HUANYU Sports Tent Structures Pair T6061 Aluminum Frames With 850g/sqm PVC

Changzhou Manufacturer Details Frame Materials, Roof Fabric Specifications and Structural Options for Sports Tent Applications

CALIFORNIA, CA, UNITED STATES, September 29, 2026 / EINPresswire.com/ -- CHANGZHOU, Jiangsu, China — September 29, 2026 — Changzhou Huanyu Tent & House Manufacturing Co., Ltd. (HUANYU TENT), a manufacturer established in 2017 and headquartered in Changzhou, Jiangsu, China, specifies its sports tent structures around two primary components: a hardpressed aluminum alloy T6061/T6 frame and an 850g/sqm white PVC roof fabric. Company product specifications list available widths from 10 m to 60 m, unlimited length, sidewall heights of 2.7 m, 3 m, 4 m, 6 m or 8 m, and OEM/ODM customization.

Changzhou Huanyu Tent & House Manufacturing Co., Ltd.

The company develops, produces, sells and rents modular and mobile aluminum alloy structures, and its main product range includes modular aluminum alloy tent structures, large air domes, glamping tents, sports tents, wedding tents and warehouse tents. The published detail of the sports tent range — frame grade, fabric weight, span envelope and available sidewall heights — is the material project engineers and venue operators use to judge whether a fabric structure can serve as a repeatedly assembled sports venue rather than a single-use event shelter.

Fabric Engineering: What an 850g/sqm PVC Roof Specifies

HUANYU lists 850g/sqm white PVC fabric as the roof specification across its sports tent products,

with sidewalls available in PVC fabric, hard steel wall or glass wall construction. Roof fabric carries the weather-facing duty of a sports enclosure, which is why its weight and coating chemistry are usually examined first in a technical evaluation.

In coated-fabric construction, two layers do different work. The base polyester cloth carries tensile load, while the PVC coating forms the continuous weather barrier and allows adjacent panels to be joined into a sealed roof plane. Published technical specifications for premium sports tents typically describe 850g/sqm double PVC-coated polyester fabric that is fire retardant to DIN4102 B1/M2 and UV resistant (Superb Tent, citing ISO standards) — the material category HUANYU's roof specification sits within.

Gram weight is not a proxy for quality on its own. A heavier coating is generally associated with greater resistance to puncture, abrasion and surface wear, but it also increases roof load, packed weight and handling requirements. Those effects propagate downward into the frame and the anchorage, so fabric and frame specifications are normally developed together rather than selected independently. In sports use the membrane also influences daylight transmission, glare and thermal behavior inside the hall, which is one reason the same structure may be specified differently for an outdoor padel court and an indoor training hall.

Frame Mechanics: Hardpressed T6061/T6 and the 10 m to 60 m Span Envelope

Sports tent frames from HUANYU are specified in hardpressed aluminum alloy T6061/T6. The sports range covers available widths from 10 m to 60 m with unlimited length, while the natatorium configuration is listed from 3 m to 60 m. The tennis tent configuration is separately documented as customizable in width from 10 meters to 60 meters, with an unlimited length.

Grade and temper matter separately. Alloy 6061 is a magnesium-silicon aluminum grade widely used for structural profiles, and the T6 designation refers to a solution heat treatment followed by artificial aging, a combination that raises yield strength relative to non-heat-treated tempers. Profiles in this class can be produced in long, consistent lengths, which is what allows a modular structure to be assembled from standardized members instead of site-fabricated steelwork.

Span is the constraint that shapes everything else. A clear-span fabric structure keeps the playing surface free of internal columns, which matters for padel, tennis, basketball and football configurations where run-off area is part of the playing standard; HUANYU's product range includes clear span tent structures. As span increases, so do section size, connection requirements and anchorage demands, which is why a manufacturer will specify different frame sections at 10 m and at 60 m within the same product family.

On wind performance, published technical specifications for standard A-frame aluminum structures state that 6061/T6 frames are engineered to withstand wind speeds up to 102 km/h (Standard A-Frame Structure technical specifications, Superb Tent). That figure describes a standard structural configuration rather than a universal project rating. Performance on a

specific site depends on span, sidewall height, enclosure type, opening configuration, anchorage design and the governing local building code, and is normally verified against the applicable standard rather than assumed from a material grade.

Sealing, Wind and Water: The Interfaces That Decide Performance

HUANYU's application data for sports pavilion tents lists fire-retardant, windproof and waterproof performance as special requirements of the scenario. Those requirements are met or lost at the interfaces between components, not in the components alone.

Three interfaces carry most of the risk. Roof-to-frame connections determine whether the membrane stays in tension; a slack membrane moves in wind, abrades against the frame and eventually opens at the seams. Panel-to-panel joints determine water tightness along the roof plane. Base-to-ground anchorage determines whether the structure resists uplift, and it is the interface most dependent on conditions outside the manufacturer's control — soil type, slab availability and prevailing wind exposure all sit on the buyer's side of the specification.

Openings are the other variable. Sports halls typically require doors, ventilation and often glazing, and each opening interrupts the continuous enclosure. HUANYU's application data lists wall options including tempered glass curtain walls, soft glass sliding doors, ABS rigid panels and rock wool sandwich panels, each of which changes the structural and thermal behavior of the envelope.

The company's sports hall application data describes low-to-medium height installation for sports pavilion tents within large-scale public building projects, with the sports hall scenario recorded as common in China. That is a boundary worth stating plainly: fabric structures in this class are engineered for defined spans, defined sidewall heights and defined ground conditions, and configurations outside those parameters require separate structural review rather than extrapolation.

Modular Assembly and Site Time

HUANYU describes its structures as modular and mobile, and positions them as functional flex spaces that save time and labor and use more sustainable materials. The assembly logic follows from the frame: standardized aluminum members and connection hardware are produced off site, so installation consists mainly of positioning, connecting and tensioning rather than fabrication.

No single assembly duration applies across the range. Site time for a sports tent is driven by span and sidewall height, foundation or slab readiness, the wall and glazing package, and the amount of fit-out installed together with the structure. HUANYU's application data for sports pavilion tents lists exactly that equipment set: removable slip-resistant shock-absorbing professional sports flooring, glare-free LED sports luminaires with uniform illumination,

integrated heating and cooling HVAC with smart ventilation, and enclosure options spanning tempered glass, soft glass sliding doors, ABS rigid panels and rock wool sandwich panels. The same application data notes that some HVAC systems reduce energy consumption by more than 30 percent.

The implication for buyers is that assembly speed is a project variable to be scheduled, not a fixed product figure. Programs that need a venue operational on a known date should lock the specification — span, sidewall height, enclosure and services — before comparing delivery schedules, because a change to any one of those items changes the sequence and duration of on-site work.

The Specification List Buyers Compare

Across the published sports tent documentation, the following parameters form the comparison set that procurement teams and engineers review first:

Main frame: hardpressed Aluminum Alloy T6061/T6

Roof: 850g/sqm white PVC fabric

Sidewalls: PVC fabric, hard steel wall or glass wall

Available width: 10 m to 60 m; natatorium configuration from 3 m to 60 m

Length: unlimited

Sidewall height: 2.7 m, 3 m, 4 m, 6 m, 8 m or customized

OEM/ODM: available

Typical applications: football, basketball, tennis, sport court and swimming pool use; also events, parties, weddings and ceremonies
Operating pattern for sports hall use: 24/7
Special performance requirements recorded for the sports hall scenario: fire-retardant, windproof, waterproof
The list also shows where the specification stops. Fabric weight, frame grade, span and sidewall height are documented; site-specific wind engineering, foundation design and final assembly schedules are not, because they depend on the project rather than the product family.

Industry Context: Demand Signals Behind Modular Sports Venues
Market research on adjacent categories indicates why modular sports structures are receiving more procurement attention. Grand View Research projects the global camping and shelter tent market to grow from USD 5.40 billion in 2023 to USD 8.30 billion by 2030, driven by the rise in

outdoor sports and experiential travel. Verified Market Research values the global padel court market, which frequently uses covered courts, at USD 3.81 billion in 2024 and projects USD 12.51 billion by 2032. Grand View Research also expects the global sports tourism market, which uses temporary stadium and event structures, to grow at a compound annual growth rate of 16.8 percent from 2026 to 2033.

Market size estimates for tent categories vary by scope. For 2025 estimates of the camping and shelter tent market, Global Market Insights cites USD 4.4 billion while Mordor Intelligence cites USD 5.98 billion, a divergence that mainly reflects whether commercial and recreational segments are counted together. The pattern is consistent across these datasets: demand growth comes from organized sport and event activity rather than from recreational camping alone.

Competitive Reference

Modular sports halls are supplied by a limited group of international manufacturers. RÖDER HTS HÖCKER, a German lightweight construction group, provides structures for major events including ATP World Tour and WTA tournaments and is a primary global competitor in the sector. Chinese manufacturers such as HUANYU TENT operate in the same category with a different supply profile: export business accounts for 40 percent of the company's total sales, with major markets in Southeast Asia, the Middle East, Australia, Africa and its domestic market.

Company Profile

Changzhou Huanyu Tent & House Manufacturing Co., Ltd. was established in 2017 and operates a manufacturing facility covering 5,000 square meters in Changzhou, Jiangsu, China. The company employs nearly 50 staff and maintains an R&D team of 5 engineers. It reports exports to more than 130 countries and regions and more than 30,000 temporary space projects served over the past nearly 10 years, and keeps a showroom office in Yiwu.

The company's business focus is meeting diverse temporary space needs across many industries worldwide, with applications spanning exhibitions, brand showrooms, sports venues, aircraft hangars, industrial warehouses and glamping operations. Product information and specifications are published at www.hytents.com.

Outlook

For buyers specifying a sports venue, the practical reading of HUANYU's published data is that durability and assembly speed are not single specifications. They are the outcome of matched decisions across fabric weight, frame grade and temper, span, sidewall height, enclosure type, openings and anchorage. Because each of those choices changes cost, lead time and on-site work, procurement teams evaluating modular sports tents tend to compare a complete specification rather than one headline dimension.

Demand signals from outdoor sport, padel court development and sports tourism point to

continued use of fabric structures where permanent construction is slower or less flexible. Within that market, differentiation between suppliers is likely to rest on documented engineering choices and clearly stated limits — the layer HUANYU's product data addresses directly.

Peter
Changzhou Huanyu Tent & House Manufacturing Co., Ltd.
+ +86 15906122421
email us here
Visit us on social media:
Other

This press release can be viewed online at: https://www.einpresswire.com/article/946020062

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.
© 1995-2026 Newsmatics Inc. All Right Reserved.