



**HEXANOM**



**HEXANOM** is a design & build company for fluid, organic structures. Ten years of experience and speciality in organic structures composed of single-layer and spaceframes structures, glazing and cladding with various high-tech materials, make us exceed in engineering and design of any project that has its own story to share. Our interdisciplinary method is based on involving professionals from different areas of expertise in joint teamwork and delivering in a seamless way excellent organic projects, where the architect's vision is the only limitation.



### **DESIGN**


Our Bespoke Design Consulting Firm specializes in developing complex architectural project design, from concept generation and 3D development to high quality delivered structures.

### **ENGINEERING**

We develop on a case-by-case basis to combine project aesthetics and performance with smart design and precision engineering.

### **BUILDING**

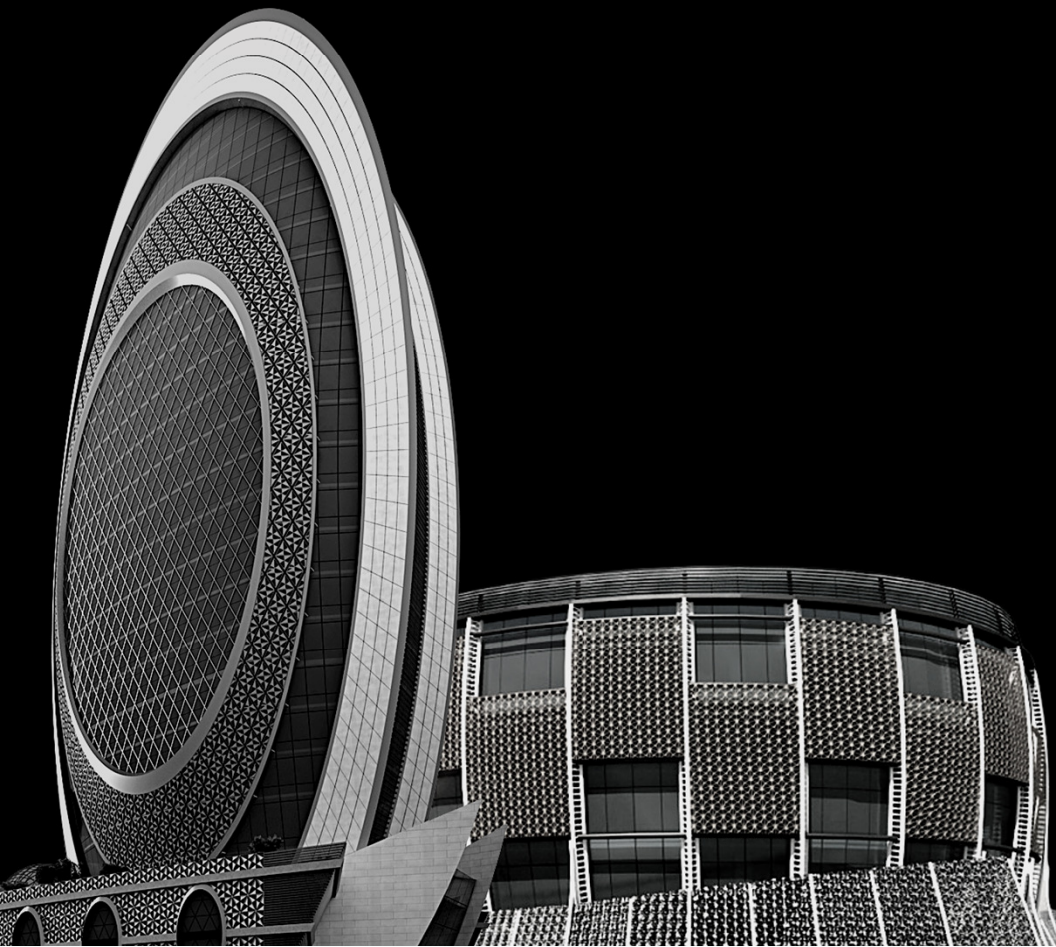
Our innovative design, advanced engineering, outstanding execution and service allow us to build any configuration as flat or free form structure, curved or waved, sphere or pyramids.



# HEXANOM

Bespoke Design

Our Bespoke Design Consulting firm specializes in developing complex architectural project design, from concept generation and 3D development to high quality delivered structures. We are experienced in organic and fluid structures. We provide a personalized service adapted to the architect's needs, and we are happy that our clients get involved in the project as they wish. Therefore, we will be available at all stages of the process, from feasibility design to completion of the installation. **HEXANOM** guarantees precise attention to detail for the duration of the project.



# HEXANOM

## Single Layer Structures

Inspired By Nature

More and more architects are beginning to draw inspiration from nature to design free-form buildings. A new concept of architectural expression. They are reproaching the use of free form shapes in traditional architecture. Freeform is giving a way to structural designs that were previously impossible. The geometries and shapes are now limited only by the architect's imagination. Dynamic structures for all architectural applications.



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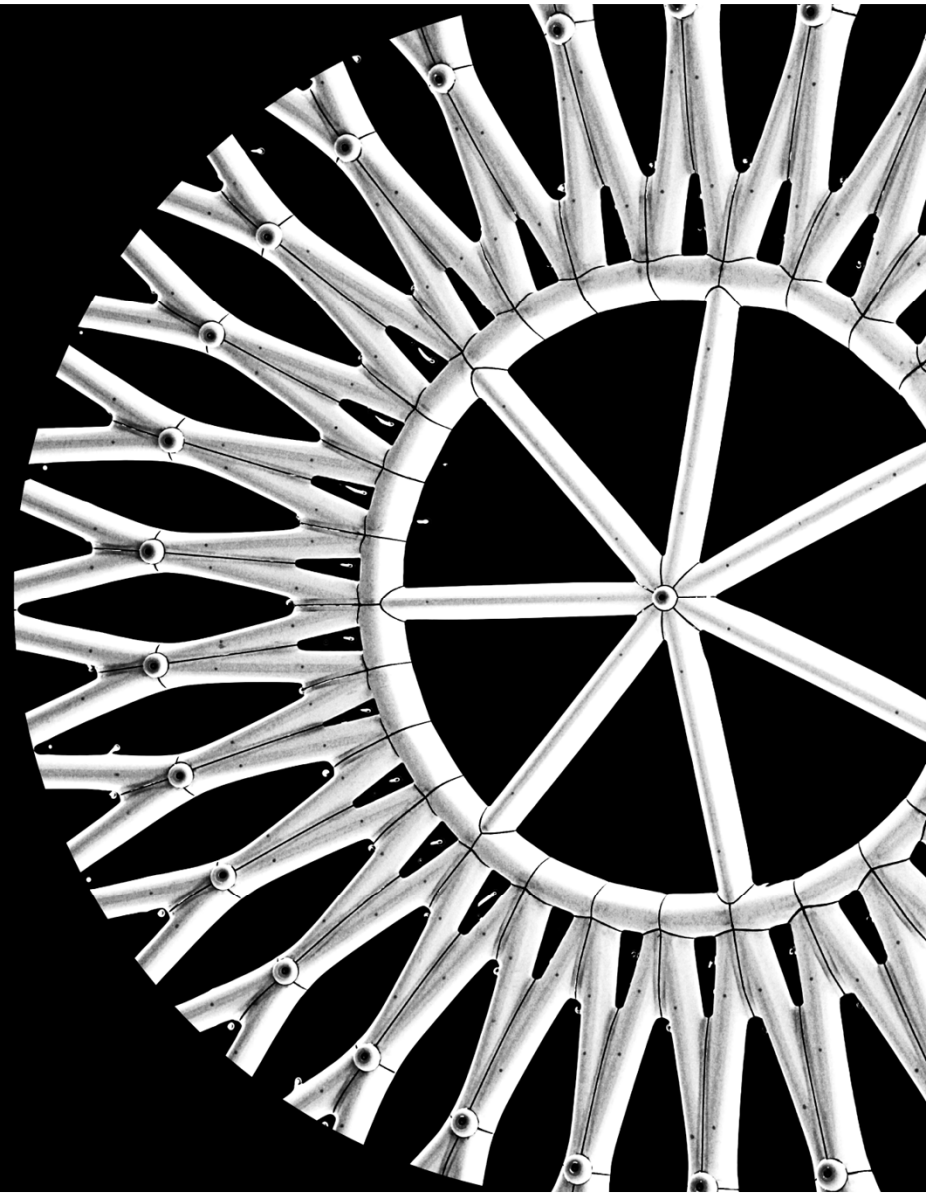
## Glazing Structures

### Curving The Impossible

**HEXANOM** opens completely new possibilities for glass structures. We develop on a case-by-case basis to combine project aesthetics and performance with smart design and precision engineering. Architects aspire to create entirely transparent facades and eliminating supporting structures of aluminum or steel. We offer the possibility to do it with frameless glass facades with an all-glass design. Minimalist, maximum transparency, large glass formats, extraordinary attention to detail: these are the attributes of the building envelopes that **HEXANOM** creates for world-renowned architects.

# **HEXANOM** Membrane Structures

**HEXANOM** Specialty in membrane architecture with experience and perseverance is using the most advanced textile materials today: ETFE and PTFE. Lightweight architecture is an avant-garde form of construction defined by materials and design. It is widely used in various areas such as sports complex, fairgrounds, malls, public and private buildings, and recreational centers, among others. In addition to constant innovative efforts, we have continuously improved the design and engineering process of our systems.





 **HEXANOM**  
Systems





# **HEXANOM**

Bespoke Design | High-end Engineering | Turnkey  
Projects | Fluid & Organic Structures | Single Layer |  
Space Frames | Membrane | Glazing | Cladding | Art  
in Facade | Material Consulting



**HEXANOM**  
Projects & Case Studies



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### Lusail Marina Twin Towers

HEXANOM STRUCTURE : 2,726 sq.m.

Oval Business Center | Structural Glass  
Façade | Glass Tent | Canopies |  
Glass Tunnel

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### Eye Of Qatar

HEXANOM STRUCTURE : 5,282 sq.m.

Elliptic Façade | Oval Glass Sphere |  
Curved Canopy

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### Shell Tower

HEXANOM STRUCTURE : 37,669 sq.m.

Envelope | Dome

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### Al Mansour Gate

HEXANOM STRUCTURE : 25,322 sq.m.

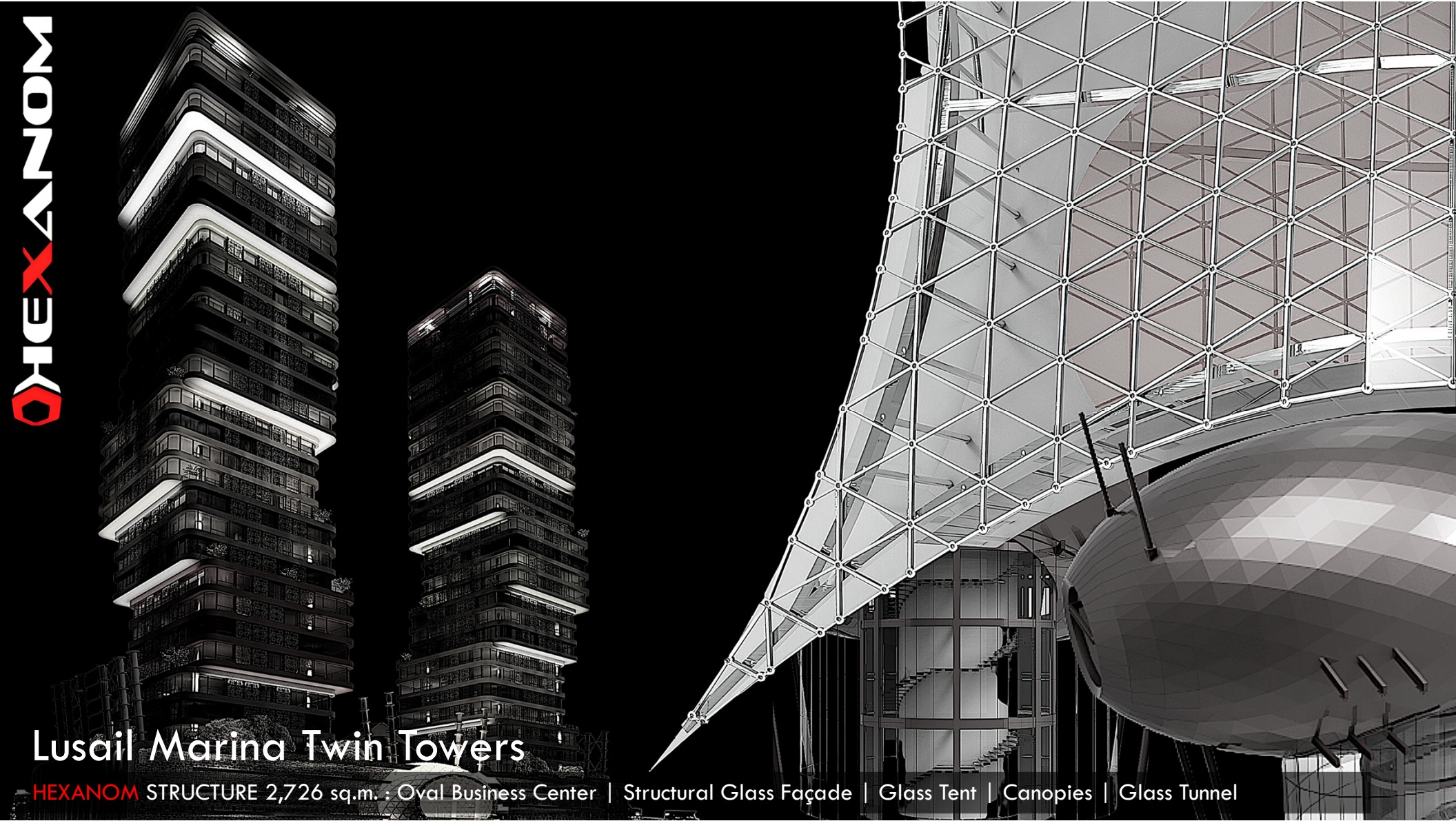
Façade Structure | Roof Ceiling Structure |  
Cocoons

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**HEXANOM**

# Lusail Marina Twin Towers

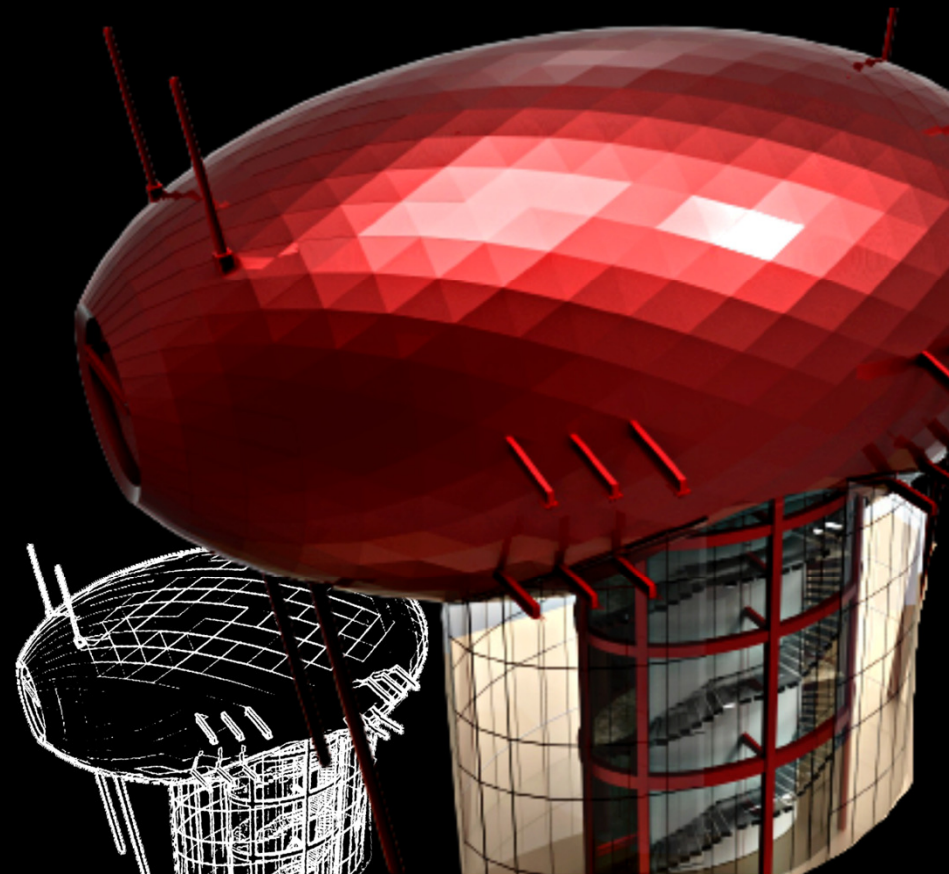
HEXANOM STRUCTURE 2,726 sq.m. : Oval Business Center | Structural Glass Façade | Glass Tent | Canopies | Glass Tunnel



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Oval Business Center : 1,809 sq.m.

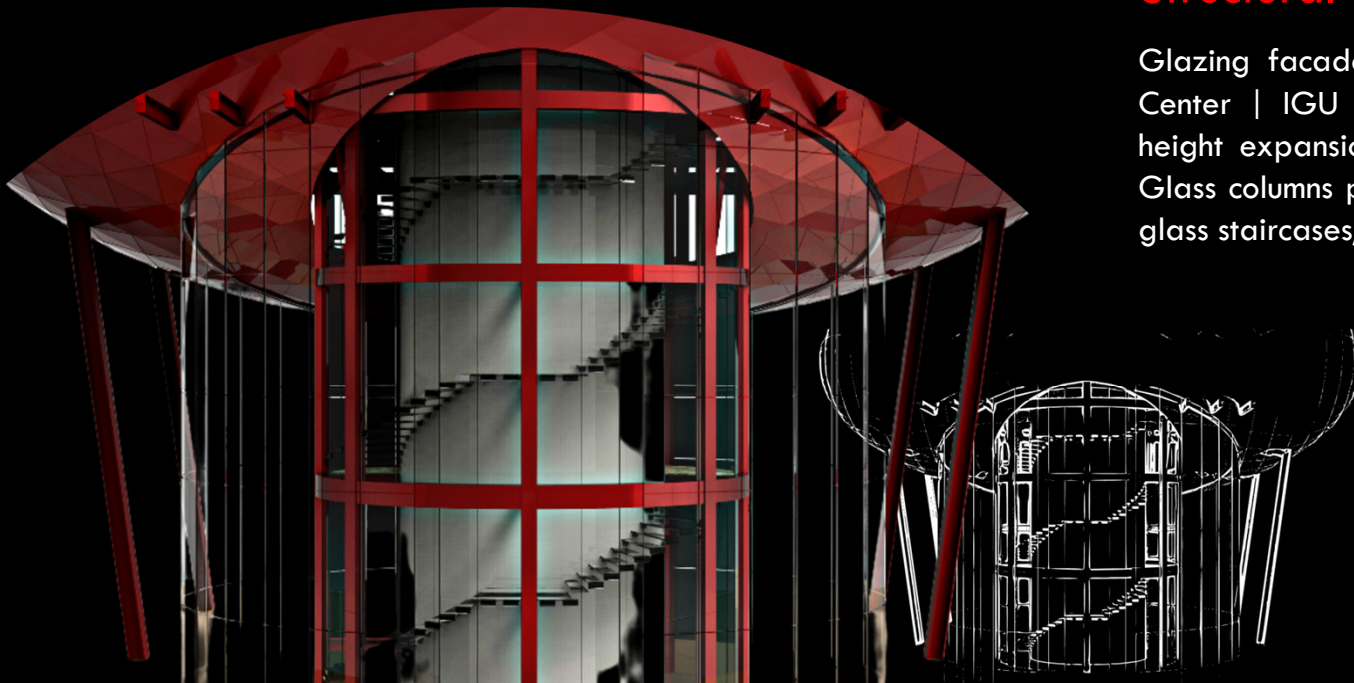
Oval sphere | Single layer triangular structure |  
Arch-ion titanium coated stainless steel sheets  
cladding | Point fixed glazing | IGU panel façade |  
Thousands unique parts in envelope creation |  
Supported only by four seamless pillars



# HEXANOM

**Structural Glass Façade** : 390 sq.m.

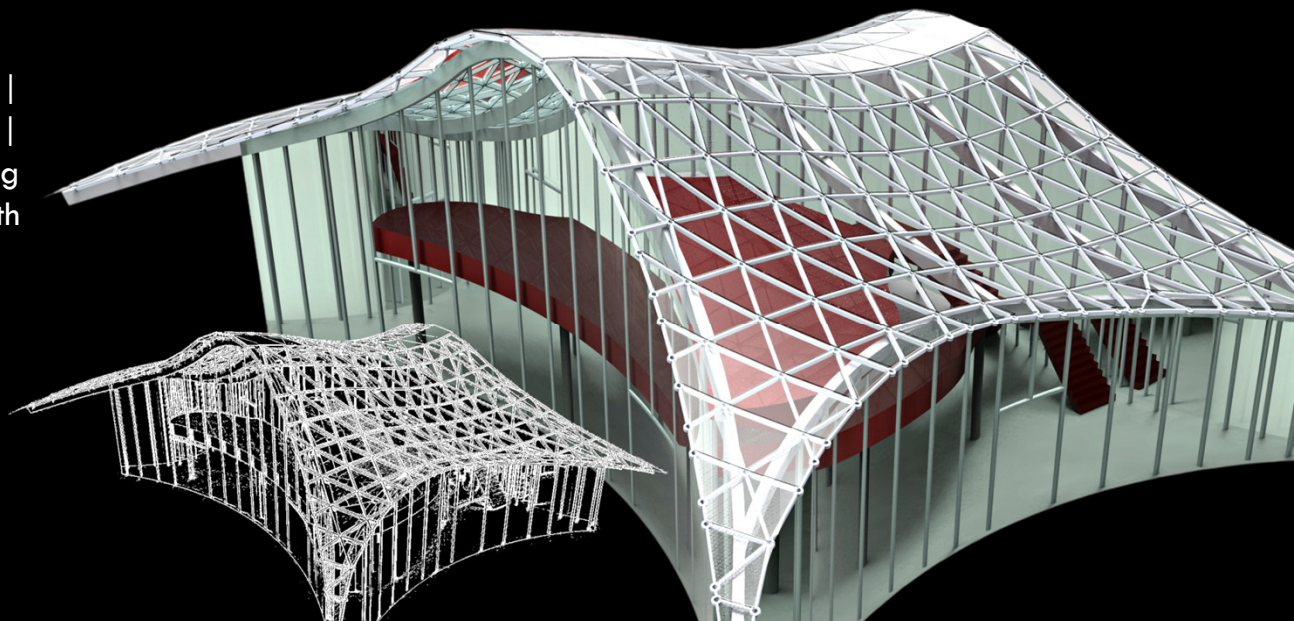
Glazing facade, serving as entrance to Oval Business Center | IGU segmented panels glazing | 10 meters height expansion | No metallic supportive members | Glass columns pinned to glazing | Interior: oval-shaped glass staircases, glass to glass connected

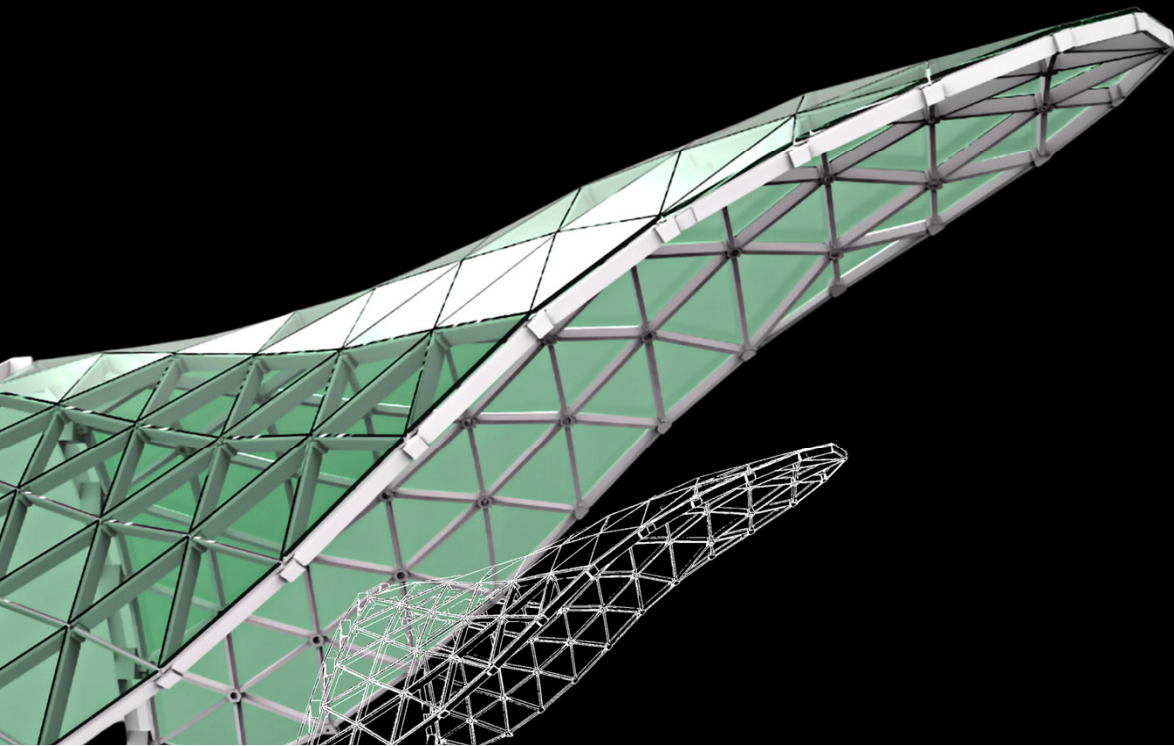


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Glass Tent : 375 sq.m.

Single layer triangular structure |  
Microscopic fritting glass in dense dots |  
Optimal comfort | Performance of shading  
efficiency and U-value | Fluidity with  
glazing





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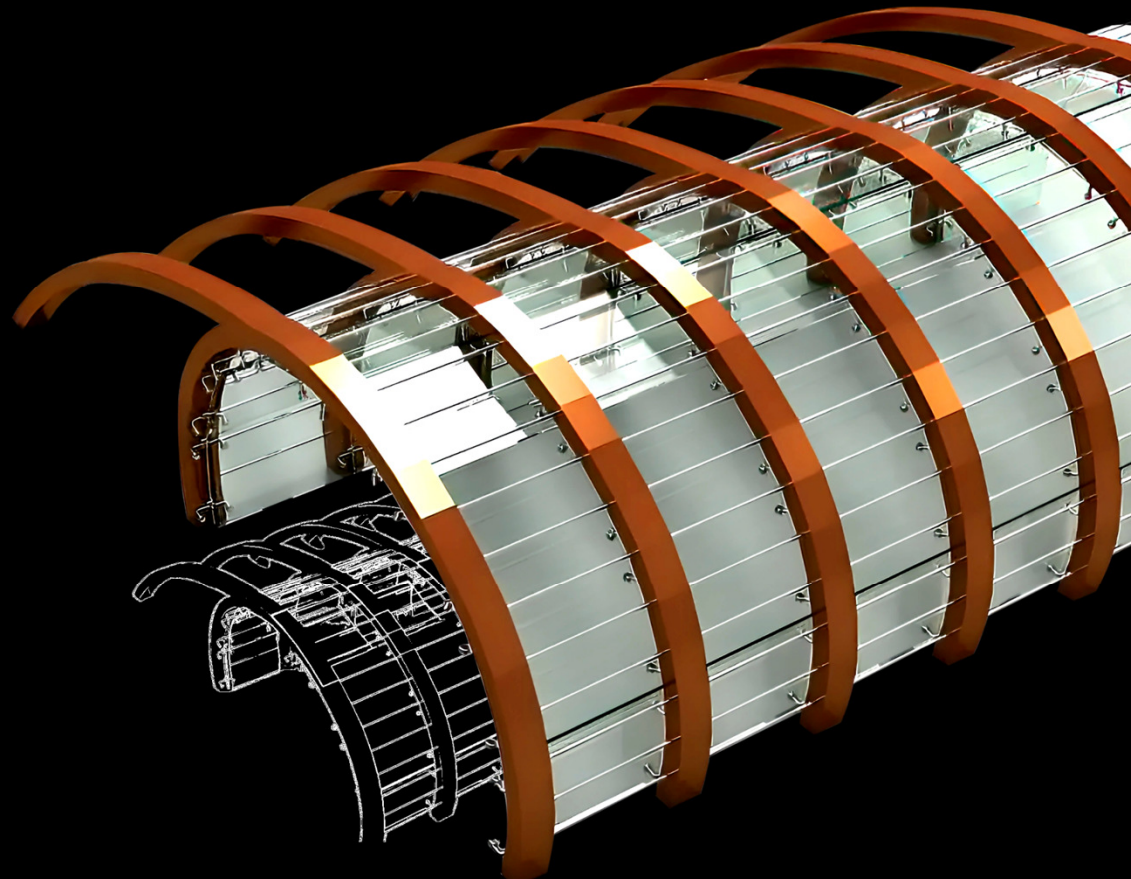
**Canopies** : 152 sq.m.

Single-layer structure | IGU glazing |  
Columnless, cantilevered | Nodes with  
LED lighting



## Glass Tunnels

Stainless steel structure | Internal curved IGU glasses



From design to **reality**

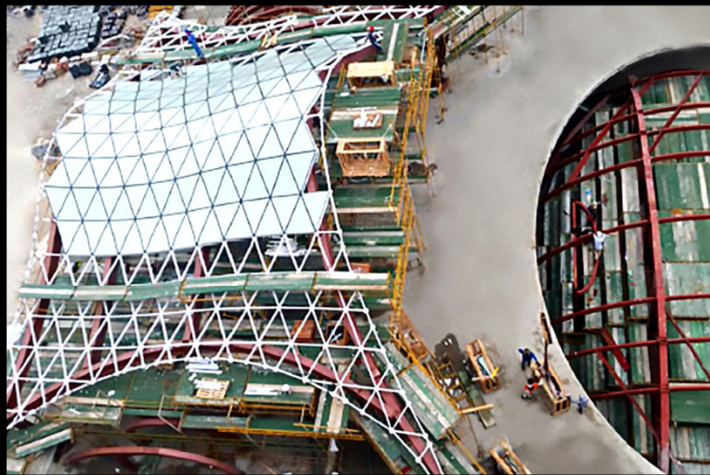
Lusail Marina Twin Towers





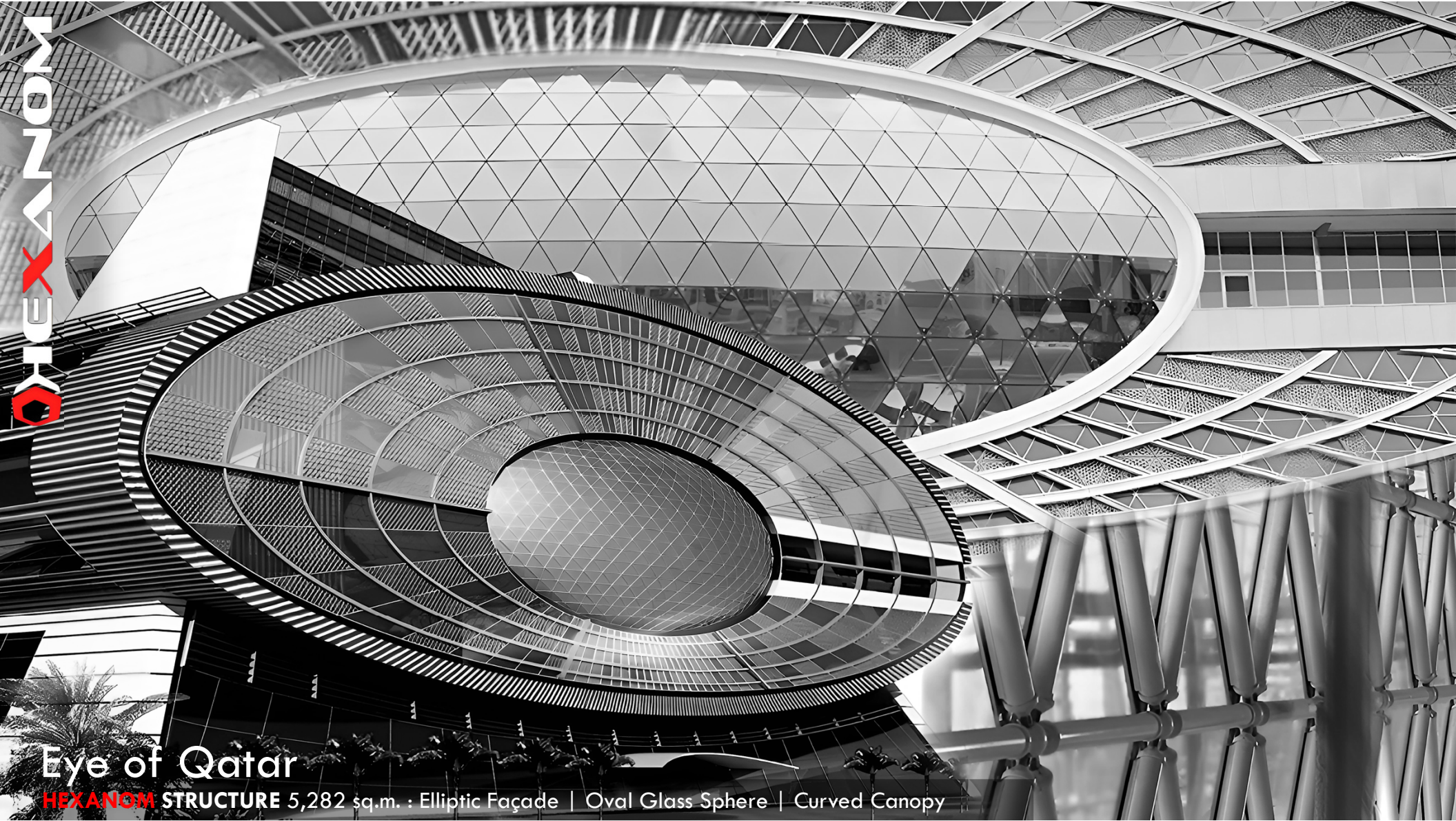


Lusail Marina Twin Towers



Lusail Marina Twin Towers

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# Eye of Qatar

HEXANOM STRUCTURE 5,282 sq.m. : Elliptic Façade | Oval Glass Sphere | Curved Canopy



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Elliptic Façade : 3,436 sq.m.

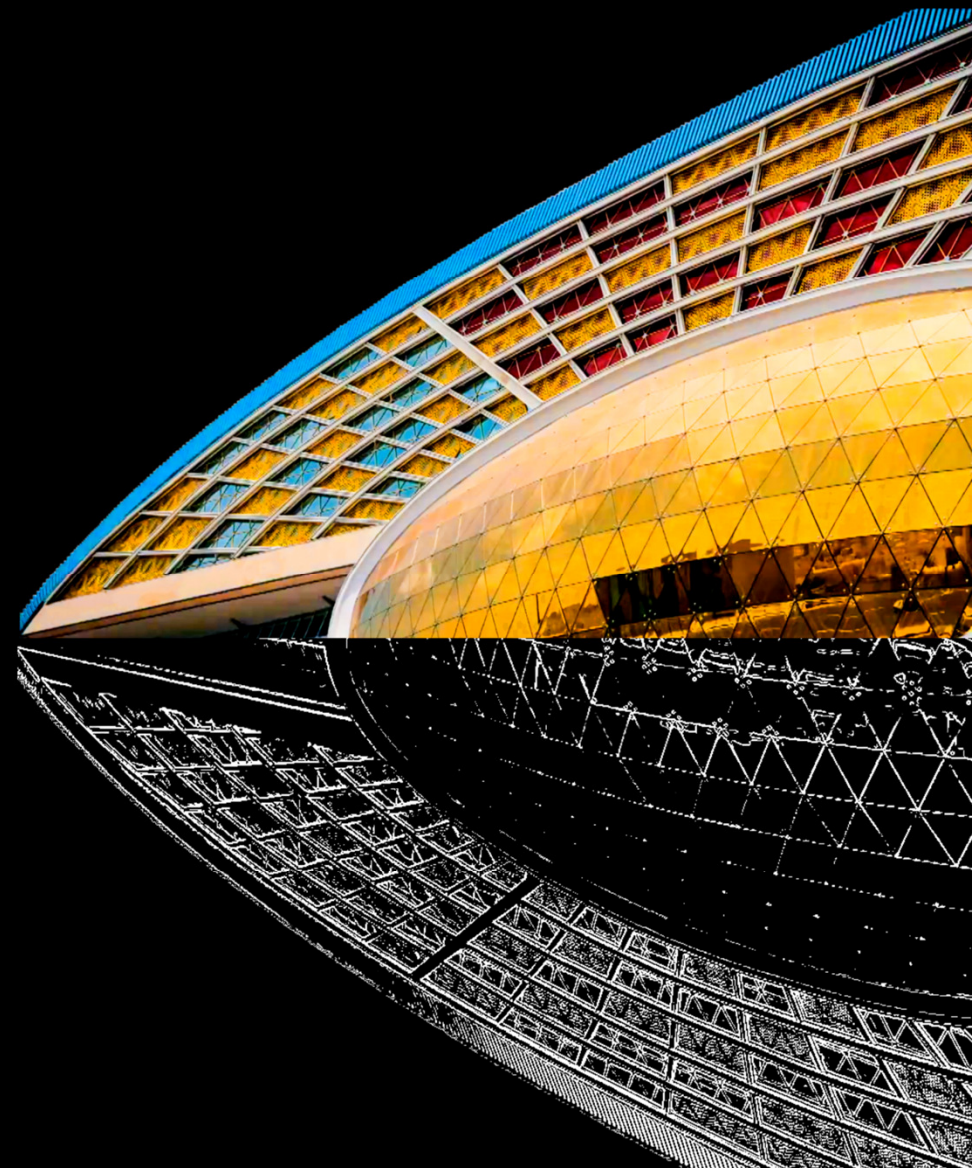
Double curvature skin | Single layer structure | Convex and concave surface | Spheres and circular hollow sections design | Glass units | Members and units unique in dimension and shape | Perfect match on erection | Perforated aluminium sheets shading | Decorative box-shaped aluminium members

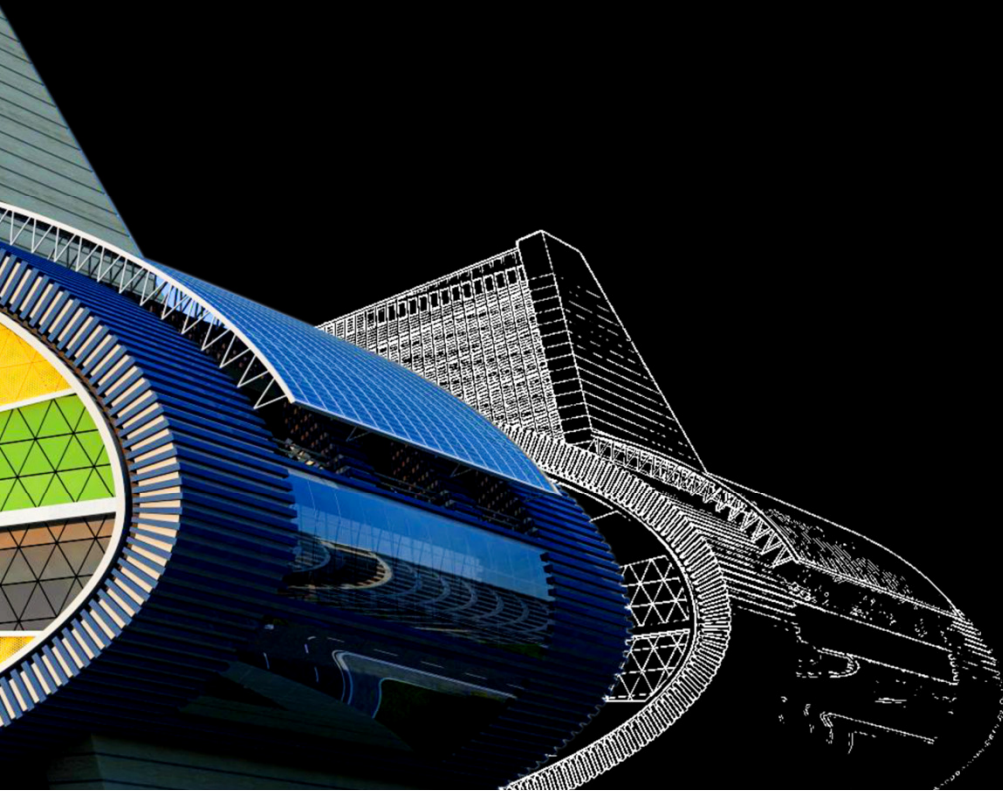




Oval Glass Sphere : 956 sq.m.

Oval spaceframe | Double curvature |  
Spheres and pipes | Unique designed spider  
system | Triangulated IGU glazing





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Curved Canopy : 890 sq.m.

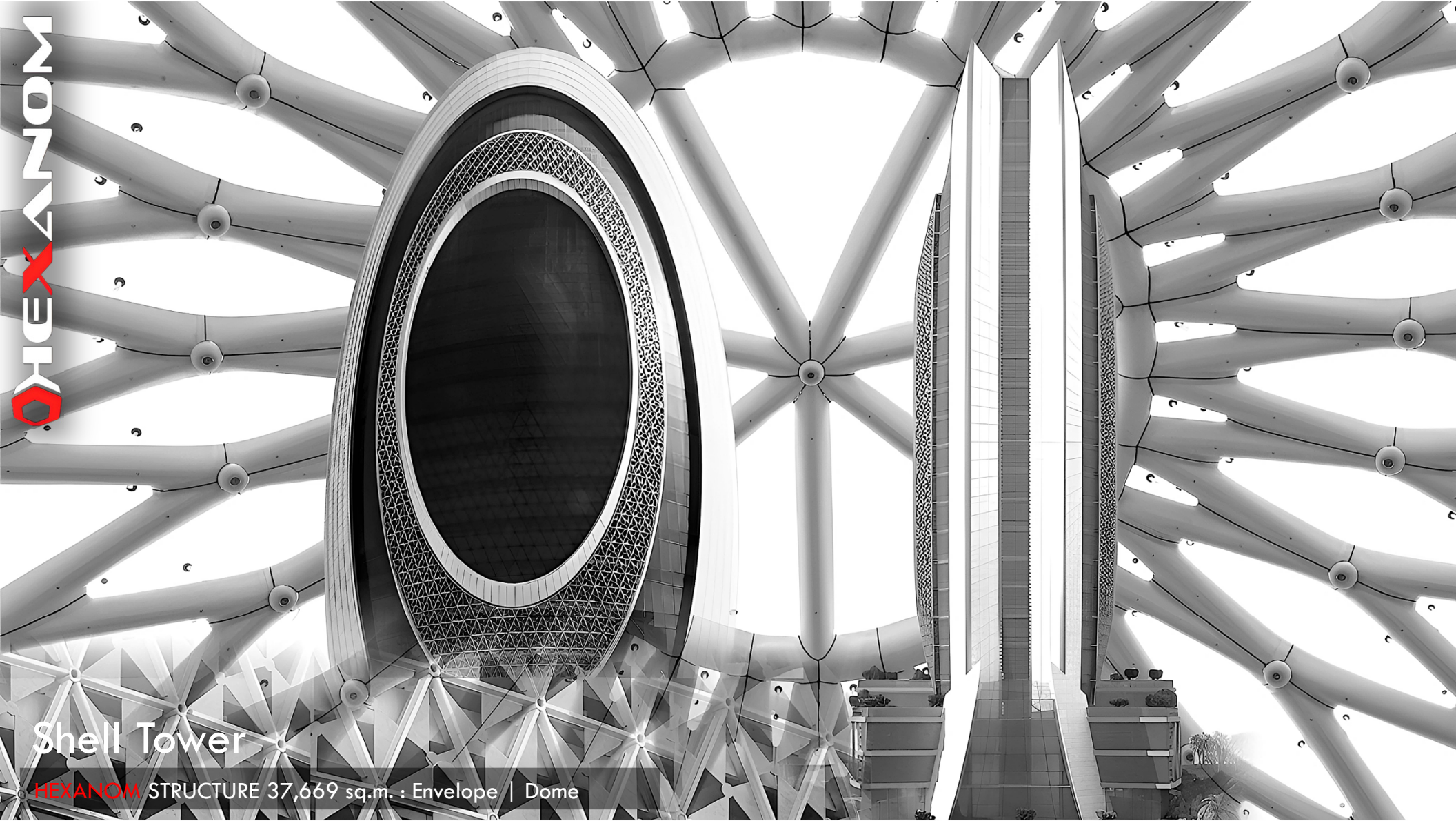
Curved space frame | Composed of spheres and round hollow pipes | Aluminium shading louvers | Designed as decorative structure | Minimum loads | Mechanical connection | Quick assembly and erection

From design to **reality**

Eye of Qatar



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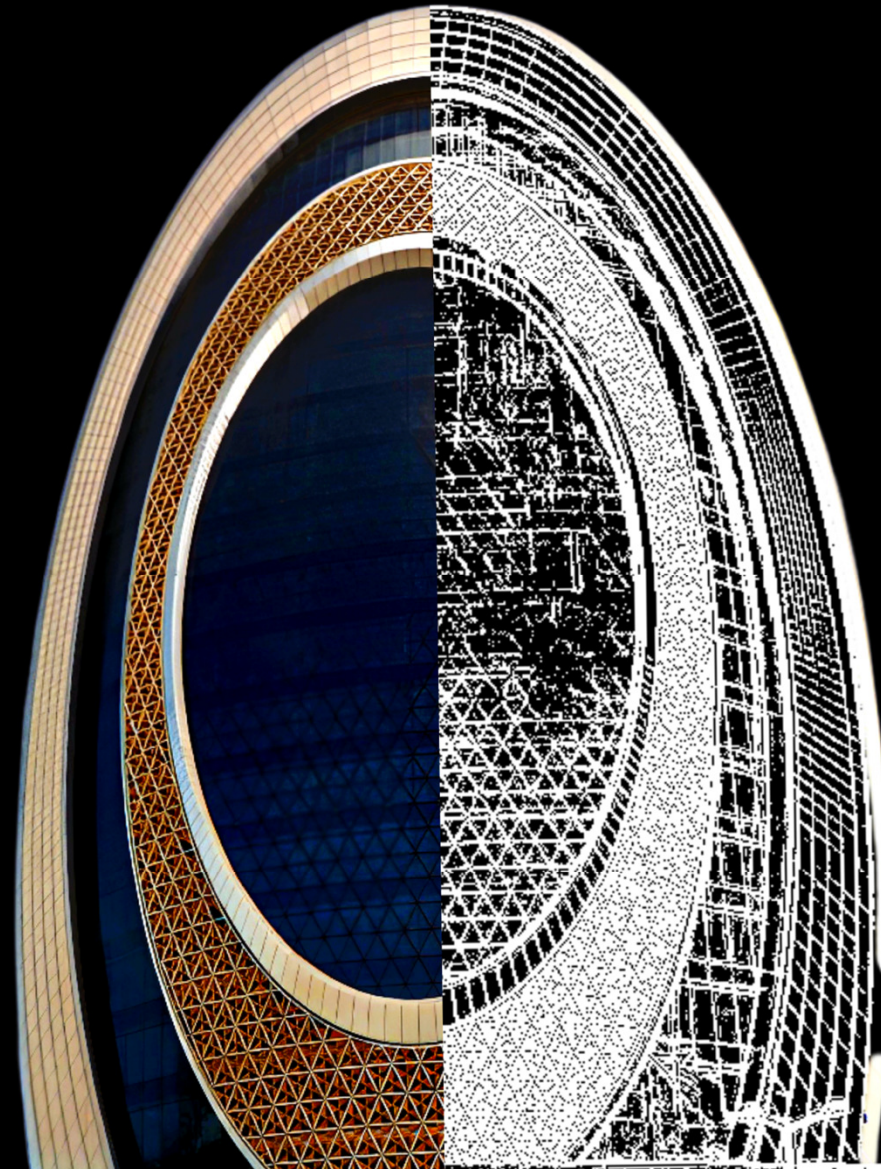
# Shell Tower

HEXANOM STRUCTURE 37,669 sq.m. : Envelope | Dome

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Envelope : 36,819 sq.m.

Double curvature façade skin | Single layer triangulated multi-curved space frame | Unique members | Glazing | Unitized double-curved cladding | Panels of mashrabiya shading | Glass panels cold bent on erection | 9 months building envelope completion





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**Dome** : 850 sq.m.

Design with diamond shape openings | Big spans | Innovative ETFE external skin | High-energy resistance properties | Strength over a wide temperature range | Lightweight structure | Incorporation of inner UHPC, while in design stage

From design to **reality**

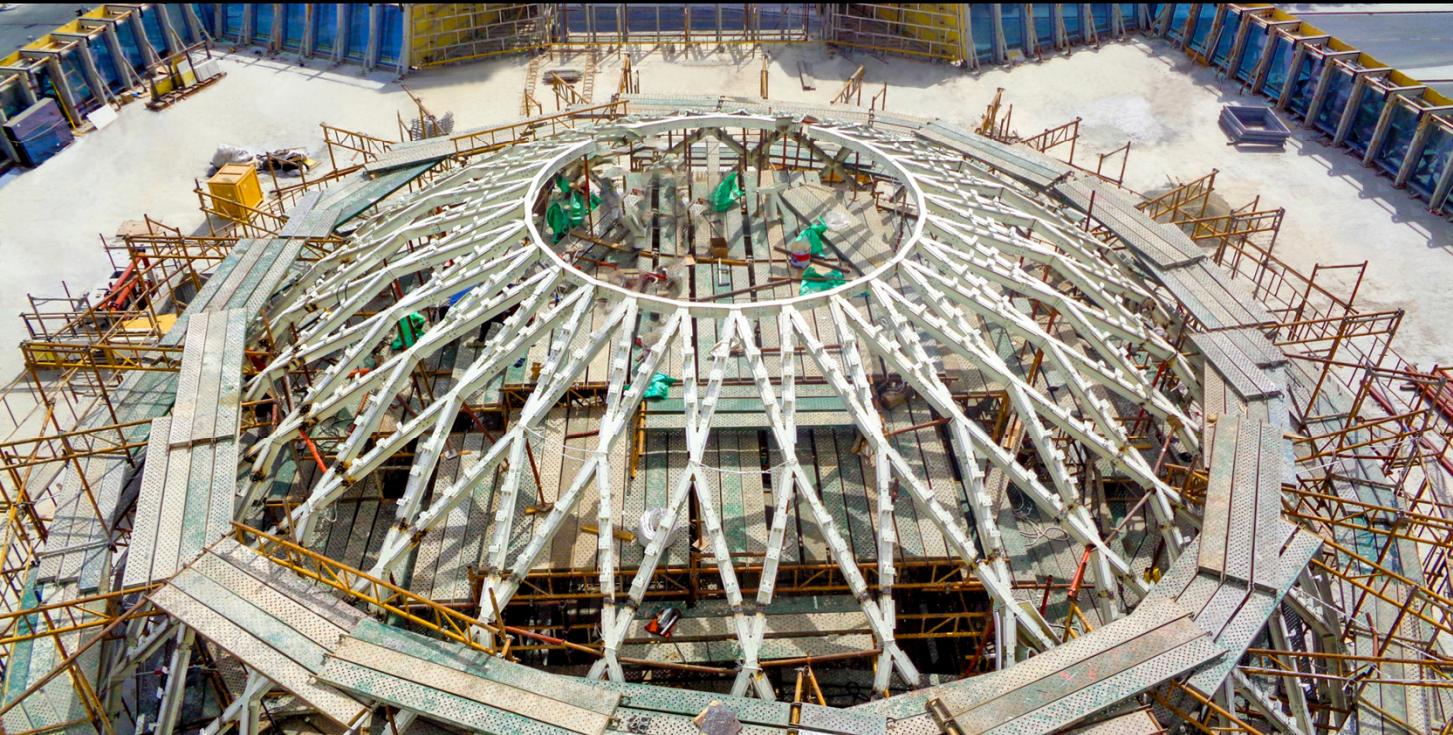


# Shell Tower



Shell Tower





Shell Tower

Shell Tower



Shell Tower



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# Al Mansour Gate

HEXANOM STRUCTURE 25,322 sq.m. : Façade Structure | Roof Ceiling Structure | Cocoons



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**Façade Structure** : 10,732 sq.m.

Double and multi curved | Single layer structure |  
Truss system | Ceramic cladding | 10.000 unique  
shaped IGU panels glazing | Massive shading system  
with wire rope and casted aluminium in fluid shape



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**Roof and Ceiling Structure** : 9,549 sq.m.

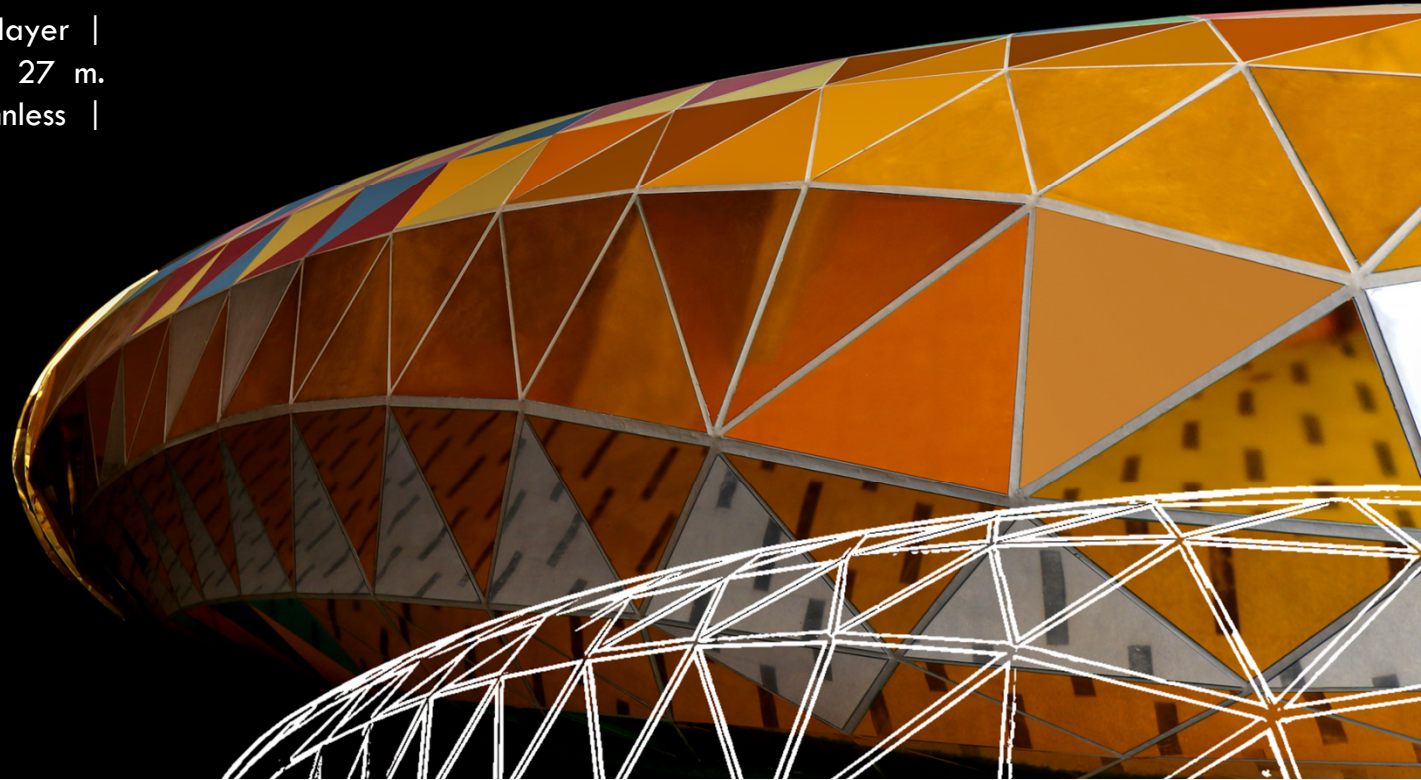
Two mega steel structures | Span of 200 x 30m. each | Double-curved | Single layer | Triangulated ceramic roof & ceiling tiles | Concealed, removable mechanism | Quick access to MEP services | Speed of work, cost-efficiencies



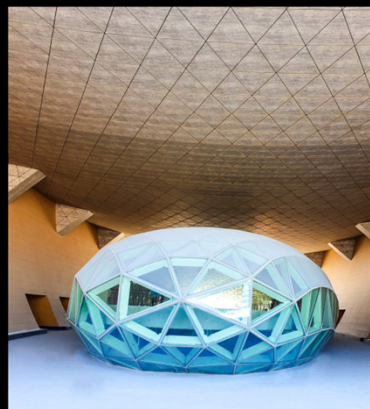
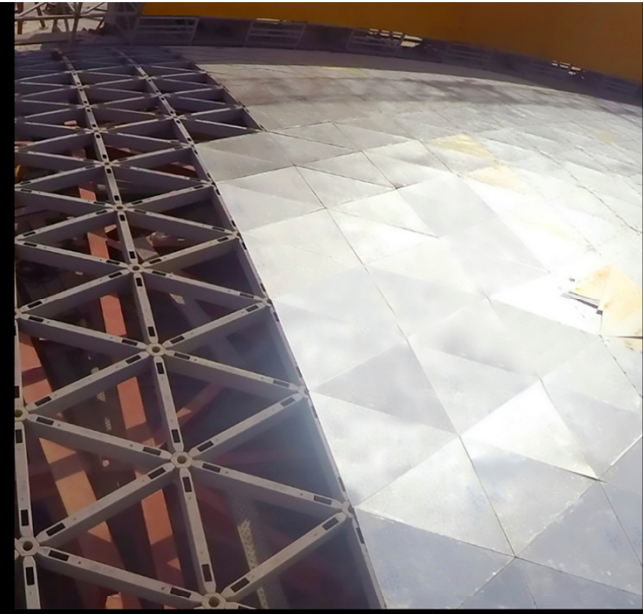
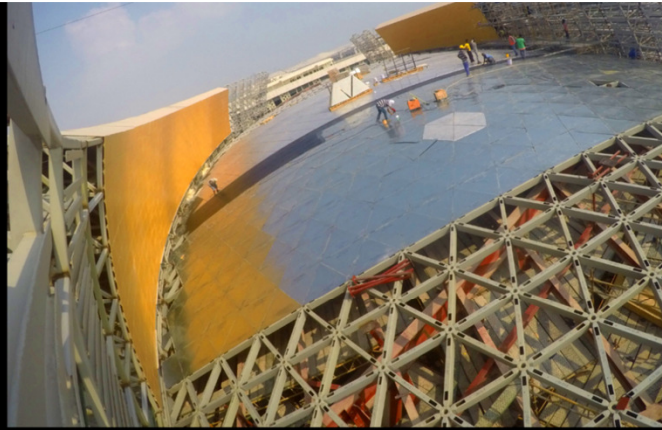
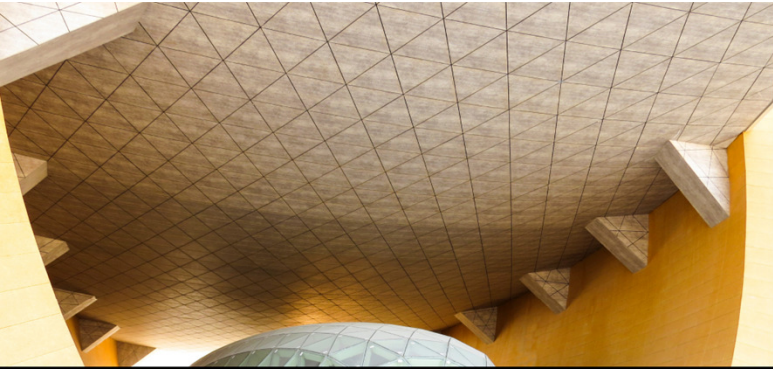
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Cocoons : 5,041 sq.m.

Two identical structures | Single layer |  
Free form frame | Span 100 x 27 m.  
wide | 2 floors height | Columnless |  
Triangular IGU glazing

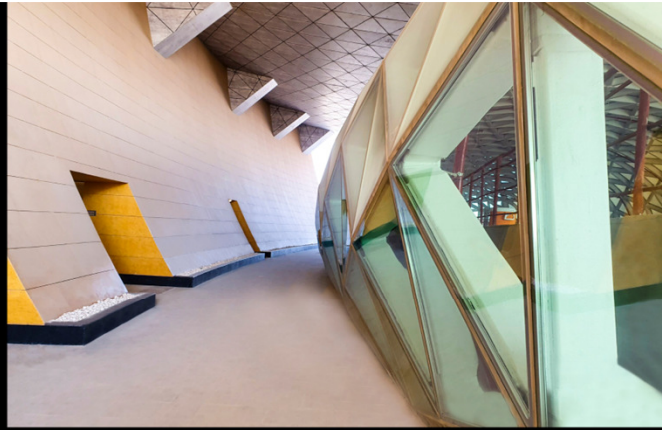
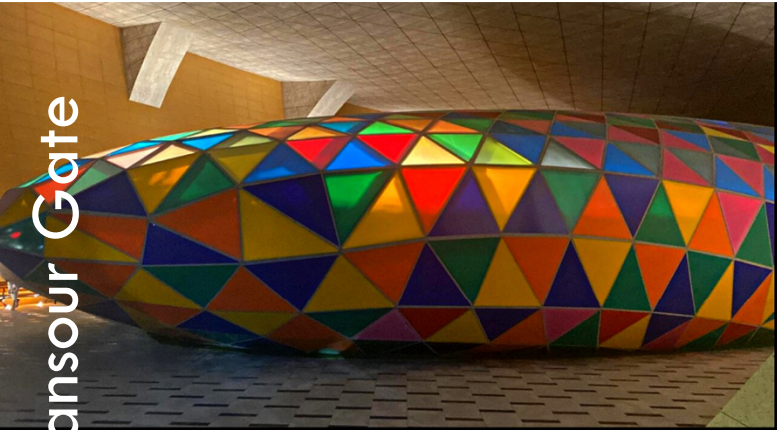


From design to **reality**



Al Mansour Gate

Al Mansour Gate



**Imagination** is the only limitation



## Qatar

Showroom:

Lusail Marina Twin Towers, Tower A, Floor no. 9

Factory:

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Emmanouil Roide str. Kirzis center, Emmanuel Roide,  
Kirzis Center, Block D, Office D25



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