



### WHO WE ARE?

- ClearSpan is one of India's leading, fastest growing and most diversified Temporary & Permanent Aluminium and Tubular Steel Frame Structure Company. We provide custom design and sector-specific complete turnkey solutions from concept to execution at site including design, engineering, manufacturing, transportation, project management and installation.
- Our aim is to deliver the best quality, aesthetical & economical products to the customers using the latest technologies for innovative applications & to attain excellence in creating Aluminium & Steel Structural Systems, while incorporating first class customer service and delivering products that achieve utmost customer satisfaction.





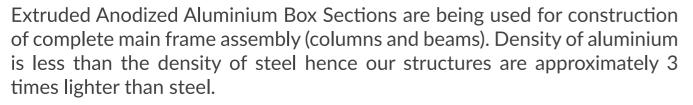
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- We use Aluminium Alloy 6082-T6 in our main frame structure, which has tensile strength of upto 300MPa. Here T6 denotes-Solution heat treated and artificially aged
- Other Aluminium Alloys available are 6005-T6 & 6061-T6.



### Chemical Composition of Aluminium Alloy 6082 (approx.)

Titanium (Ti)	0.01
Chromium (Cr)	0.00
Magnesium (Mg)	0.72
Iron (Fe)	0.24
Manganese (Mn)	0.47
Silicon (Si)	0.86
Copper (Cu)	0.01
Zinc (Zn)	0.01
Aluminium	Balance





Large clear span structures & cost-efficient



Structurally sound & proven globally



Fast to build



Safe (All the materials are flame retardant)





Easy to clean as all the sections are aluminium box sections



No problem of corrosion, priming or painting

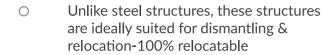


Extremely modular & flexible





Structures can be provided in several configurations based on requirements





Building width & length, if designed accordingly, can be increased or decreased as per requirement in future.



with German Design Software.

Compliant with all latest

Factory finished & High aesthetics



Areas, rooms, service points etc. can be converted easily and mostly overnight



 Extension can be done without interfering the existing operation

Ruggedized construction with long life, corrosion free materials (Aluminum, ABS, etc.)

Indian & international building codes



- O Products are designed as per DIN EN 13782 design standard, which is fully approved by the TÜV, the German technical inspection authority.
- O Design team fully equipped with the latest software applications, including RSTAB & AutoCAD etc.
- O Static calculation for structures.
- O Design & drawings of aluminium structures as well as covers.
- Structures are also designed to comply other international design code criteria, including the USA-IBC2009/12 and AS/NZS standards.

# FRAME PROFILE

- 4-Channel Extruded Aluminium Profile.
- All the aluminium sections are anodized.
- Inserts/Jointers to connect aluminium profiles are made of aluminium.
- All the steel components (like: base plate, eave connectors, ridge connectors and other accessories) are manufactured from high tensile steel and these members are hot-dip galvanized to avoid bi-metallic corrosion.
- Aluminium profiles are available in various sizes and thickness as per structural design. Standard sizes available are- 150mm x 120mm x 3mm, 200mm x 120mm x 4mm, 250mm x 120mm x 4mm, 300mm x 120mm x 5/8mm.
- O Standard structures are designed to withstand wind load of 0.5 kN/m2 (wind speed- 102 km/hr). However, our structures can be custom designed to withstand high wind loads as well, as per customer requirements.







**Roof and wall coverings** in the Aluminium Frame Tents are crucial aspects in providing protection, insulation, and customization for the tent structure. ClearSpan offers **various options for roof & wall coverings** according to customer requirement as mentioned below:

### 01 FABRIC

High quality tensile fabric in our standard structures are of 800 grams/m2 (GSM). Fabric is specifically designed to meet our structural requirements and quality standards. Fabric quality test certificates are provided to ensure optimum quality of fabric.

### **FABRIC PROPERTIES:**

- Good aesthetics
- High solar reflective index
- Water resistant
- Flame retardant
- Easy repair solutions

- No requirement of any major machinery for installation
- High tensile strength to resist harsh environmental conditions
- High durability with fabric life of 10-15 years
- Quick and hassle-free installation & dismantling

### **FABRIC ARE AVAILABLE AS**

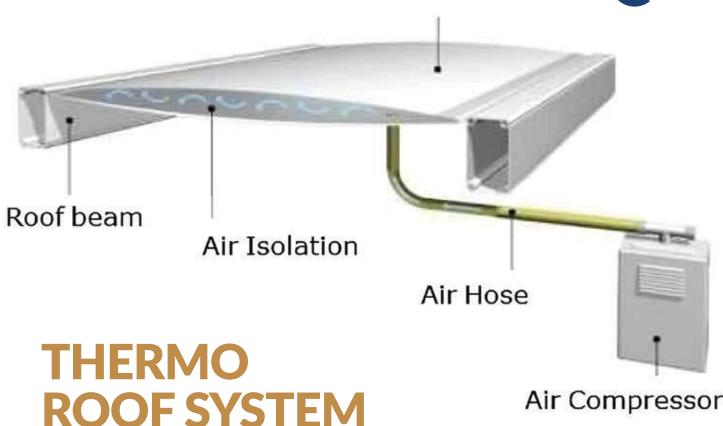








- Our insulated double layer tensile fabric roof option for aluminium tents is designed to provide better temperature regulation and comfort within the tent. Double layer fabric roofs are especially useful in various settings, including event spaces, temporary shelters, industrial applications, & more.
- The installation and dismantling of double layer tensile fabric is fairly quick and easy. In this roofing method, air is filled in the space between two fabric layers, which provides a layer of insulation inside the tent, helping in regulation of the indoor temperature.
- An automatic low-pressure air compressor pump is used to automatically inflate each roof piece. Once inflated, the roof lowers interior dampness and structural noise. This type of roof is best suited for storage warehouses where protection from external temperature & condensation is required.



**Temperature Regulation** 

**Condensation Prevention** 

- Insulated roofs help maintain a more consistent indoor temperature by reducing heat transfer between the interior and exterior of the tent. This helps in keeping the interior environment cool in hot weather and vice-versa.
- Energy Efficiency
  The insulation helps reduce the need for additional heating or cooling equipment, thus

potentially lowering energy consumption and associated costs.

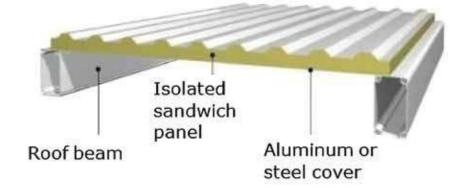
- Comfort
- Insulated roofs create a more comfortable environment for occupants, making the tent suitable for various purposes, such as exhibitions, conferences, events and more.
- Insulation can help prevent condensation from forming on the interior surfaces of the roof, which is particularly important in cold or humid conditions.



- We provide Sandwich Panels owing to their **lightweight**, **insulating**, **and durable properties**. These panels consist of three main layers: two outer layers and a core insulating material layer in between.
- The two faces provide durability, weather & impact resistance, while the lightweight core maintains the two outer faces in the proper position and offers insulation.









### Insulation

The insulating core of the sandwich panel provides thermal insulation, helping to regulate the temperature inside the tent. This can be crucial for maintaining a comfortable environment in various weather conditions.



### Lightweight

Sandwich panels are lightweight, making them easy to transport, handle, and install. This is especially important for temporary structures



### Strength and Durability

Despite their lightweight nature, sandwich panels are strong and durable, offering resistance against impacts, bending, and other stresses.



### **Quick Installation**

Sandwich panels are designed for easy and quick installation. They often come with interlocking mechanisms or fasteners that simplify the assembly process.



### Versatility

These panels are versatile and can be used for both roofing and walling, allowing for flexibility in tent design and layout.



### **Aesthetic Appeal**

Sandwich panels provide a sleek and modern appearance to the tent, enhancing its visual appeal.



### **Weather Resistance**

The exterior sheet provide protection against weather elements such as rain, wind, and UV radiation.



### Customization

Sandwich panels can be customized in terms of thickness, insulation material, and finish to suit specific needs and requirements.



- Corrugated steel panels as roofing materials provide durability, weather resistance, and structural integrity. These panels are known for their strength and ability to withstand various weather conditions. Zincalume/Galvalume sheets made of 26G (0.5mm TCT) High Tensile Steel - 550 MPa with coating of AZ 150 (150 GSM).
- These panels are mainly used in semi-permanent and permanent structures and are fixed through self-drilling and self-fastening methods. We can propose daylight panels, ventilation system and other accessories with this roofing solution.



### Strength and Durability

Corrugated steel panels are strong and can handle heavy loads, making them suitable for roofing applications in tents.

### **Weather Resistance**

These panels are highly weather-resistant, offering protection against rain, snow, wind, and UV radiation.

### **Longevity**

Corrugated steel panels have a longer lifespan compared to some other roofing materials. They are less prone to deterioration over time.

### **Variety of Profiles**

Corrugated steel panels come in various profiles and designs, allowing you to choose the one that best suits your aesthetic preferences and functional needs.

### **Fire Resistance**

Steel is naturally fire-resistant, which can be an important safety feature, especially in public events or crowded spaces.

### **Low Maintenance**

Corrugated steel panels require minimal maintenance. They don't rot, warp, or get damaged easily.

### **Quick Installation**

These panels can be relatively easy to install, which is important for temporary structures.







- The characteristics of Pagoda structures are easily defined by their impressive high peaked roof design. The Pagoda range is available in sizes from 3.00m - 20.00m and combines traditional tent design with high-tech innovation, creating an architecturally pleasing, yet fully functional structure system. Because of their high versatility, Pagodas are an ideal choice for a wide range of event applications-From entrance canopies to wedding receptions or eye-catching hospitality, this range of elegant structures will aesthetically enhance events of any category.
- Our Pagoda structures are available in a range of various functional designs as per customer's requirement. All Pagoda structures can be further enhanced by the addition of one or more of our pagoda accessory products including glass or solid walling, door units, overhead canopies, integrated flooring systems, internal linings and more.







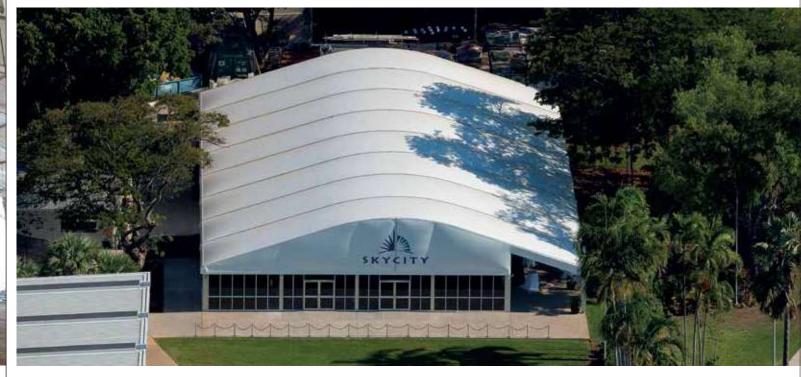
- Various design options available.
- Available in squared shape units from 3m (9m2) 20m (400m2).
- Pagodas can be linked together to create multiple configurations.
- Interchangeable parts used within specific pagoda ranges.
- Easy and quick installation of roof cover.
- Wind load approved according to DIN EN 80km/h 120km/h according to size.
- For all pagoda structures, a wide variety of auxiliary accessories are available.

# & EXHIBITION



- We offer multi-functional and sophisticated space solutions for a variety of event applications, including VIP hospitality, festivals, trade exhibitions, product launches, sporting events, and many more.
- Individuals can choose a tent of their interest from a varied category of event and exhibition tents which can further be customized and accessorized according to their requirement and use.





### FEATURES.....

- Flame retardant material
- All the event tents are designed as per DIN 13782
- Temporary Tent building width can be adjusted as per requirement.
- A 60m clearspan tent can be modified in to 50m, 40m & 30m tent.
- Structures can be supplied from 5m clear span to 60m clear span with height up to 6.0m on sides.
- Anodized Aluminium Frames are supplied for these structures
- Frames can be fixed with anchor fasteners, nails or chemical fasteners
- We provide complete set-up guide & supervision for first time installation of these temporary tent structures.









- Temporary industrial buildings with aluminum frames are modular structures with a relatively straight-forward but incredibly robust design. The materials, parts, and fixings that are used in their construction are neat, safe, and out of the way but still visible.
- Manufactured to meet the necessary global building standards for structural integrity, which are essentially the same requirements as a permanent building in terms of snow and wind loadings, making them far better option than a coventional tent.
- Its wide variety of uses include temporary warehouses, industrial storage sheds, temporary workshops, production buildings, loading bay, warehouse canopies and modular retail buildings, as well as recycling facilities.

- Fast and short assembly time
- Easy to expand, modify and relocate
- Aluminium frame, industrial PVC roofing, corrugated steel sheet or PVC side walls
- Robust, durable, and proven for installation, dismantling and storage
- Translucent PVC roof fabric reduces day lighting costs
- Designed for wind load as per IS 875 Part 3, DIN EN 13782 (Temporary Buildings)
   and DIN EN 1991 (Permanent Buildings)







- ClearSpan Hangars and Maintenance Shelters are diverse enough to cover maintenance for aircrafts of any size.
- These maintenance shelters and hangars are extremely weather resistant, achieving 100 kg/m² snow load and 100 km/h+ wind speed. These structures are built to comply standard hangar specifications and adaptable to customer specific requirements.
- Maintenance shelters range from 7.60m to 70.00m width, have unlimited length and a max peak height upto 16m - but we do specialize in producing customized designs and larger sizes as well.
- The aircraft hangars also feature an optional eyelid gate to allow easy access for high tail fins.
- The smallest vehicle maintenance tent can be packaged and transported in a small, 2.50m long bundle.
- The aircraft hangars can be transported in 20 ft. and 40 ft. container and could be installed within 7-10 days, depending on size and configuration.

- Special structure for aircraft & helicopters
- Up-to 70m wide clear span structure
- Unlimited length
- Designed for high snow and wind loads
- Low packing volume
- Different types of door options are available





- MULTI-SPORTS STRUCTURES provide variety of modular enclosure solutions intended to offer high-quality, yet reasonably priced semi-permanent settings, ideal for a wide range of indoor sporting activities. SPORTS STRUCTURES are the perfect option for recreational applications like racquet sports, swimming pools, equestrian sports, and indoor football. They are available in a variety of clear-span widths and stunning unobstructed internal heights, thanks to the revolutionary modular design features.
- **SPORTS STRUCTURES** offer the most versatility for multi-sport applications including badminton, basketball, netball, volleyball, and football. The clear-span widths of the structures range from 10 to 40 meters, and their varying eave heights range from 3 to 7 meters. In addition to delivering conventional buildings, SPORTS buildings can be modified to meet the specific demands of each customer. We do this by providing a full design and build service. The goal of the ClearSpan multi-sports structure is diversity.
- We use Anodized Aluminum structural elements which have excellent corrosion resistant property. Thus, keeping the maintenance cost to the minimum and also provides extended product life.

- Available in standard span widths of 10m,15m, 18m, 20m, 25m, 30m, 35m & 40m.
- Supplied with vertical or slanted uprights with standard eave heights of 3m to 7m.
- Choose between pressure-tensioned single PVC or our thermo inflatable fabric roof system.
- Ideal for all weather conditions structure side walls can be opened in summer and closed in winter.
- Translucent roof fabric allows natural daylight to penetrate thus saving artificial lighting energy costs.
- All structures can be designed to meet site-specific/regional wind and snow load requirements.
- Possible to install over existing facilities thus keeping costs to an absolute minimum.
- Accessory options include glazed or solid insulated walls, access doors, lighting and more.



- These shelters can tolerate much higher snow and wind loads than their traditional counterpart and to create even more strength, the laterals walls are tilted inside.
- They are also much lighter and smaller when packaged up to 35% reduced weight and up to 50% reduced volume. This makes transport and installation far quicker and easier in all favorable and unfavorable conditions.
- These advanced Rapid Deployment Structures can operate in extreme temperatures ranging from 40°C to +80°C.
- Standard Sizes range from 12.00m to 15.00m width, unlimited length and 3.00m wall height. We also manufacture larger sizes and customized design as a standard part of our product offering.





Width	Minimum Length	Bay Distance/ Extension Bay	Side Height	Peak Height	Wind load	Snow load	Capacity	Setup time
16.00m	25.00m	5.00m	4.10m	8.77m	100Km/h	On request	Aircraft/Vehicle/Military equipment	8 hours
16.00m	25.00m	5.00m	2.50m	7.17m	100Km/h	On request	Aircraft/Vehicle/Military equipment	8 hours
16.00m	25.00m	5.00m	4.10m	8.77m	100Km/h	On request	Aircraft/Vehicle/Military equipment	8 hours
20.00m	25.00m	5.00m	4.10m	7.36m	100Km/h	On request	Aircraft/Vehicle/Military equipment	8 hours
30.00m	25.00m	5.00m	5.20m	10.20m	100Km/h	On request	Aircraft/Vehicle/Military equipment	2 days
40.00m	40.00m	5.00m	4.00m	10.30m	100Km/h	On request	Aircraft/Vehicle/Military equipment	4 days
50.00m	50.00m	5.00m	4.00m	12.00m	100Km/h	On request	Aircraft/Vehicle/Military equipment	6 days
60.00m	50.00m	5.00m	4.00m	13.92m	100Km/h	On request	Aircraft/Vehicle/Military equipment	7 days













- ClearSpan provides Airport building solutions to both the public and private sectors for semi-permanent and temporary airport structures. These solutions include hangars for aircraft & helicopters, logistics centers, storage facilities, temporary airport terminals & arrival halls, baggage handling areas, cargo and warehousing facilities, relocatable structures for ground support equipment, canopy structures, and custom-built structures as per customer's exact specifications.
- Airport terminal buildings by ClearSpan are engineered to combine lightweight, noncorrosive qualities with strength and durability. It also makes the buildings quick and easy to transport and install

- Areas, Rooms, Service Points can be converted easily and within a small period of time
- Extension can be done without interfering the existing operation
- Tailor-made Air-conditioning
- Fire retardant material

- Cost-efficient
- Fast to build
- Easy to receive the Building Permit
- Low operational cost
- 100% relocatable

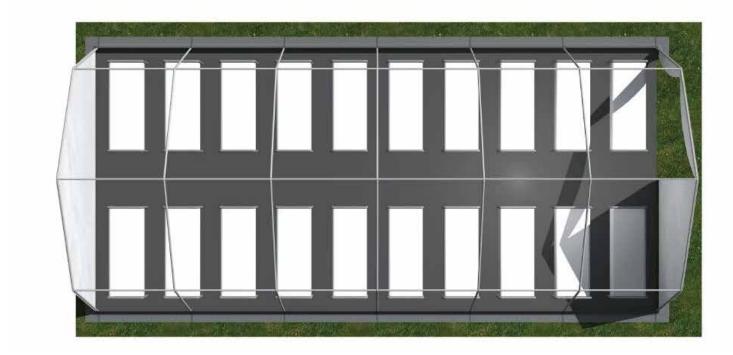
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- Complete solution is available for temporary hospital setup and can be air-conditioned as per requirement.
- These structures are most efficient for areas where there is a space crunch or extension is required in existing hospital premises.
- Can be setup in short period of time which makes them excellent options in times of emergency where urgent medical facilities are needed.



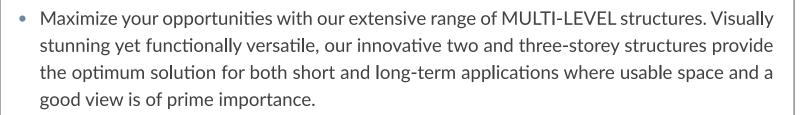


### **KEY FEATURES**

- Areas, Rooms, Service Points etc. can be converted easily and mostly in short period of time.
- Provides a clean and hygienic environment for hospital activities.
- Extension can be done without interfering the existing operation
- Flame retardant material and certified
- Does not require major civil foundation work at site.
- Since sections are box sections, cleaning can be done easily



# OLIVANOVA.COM



• MULTI-LEVEL structures are available with a multitude of accessory products to further enhance the visual appearance and functionality of the chosen structure. Accessories include insulated 'thermo' air-filled roof covers, vertical and horizontal solid and glass walling systems, double and single door units, internal and external staircases, balustrades, decorative integrated linings, lighting systems, and flooring systems.



- Increases additional functional space in restricted areas.
- Available in both 2 and 3-story design configurations.
- Standard structures are available from 10.00m 40.00m span.
- Choose from a variety of strikingly versatile designs; "A" Framed, Curved, Semi Curved, Slanted, Multi-peak, and Cube shaped.
- Floors based on a standard 5.00m x 5.00m modular grid system.
- Innovative design features enable the creation of numerous internal configurations including atriums, balconies, and terraces to meet the user's specific needs.
- Can be designed to meet region-specific wind and snow load requirements.
- Choose from a variety of aesthetical yet functional accessory products including internal/external staircases and balconies, insulated glazed and solid walling, doors, lighting and HV/AC systems.





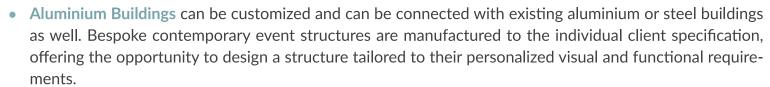


- ClearSpan Inflatable tents just takes a few minutes for one or two persons to install, depending on the size and arrangement of the tent.
- We offer the best conditions for lodging, living space, headquarters, medical tents, weather shelters, or workstation and are particularly multi-functional. The ClearSpan Inflatable Shelters are perfect for entire field camp projects since they are built according to normal military specifications and are adjustable to customer-specific regulations.
- The standard width is 5.65m, length is flexible up to 20.80m, and the standard wall height is 2.80m. All of our inflatable military tents have a design that allows for many uses, sizes, & configurations. One pallet can be used to package and transport the largest conventional inflatable shelter available.

Width	Minimum Length	Bay Distance/ Extension Bay	Side Height	Peak Height	Wind load	Snow load	Capacity	Setup time	Weight
5.65m	5.28m	2.64m	2.80m	3.00m	80Km/h	25Kg/m²	4 beds	3 min	176kg
5.65m	7.92m	2.64m	2.80m	3.00m	80Km/h	25Kg/m²	6 beds	5 min	225kg
5.65m	<b>10.56</b> m	2.64m	2.80m	3.00m	80Km/h	25Kg/m²	8 beds	8 brds	275kg
5.65m	13.20m	2.64m	2.80m	3.00m	80Km/h	25Kg/m²	10 beds	9 min	327kg
5.65m	20.80m	2.60m	2.80m	3.00m	80Km/h	25Kg/m²	*	*	*

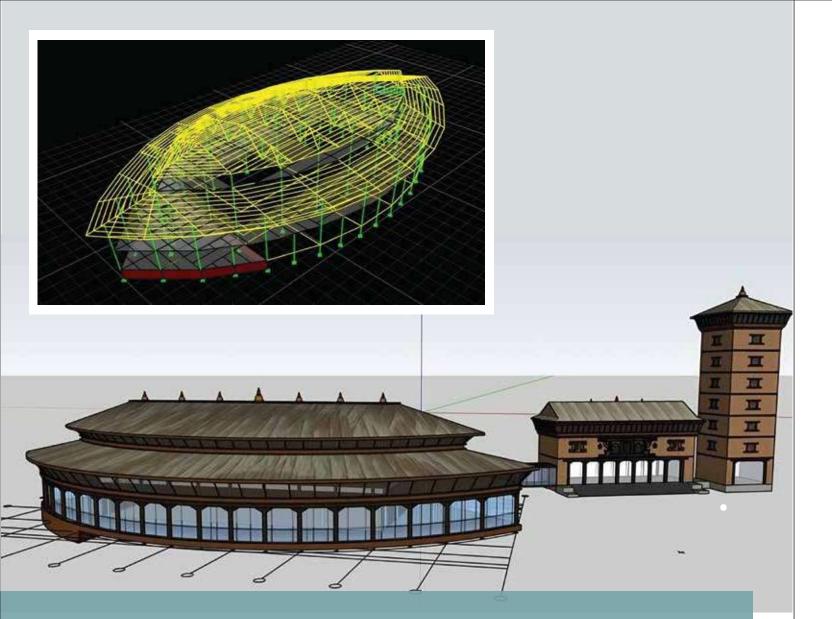
<sup>\*</sup>to be provided on request





- No matter the size or design, we can satisfy all customer requirements, from a straightforward addition to a fully insulated, multi-level construction. One of our main goals when constructing Customized Structures is to incorporate as many stock components as possible from our standard selection of tents and structures. This keeps costs low and allows the project to go forward with design much more quickly than if components were produced separately.
- We provide almost any design, from initial concepts to working drawings and installation. For projects in harsh climates or settings, structures can be created in a variety of sizes and shapes with increased wind and snow tolerances.





### **TUBULAR STEEL STRUCTURES**

• ClearSpan offers rapid construction using Steel Tubular Sections- Rectangular Hollow Sections (RHS), Square Hollow Section (SHS) and Circular Hollow Sections (CHS). This construction methodology is faster, economical and provides high aesthetics. Tubular structures can be used for multiple applications including Industrial, Commercial, Residential and Multi-Storey Buildings.



## ADVANTAGES OF TUBULAR STRUCTURES:

### Strength-to-Weight Ratio

Tubular structures offer an excellent balance between strength and weight. The hollow shape distributes loads effectively, making them structurally efficient.

### Aesthetics

The cylindrical shape of tubular structures can create visually appealing designs that stand out from H/I beam structure.

### Versatility

Tubular structures can be adapted for various architectural styles and functional purposes.

### Ourability

The closed shape of tubes can protect the interior from environmental factors, contributing to the longevity of the structure.

### Efficient Load Distribution

The curved shape of tubes allows for optimal load distribution, reducing stress concentrations and enhancing stability.

### Ease of Fabrication

Tubes are available in cut-to-lenght size, hence wastage is less

### Adaptability

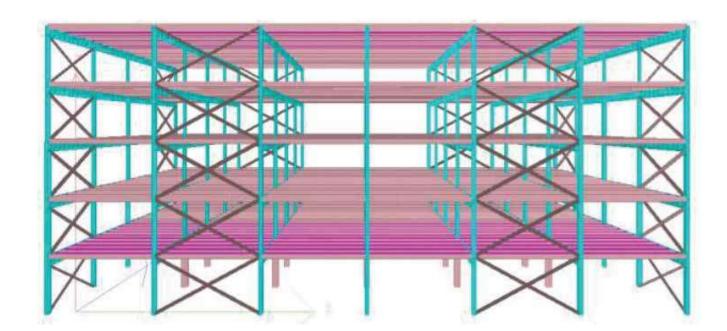
Tubular structures can be easily modified or expanded by adding or removing sections, making them flexible for future changes.

# TUBULAR STRUCTURE BENEFITS

### BENEFITS OF TUBULAR STRUCTURES OVER CONVENTIONAL RCC CONSTRUCTION:

- More Material Efficiency
  - าсу
- Recyclability
- High Strength-to-Weight Ratio
- Wersatility in Design

- Ease of Manufacturing
- Long-Span Capabilities
- Shorter Construction Time
- Low Project Cost



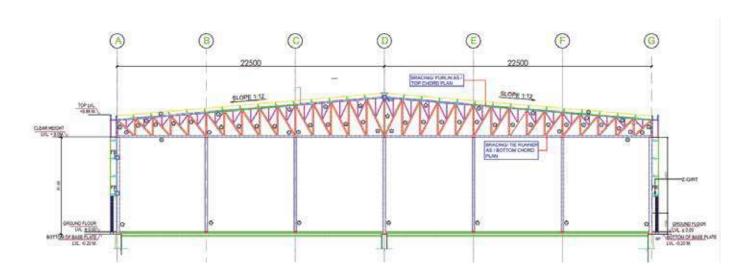


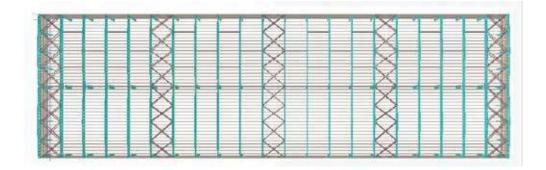
# TUBULAR STRUCTURE APPLICATIONS

### **APPLICATIONS**

- Bridges
- Towers
- Architectural Canopies
- Stadiums and Arenas
- Aircraft Hangars

- Skyscrapers and High-Rise Buildings
- Pedestrian Bridges and Walkways
- Greenhouses and Agricultural Shelters
- Footbridges and Overpasses





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### **TENSILE STRUCTURES**

ClearSpan India is among the leading supplier of tensile fabric structures. We manufacture, and assemble high-quality tensile structures, including parking shades, and canopies.

Our structures are manufactured from high quality steel tube materials (RHS, SHS, CHS) making it durable and long lasting. Along-with durability, these structures possess aesthetic appeal while keeping the functionality of the structure intact.

### **FEATURES**













### **WALKWAY STRUCTURES**

Our tensile walkway canopy structures are designed from concept and can be used to cover an area of considerable size. These shade structures are made of materials that are extremely robust, giving them a long lifespan and provide protection to visitors from the effects of sun, rain, and snow. The high-quality PVC coated, weather proof and UV resistant fabric provides protection against all weather conditions.



- The tensile canopies are the best because they offer a clear view of the entry, provide natural lighting and offer protection from the environmental elements. These structures can be made to fit any shape or size, which makes them extremely adaptable and suited for both large and small entrances.
- These structures provide a nice aesthetic appeal. Our in-house team of designers and engineers collaborate closely with customers to make sure the finished product satisfies all of their needs and standards. We take great satisfaction in our ability to provide clients with high-quality products that not only meet but also surpass their expectations.
- These structures are made of weather-resistant high-strength fabric; hence, it can withstand intense rainfall, strong winds, and snowfall.
- Due to their **portability and light weight**, these structures may be set up fast & effectively with little interruption to the surrounding area. Businesses aiming to reduce downtime during installation ought to direct particular consideration to this.

### **OUR CLIENTELE**























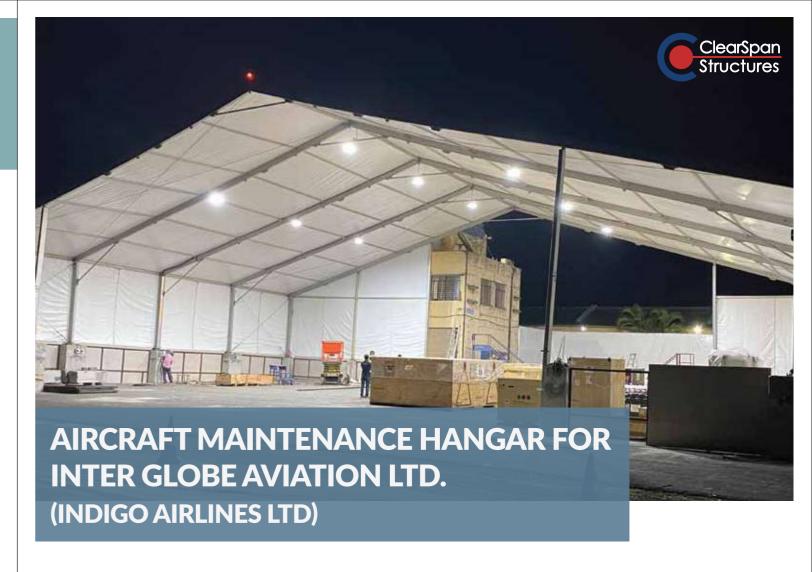








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