



Clear Span Deployable Shelter CSS20

Product Images



Short Description

The aluminum hangar is a robust and versatile structure designed for a wide range of applications, including aircraft storage, industrial equipment protection, and material storage. Its durable construction and corrosion resistant materials make it ideal for enduring harsh weather conditions and prolonged use.

Description

The hangar, in standard construction, can withstand a snow load of at least 75 kg/m² and wind gusts of up to 150 km/h. It can also operate in temperatures ranging from -30°C to +55°C and is designed for continuous operation. If needed, the structure can be dismantled, repacked, stored and re-used several times with minimum refurbishment.

Frame

The hangar frame is constructed using sturdy aluminum profiles with kedder grooves for the fixation of the tent inner and outer covers. Galvanized steel bracing cables with high-strength cage tensioners are installed on the roof and side walls to ensure optimal wind stability and prevent lateral movement. Three galvanized steel cables are installed along the hangar’s full length, providing convenient mounting points for lights, heating/air conditioning diffusion ducts, and other equipment, optimizing space utilization. The hangar is anchored to the ground using steel base plates and pegs or chemical anchors (for concrete platforms). Each structure is designed according to local wind and snow loads, following the Eurocode 1: Actions on structures normative. Static calculations are being designed as per EN 13782:2015 standards, Eurocode 3: Design of steel structures and Eurocode 9: Design of aluminum structures.

Roof, side walls and peripheral groundsheet

Easy to install thanks to its kedder rims, the outer cover of the hangar is crafted from high-density PVC coated polyester fabric. This resilient material boasts a filament density of 1100 dtex and a weight of 650 g/m², ensuring exceptional weather resistance, high tear resistance and tensile strength. It effectively shields the hangar from the elements, being waterproof, mold and mildew resistant, and able to withstand extreme temperatures. Additionally, it is fire retardant, self-extinguishing, and resistant to cleaning chemicals. To further enhance its longevity, the outer coating is UV resistant.

All cover sections are seamlessly joined using high frequency welding, ensuring an impenetrable barrier against water ingress. This effective approach extends at ground level, where a peripheral groundsheet provides an additional layer of protection against water penetration.

The hangars are safe and simple to erect and dismantle by experienced personnel, or after having received introductory training for this system. Robust and sturdy, they require limited maintenance and can be serviced using basic tools.

Additional Information

Application area	Field Hospitals, Military, Accommodation and Catering, Industry and commerce, Weatherproof Shelter for Sensitive Equipment and Workshops
Bay distance	5.00 m
Roof pitch	20°
Span width	20.00 m
Eaves height	2.70 m - 5.50 m
Length	unlimited in 5 m increments
Ridge height	4.50 m - 8.50 m