AVIATION HANGARS

- Aircraft
- MRO
- Exhibition
- Military
- Executive aviation

IRMARFER
STRUCTURES

WHY IRMARFER?

We have **25 years of experience** in supplying structures for a wide range of uses worldwide. The **recognition** of our products and services is a reality on a **global scale**. Our wide experience in **designing**, **manufacturing**, and **delivering** structures, allied with our **constant investment** in **developing** and **innovating new solutions**, places us as the **Iberian leader** in the industry, and one of the worldwide reference players in the structures market.

COST-EFFECTIVE

Less expensive than traditional buildings. They require less material and labor to manufacture, transport, and assemble, making them a cost-effective option for many applications. Possible to achieve **70% of cost savings** when compared to a permanent building

FLEXIBILITY

We can design structures of **any size,** and install them in almost any location. We can sell or hire for the time that suits your needs. The structures can be **modified or relocated** to fit your business requirements.

QUICK INSTALLATION

Easy to transport, assemble, and reassemble, a temporary structure can be **installed in a few days**, reducing labor costs and minimizing disruptions to ongoing operations.

RISK MANAGEMENT

In uncertain times, a temporary building is a **lower risk option** than constructing a permanent facility.

SAFETY

Independent of the purpose, our structures follow all the specific requirements regarding **stability** and **safety**. Our structures are made of fire, snow, and windproof materials and are in compliance with EN 13782 for temporary structures and any applicable code or standard for permanent structures.

CE Our products are CE compliant

DURABILITY

All of our structures are resistant to environmental influences and can have a **useful life of up to 60 years**. Such characteristics are possible due to the use of **high-quality materials** and state-of-the-art processing methods. They can withstand cyclones, storms, rain, and strong sunlight for long periods.

13
Al
ALUMINIUM
26.982

IRMARFER ALUMINIUM SYSTEM

Why choose aluminium?

1

ADAPTABLE & RELOCATABLE

Aluminium is a highly versatile material, so it can be fabricated into a wide range of shapes and sizes. It's also lightweight so it's easy to transport, assemble, dissasemble and relocate the structures. The modular system allows to expand and adapt the structures to all needs.

2

LOW MAINTENANCE

Aluminium requires minimal maintenance, which makes it a cost-effective material.
Unlike other metals, like steel, aluminium is naturally corrosion-resistant, so it does not need to be painted or coated to protect it from corrosion.

3

SHORT BUILDING TIME

All products are designed and produced for a simple and fast assembly process. The assembly of all elements is done by clicking and/or bolting methods, reducing the construction time.

4

RECYCLABE & SUSTAINABLE

Aluminium is 100% recyclable, it can be recycled over and over again without losing its properties. Which makes it an environmentally friendly. It has an extended service life and less waste of resources. Low CO2 footprint.

5

TRANSPORT & LOGISTICS

Due to its low density, malleability and lightweight, aluminium is easy to transport. Doesn't require extensive protective measures, reducing transportation costs, and it also has a lower environmental impact.

ALUMINIUM CONSTRUCTION VS STEEL CONSTRUCTION

Density: The density of aluminium is about one-third that of steel

Maintenance of buildings:

- Aluminium can be 8 times cheaper to maintain than steel, in an aggressive environment
- Aluminium can be 5 times cheaper to maintain than steel, in a normal environment.

IRMARFER ALUMINIUM SYSTEM

Aluminium Options

NON-ANODIZED ALUMINIUM

- more susceptible to corrosion, scratches, and wear
- uneven appearance
- less expensive
- faster to delivery

ANODIZED ALUMINIUM

- more resistant to corrosion, scratches, and wear
- more consistent appearance
- more durable
- more expensive

LACQUERED ALUMINIUM

Lacquered aluminium means that the aluminium has been coated with a layer of lacquer, a type of clear or colored varnish, that protects the aluminium and enhances its appearance. The lacquer coating provides a **smooth** and **glossy finish** that is **highly resistant** to corrosion, scratches, and wear.
Lacquered aluminium is commonly used in our padel and tennis structures.

E.g.: brown

E.g.: green

E.g.: black

AVIATION HANGARS

Irmarfer's hangar systems are **flexible** and **modular** options for almost every space solution. They are an **innovative, cost-effective solution with high-quality patterns** that can be adapted for both **civil** and **military** sectors. Modular construction allows designing solutions with large spans and unlimited lengths.

Our engineering team can develop a tailor-made solution, adapted to the client's requirements and the constraints of existing spaces.

KEY ADVANTAGES

- **Large door options**, customized by our partners
- Fully and easily **relocatable**
- **Scalability**
- **Short** or **long-term** use
- **Fast installation**

RESISTANCES

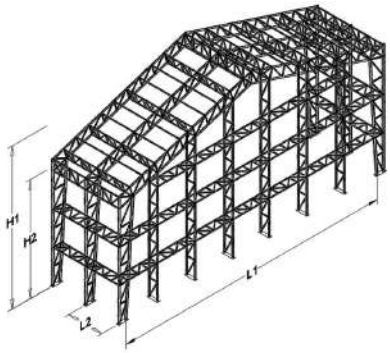
- Fire System RE30 (F30)
- Burglar-resistant security doors (RC3 - DIN EN 1627)
- Wind loading - EN 13782 or any applicable code or standard
- Snow loading - 0,1kN/m^2
- Extreme weather environments

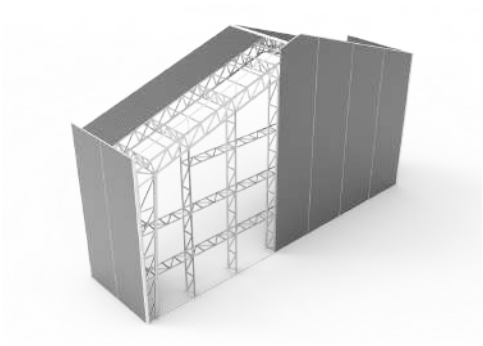
MATERIALS

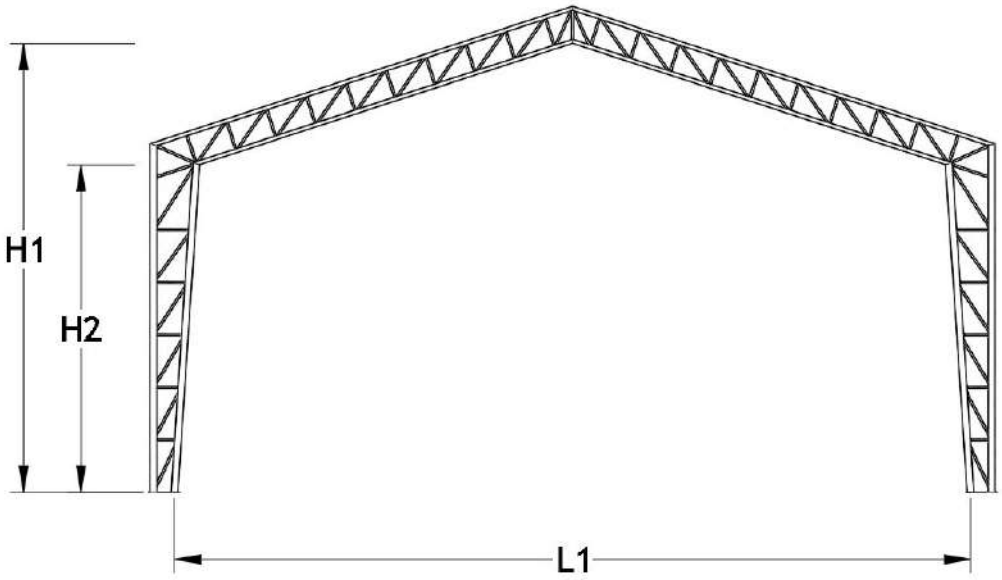
- Aluminium alloy 6082 T6
- Covers: PVC, insulating panels, corrugated steel sheets, sandwich panels
- Doors: sectional and sliding options

AVIATION HANGARS

A-FRAME FLEXSPAN





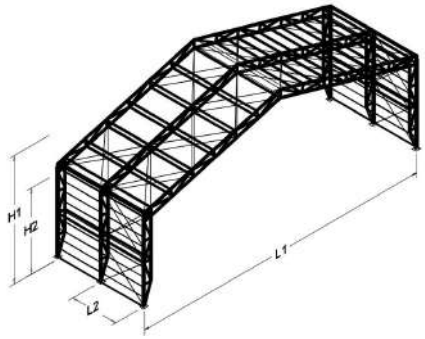


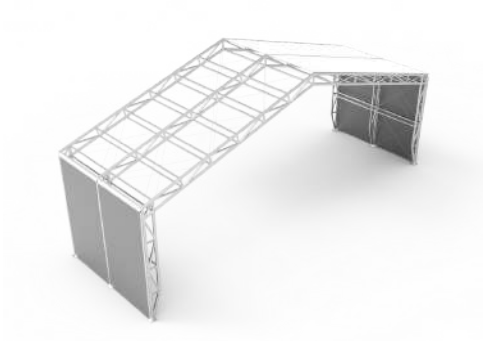
Specifications	Measure						
Width	L1	20m	30m	40m	50m	60m	70m
Side height - Up to	H2	10m	10m	10m	10m	10m	10m
Ridge height	H1	12m	13m	15m	17m	19m	21m
Bay distance / grid	L2	5m	5m	5m	5m	5m	5m
Total Lenght		No limit. Expandable with the grid.					
Rigging Capacity - Up to	Per frame	6 tonnes	6 tonnes	6 tonnes	6 tonnes	6 tonnes	6 tonnes
Max. wind speed - Up to		195km/h					
Snow load		0,1kN/m^2	0,1kN/m^2	0,1kN/m^2	0,1kN/m^2	0,1kN/m^2	0,1kN/m^2

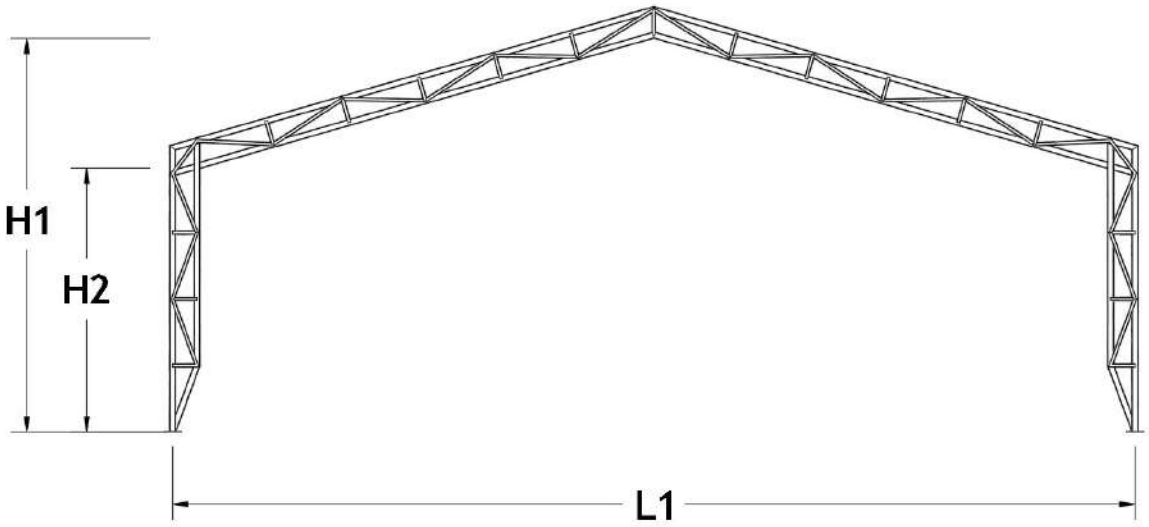
Note: This is a summary of the main data and measurements of our standard structures. We can provide different options to match your requirements.

AVIATION HANGARS

A-FRAME AEROSHELL







Specifications	Measure			
Width	L1	20m	30m	40m
Side height - Up to	H2	9m	9m	9m
Ridge height	H1	12m	13m	15m
Bay distance / grid	L2	5m	5m	5m
Total Lenght		No limit. Expandable with the grid.		
Rigging Capacity - Up to	Per frame	6 tonnes	6 tonnes	6 tonnes
Max. wind speed - Up to	195km/h			
Snow load		0,1kN/m^2	0,1kN/m^2	0,1kN/m^2

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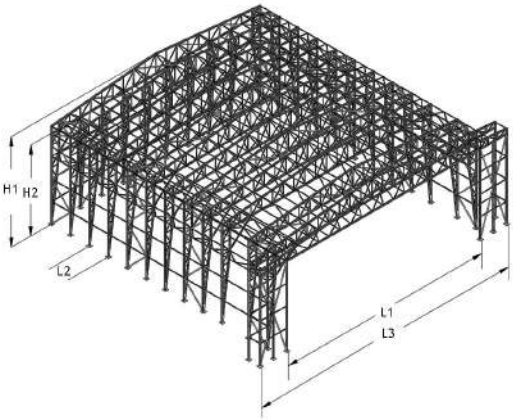
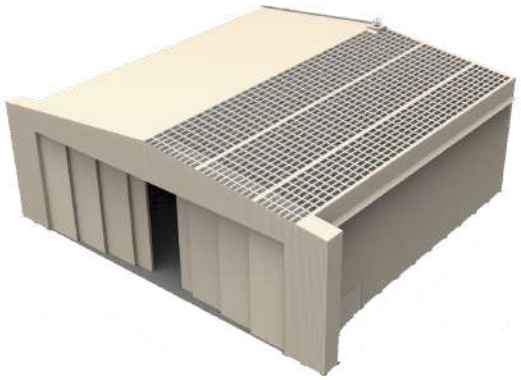
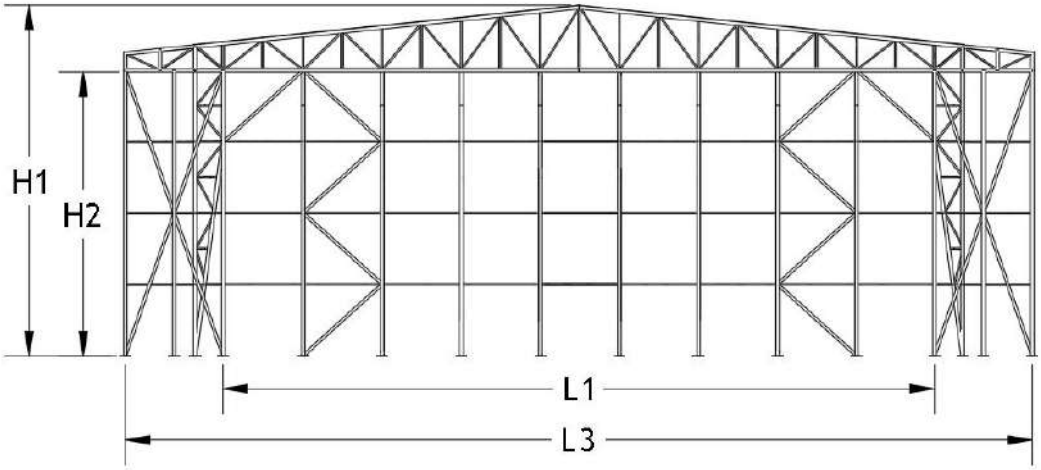
AVIATION HANGARS

A-FRAME TRUSS CONSTRUCTION





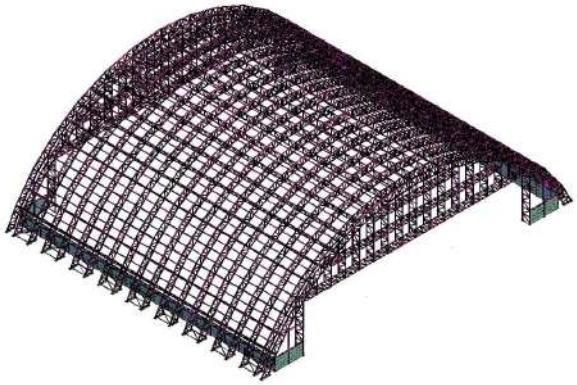


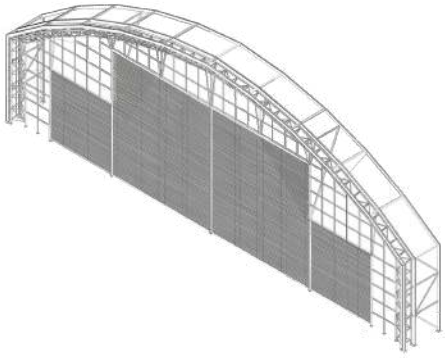
Specifications	Measure			
Width	L1	30m	40m	50m
Side height - Up to	H2	20m	20m	20m
Ridge height	H1	22m	24m	26m
Bay distance / grid	L2	5m	5m	5m
Total Lenght		No limit. Expandable with the grid.		
Rigging Capacity - Up to	Per frame	6 tonnes	6 tonnes	6 tonnes
Max. wind speed - Up to	195km/h			
Snow load		0,1kN/m^2	0,1kN/m^2	0,1kN/m^2

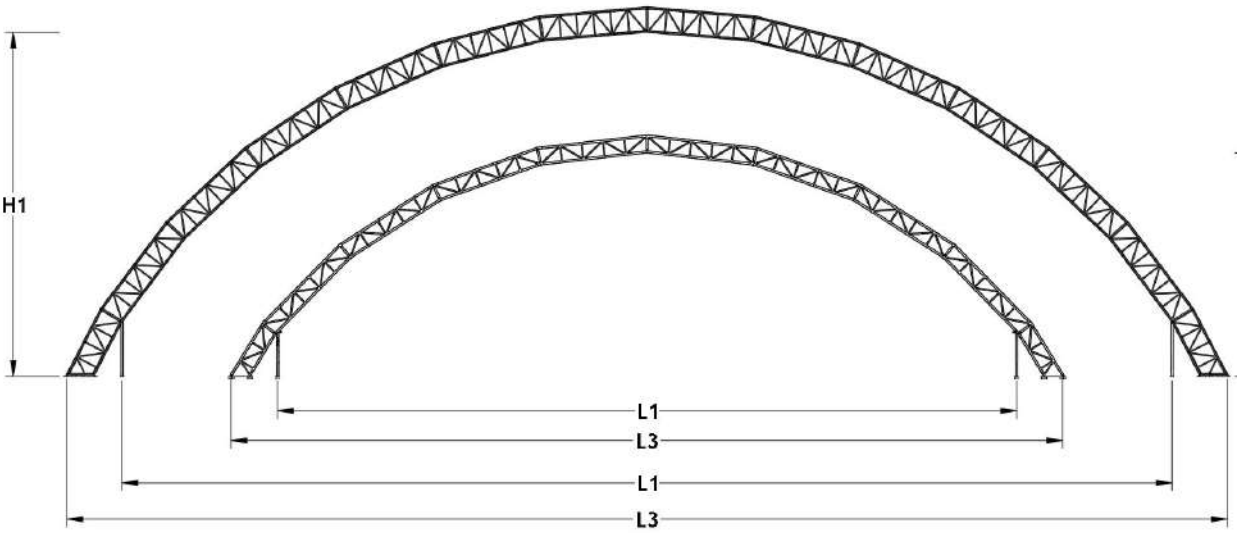
Note: This is a summary of the main data and measurements of our standard structures. We can provide different options to match your requirements.

AVIATION HANGARS

ARCH TRUSS CONSTRUCTION







Specifications	Measure					
Inner Dimension	L1	60m	70m	80m	90m	100m
Outter Dimension	L3	68m	78m	90m	100m	110m
Ridge height	H1	18m	21m	27m	30m	33m
Bay distance / grid	L2	5m	5m	5m	5m	5m
Total Lenght		No limit. Expandable with the grid.				
Rigging Capacity - Up to	Per arch	7 tonnes	7 tonnes	12 tonnes	12 tonnes	12 tonnes
Max. wind speed - Up to	195km/h					
Snow load		0,1kN/m^2	0,1kN/m^2	0,1kN/m^2	0,1kN/m^2	0,1kN/m^2

Note: This is a summary of the main data and measurements of our standard structures. We can provide different options to match your requirements.

AVIATION HANGARS

HANGAR DOORS OPTIONS

Champion Door manufactures **vertical lifting fold-up doors** for very large openings. Vertical lifting fabric fold-up doors are an alternative for large-scale door locations, light yet durable, and with possibilities of high-quality heat and noise insulation. All Champion Door's doors are CE-marked and comply with currently valid standards.

CHAMPIONDOOR®

Shipyarddoor presents **large vertical lift fabric doors.** Steel or aluminum body is designed for different operational conditions. The hangar doors can be manufactured 50X40 mt one piece and unlimited width with mullion doors. All doors are manufactured according to EN and ASTM standards with high safety levels.

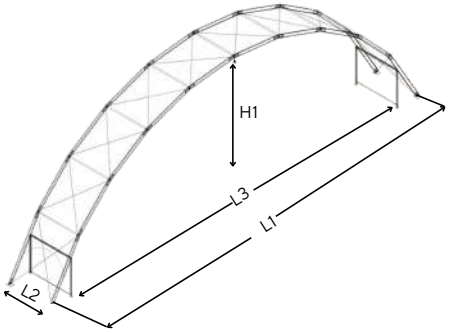
SHIPYARDDOOR®

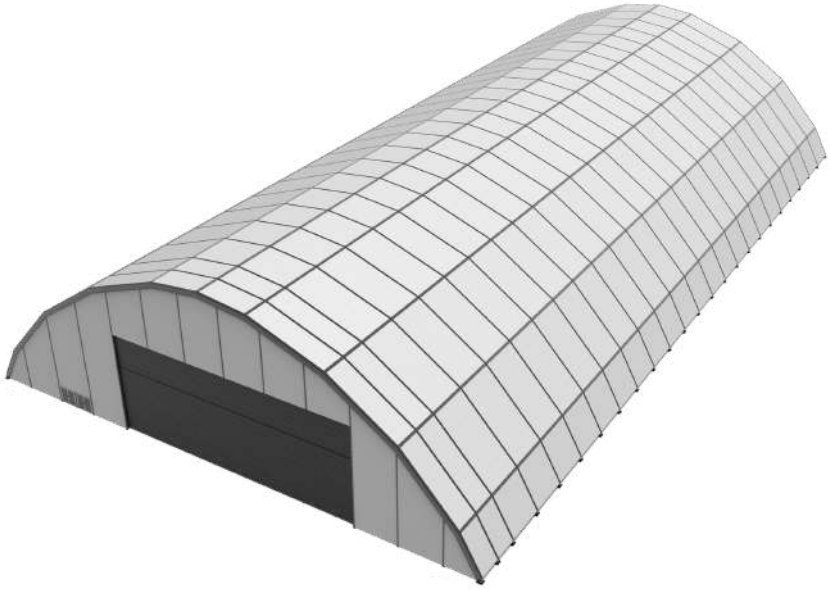
Jewers Doors manufactures creative yet functional door solutions to meet customers' requirements. The Esavian product range comprises two **horizontal sliding hangar door systems** and a **bottom rolling sliding folding door**, the Flatfold.

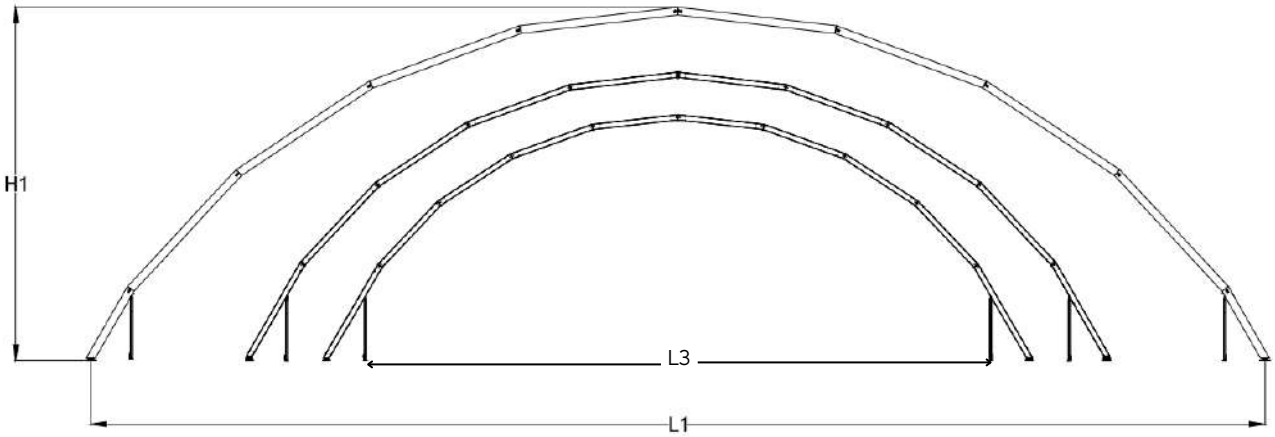
JEWERS
The Mark of Excellence & Innovation

AVIATION HANGARS

TEMPORARY OPTIONS







Specifications	Measure			
Outter dimension	L1	45m	55m	75m
Inner dimension	L3	40m	50m	70m
External ridge height	H1	15,6m	18,4m	22,5m
Feet height	H2	6,1m	6,3m	4,7m
Bay distance / grid	L2	5m	5m	5m
Total Lenght		No limit. Expandable with the grid.		
Rigging Capacity - Up to	Per arch	1500kg	2000kg	2000kg
Max. wind speed - Up to	100km/h			
Snow load		0,1kN/m^2	0,1kN/m^2	0,1kN/m^2

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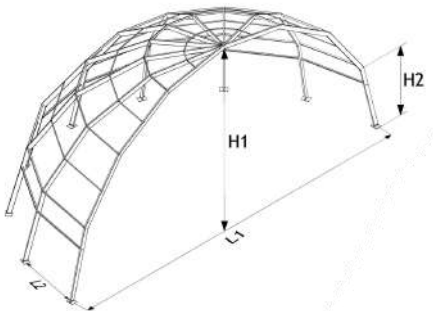
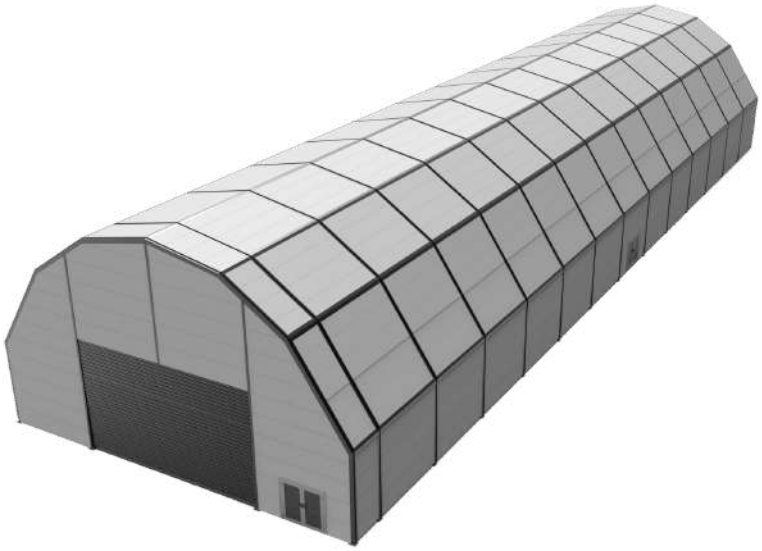
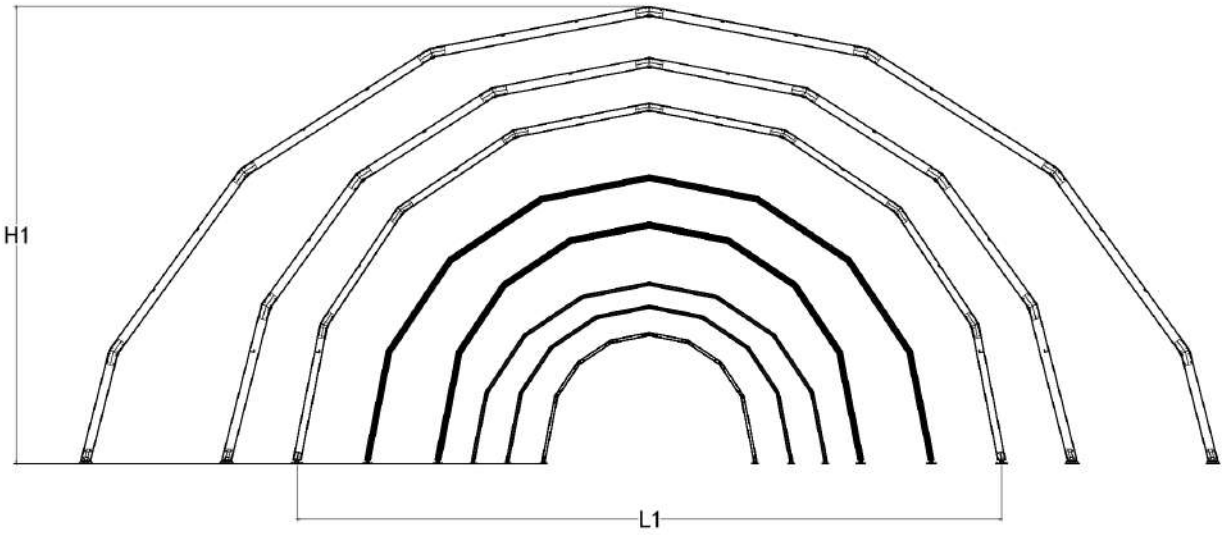
AVIATION HANGARS

TEMPORARY OPTIONS







Specifications	Measure								
Diameter	L1	7,5m	10m	12,5m	15m	20m	25m	30m	40m
Distance between feet	L2	3,75m	3,85m	4,78m	4,63m	5,17m	5,55m	5,65m	4,0m
External ridge height	H1	4,65m	5,62m	6,44m	8,56m	10,23m	12,78m	14,4m	6,25m
Feet height	H2	2,4m	2,5m	2,5m	4,0m	4,0m	5,0m	5,65m	4,0m
Bay distance / grid	L2	5m	5m	5m	5m	5m	5m	5m	5m
Total Lenght		No limit. Expandable with the grid.							
Rigging Capacity - Up to	Per arch	300kg	300kg	300kg	450kg	450kg	750kg	1250kg	1250kg
Max. wind speed - Up to	100km/h								
Snow load		0,1kN/m^2	0,1kN/m^2	0,1kN/m^2	0,1kN/m^2	0,1kN/m^2	0,1kN/m^2	0,1kN/m^2	0,1kN/m^2

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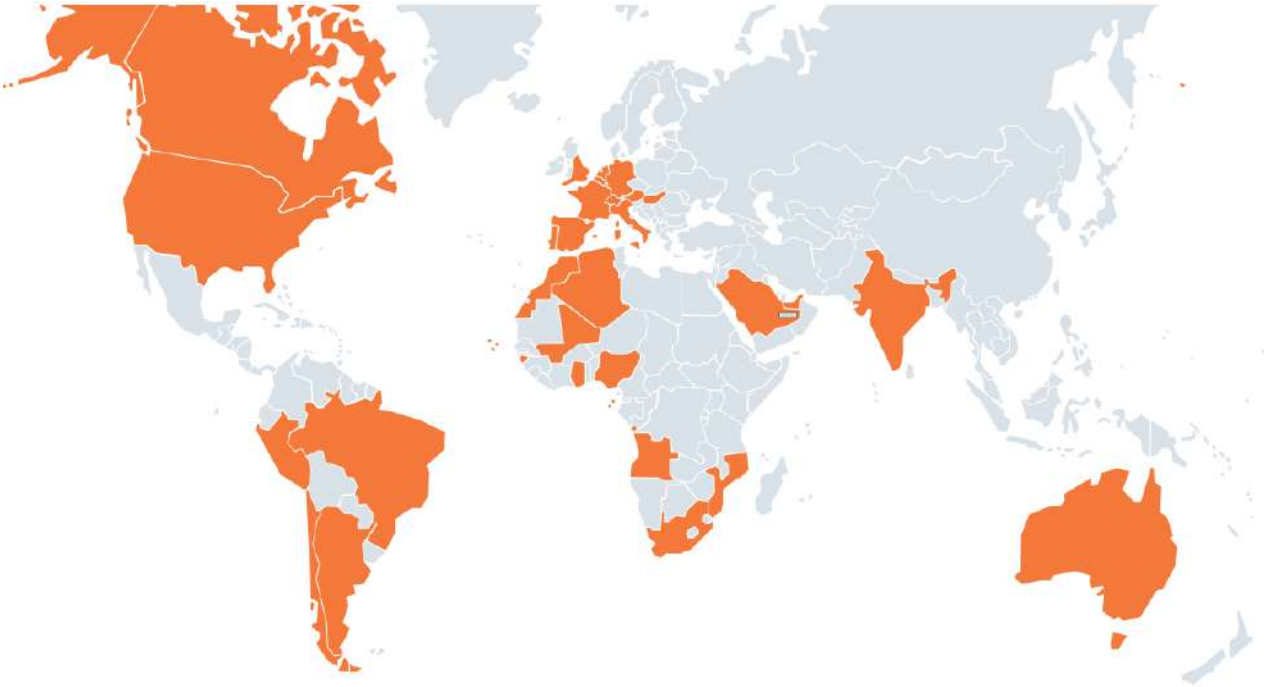
IRMARFER WORLDWIDE



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United Arab Emirates
United Sates of America

IRMARFER STRUCTURES

IRMARFER GRAPHIX

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