



上海泛洲膜结构工程 有限公司

SHANGHAI FANZHOU MEMBRANE
STRUCTURE ENGINEERING CO.,
LTD.



<https://fanzhou.com.cn/>

2026版

泛洲膜结构
用品质说话
让时间证明

世界先进水平的膜 结构应用解决方案 综合服务商

World-Class Comprehensive
Service Provider of Mem-
brane Structure Solutions



目录 contents

关于泛洲About Fanzhou / page 04

交通于基础设施 Transportation & Infrastructure/ page 28

环保与工业设施Environmental & Industrial Facilities/ page 46

膜材选择Membrane Material Selection/ page 54

服务流程Service Process/ page 64

体育与大型场馆Sports & Large Stadiums/ page 18

商业于景观小品Commercial & Landscape Features/ page 36

伞类设施Umbrella Facilities/ page 52

钢结构加工与安装Steel Structure Fabrication & Installation/ page 58

关于泛洲

About Fanzhou

20年专业从事异型钢结构、膜结构制造安装

20 Years of Specialization in the Manufacturing and Installation of Special-Shaped Steel Structures and Membrane Structures

上海泛洲膜结构工程有限公司从事异型钢结构制作安装和膜结构制作安装。公司成立于2005年8月5日，注册资金为2000万元人民币，事务所分别位于上海市奉贤区青村镇和闵行区莘庄龙之梦，加工基地则位于安徽省马鞍山市。泛洲拥有钢结构专业承包二级资质，膜结构专项安装、专项设计和专项制作一级资质，ISO9001质量管理体系认证，ISO14001环境管理体系认证和ISO45001职业健康安全管理体系等多项工程资质。

Established on August 5, 2005, the company has a registered capital of 20 million RMB. It possesses the Class II Qualification for Professional Contracting of Steel Structures and Class I Qualifications for Membrane Structure Specialized Installation, Specialized Design and Specialized Fabrication. The company has also obtained various certifications including ISO9001 Quality Management System, ISO14001 Environmental Management System and ISO45001 Occupational Health and Safety Management System.

企业实力

Corporate Strength

以长远规划，护航未来

Long-term Planning for Sustainable Future

以先进设备，保证品质

Advanced Equipment, Reliable Quality

深耕膜结构行业二十余载，泛洲凭借精湛工艺与成熟技术，承接国内外各类大型钢膜工程，赢得市场广泛认可。企业始终秉持精益求精、诚信优质、求实创新的经营理念，持续与全球客户携手共创优质工程。

拥有约12000㎡专业化钢膜加工基地。配备数控切割、喷砂除锈、自动喷涂、型钢加工、起重焊接等百余台钢结构生产设备，年产异型钢结构可达6500吨；搭载数控裁切机器人、自动热合机、精密检测设备四十余台专业膜材加工设备，实现全流程精细化智造。

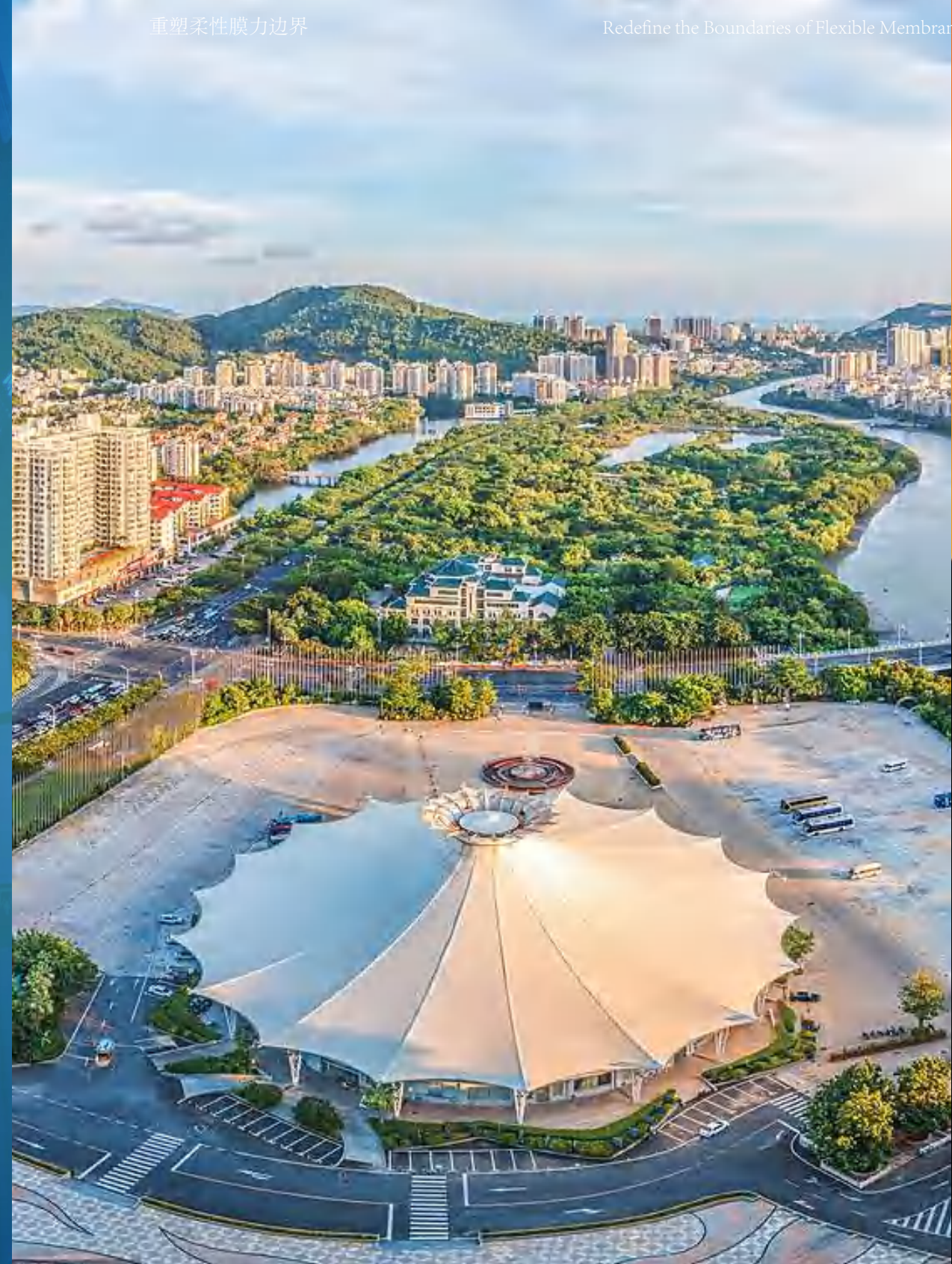
针对海外复杂工况，定制抗风、抗震、强防腐专项方案。依托模块化工厂预制、标准化跨境物流与本地化施工协作，实现短周期、高品质交付。同时具备多语言对接与跨境项目管理能力，提供远程技术支持与定期巡检，长效保障工程安全稳定运营。

With over 20 years of industry experience, Fanzhou has undertaken numerous domestic and overseas membrane structure projects with sophisticated technology, gaining widespread recognition. Adhering to the philosophy of excellence, integrity and innovation, we cooperate with global clients for win-win development.

Covering 12,000 m², our professional manufacturing base is equipped with over 100 steel processing devices including CNC cutters, shot blasting rooms and spraying equipment, with an annual output of 6,500 tons of special-shaped steel structures. More than 40 advanced membrane processing machines ensure precise and efficient membrane fabrication.

We provide customized wind-resistant, seismic and anti-corrosion solutions for overseas projects. Modular prefabrication, cross-border logistics and local cooperation support high-quality & short-cycle delivery.

With multilingual communication and cross-border management, we offer remote technical support and regular inspections for long-term safe operation.



资质证书

Qualification Certificate

深耕行业二十多年

膜结构专项制作一级证书



膜结构专项设计一级证书



膜结构专项安装一级证书



安全生产许可证证书



营业执照副本



ISO质量管理体系认证证书



ISO环境管理体系认证证书



ISO职业健康管理体系认证证书

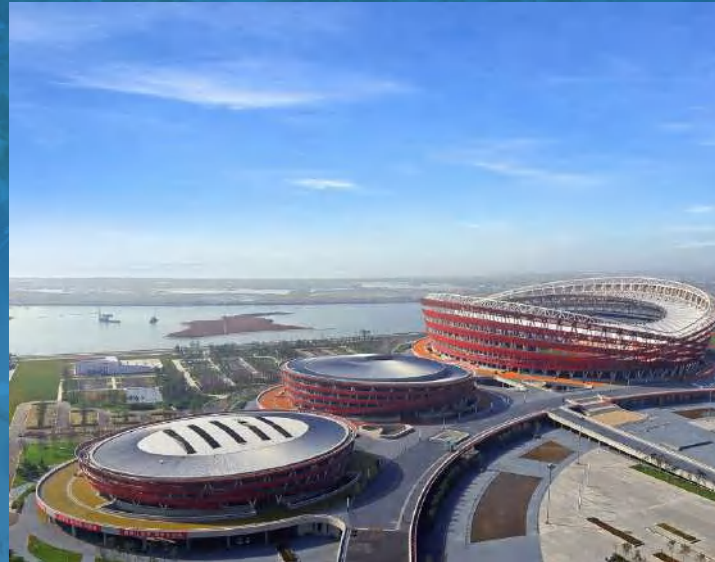


盘锦红海滩体育中心锦绣体育场

Jinxiu Stadium (Panjin Red Beach Sports Center)

盘锦市红海滩体育中心原名盘锦市体育中心、盘锦市奥体中心，主场馆由锦袖体育场、红伞体育馆、游泳馆与网球馆和商业综合体组成。盘锦市红海滩体育中心锦绣体育场位于辽宁省盘锦市辽东湾新区，主场馆由锦袖体育场、红伞体育馆、游泳馆与网球馆和商业综合体组成。主题红色的设计理念充分融合了盘锦著名国家级著名保护区红海滩的红色元素，鲜艳的红色如红飘带一般把红海滩体育中心一场三馆紧紧的包围其中，充分显示出其青春与朝气。

Keywords: 45,000 m² red PTFE mesh facade membrane, 26,000 m² white PTFE saddle tensile roof, asymmetrical cable-membrane system, 35,600 seats, completed 2013, constructed by Shanghai Taiyo Kogyo(STC), landmark coastal stadium in Northeast China



鄂尔多斯东胜体育场

Ordos Dongsheng Stadium

屋面整体采用永久性 PTFE 玻纤建筑膜材，划分为外圈固定膜屋面、中心可开启活动膜面两大区域。膜材透光率 20%~25%，自然光漫射入场，节能降耗；耐零下 40℃ 极寒、风沙紫外线，自洁耐用，设计使用寿命 30 年以上。中心活动膜顶可电动平移启闭，全程约 18 分钟完成开合，晴天敞顶还原露天赛场，雨雪密闭实现室内恒温赛事，兼顾专业竞技、大型演艺、全民健身多重用途，项目荣获鲁班奖、钢结构金奖等多项国家级工程大奖。

Total imported US-made translucent PTFE mesh facade membrane: 17,000 m² with 32% light transmittance, divided into 5 annular strip modules. PTFE features salt-fog resistance, typhoon-proof, self-cleaning & Class A fireproof, customized for Zhanjiang coastal humid climate. The whole complex follows “sea shell & ribbon” coastal design concept.



深圳宝安体育场

Bao'an Stadium (Shenzhen)

深圳市宝安体育场位于深圳市宝安区，深圳市区外围。这个体育场的主要建设目的是为了2011年的深圳国际大学生运动会，曾经是中国足球甲级联赛深圳红钻足球队的主场。

宝安体育场采用了竹林造型，有节节攀升的寓意。体育场的屋盖为马鞍形车辐式张拉索膜结构，屋盖平面为微椭圆形，平面尺寸大约为230米乘237米。屋盖的进深为54米。主结构为环索轮辐式结构，主结构分为两个中央的拉环和一个外部的压环。36根索桁架作为轮辐，连接着外拉环和内压环。在索桁架的上下径向索之间，为7条拉索和一根前端的立柱。

Keywords: 30,436 m² white PTFE tensile membrane, radial wheel-spoke cable-membrane saddle roof, 54m cantilever span, 40,050 seats, bamboo facade design, completed 2011, installed by Shanghai Taiyo Kogyo(STC), University landmark stadium in South China



湛江奥林匹克体育中心项目

Zhanjiang Olympic Sports Center

总用地面积为 664.51 亩，总建筑面积 18.47 万平方米——中国第一个PTFE膜结构建筑。该项目由一场三馆及周边配套道路工程两部分组成，建设内容包括：体育场（含训练场）、体育馆、综合球类馆、室外工程、周边配套工程等。项目整体设计贯穿“飘带”主题，凸显了如海湾一般自然流畅的规划，体育场以“海之贝”为理念，以“海螺”为母体，建筑形体简洁、纯净。

Total imported translucent PTFE mesh facade membrane: 17,000 m² for main stadium, total PTFE across the whole complex reaches 21,000 m², 32% light transmittance, Class A fire rating. Supported by exposed space steel grid frame, customized for coastal high salt-spray & typhoon climate of Zhanjiang, self-cleaning & UV-resistant, service life over 30 years. Facade divided into 5 annular membrane strips with variable width from 0.6m to 4m, inner backlit LED for night glowing shell effect.

里程碑

膜结构典范

越南国际会展中心 Vietnam Exposition Center

项目成就

Project Achievements

全球最大单体膜结构展馆：核心“金龟展馆”膜屋面展开面积12.4万平方米（约17个标准足球场），屋顶覆盖直径约375米，穹顶高56.26米，外檐最低8.8米。

全球最大圆形展馆：建筑面积10.49万平方米，9个展厅可连通为9.4万平方米无柱空间，地板承重5吨/㎡，满足重型展览需求。





作为东南亚规模领先的会展综合体核心建筑，金龟主展馆以越南传统金龟神为设计灵感，360 米超大直径圆形穹顶成为项目视觉核心，也是当今全球极具代表性的巨型膜结构地标工程。

项目屋面膜结构总面积达 12.4 万平方米，整体采用 PTFE 永久性建筑膜材，搭配重型空间钢桁架支撑体系，实现无柱大跨度空间效果。膜材自重轻、抗拉强度优异，具备 10% 自然透光率，白天可大幅降低室内照明能耗；同时依托优异的自清洁、耐候、抗水解性能，完美适配越南高温高湿的热带气候，设计使用寿命可达 25-30 年。

PTFE 膜材



永久耐用 | 不燃A级 | 地标建筑

As the core building of South-east Asia's leading exhibition complex, the Golden Turtle Main Exhibition Hall draws design inspiration from the traditional Vietnamese sacred golden turtle. Its 360-meter-diameter circular dome serves as the visual centerpiece of the project and stands as one of the world's most iconic large-scale membrane structure landmarks today.

The 124,000 m² roof uses durable PTFE membrane and heavy-duty spatial steel trusses to form a column-free large-span space. Lightweight and high-strength, the membrane has 10% natural light transmittance to save lighting energy. With outstanding self-cleaning, weather and hydrolysis resistance, it adapts well to Vietnam's hot humid tropical climate, with a designed service life of 25 – 30 years.

世界十大会展中心



生产加工基地

Production & Processing Base

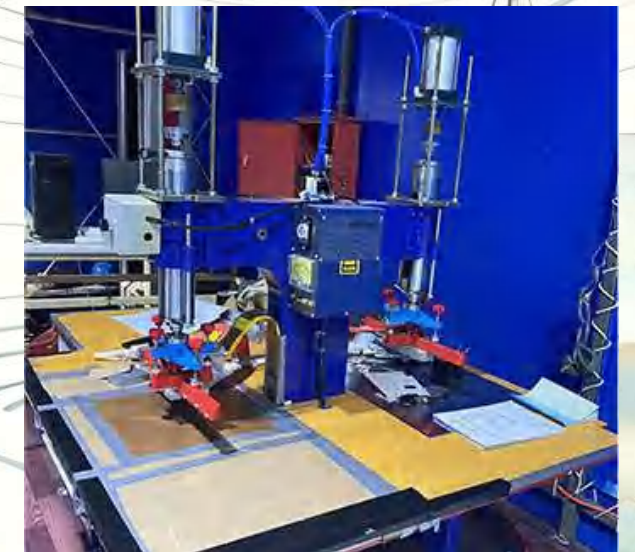
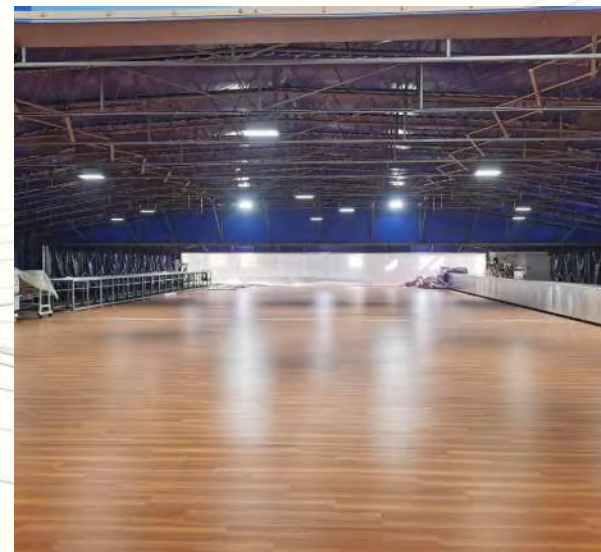


技术飞速革新，建筑精工慢行

Rapid Technological Innovation
Meticulous Architectural Craftsmanship

生产加工基地

Production & Processing Base



技术飞速革新，建筑精工慢行

Rapid Technological Innovation

Meticulous Architectural Craftsmanship



大型体育场罩棚
田径看台雨棚

体育馆屋顶
校园运动场地顶棚

网球/羽毛球/游泳馆
气膜综合运动馆

体育 与大型场馆

Sports & Large Stadiums

膜结构凭借超大跨度、无柱空间、自然采光及现代造型，成为现代体育场馆首选建筑形式，适配大型赛事、全民健身、校园体育、综合运动中心等场景。

With ultra-large span, column-free space, natural daylighting and modern styling, membrane structure has become the preferred architectural form for modern stadiums, suitable for major competitions, public fitness, campus sports and integrated sports centers.





柬埔寨国家体育场 · National Stadium of Cambodia



深圳大运中心 · Shenzhen Universiade Sports Center

超大无柱空间：百米级跨度无遮挡，视野通透，适合赛事、演出、会展多功能转换。

轻质高强：膜材自重约为传统钢屋面的1/30，减轻地基负荷，节省钢材与基础造价；可抗8-10级风、暴雪，使用寿命20-30年。

自然采光+节能：PTFE/ETFE透光率40%-95%，漫射光均匀，白天可零照明；双层膜隔热保温，空调能耗降低30%+。

施工快+可复用：工厂预制、现场拼装，工期缩短50%；气膜/张拉膜可拆卸迁移，适合临时赛事或校园快速建设。

造型自由+地标性：曲面、马鞍形、穹顶等异形设计，视觉轻盈现代，易成城市地标（如深圳大运中心、无锡奥体中心）。



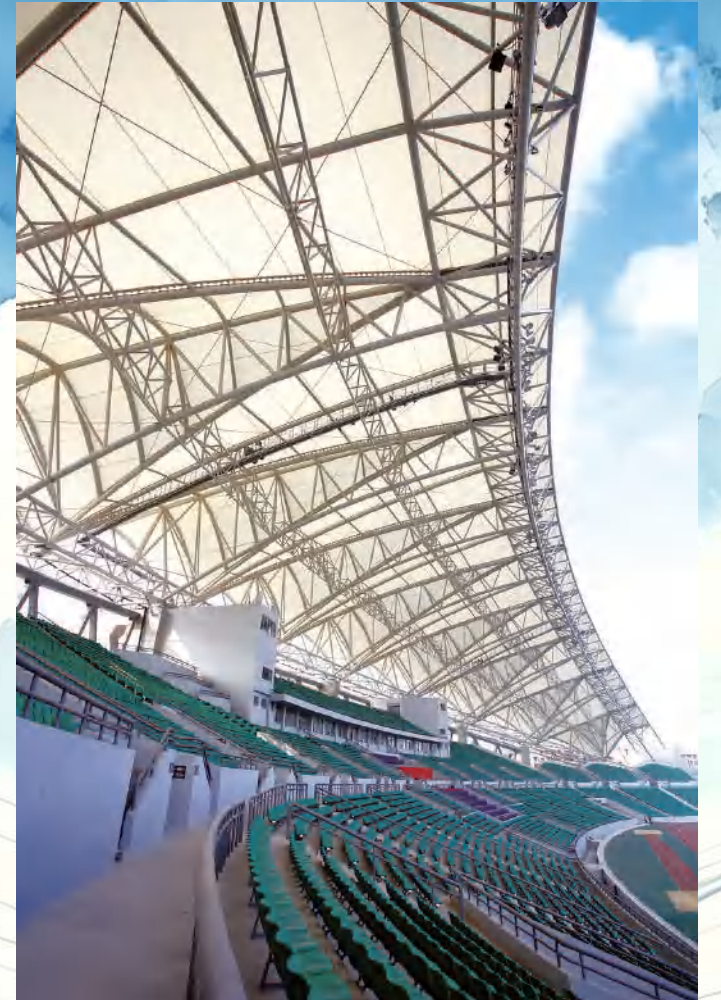
上海交大体育馆 · Shanghai Jiao Tong University Gymnasium



上海位育中学体育场看 · Stand of Stadium, Shanghai Weiyu Middle School



漳州体育馆 · Zhangzhou Gymnasium



广东广州大学体育场膜安装 · Membrane Structure of Guangzhou University Stadium



上海复旦大学体育馆 · Gymnasium of Fudan University



绍兴中国轻纺城体育中心体育场 · Shaoxing Textile City Stadium

Column-free long-span structure creates unobstructed open space, adaptable for sports events, performances and multi-purpose activities.

Ultra-light membrane reduces steel and foundation costs significantly. It features excellent wind and snow resistance with high structural stability.

Natural diffused light fills interior to cut daytime lighting consumption; superior thermal insulation saves air-conditioning energy.

Sleek contemporary outlines deliver outstanding aesthetics, ideal for constructing distinctive venues and iconic urban sports landmarks.

Standardized factory prefabrication and on-site modular assembly greatly shorten the construction cycle and realize efficient project delivery.



枣庄体育场 · Zaozhuang Stadium



深圳宝安体育场 · Bao'an Gymnasium



章丘体育场 · Zhangqiu Gymnasium



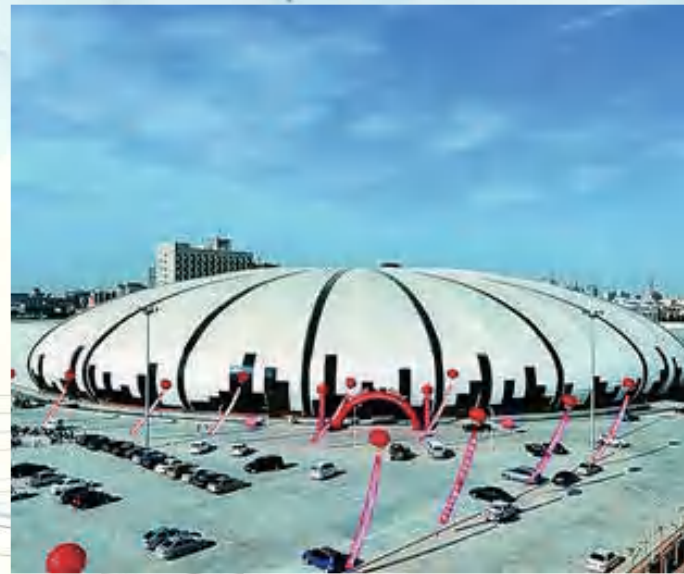
四川凤凰山体育馆 · Chengdu Phoenix Mountain Indoor Stadium



上海徐汇游泳馆 · Xuhui Natatorium



德清地理信息小镇篮球场 · Deqing Geographic Information Park Basketball Court



宁夏亲水体育中心膜屋顶 · Membrane Roof of Ningxia Hydrophilic Sports Center



鄂尔多斯东胜体育场 · Ordos Dongsheng Stadium



湛江奥体中心 · Zhanjiang Olympic Sports Center



白鹭体育场 · Egret Stadium



江苏江南大学体育场看台 · Jiangnan University Stadium Spectator Stands



濮塘体育馆 · Putang Gymnasium



梁丰高级中学体育场看台 · Liangfeng Senior High School Stadium Membrane Roof Stands



上海卢湾体育场 · Shanghai Luwan Stadium



广州大学城体育中心 · Guangzhou University Town Sports Center Stadium



唐海国际专家服务中心 · Tanghai International Expert Service Center



定西体育场 · Dingxi Stadium

火车站站台雨棚
城市连廊通道

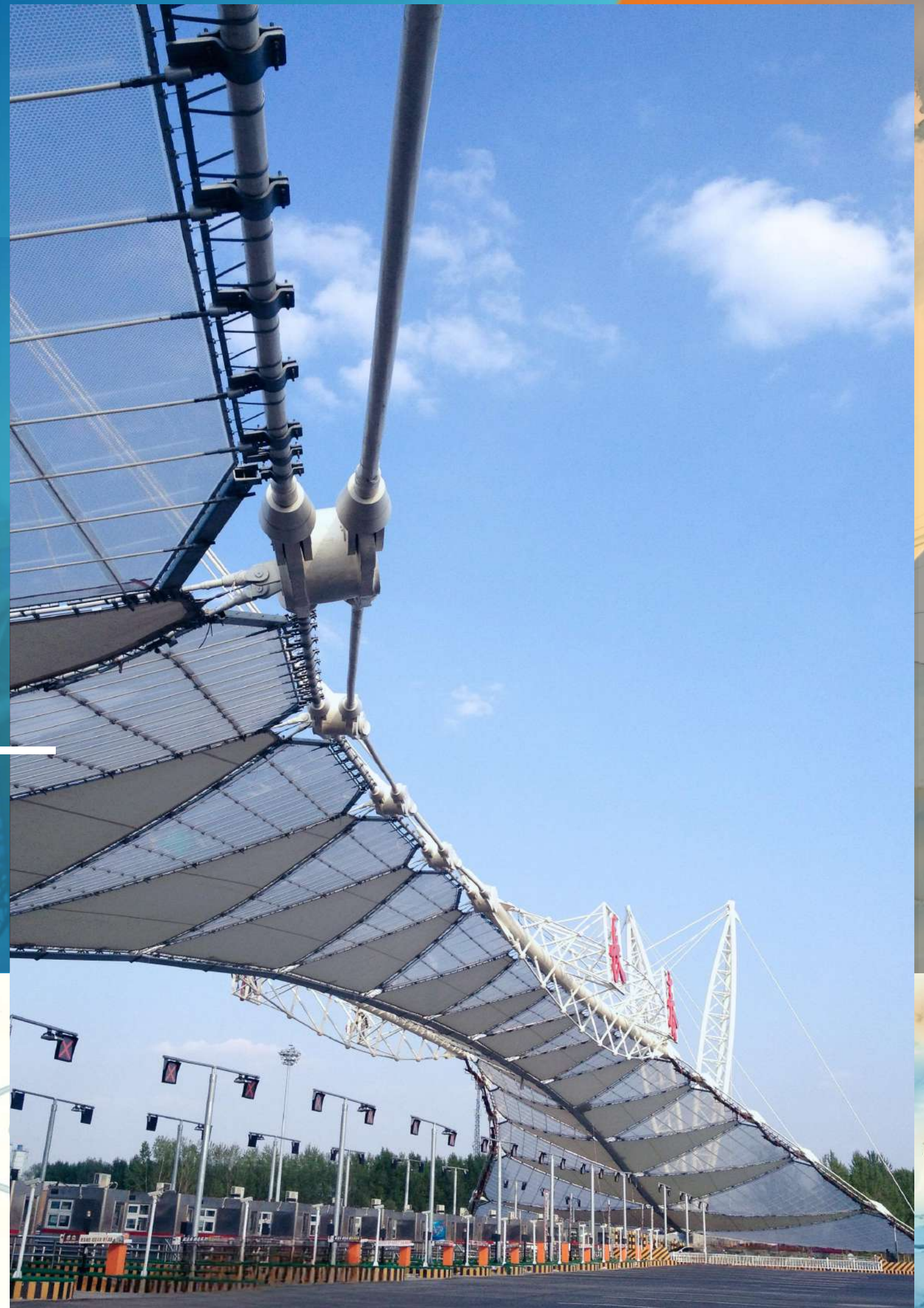
人行天桥遮雨棚
园区及小区停车棚

高速公路收费站顶棚
道路隧道出入口遮光罩棚

交通 与基础设施 Transport & Infrastructure

膜结构适配交通工程大跨度、露天耐候、通透美观、改造便捷需求，是现代城市交通及市政基建的标配配套设施。

Tensile membrane structures meet the requirements of transportation projects for large span, outdoor weather resistance, transparency and aesthetic appeal, as well as convenient renovation. They have become standard supporting facilities for modern urban transportation and municipal infrastructure.





随州南站 · Suizhou South Railway Station

大跨度无柱空间：轻松实现几十米甚至上百米跨度，适合收费站、车站、天桥、大面积停车场，无遮挡、通行无障碍。

自重极轻、荷载小：膜材自重仅为传统钢结构屋面的 1/20~1/30，不用大幅加固原有建筑 / 桥梁基础，改造新建都省钱。

耐候防腐、使用寿命长：露天风吹日晒、雨雪霜冻环境下，PTFE 可达 25 - 35 年，PVDF15 - 20 年，抗紫外线、不生锈、不易老化。

自洁易维护：膜表面不积灰、雨水自洁，不用频繁清洗，适合道路、车站、天桥等不易高空维护的场景。

施工周期短：工厂下料预制，现场组装张拉，比传统钢结构屋面工期缩短一半以上，不影响交通正常通行。

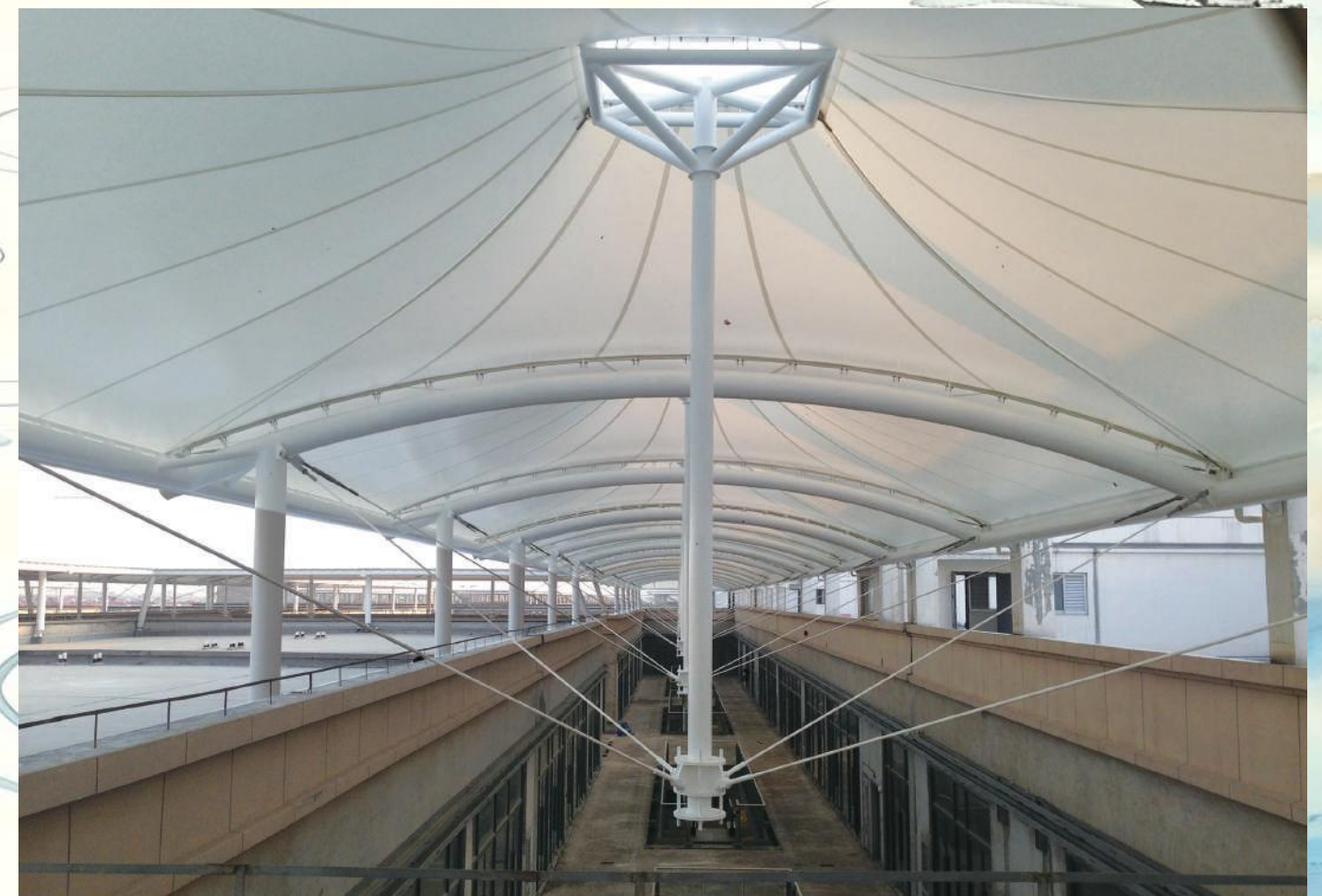
造型美观、适配城市规划：可做弧形、马鞍形、波浪形、异形曲面，线条流畅，能作为城市道路、高铁站、天桥的景观地标。



上海高行商业中心中庭 · PRISMA New Jia Center Atrium



澳大利亚珀斯 · 兰利之链 | Link at Langley



上海红星美凯龙地球村 · RMAC Global Home Mall



北京首都机场停车楼 · Beijing Capital International Airport Parking Garage



库尔勒机场入口 · Korla Licheng Airport T2 Terminal Entrance Tensile Membrane Canopy



南京四桥南北区收费站 · Nanjing Qixiashan Yangtze River Bridge Toll Gates



上海浦东机场商业街 · Shanghai Pudong Airport Commercial Boulevard



河北唐山机场 · Tangshan Sannvhe Airport Terminal Membrane Structure Roof



草地滚球俱乐部顶棚 · Bowling Green Tensile Roof

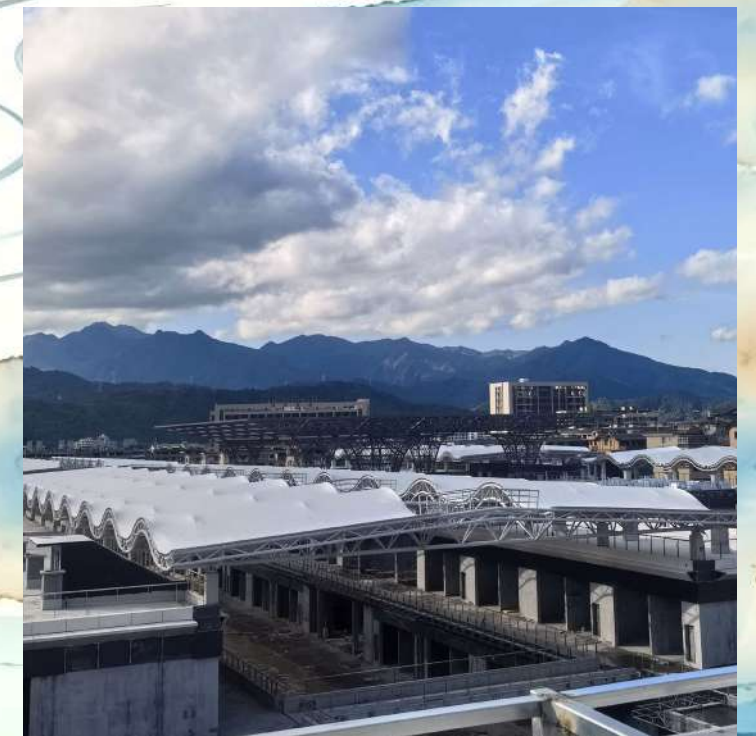
The column-free large-span structure delivers unobstructed vision and spacious passage, without blocking traffic signs, ensuring smooth and safe traffic flow.

The ultra-light membrane eliminates the need for extensive reinforcement of existing structures, fully compatible with both new construction and renovation projects.

UV-resistant, waterproof and anti-corrosive membrane features rain self-cleaning performance, greatly reducing later maintenance workload and costs.

With a minimalist and elegant appearance, it blends well with urban road landscapes, beautifies public spaces and enhances urban image.

It features moderate cost and rapid on-site installation. The construction causes minimal interference and ensures normal traffic operation.



南方食药两用项目 · China Southern Medicinal & Edible Fungi Trading Center



上海火车站 · Shanghai Railway Station



吴江停车场 · Wujiang Membrane Structure Parking Lot/Canopy



江苏宜兴森林公园 · Yixing Longbeishan Forest Park Roller Coaster - Membrane Structure Canopy



临港人行天桥 · Lingang Center Pedestrian Bridge



烟台胜地汽车 · Yantai Winhere Auto Parts Manufacturing Co., Ltd.



北京首都机场收费站 · Beijing Capital International Airport T3 South Toll Plaza



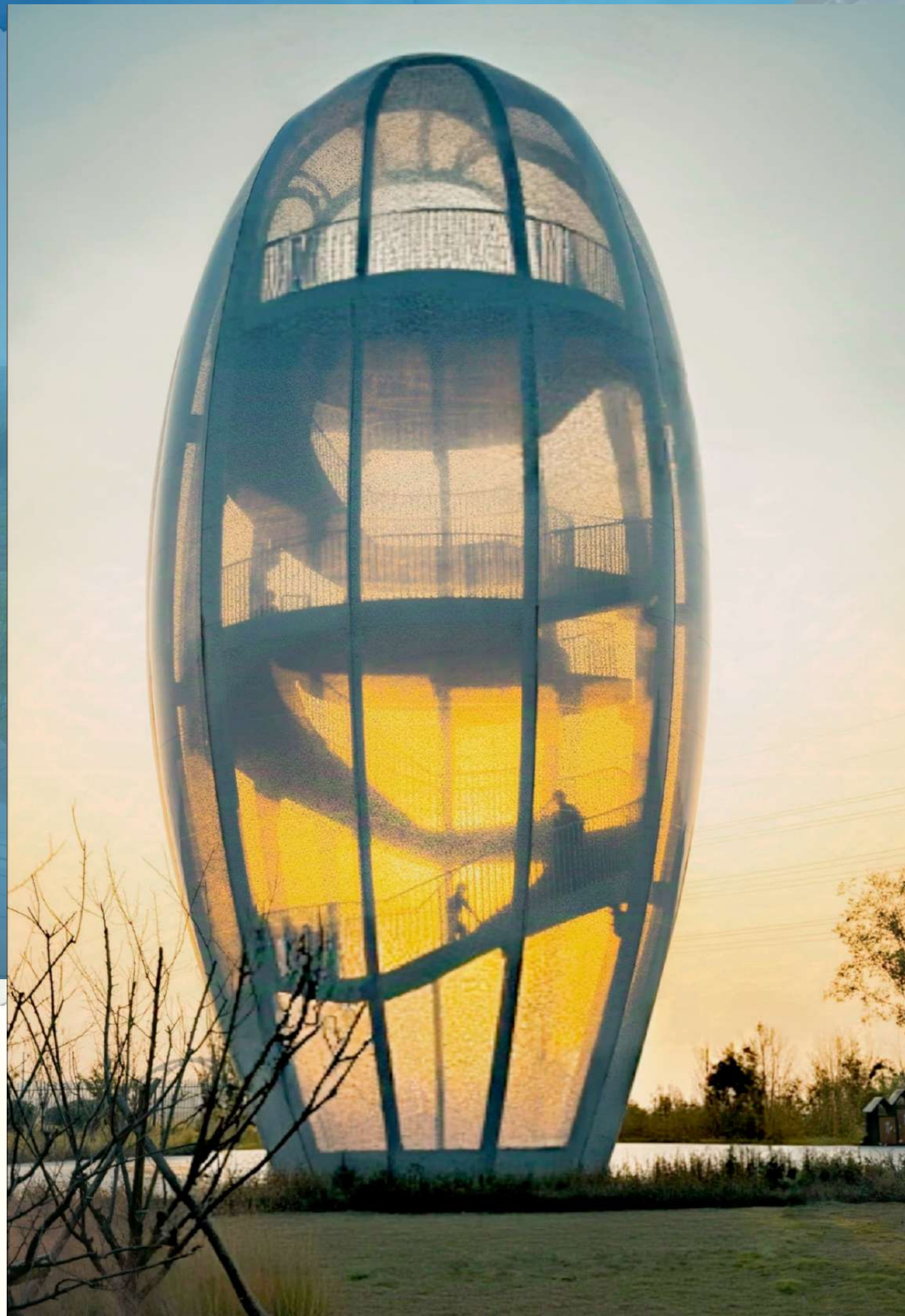
北京丰台站 · 中央光庭ETFE膜结构 · Beijing Fengtai Railway Station - Central Atrium ETFE Membrane Structure

商业 与景观小品

Commercial & Landscape Canopies

膜结构兼具实用功能与艺术造型，是商业地产、文旅景区、市政公园、高端小区提升颜值与体验感的核心景观配套。

Membrane structures combine practical performance and artistic styling, serving as core landscape facilities to upgrade aesthetics and user experience for commercial real estate, scenic spots, municipal parks and high-end residential communities.

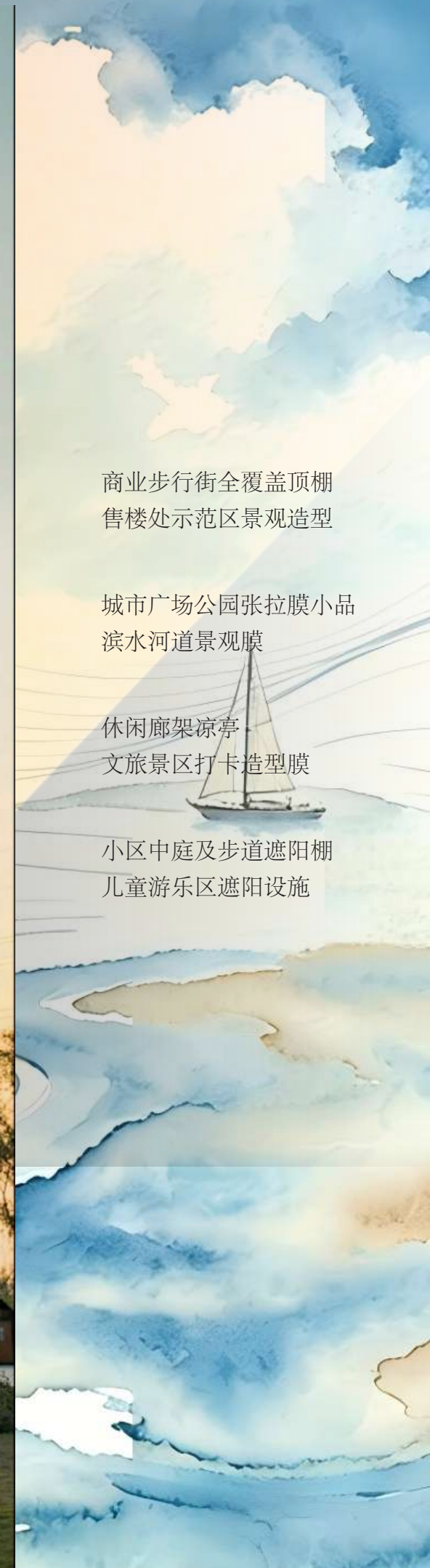


商业步行街全覆盖顶棚
售楼处示范区景观造型

城市广场公园张拉膜小品
滨水河道景观膜

休闲廊架凉亭
文旅景区打卡造型膜

小区中庭及步道遮阳棚
儿童游乐区遮阳设施



造型艺术感强：可做任意曲面、异形造型，轻盈灵动，远超传统钢结构、混凝土、木质景观。

遮阳防雨、四季可用：有效隔热降温，夏季比露天低 5-8℃，雨天不淋行人。

自重轻、基础造价低：荷载小，不需要厚重基础，适合公园软土地、湖边、广场改造。

自洁耐候、免频繁维护：PVDF/PTFE 膜抗紫外线、不褪色、雨水自洁，露天可用 15-30 年。

施工快、颜值高、易亮化：工厂预制现场安装，工期短；可搭配灯带、夜景亮化，夜晚氛围感拉满，适合商业夜游。

色彩丰富可定制：可做纯白、浅灰、渐变色、企业标准色，匹配商业调性与园林风格。



上海世博未来馆膜结构 · 2010 Shanghai World Expo · City of the Future Pavilion



沃克街88号建筑下表面 · 88 Walker Street (North Sydney) - Cantilever Soffit / Underside

Free and flexible modeling supports wave shapes and special curved surfaces, presenting unique visual effects and strong artistic appeal.

It provides sunshade and rain protection, insulates heat in summer to create cozy all-weather leisure space.

Diversified color options plus customized night lighting help build popular internet-famous landmarks.

Excellent anti-corrosion and fade resistance ensures long service life outdoors.

High cost performance and quick construction; more contemporary than traditional pavilions and iron pergolas.



深圳华侨城大峡谷 · Shenzhen OCT East Knight Valley (Grand Canyon)



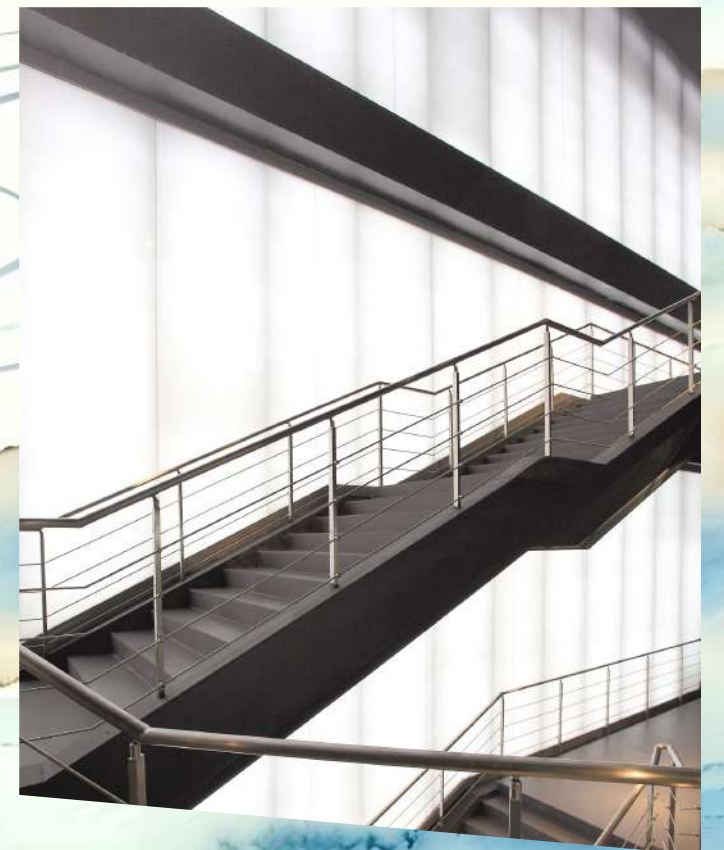
上海世博韩国企业联合馆 · 2010 Shanghai Expo - Korean Corporate Pavilion



上海世博江南广场 · 2010 Shanghai Expo - Jiangnan Square (Outdoor Stage Membrane Structure)



北京水立方戏水中心 · Beijing National Aquatics Center (Water Cube) - Water Park & Landscape Membranes



上海世博意大利馆 · 2010 Shanghai Expo - Italy National Pavilion (Indoor Double-Layer ETFE Membrane)



南宁国际会展中心 · Nanning International Convention and Exhibition



上海世博日本馆 · 2010 Shanghai Expo Japan Pavilion



上海世博挪威馆 · 2010 Shanghai Expo - Norway Pavilion (Norwegian Forest)



上海金山沙滩长廊 · Shanghai Jinshan Beach Promenade



青岛伊甸园 · Qingdao Oriental Eden



上海世博会比利时馆膜结构 · 2010 Shanghai Expo - Belgium-EU Pavilion (Brain Cell Membrane)



上海世博会宝钢舞台膜结构 · 2010 Shanghai Expo - Baosteel Stage Membrane Structure



澳洲雪佛龙万丽购物中心中庭 · Chevron Renaissance Shopping Centre Central Atrium



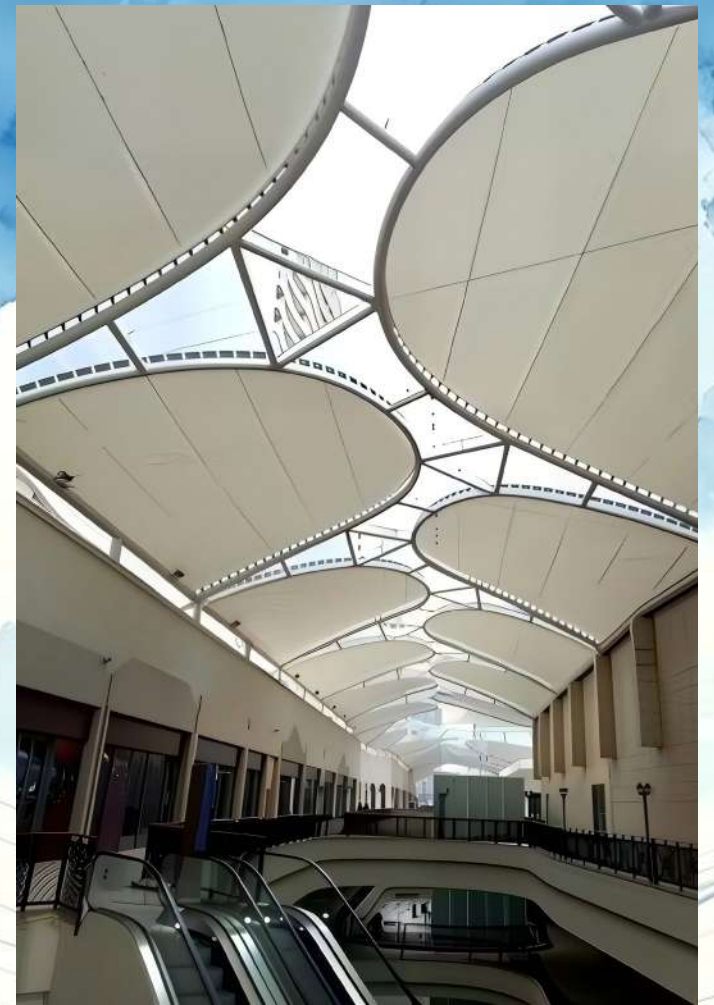
浙江黄岩贡橘园 · Zhejiang Huangyan Tribute Orange Garden



松江中央公园八爪鱼 · Songjiang Central Park “Octopus” Tensile Membrane Pavilion



智汇光谷 · 超级大伞 · Dezhou Solar Town · Wisdom Valley Super Umbrella



山东烟台星颐广场 · Yantai Xingyi Plaza



无锡潮宏基立面门头 · CHJ Jewellery (Wuxi Chong'an Temple Flagship Store) Facade & Entrance



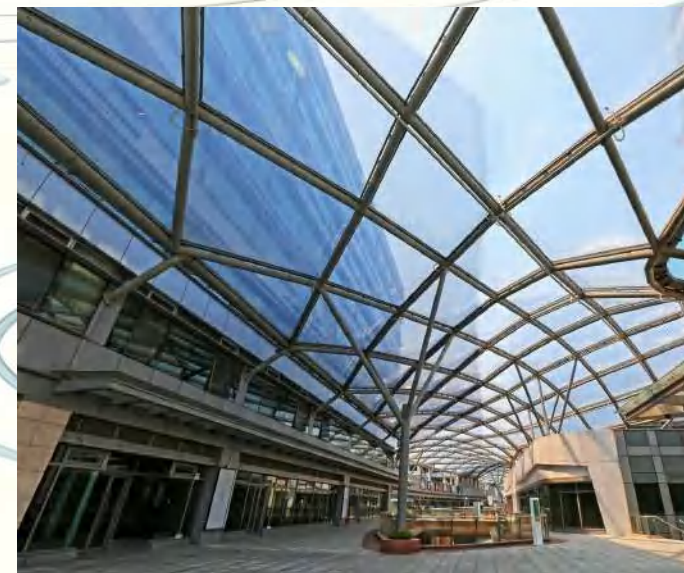
烟台胜地汽车 · Chengdu Lan Kwai Fong Sky Canopy



宿迁吾悦广场地下车库入口膜结构 · Suqian Injoy Plaza Underground Parking Entrance Membrane Structure



中国第八届花博会特馆和创意馆 · Changzhou Flower Expo Main Hall



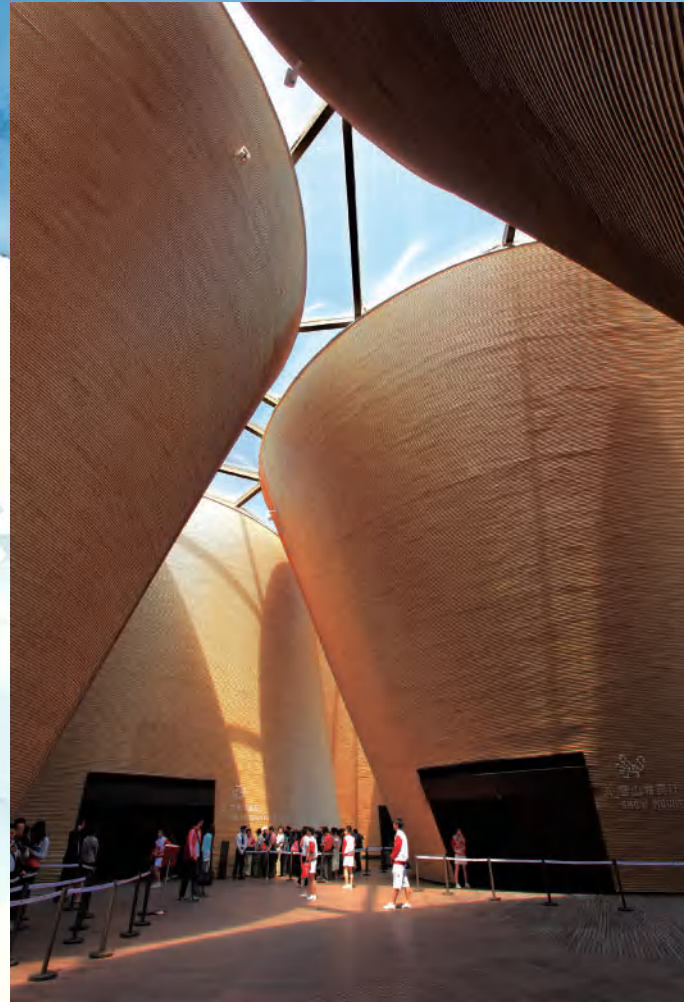
上海建滔广场天幕 · Kingboard Square Sky Canopy (Shanghai)



兰州中海天幕 · Lanzhou Zhonghai ETFE Sky Canopy



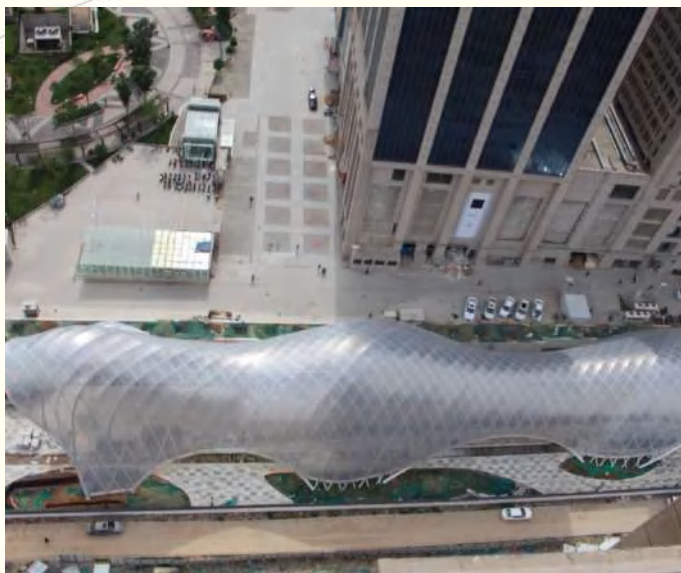
成都露天音乐广场 · Chengdu Open-air Music Park



上海世博会万科馆膜结构 · 2010 Shanghai Expo - Vanke Pavilion



上海三重莫比乌斯环景观小品 · 2023 Shanghai Rowing Open - The Eddy Pavilion



西安纺织城铁路主题公园（机车公园）艺术连廊 · Xi'an Textile City Locomotive Park Art Corridor



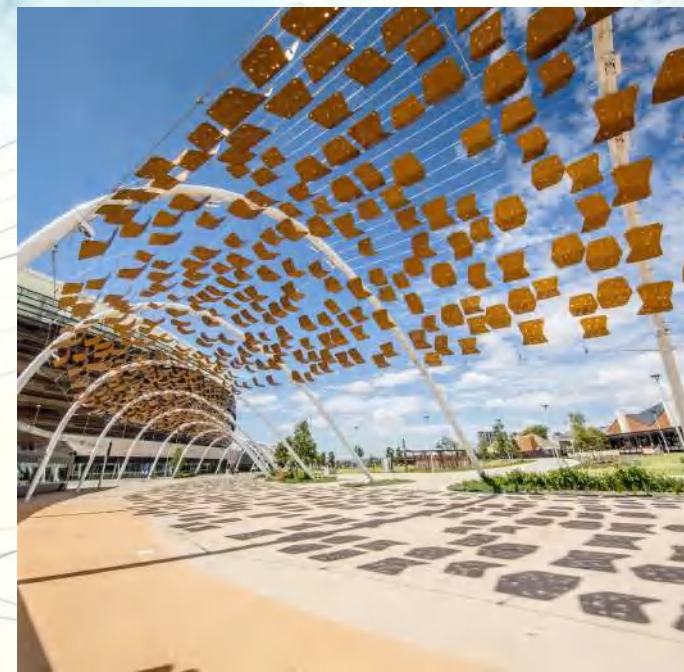
上海世博会芬兰馆内膜结构 · Finland Pavilion (Shanghai Expo 2010) Inner Membrane



澳大利亚悉尼沃里克农场 · Warwick Farm



Wangun 露天剧场 膜构造阳棚 · Wangun Project



珀斯体育场廊架索网天幕 · Perth Stadium Harbour



纽约多米诺公园网格膜 · Domino Park Cable-Net Mesh Canopy (New York)



德州太阳能小镇太阳翼 · Dezhou Solar Town · Solar Wing



工业化工防腐设备罩棚 港口散料堆场防尘棚 煤矿砂石料场全封闭气膜棚
物流堆场卸货雨棚 气膜粮仓 临时工业厂房与应急仓储

环保 与工业设施

Environmental Protection & Industrial Facilities

膜结构以全封闭、强防腐、大空间、抑尘除臭、快速建设特点，成为环保治理、工业仓储、物料堆场的合规标配方案。

Featuring full enclosure, superior corrosion resistance, large-span space, dust and odor suppression, as well as rapid construction, membrane structures have become the standard compliant solution for environmental governance, industrial warehousing and material storage yards.





极致密封控污：全封闭设计，抑尘率>95%、除臭率>99%，彻底解决扬尘 / 臭气外溢，环保合规首选。

伸缩结构：轻松实现100 - 200 米跨度，内部无梁柱，空间利用率>90%，大型设备自由作业。

耐腐抗老化：pvc 膜材抗酸碱、抗紫外线、自洁，露天可用15 - 30 年，高腐蚀环境稳定运行。

快速施工 + 低成本：工厂预制、现场组装，工期缩短 50% 以上；自重轻（仅为钢结构 1/20），基础造价低，整体省 30% - 50% 成本。

智能运维 + 节能环保：配套智能系统（通风 / 降尘 / 监测 / 温控），能耗为传统建筑 30% - 50%；膜材可回收，符合循环经济。

灵活适配 + 可拆迁：可定制异形曲面，适配复杂场地；气膜 / 张拉膜可快速拆迁、重复使用，适合临时 / 中期项目。



The fully enclosed structure achieves efficient dust suppression, deodorization and anti-seepage, fully meeting environmental inspection standards.

Column-free extra-large span enables free operation of large machinery indoors and improves space utilization.

Resistant to acid, alkali, corrosion and aging, the material maintains stable performance, suitable for chemical, sewage, high-dust and other harsh environments.

Compared with traditional steel structures, it features lower overall cost and more than half shorter construction period, greatly saving project investment and time.

Detachable and reusable structure adapts to temporary and medium-long term industrial projects, delivering excellent flexibility and economy.



伞类设施

Umbrella-style Membrane Facilities

张拉膜伞造型轻盈灵动，安装便捷，可单体布置或连片组合，广泛用于商业街、休闲广场、滨水步道、小区休憩区，遮阳防雨，点缀景观，打造轻量化户外休憩空间。

Umbrella-shaped tensile membrane canopies feature elegant appearance and easy installation. Available in single unit or connected clusters, they are widely deployed in commercial streets, plazas, waterfronts and residential rest zones for sunshade, rain protection and landscape beautification.





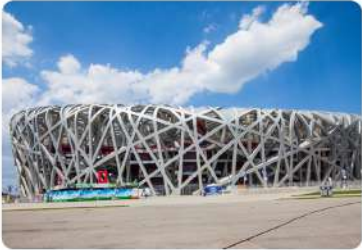
原材料特性

乳白色半透明，质感硬挺，可见玻璃纤维肌理。由高强度玻璃纤维编织基布，经聚四氟乙烯（PTFE）乳液浸渍涂层制成。

核心优势与指标

核心特点：高强耐久 · 自洁极佳 · 不燃 · 抗老化，是真正意义上的永久性建筑材料。

- ◇ 抗拉强度：300-400 MPa
- ◇ 透光率：5% - 15%
- ◇ 设计寿命：25-30年+
- ◇ 防火等级：A级（不燃）



经典应用案例

广泛应用于大型地标性公共建筑，兼顾美学与功能性。
代表建筑：北京国家体育场（鸟巢）、广州白云国际机场、国家会展中心(上海)。

1500克白色 pvc膜布



原材料特性

主要以聚氯乙烯为原料，通常为白色或彩色卷材。布面纹理清晰可见，触感柔软，具备一定的拉伸弹性，便于裁剪与拼接。

核心特点与关键指标

优势：性价比极高，易加工成型，色彩丰富多样。
局限：物理强度中等，徐变较大，表面自洁性一般，整体寿命相对较短。

抗拉强度 120-180 MPa	透光率 6% - 13%
设计寿命 10 - 15 年	防火等级 B1级



典型应用场景

广泛应用于对成本敏感且对使用年限要求不高的项目，例如：临时展览馆、大型体育场馆看台、户外车棚、步行街遮阳顶篷及各类景观小品等。



原材料特性

外观呈完全透明状，质感类似厚胶片。不含基布，是一种高强度、极轻质的**纯膜材**。

核心特点 & 关键指标

**极致透光 · 重量极轻
自洁性强 · 100%可回收**

1% 同厚玻璃重量	85%-95% 可见光透光率
20-25年 设计使用寿命	B1级 建筑防火等级



典型应用场景

国家游泳中心“水立方”
大型生态植物园穹顶
商业综合体采光顶

1100克白色 PVDF膜布



原材料展示

哑光白色，表面更细腻，增加了PVDF涂层，质感与性能双提升。

核心特点与指标

在PVC基础上增加一层**PVDF涂层**，显著提升了**耐候性与自洁性**，有效防止材料老化发黄，延长维护周期。

 15-20年 超长使用寿命
 B1级 难燃标准



应用案例展示

广泛应用于城市商业设施、中档景观工程项目、以及校园体育看台的升级改造等场景。



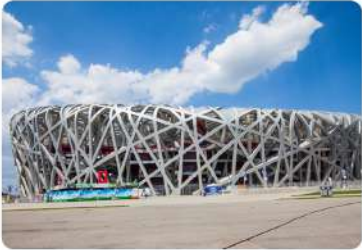
Raw Material Characteristics

The PTFE membrane presents a milky white translucent appearance with a stiff and tough texture. The glass fiber base cloth features excellent dimensional stability, laying a solid foundation for the material's super-strong durability and weather resistance.

Core Advantages & Key Indicators

High strength, durable, excellent self-cleaning, non-combustible, and anti-aging. It is a truly permanent building material.

- Tensile Strength: 300-400 MPa
- Light Transmittance: 5% - 15%
- Design Life: 25-30+ Years
- Fire Rating: Class A (Non-combustible)



Classic Application Cases

Widely used in landmark projects such as the Beijing National Stadium (Bird's Nest), large airport terminals, and convention and exhibition centers. Its ultra-thin structure and fire resistance have set a new durability benchmark for modern large-span architecture.



Raw Material Characteristics

Mainly composed of high-quality polyethylene (PE) as the base fabric, usually in white or customizable color fabric. The fabric has a clear texture, soft and smooth hand feel with a certain degree of tensile elasticity, easy to cut and splice, which effectively reduces the difficulty of the construction cycle.

Core Features & Key Indicators

Tensile Strength 120-180 MPa	Light Transmittance 6% - 13%
Design Life 10 - 15 Years	Fire Rating B1 Class



Typical Applications

Ideal for projects that are cost-sensitive and have low requirements for service life, and are widely used in temporary exhibition halls, large stadium stands, outdoor carports, pedestrian street awnings and urban landscape decorations.



Raw Material Characteristics

ETFE membrane is a completely transparent, ultra-thin architectural film. Structurally a thick, flexible film, it is extremely lightweight, making it a pioneering and innovative material for modern architecture.

Core Features & Key Indicators

It is ultra-light and self-cleaning during use. 100% recyclable but requires a sophisticated inflation system and is the most expensive.

1% Weight (of glass)	85% - 95% Transmittance
20-25 Years Lifespan	B1 Class Fire Rating



Typical Application Scenarios

Widely used in iconic projects like the Beijing National Aquatics Center (Water Cube), modern botanical gardens, sky lights, and stadium roofs, where creating visually striking structures is paramount.



Raw Material Display

Matte white in appearance, featuring a finer and smoother surface texture. The added PVDF coating enhances both texture and performance, making the material more resistant to yellowing and aging.

Core Features & Indicators

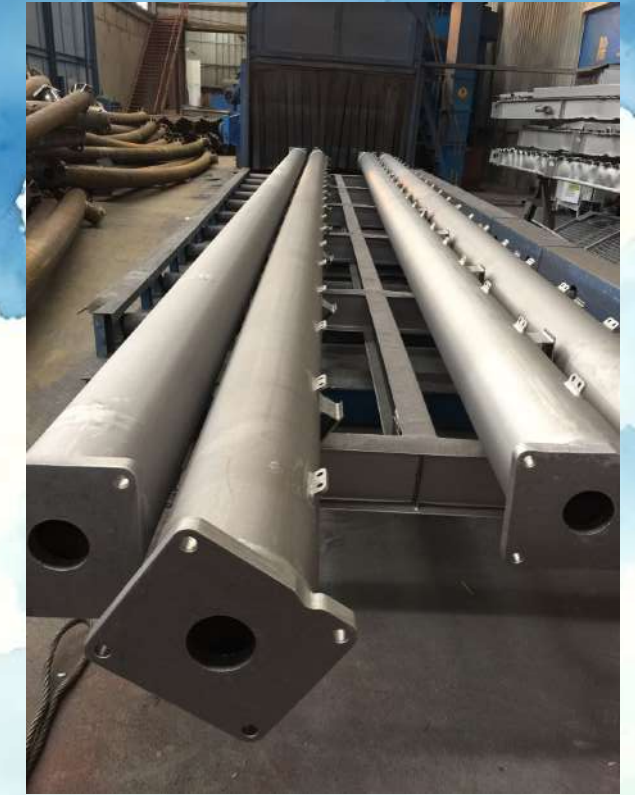
Based on PVC substrate, the PVDF coating significantly improves weather resistance and self-cleaning properties, effectively preventing yellowing and extending the service life.

15-20 Yrs(Long Service Life)
Class B1(Fire Rating)



Application Case Display

Ideal for urban commercial facilities, mid-to-high-end landscape engineering projects, and the upgraded transformation of campus stadium stands. Its stability and low maintenance make it the first choice for projects pursuing both long-term beauty and practicality in large scale constructions.



钢结构加工与安装

Steel Structure Fabrication & Installation

从板材除锈、精密下料，到组焊校正、防腐涂装，全程标准化作业。抛丸处理严格按照标准执行，数控切割精准应对复杂曲面，持证技师规范焊接，关键节点无损探伤。最后经多道环氧底漆与耐候面漆喷涂，赋予钢结构长久防腐与精准形态，为膜体立骨塑形。

We adopt full-process standardized operations covering steel plate derusting, precision cutting, assembly welding and anti-corrosion coating. Steel surfaces undergo strict shot blasting, while CNC cutting ensures precise forming of complex curved surfaces. Welding is performed by certified technicians, with non-destructive testing for key joints to guarantee structural safety. Multi-layer epoxy primer and weather-resistant topcoat endow steel structures with superior corrosion resistance and accurate dimensions, delivering reliable structural support for membrane systems.



钢结构加工与安装

Steel Structure Fabrication & Installation

每件钢构件出厂前，均须通过尺寸复核、焊缝探伤与涂层检测，确保零缺陷交付。现场安装以精密测量定位，大型桁架分段吊装，高强螺栓与焊接节点双重紧固。全程跟踪校正，使钢骨架空间曲面与设计模型精准吻合，为膜体张拉提供坚实有力的刚性依托。

All steel components undergo dimensional inspection, weld flaw detection and coating testing prior to factory delivery to guarantee defect-free supply. On-site installation adopts precise survey positioning; large trusses are hoisted in segments with dual fastening via high-strength bolts and welded joints. Continuous realignment ensures the spatial curved steel frame matches the design model accurately, forming a rigid base for subsequent membrane tensioning.

设备安装

Equipment installation



咨询沟通，需求对接

客户咨询膜结构相关需求，我们安排专业顾问一对一沟通，明确项目用途、场地尺寸、预算范围、造型要求、工期节点等核心信息，初步解答客户疑问，提供初步方案思路。

现场勘测，方案设计

专业勘测团队上门勘测场地，结合现场地形、环境、荷载等实际情况，由资深设计师团队设计专属方案，包含结构设计、膜材选型、造型渲染、造价核算等，方案修改优化至客户满意。

合同签订，工厂预制

双方确认方案后，签订正式施工合同，明确双方权利义务、工期、付款方式等细节。同步启动膜材裁剪、钢结构加工等工厂预制工作，严格遵循行业标准，确保产品质量。

现场安装，规范施工

预制完成后，施工团队上门安装，严格按照施工规范操作，做好安全防护、进度管控，减少对现场环境及正常运营的影响，确保施工安全、高效推进，按期完工。

Consultation & Requirement Confirmation

Our specialists provide one-on-one consultation to confirm site size, usage, budget, design and schedule, offering preliminary proposals after answering inquiries.

Site Survey & Scheme Design

Our professional team conducts on-site surveys based on site terrain, environmental conditions and load parameters. Senior designers provide customized solutions including structural design, material selection, rendering and cost accounting, with continuous optimization until client satisfaction.

Contract Signing & Factory Prefabrication

After scheme confirmation, official construction contracts are signed to clarify rights, obligations, construction periods and payment terms. We immediately launch standardized factory prefabrication including precise membrane cutting and steel structure processing, strictly following industry standards to guarantee product quality.

On-site Installation & Standardized Construction

Upon prefabrication completion, our crew performs on-site installation per construction codes. We manage safety and schedule to minimize site disruption and deliver projects on time.

服务流程 Service Process

从图纸到落地全周期精准结构计算

Accurate structural calculation runs through design to completion. Load and wind pressure analysis ensures safe bearing of steel frames and membranes.

创新膜结构

未来新空间





SHFZ

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上海泛洲膜结构工程有限公司