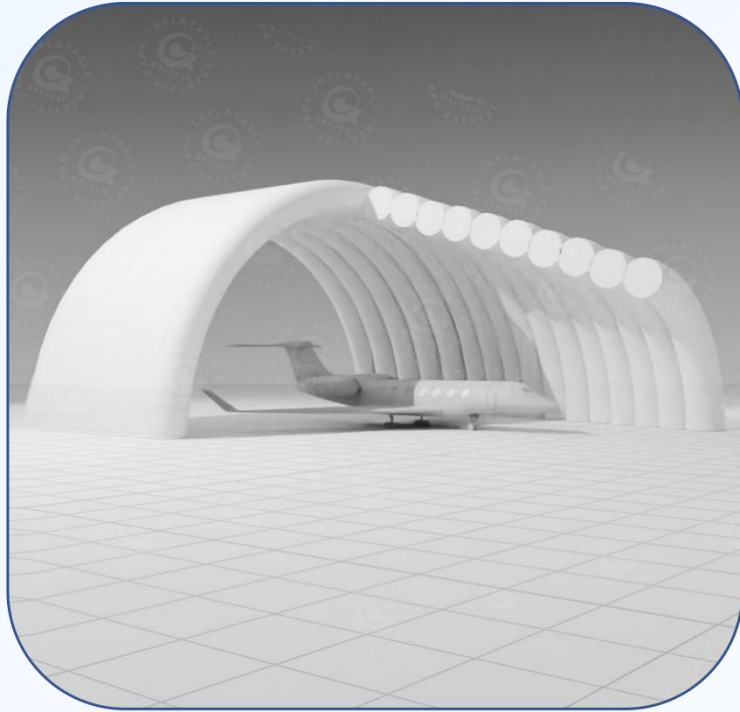
MAIN CHARACTERISTICS

Aircraft Type: E-190

Hangar Size: 46.5M×53.6M×23.25M



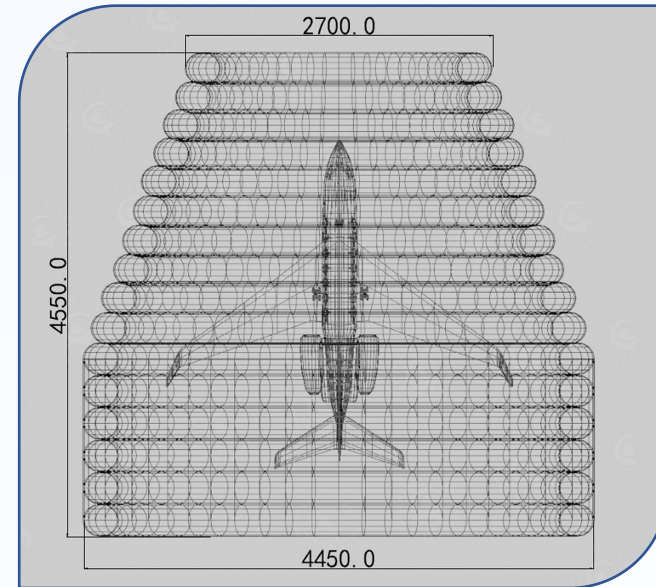
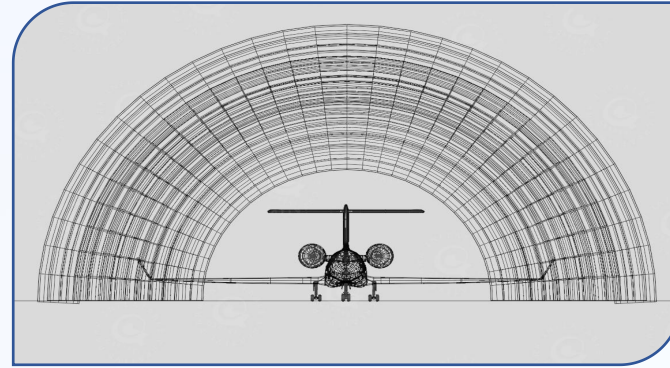
Hangar G650



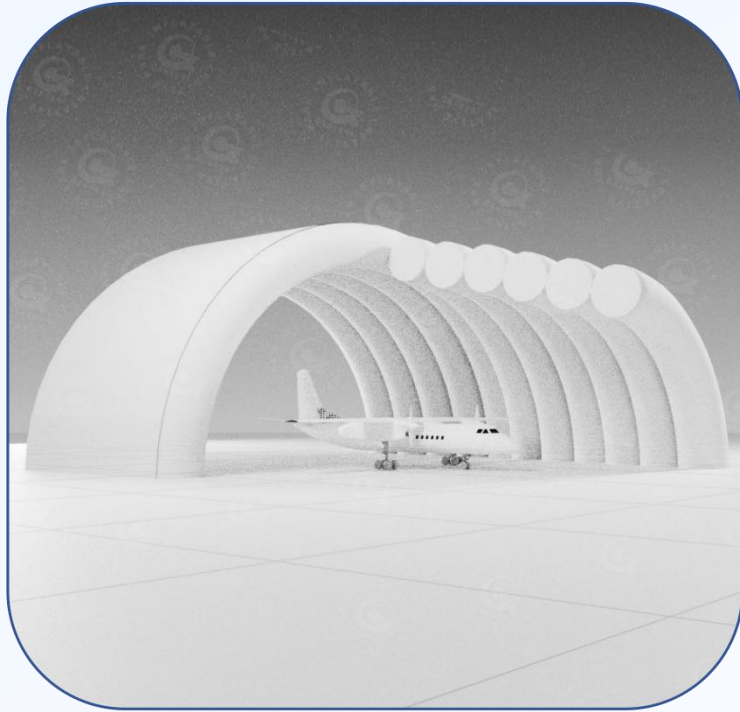
MAIN CHARACTERISTICS

Aircraft Type: G650

Hangar Size: 27M×45.5M×13.5M



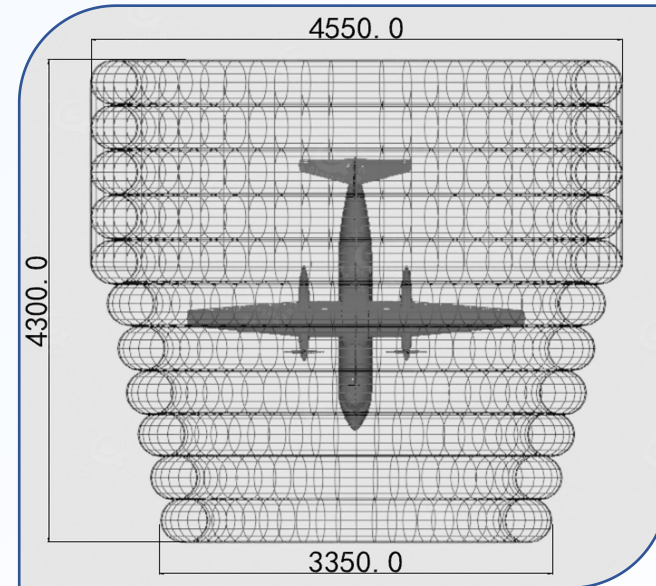
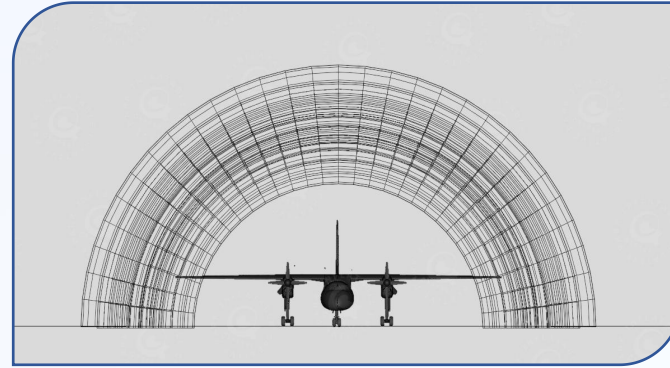
Hangar MA60



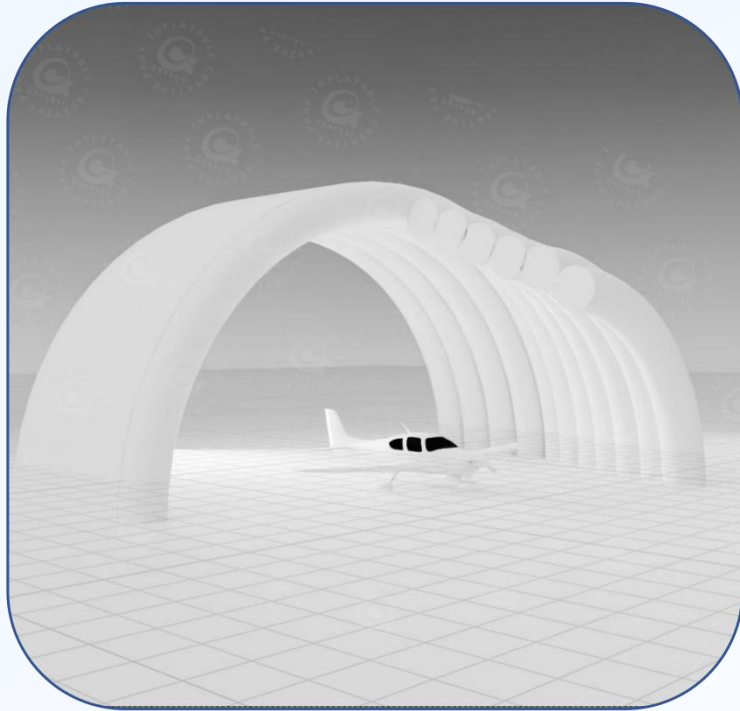
MAIN CHARACTERISTICS

Aircraft Type: MA60

Hangar Size: 45.5M×43M×22.75M



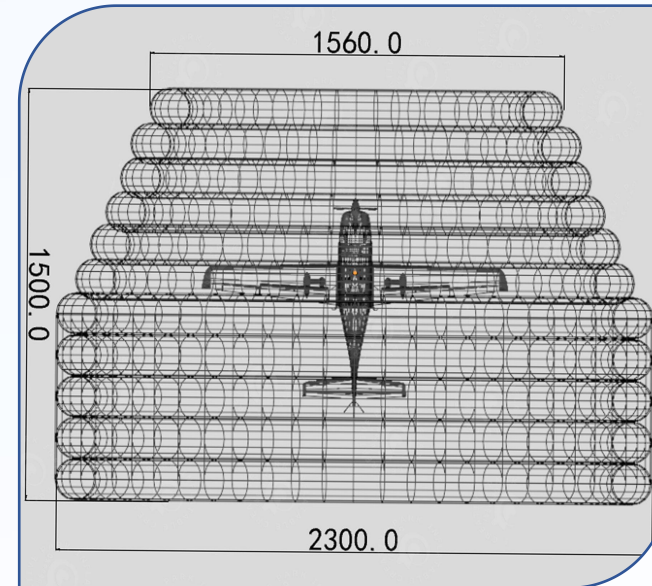
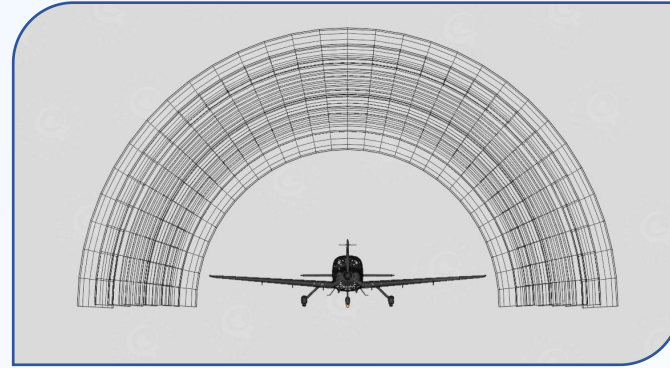
Hangar SR22



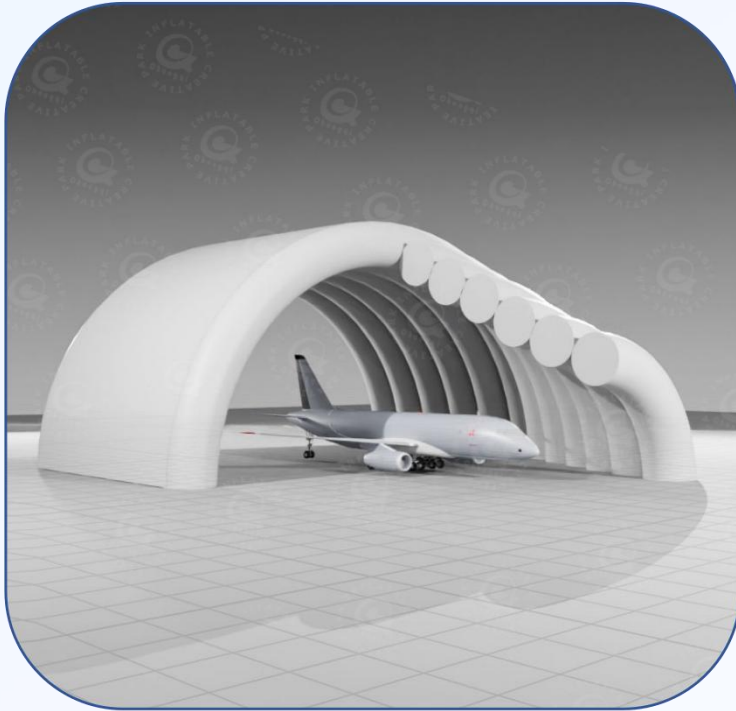
MAIN CHARACTERISTICS

Aircraft Type: SR22

Hangar Size: 23M×15M×11.5M



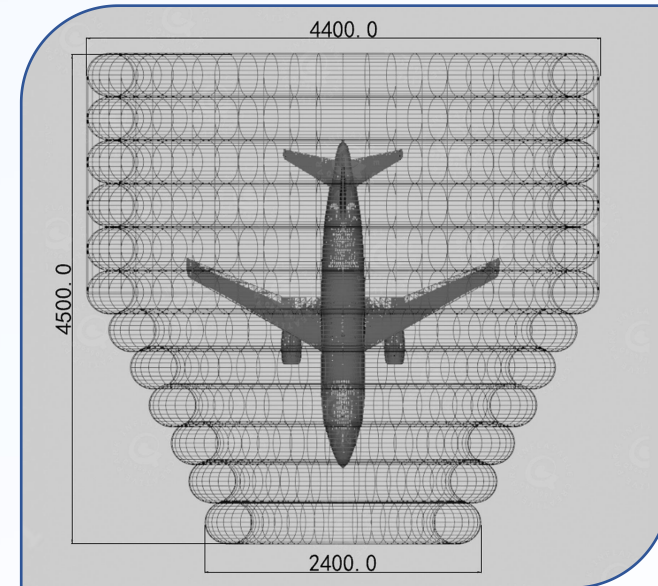
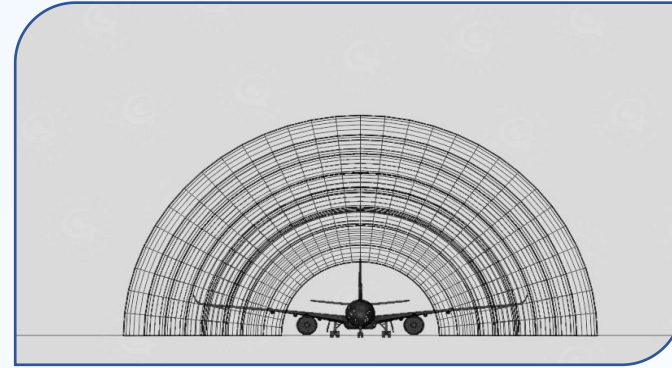
Hangar SSJ-100



MAIN CHARACTERISTICS

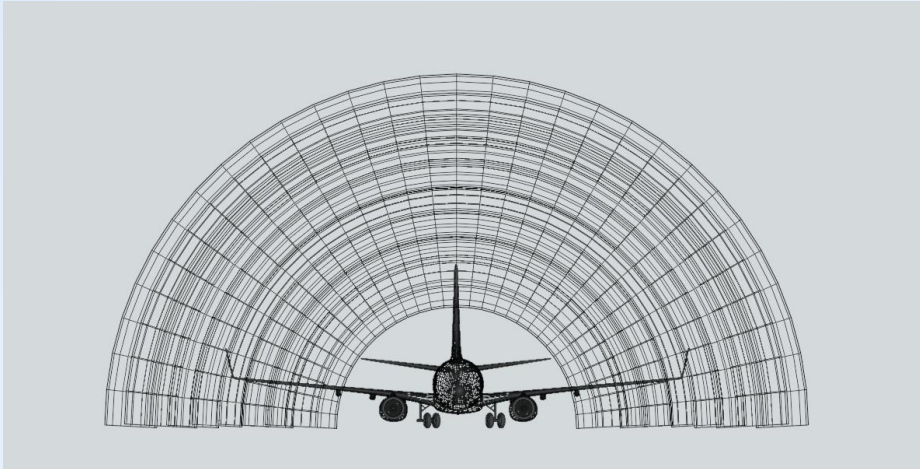
Aircraft Type: SSJ-100

Hangar Size: 44M×45M×22M



The Revolutionary Solution: Inflatable Aircraft Hangar

A cutting-edge alternative that addresses all traditional hangar challenges



Ready in days, not months!

What Are Inflatable Hangar Tents?

Modular structures with independent air-tight arches connected by high-strength nylon webbing and stainless steel buckles, creating a robust temporary or semi-permanent aviation facility.

How They Transform Aviation Operations:

- Deploy in **hours/days** instead of months
- **60-75% cost savings** compared to traditional construction

Portable solution that can be **relocated as needed**

Smart technology integration for **automated pressure control**

- Customisable to any aircraft size or operational requirement

"The future of aviation infrastructure is not about building bigger concrete structures, but creating smarter, adaptable solutions."

Technical Specifications & Materials

Advanced Materials



Exterior Fabric

High-strength PVC coated fabric with:

- Waterproof & fire-resistant properties
- UV-resistant coating for longevity
- Tear and wear resistance
- Temperature tolerance: -30° C to +70° C



Internal Framework

Multi-layered air columns for enhanced safety:

- Primary inflation layer
- Secondary backup chamber
- Reinforced connection points



Connecting System

Structural integrity ensured by:

- High-strength nylon webbing
- Marine-grade stainless steel buckles
- Reinforced seam technology

Engineering Features



Weather Resistance

Engineered to withstand:

- Wind speeds up to 80 km/h (standard model)
- Snow loads up to 25 kg/m²
- Heavy rain and diverse weather conditions



Access System

Multiple entry options:

- Front and rear curtain systems
- Electric winch operation with manual backup
- Personnel doors with safety mechanisms
- Customisable opening dimensions



Smart Control System

Intelligent pressure monitoring:

- Automatic inflation system with smartphone app
- Real-time pressure monitoring
- Alert system for maintenance needs
- Energy-efficient operation

Customisation Options

Available in any size • HVAC integration • Lighting systems • Floor solutions • Branding & colours

10 Key Advantages

Why Inflatable Hangar Tents are the Future of Aviation Infrastructure

1

Speed

Deploy in hours or days instead of months, enabling rapid response to operational needs and minimizing downtime

2

Affordability

Significantly lower upfront costs than traditional hangars, with minimal foundation requirements and reduced maintenance expenses

3

Mobility

Easily deflated, packed, and transported to new locations, offering unprecedented operational flexibility

4

Adaptability

Suitable for multiple aviation applications including maintenance, painting, storage, and emergency operations

5

Sustainability

Energy-efficient operation with recyclable materials, reducing environmental impact compared to traditional construction

6

Resilience

Engineered to withstand harsh weather conditions with proper anchoring and pressure control systems

7

Simplicity

Modular components allow for easy maintenance, repairs, and part replacements without complex construction work

8

Safety

Intelligent anchoring systems and automatic pressure monitoring ensure structural integrity and operational safety

9

Design

Sleek, modern aesthetics with customisable branding opportunities and professional appearance

10

Flexibility

Scalable to any operation size, from small aircraft maintenance to large commercial fleet facilities

"Innovation is not about what you can build, but what you can enable."

Flexible Sizing & Customisation Options

Tailor-made solutions for any aircraft type or operational requirement

Standard Size Configurations

Model	Width (m)	Length (m)	Height (m)	Suitable For
Small	15-20	20-30	6-8	Small Aircraft, Helicopters
Medium	25-35	35-50	8-12	Regional Jets, Business Jets
Large	40-60	60-80	12-15	Narrow-body Commercial
Extra Large	70-100+	80-120+	15-25	Wide-body Commercial

All dimensions are customisable based on specific aircraft requirements and operational needs. Our engineering team will work with you to determine the optimal specifications.

Note: Custom dimensions beyond these ranges are available upon request for specialised applications.

Customisation Features

- **Access Options**
Multiple door types and placements for operational efficiency
- **Lighting Systems**
Integrated LED lighting for optimal work conditions
- **HVAC Integration**
Climate control systems for all-weather operations
- **Branding Options**
Custom colours and logo integration

Design Process

- 1

Site Assessment
Analysis of location, aircraft types, and operational requirements
- 2

3D Modelling
Custom design based on your specifications and site constraints
- 3

Engineering Review
Technical validation to ensure safety and functionality
- 4

Production & Delivery
Rapid manufacturing and global logistics solutions

Applications & Case Studies

Versatile solutions for diverse aviation needs



Aircraft Maintenance

Temporary or permanent solution for MRO operations requiring flexible space without permanent construction costs.

Case Study: Regional Airport

- Deployed 40m x 60m hangar in 5 days
- 75% cost savings vs. traditional hangar
- Enabled MRO contract fulfillment within tight deadline



Aircraft Painting

Controlled environment for aircraft painting operations with integrated ventilation and filtration systems.

Case Study: Commercial Airline

- Custom 50m x 70m painting facility
- HVAC system with VOC filtration
- Reduced rebranding project timeline by 60%



Military Operations

Rapid deployment shelters for aircraft and equipment in remote or temporary military bases.

Case Study: Defence Force

- Multiple 30m x 40m deployable units
- Air-transportable design for rapid response
- Deployed in under 72 hours in remote location



Emergency Response

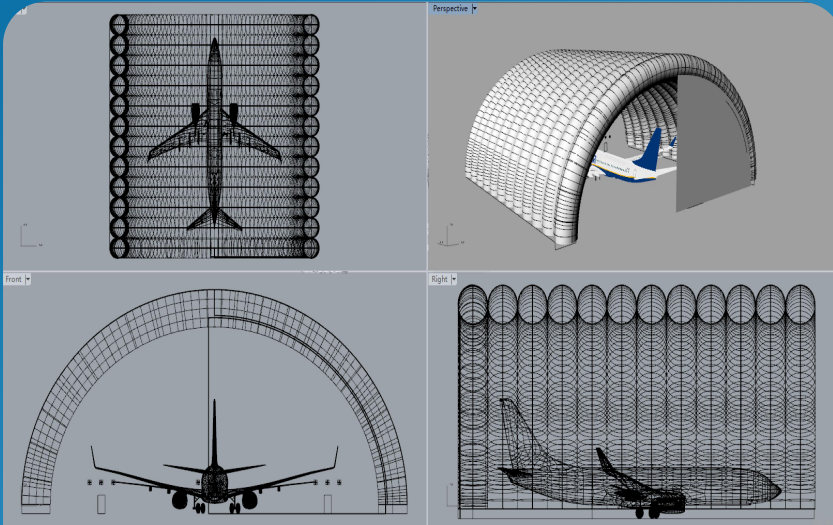
Quick-deployment solutions for disaster response, medical evacuations, and humanitarian operations.

Case Study: Disaster Relief

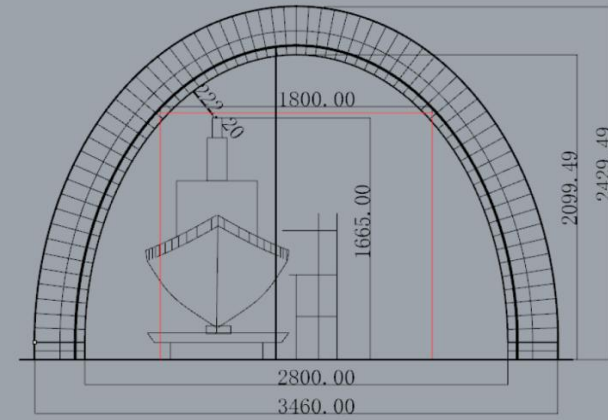
- 25m x 30m medical support hangar
- Setup by 4-person team in 48 hours
- Supported helicopter operations for 3 months

Applications & Case Studies

Versatile solutions for diverse aviation needs



Croatian Airport



Ship Factory





Cost Comparison Analysis

Substantial savings with inflatable hangar solutions

Traditional vs. Inflatable Hangar: Cost Breakdown

Cost Factor	Traditional Hangar	Inflatable Hangar	Savings
Initial Construction	\$60-120/ft²	\$25-45/ft²	60-70%
Foundation Requirements	\$15-30/ft²	\$3-8/ft²	75-90%
Construction Time Cost*	\$180,000-400,000	\$15,000-40,000	85-95%
Annual Maintenance	\$3-6/ft²	\$1-2/ft²	60-70%
Energy Costs	\$2-5/ft²	\$1.5-3/ft²	25-40%
End-of-Life Costs	\$10-20/ft²	\$2-5/ft²	75-80%

*Construction time cost based on average operational losses during construction period for a medium-sized hangar

Total 10-Year Cost Comparison (10,000 ft² Facility)

Traditional: \$1.2-2.1 million

Inflatable: \$450-650 thousand

60-70% Lifetime Savings

Hidden Cost Benefits

-  **Faster Revenue Generation**
Begin operations in days rather than months, accelerating your return on investment
-  **Tax Advantages**
Often classified as equipment rather than permanent structure, allowing for accelerated depreciation
-  **Location Flexibility**
Avoid premium land purchase costs by deploying at temporary or lower-cost locations
-  **Scalability Value**
Expand or contract operations without costly renovation or demolition

Return on Investment



Based on operational efficiency gains, reduced construction costs, and faster time-to-market compared to traditional hangar construction.

Frequently Asked Questions

How durable are inflatable hangar?

Chongqi's inflatable hangar are made from high-strength PVC coated fabric with waterproof, fire-resistant, UV-resistant, and wear-resistant properties. With proper maintenance, they have a lifespan of 8-15 years or longer, depending on usage and environmental conditions.

How quickly can an inflatable hangar be deployed?

Setup time varies based on size, but generally a small to medium-sized inflatable hangar can be fully erected within a few days by an experienced team. This is significantly faster than traditional construction, which typically takes 12-24 months. Our installation team provides comprehensive support throughout the process.

Can inflatable hangars withstand severe weather?

Yes, Chongqi's inflatable hangars are designed to remain stable in various weather conditions. They include ground anchoring systems to increase wind resistance and can withstand strong winds and moderate snowfall. For extreme weather events (like hurricanes or tornadoes), we provide protocols for additional reinforcement or temporary deflation as a safety precaution.

Is continuous inflation required?

No, continuous manual inflation is not required. After initial setup, Chongqi's intelligent air pressure control systems automatically monitor and maintain optimal pressure levels. The systems include smart pressure monitoring and automatic refilling functions that ensure stable internal air pressure with minimal power consumption and without frequent manual intervention.

Frequently Asked Questions

What maintenance is required?

Maintenance is relatively simple compared to traditional structures. Regular inspection for wear or damage, prompt repairs when needed, and occasional cleaning with mild detergent and water are typically sufficient. When not in use, proper storage away from direct sunlight and damp environments will extend the lifespan. We offer comprehensive maintenance packages and training for your team.

Do you provide installation services?

Yes, especially for large hangar tents, we send engineers to direct the installation process. We're building our own dedicated installation team for future projects. The service requires covering travel and accommodation expenses for Chongqi's team, plus any installation-related costs. We can also train your local team for future maintenance and adjustments.

Can designs be customised?

Absolutely! Chongqi's provide comprehensive customisation services. Send us photos, videos, or plan layouts of your site along with your specific requirements, and we'll create a 3D drawing for your approval. Customisation options include size, door configurations, branding, lighting systems, HVAC integration, and specialized operational features tailored to your needs.

How are inflatable hangars transported?

Transportation is straightforward and cost-effective. Inflatable hangar tents are constructed of individual tubes and covers that can be folded into a relatively small volume after deflation. This makes them easy to transport by truck, container, or even aircraft. We provide comprehensive shipping services by sea, air, or courier to your destination port or delivery address worldwide.

Have More Questions?

Our technical team is available to answer any additional questions and provide detailed specifications for your specific requirements.

 sales@china-inflatables  +86-020-82576020  www.inflatable-hangar.com

Partnership & Distribution Opportunities

Join our global network of aviation infrastructure partners

Partnership Benefits



Established Global Presence

Join our network with existing foothold in Europe, North America, Southeast Asia, and the Middle East, benefiting from proven market penetration strategies.



Premium Product Quality

Represent a high-tech enterprise with industry-leading product quality, innovative engineering solutions, and consistent customer satisfaction.



High-Growth Market

Enter a rapidly expanding aviation infrastructure market with increasing demand for flexible, cost-effective hangar solutions worldwide.



Competitive Margins

Enjoy attractive profit margins with tiered commission structures and volume-based incentives for distributors and sales partners.

Take Flight with Chongqi

Join our global distribution network and revolutionise aviation infrastructure in your region

sales@china-inflatables.com

Comprehensive Partner Support



Technical Training

Comprehensive product knowledge and installation expertise



Engineering Support

Custom design solutions and technical consultancy



Logistics Support

Global shipping coordination and customs expertise



Sales Support

Joint client meetings and proposal development



Marketing Materials

Professional collateral and demonstration resources



Account Management

Dedicated partner manager and support team

Ideal Partner Profile



Aviation Industry Connection: Established relationships with airports, airlines, MROs, or military aviation



Technical Understanding: Familiarity with aviation infrastructure and facility requirements



Sales Capability: Proven track record in B2B technical sales and project development



Regional Presence: Strong local market knowledge and established business network

Thank You

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