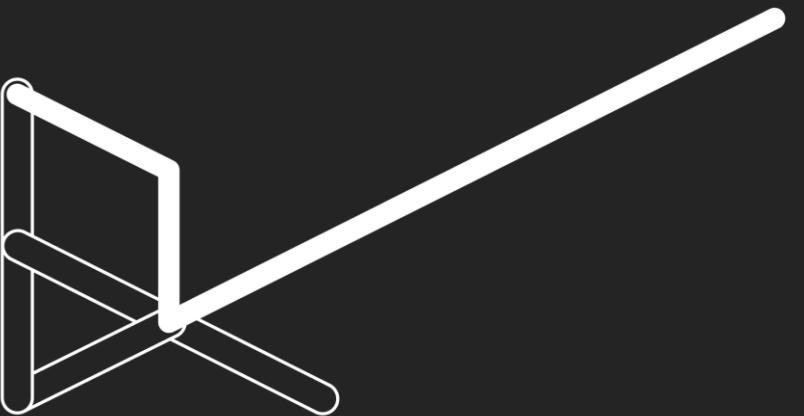


bespoke.



- 1. Why bespoke**
2. Our Approach
3. What we do

Why bespoke.



Bespoke \ bi-'spōk \ : Specially made for a particular person

Architect

建筑师

Artist

艺术家

Interior Designer

室内设计师

Engineer

工程师

Landscape

景观设计师

Factory

加工厂

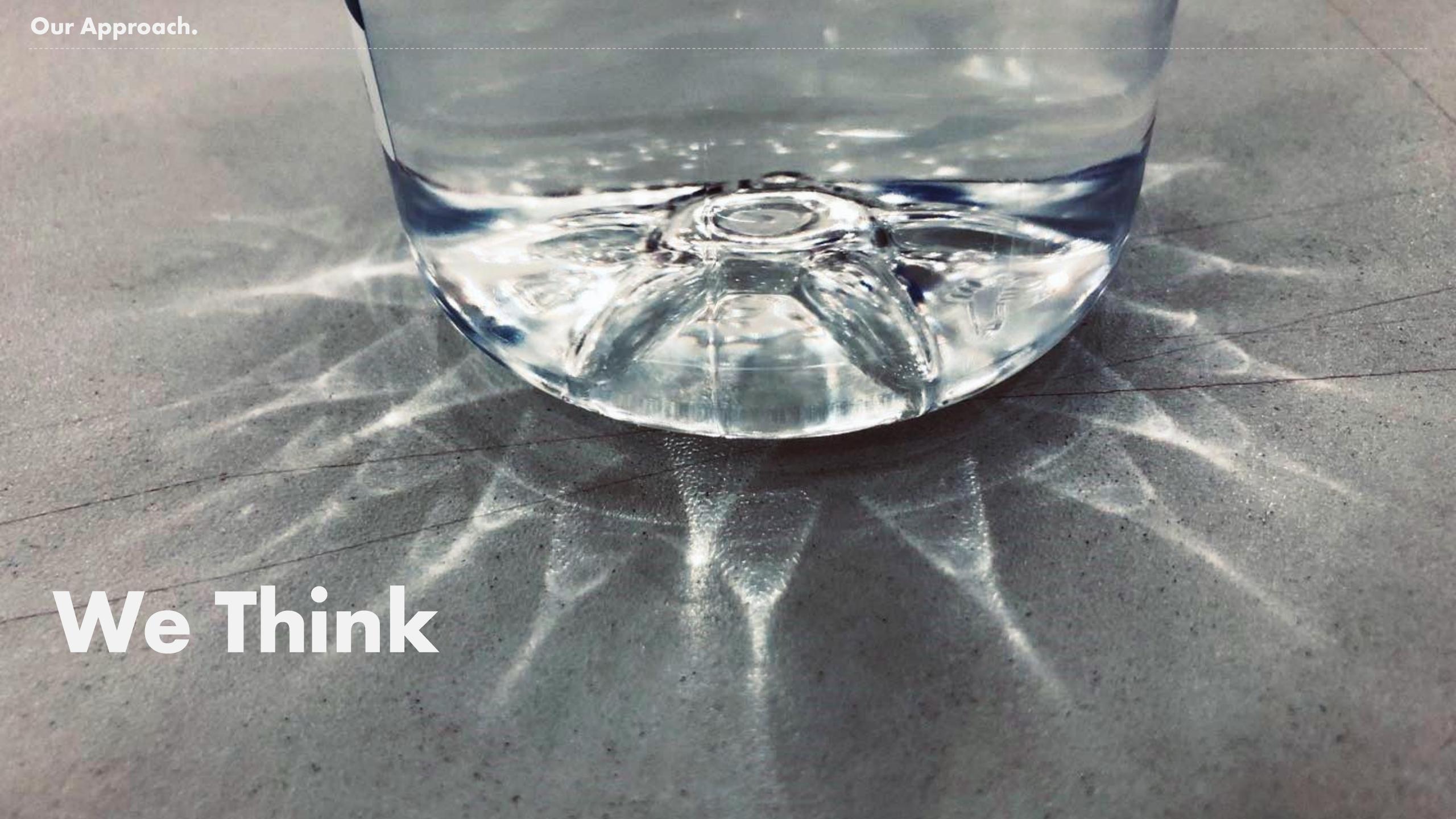
Bespoke is a Creative Engineering Studio which emphasize collaboration between Architects, Interior Designers, Artists and Engineers to achieve outstanding results. Architecture, Art and Engineering are brought together as a whole during the creative process.

必思博是一家创意结构设计公司，致力于建筑师、室内设计师、艺术家和工程师之间的合作，以求最完美的结果。在创意过程中，建筑、艺术和工程视作一个整体。



1. Why bespoke
- 2. Our Approach**
3. What we do

Our Approach.



We Think



We Design

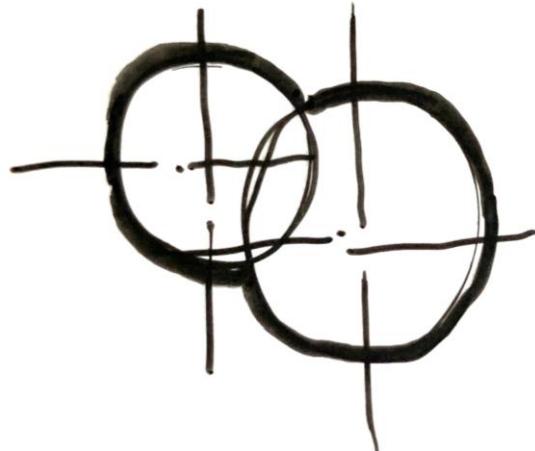
Our Approach.

We Experiment



Our Approach.

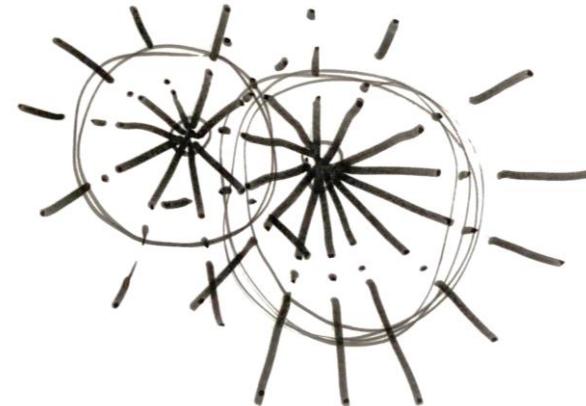
- ① Planar Geometry based on circles



- ② Geometry center definition



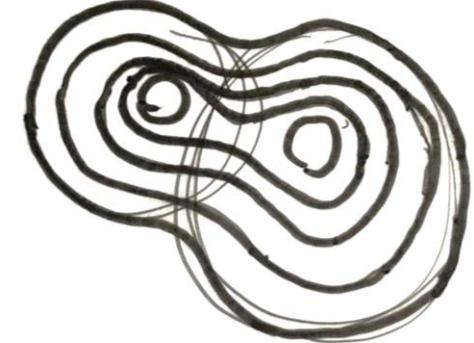
- ③ Radial Axis Definition



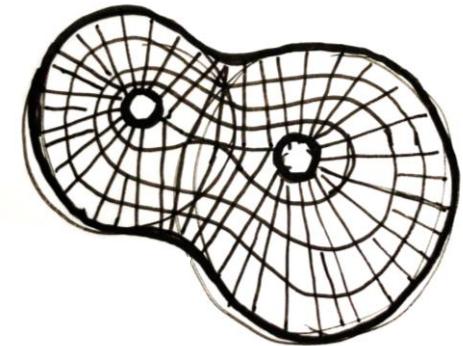
- ④ Radial Beam Grid Definition



- ⑤ Concentric Structure Direction based on offset interpolation

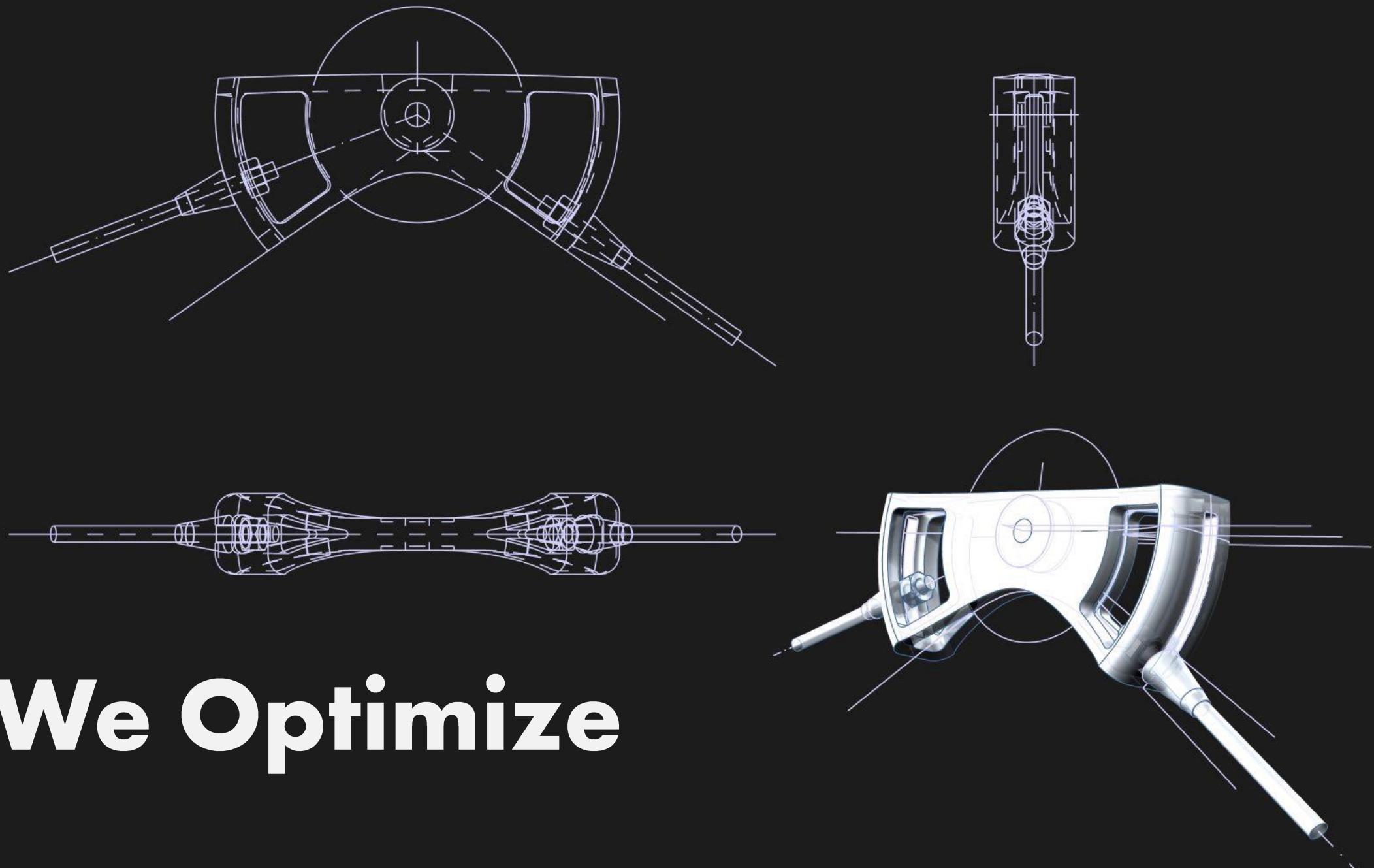


- ⑥ Final Structure Grid with Radial and Concentric Directions

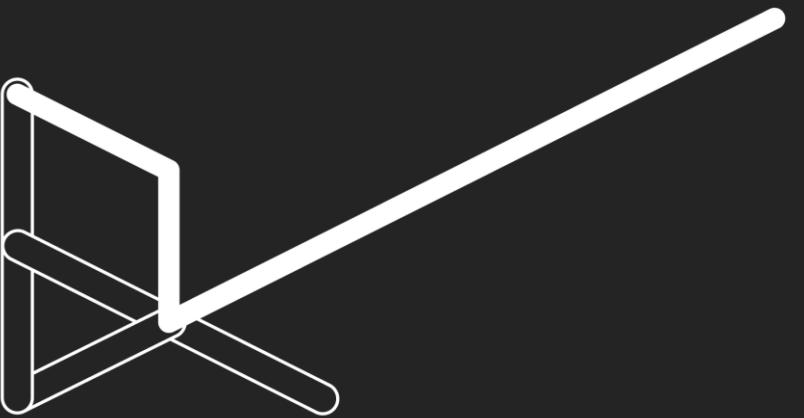


We Research

Our Approach.



We Optimize



1. Why bespoke
2. Our Approach
3. **What we do**

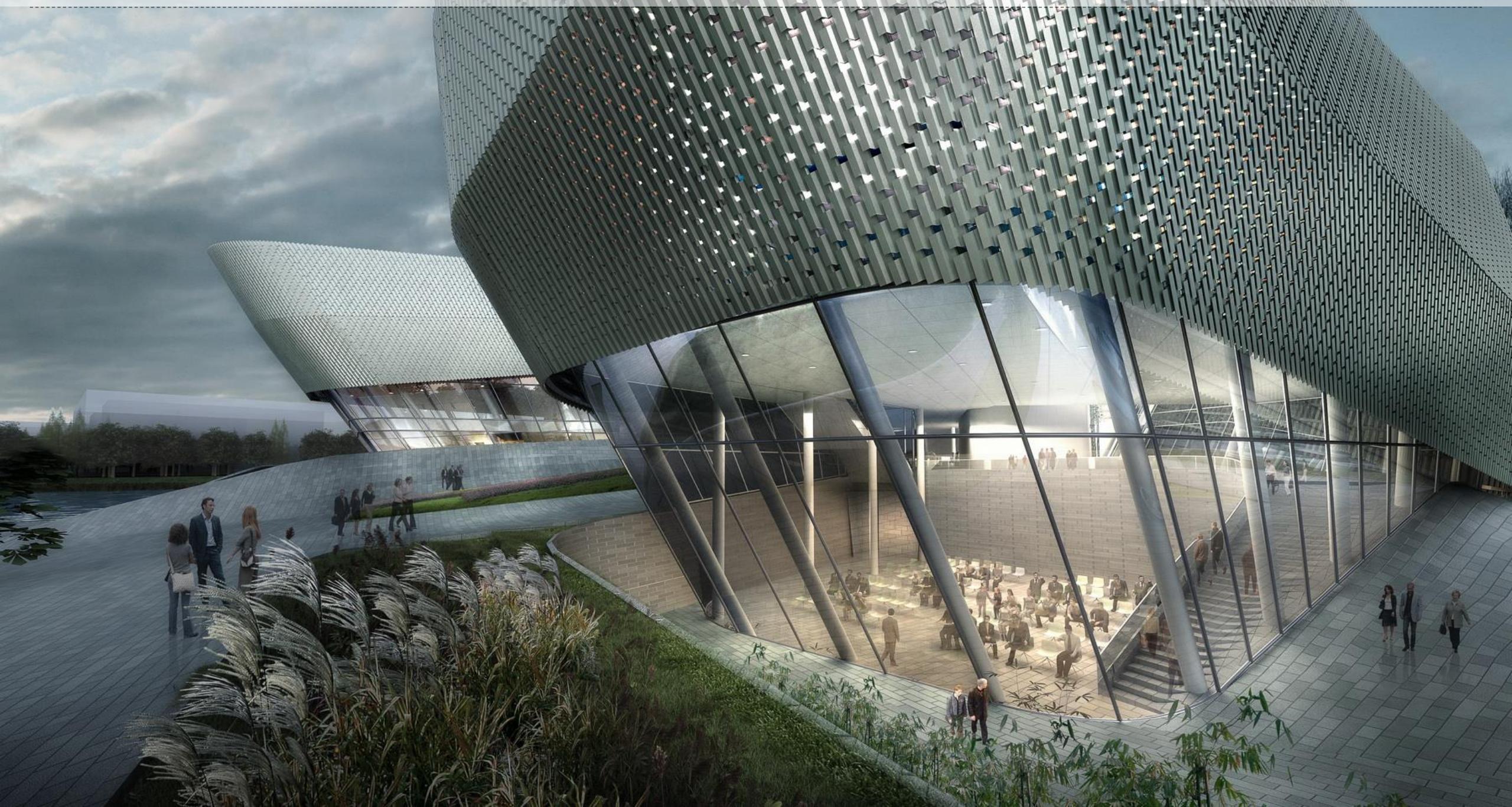


RFR Project Experience

- + Geometry Rationalization & Optimization
- + 3D BIM Model for Fabrication

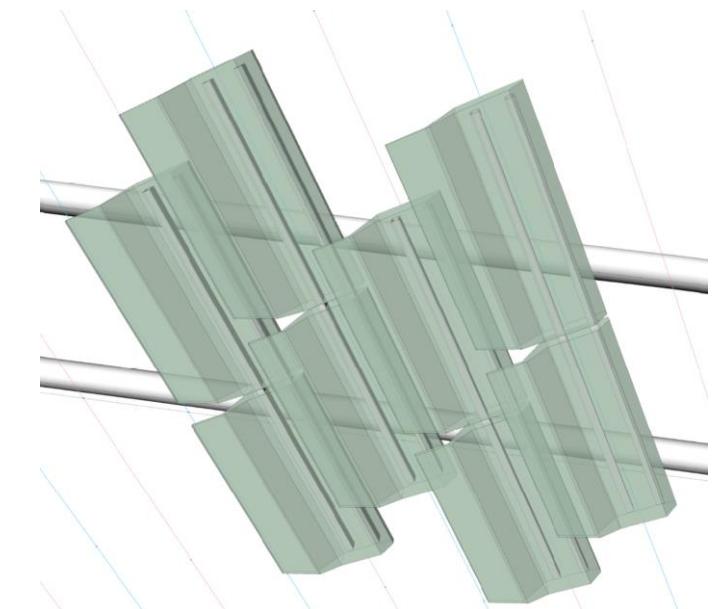
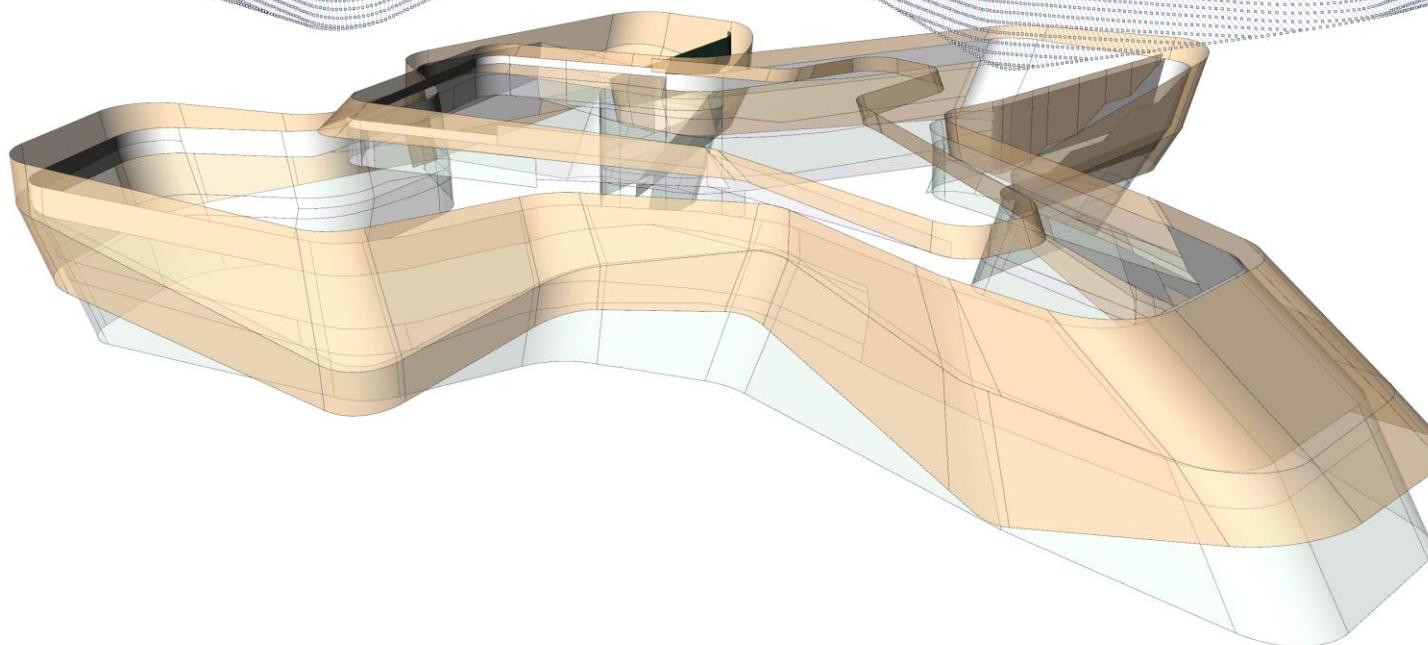
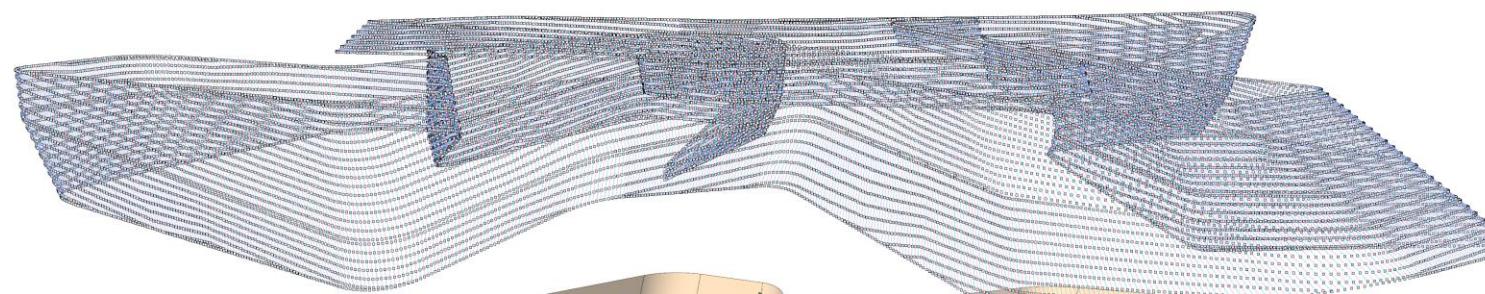
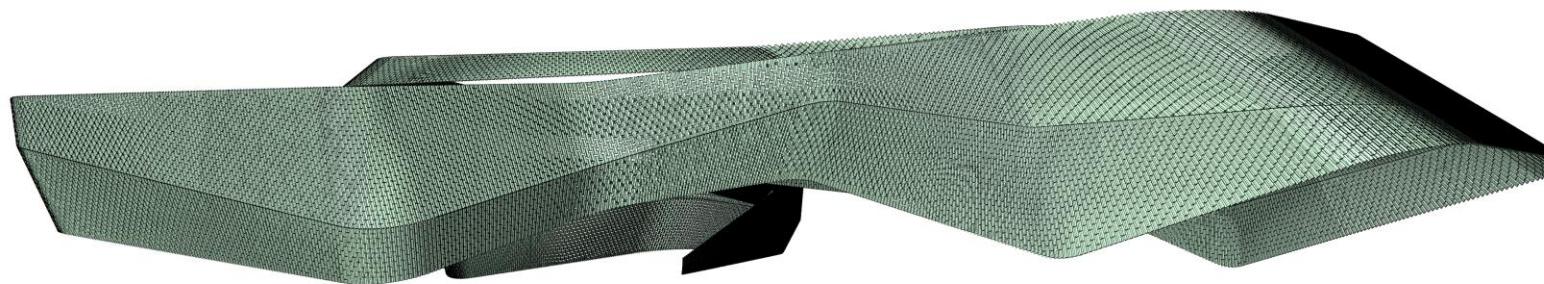
What we do. RFR Project Experience

Ningbo Exhibition Center, Playze



What we do. RFR Project Experience

Ningbo Exhibition Center, Playze



What we do. RFR Project Experience

Ningbo Exhibition Center, Playze

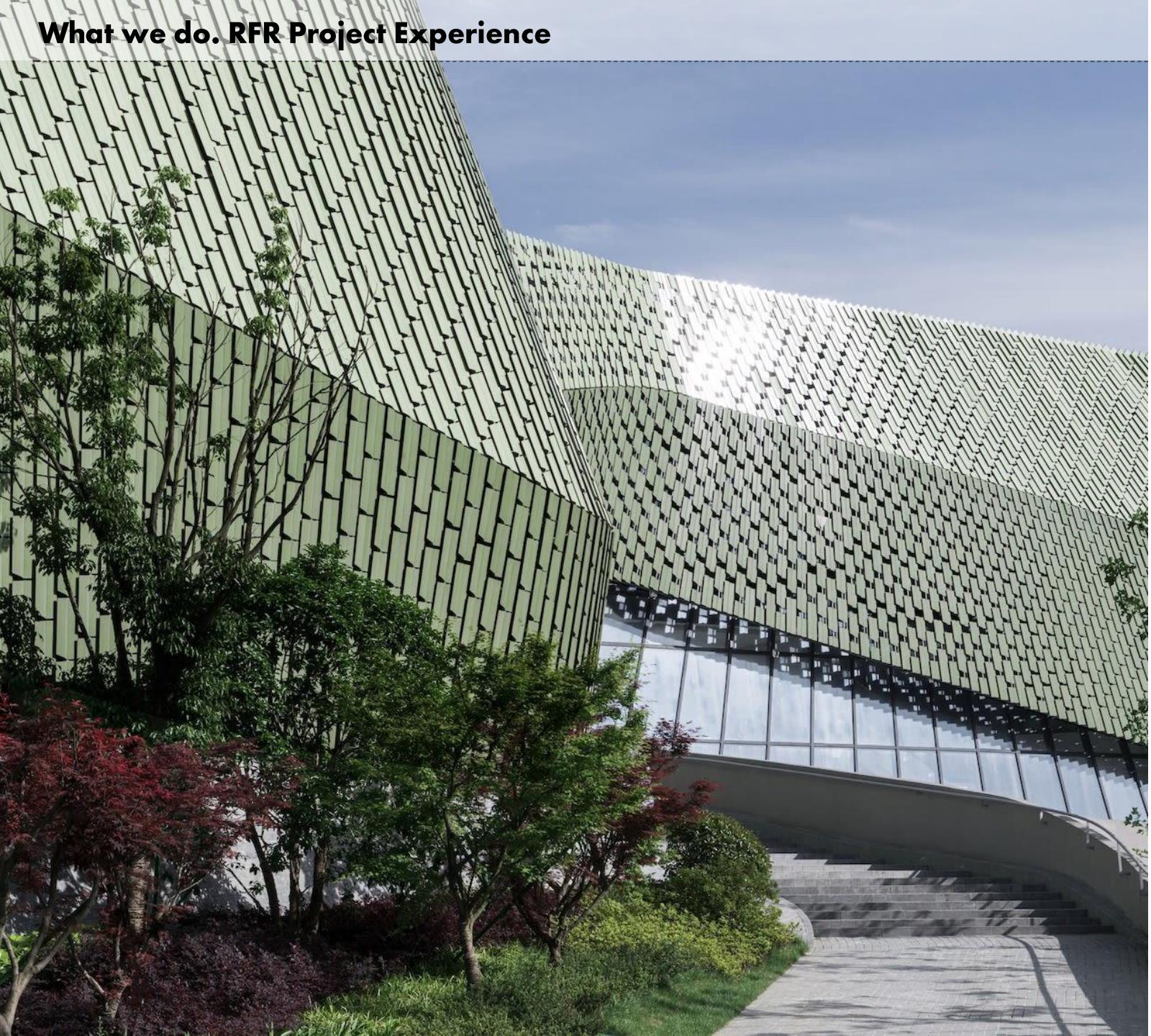


What we do. RFR Project Experience

Ningbo Exhibition Center, Playze



What we do. RFR Project Experience



Ningbo Exhibition Center, Playze



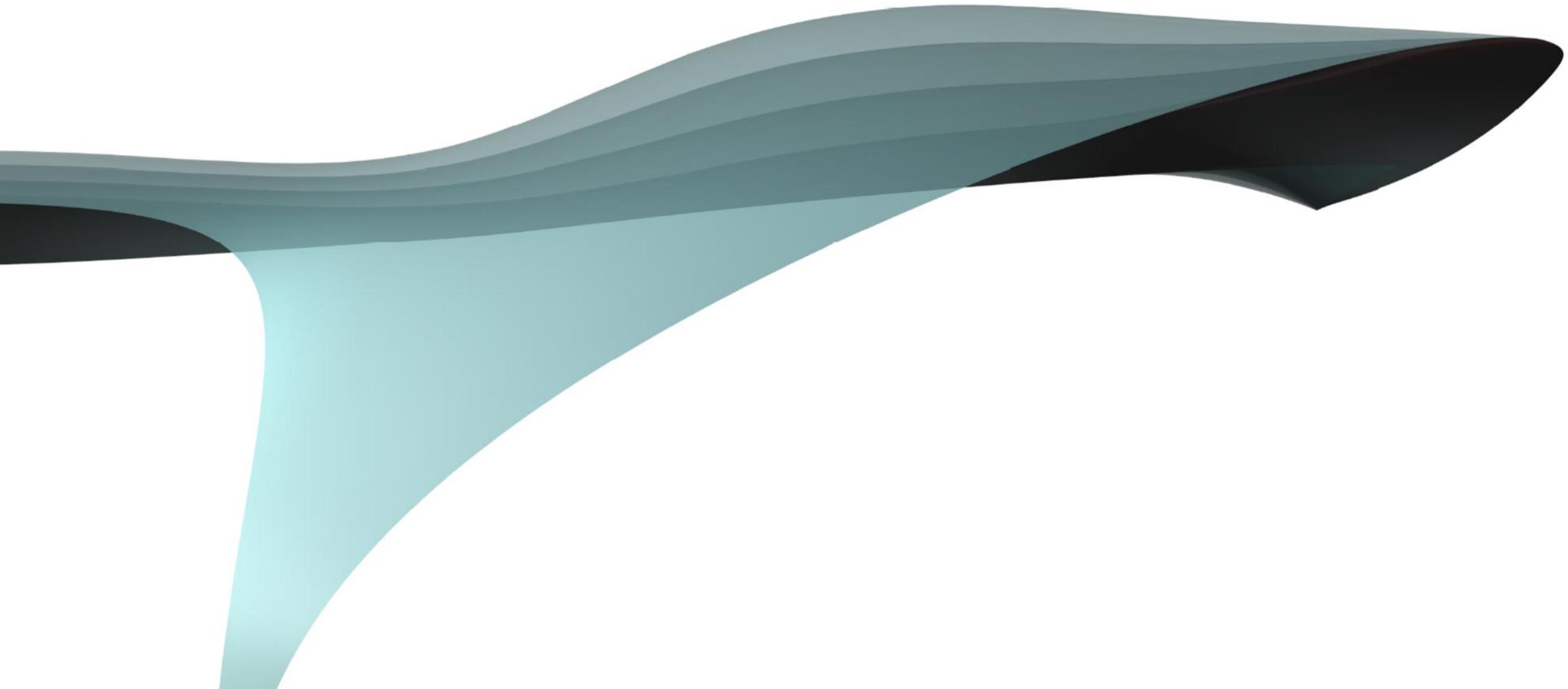
What we do. RFR Project Experience

Qianhai Grand Canopy, Benoy



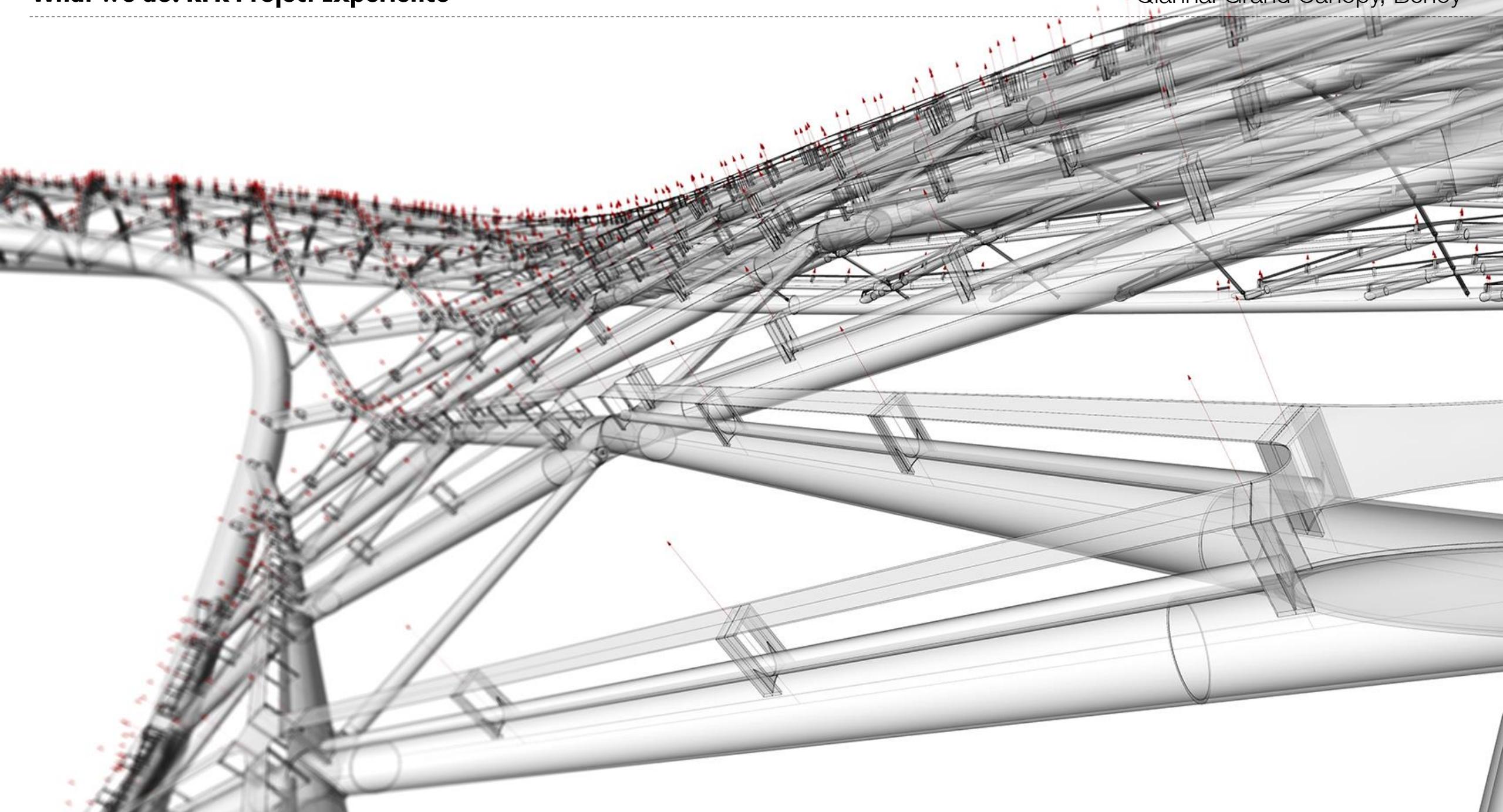
RFR Project Experience

- + Form Finding
- + Structural Design & Optimization
- + 3D Model for fabrication



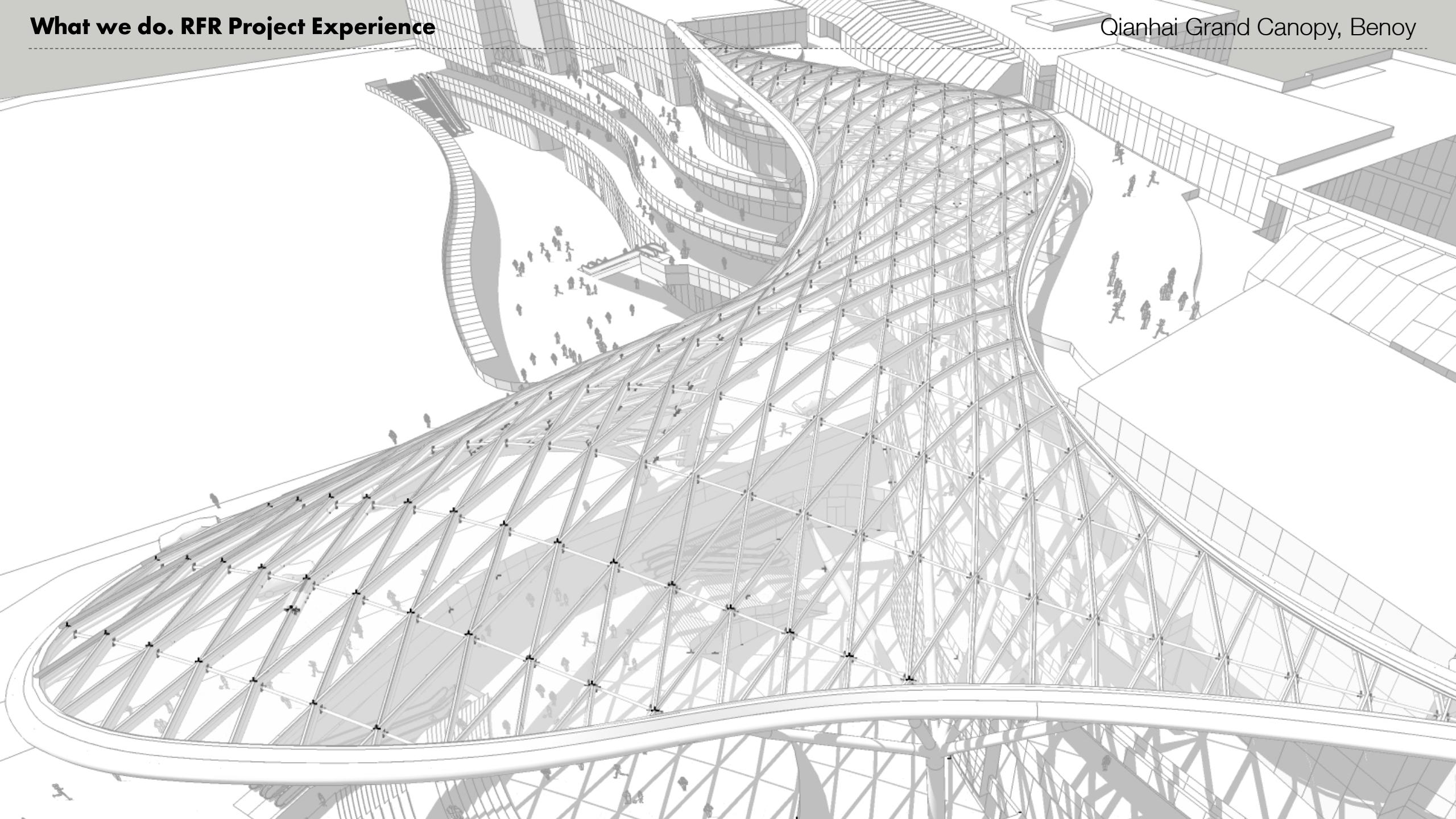
What we do. RFR Project Experience

Qianhai Grand Canopy, Benoy



What we do. RFR Project Experience

Qianhai Grand Canopy, Benoy



What we do. RFR Project Experience

Qianhai Grand Canopy, Benoy

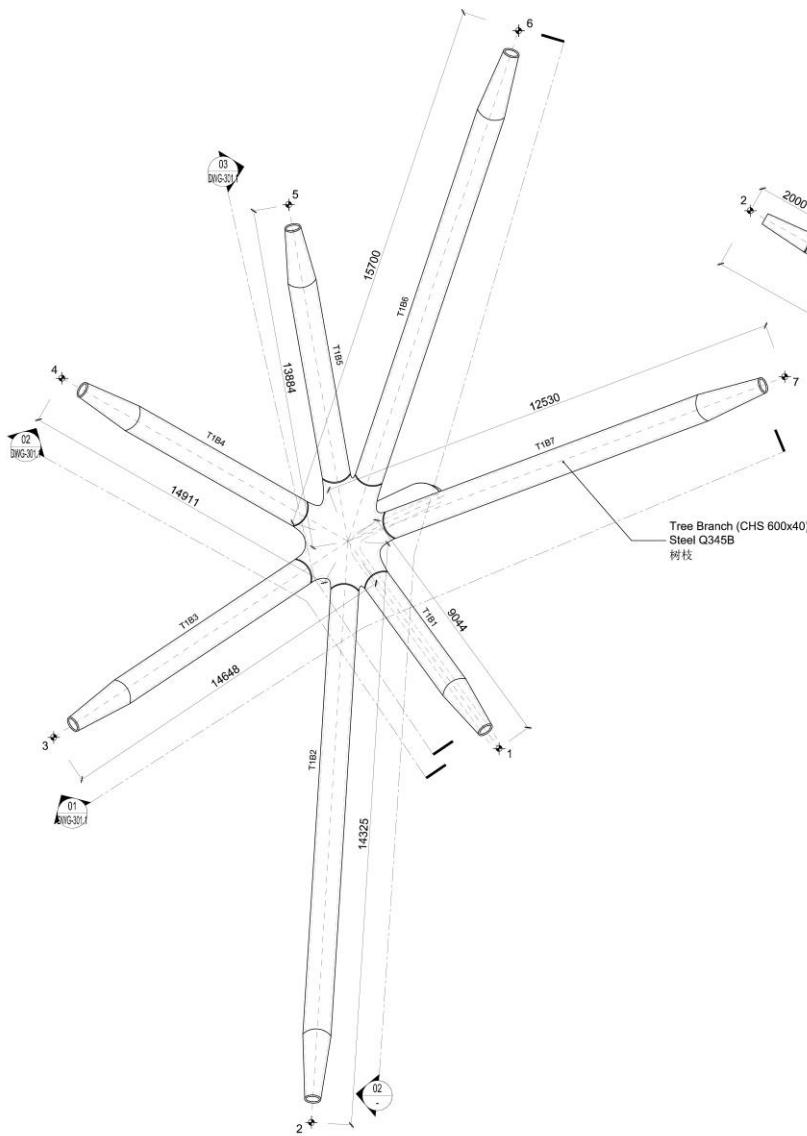




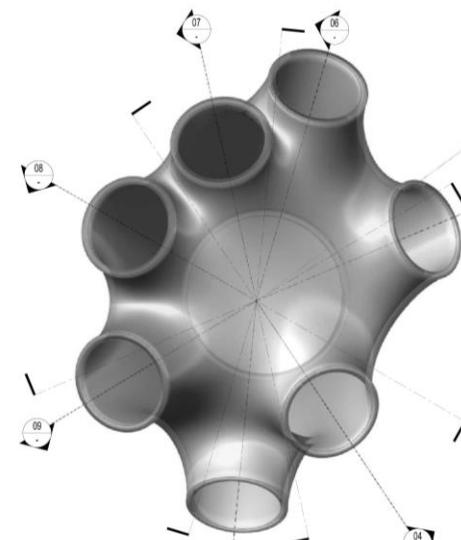
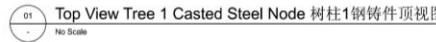
What we do. RFR Project Experience

Qianhai Grand Canopy, Benoy

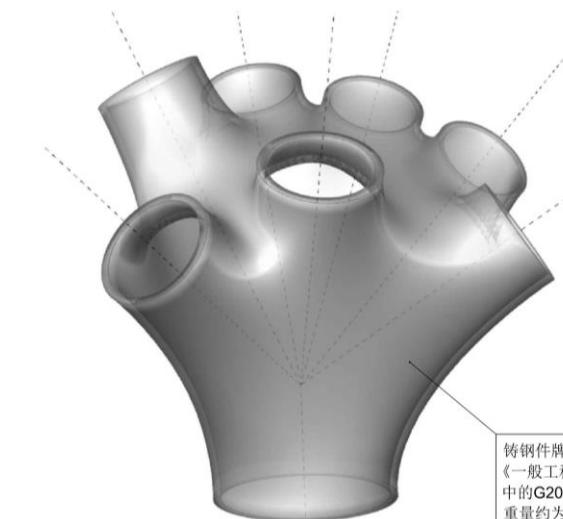
01 Tree 1 Main Tree Top View 主树柱1俯视图
Scale: 1:50



02 Tree
- Scale: 1:70



02 Perspective View Tree 1 Casted Steel Node 树柱1钢铸件透视图
- No Scale



铸钢件牌号为德标DIN EN10293
《一般工程用途铸钢件》10293-2005
中的G20Mn5(对应国标牌号为ZG20Mn)
重量约为4吨

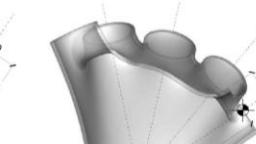
Section A 剖面
No Scale



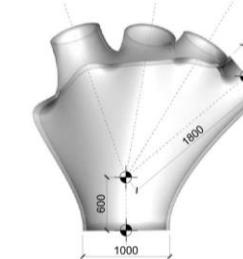
Section B
No Scale



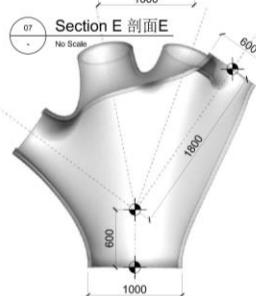
Section C



Section D 音
No Scale



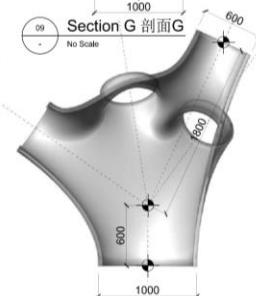
07 Section E 剖面圖



Section F



Section C



Note:

- Exact Geometry To Be Extracted From 3D Model.
 - Contractors To Further Optimize According To Fabrication Practices.

说明·

- 该节点几何布置截取自三维模型。
-承包商需根据加工中的实际需要深化此铸件节点。

What we do. RFR Project Experience



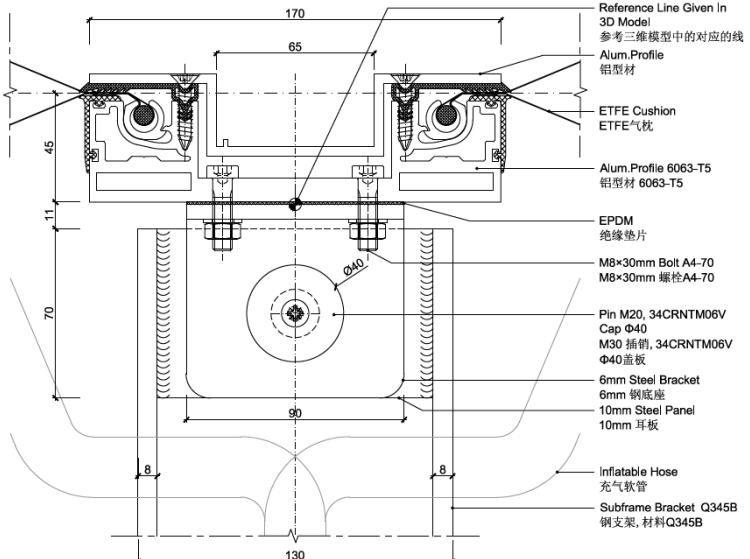
Qianhai Grand Canopy, Benoy



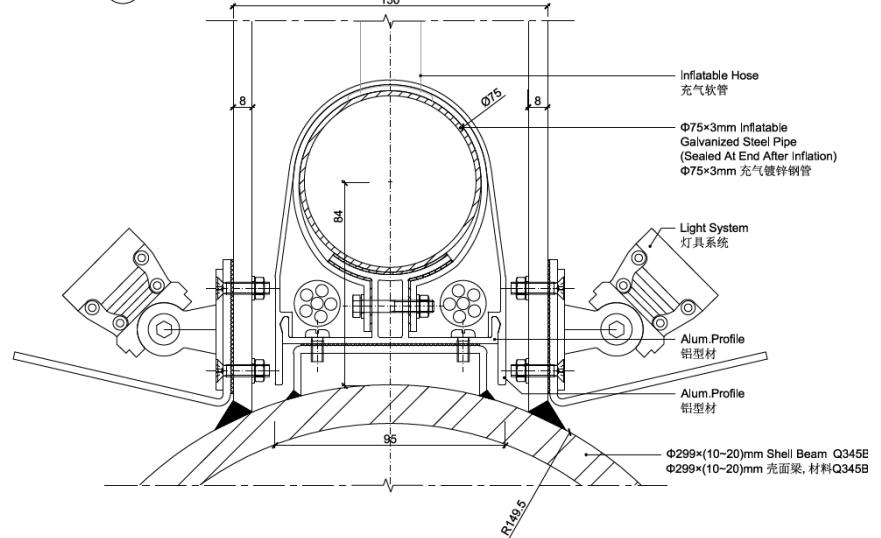
What we do. RFR Project Experience

Qianhai Grand Canopy, Benoy

3 ETFE Extrusion Typical Detail 气枕典型节点图
Scale 1:1

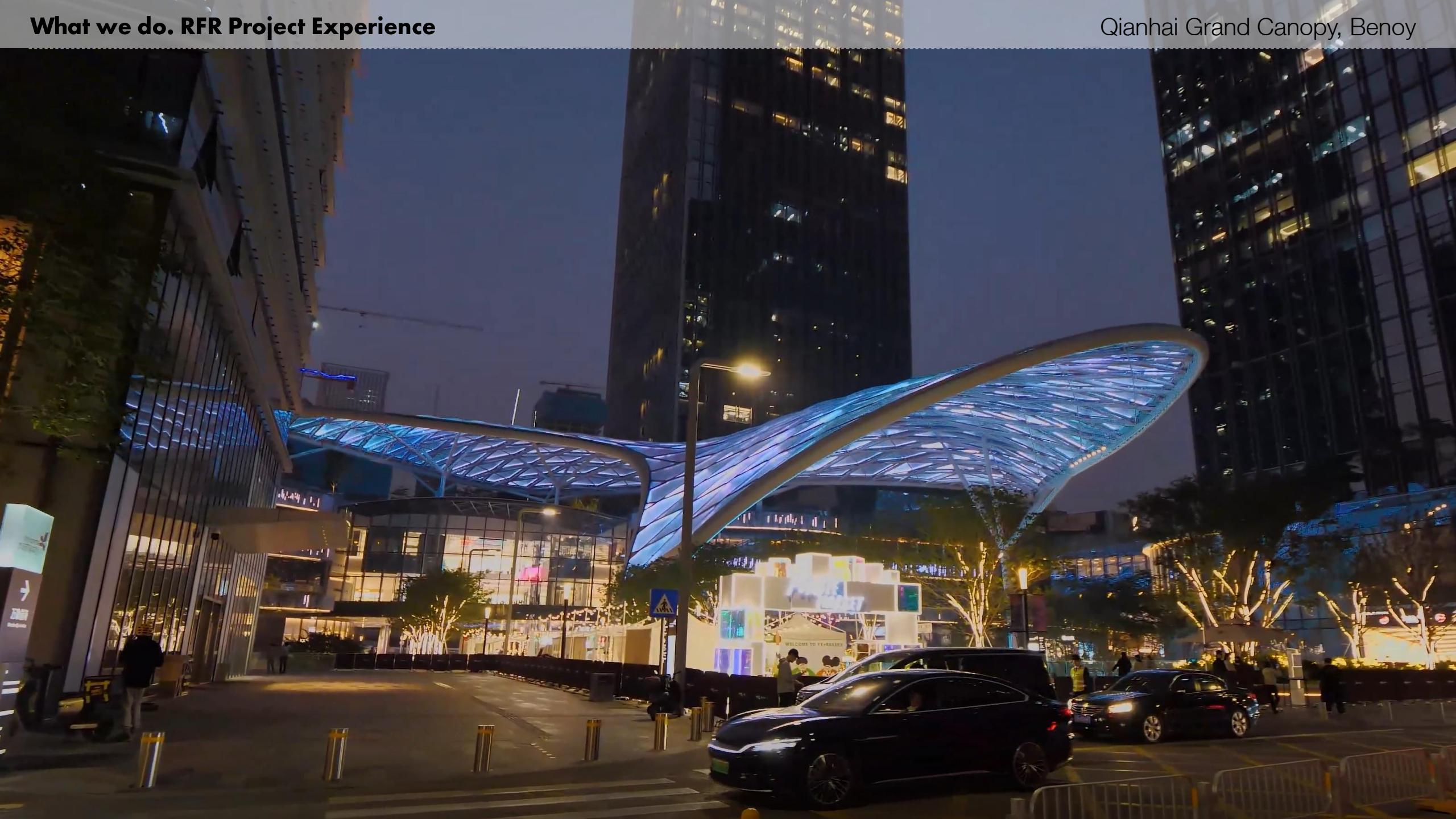


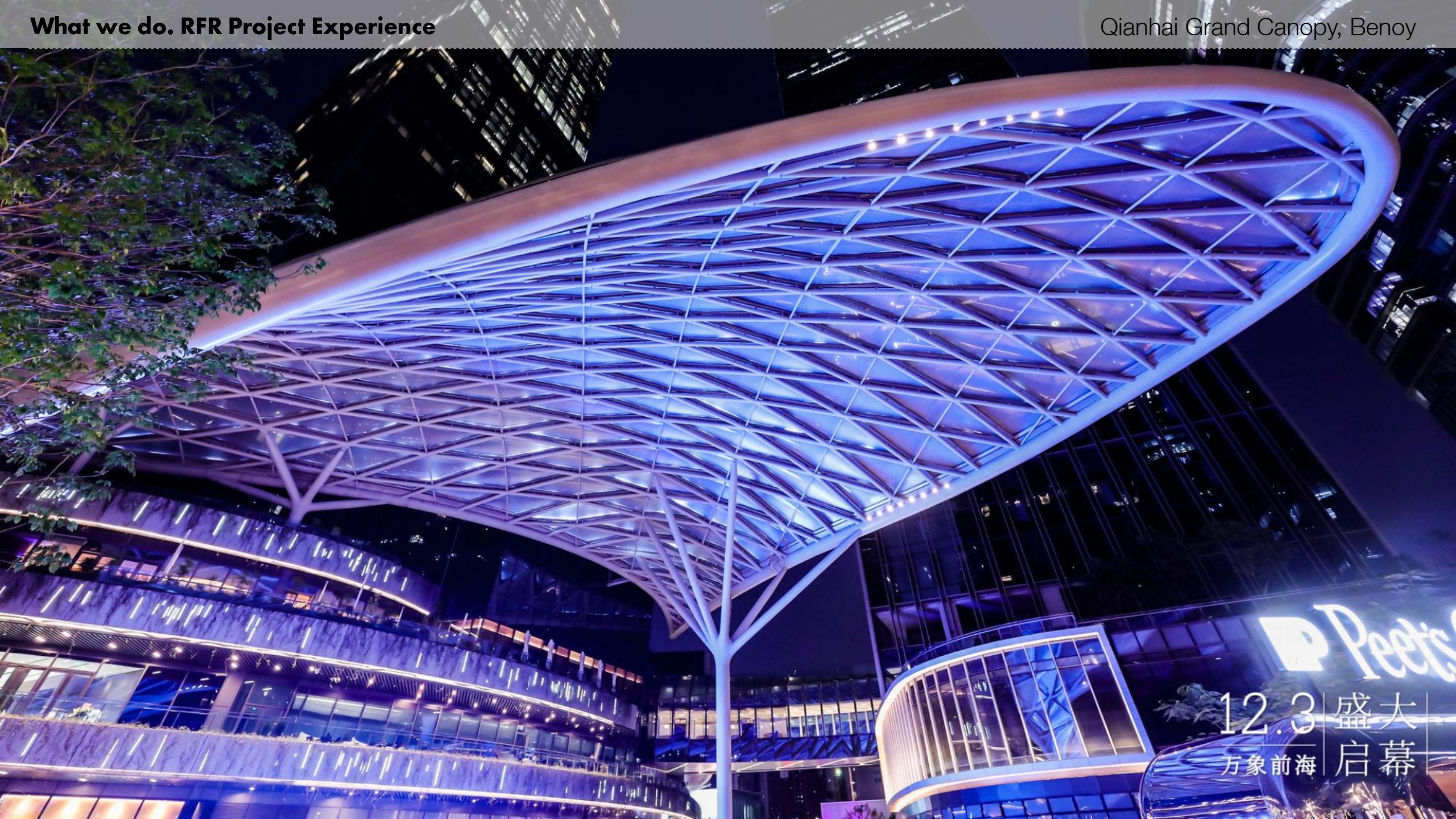
4 ETFE Extrusion Typical Detail 气枕典型节点图
Scale 1:1



What we do. RFR Project Experience

Qianhai Grand Canopy, Benoy





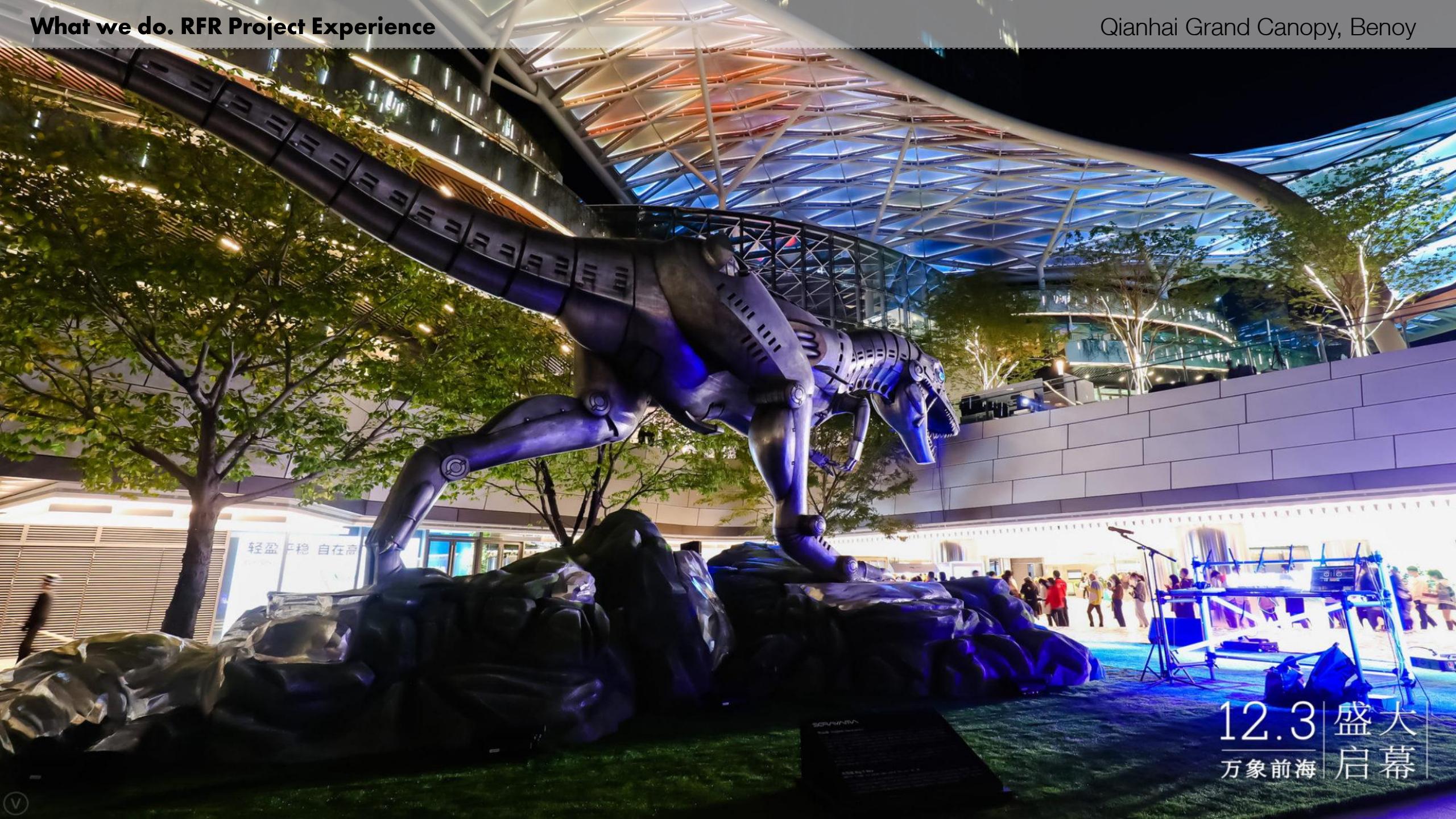
12.3 盛大
万象前海 启幕

What we do. RFR Project Experience

Qianhai Grand Canopy, Benoy



12.3 盛大
万象前海 启幕



12.3 盛大
万象前海 启幕

What we do. RFR Project Experience

Qianhai Grand Canopy, Benoy



What we do. RFR Project Experience



Qianhai Grand Canopy, Benoy



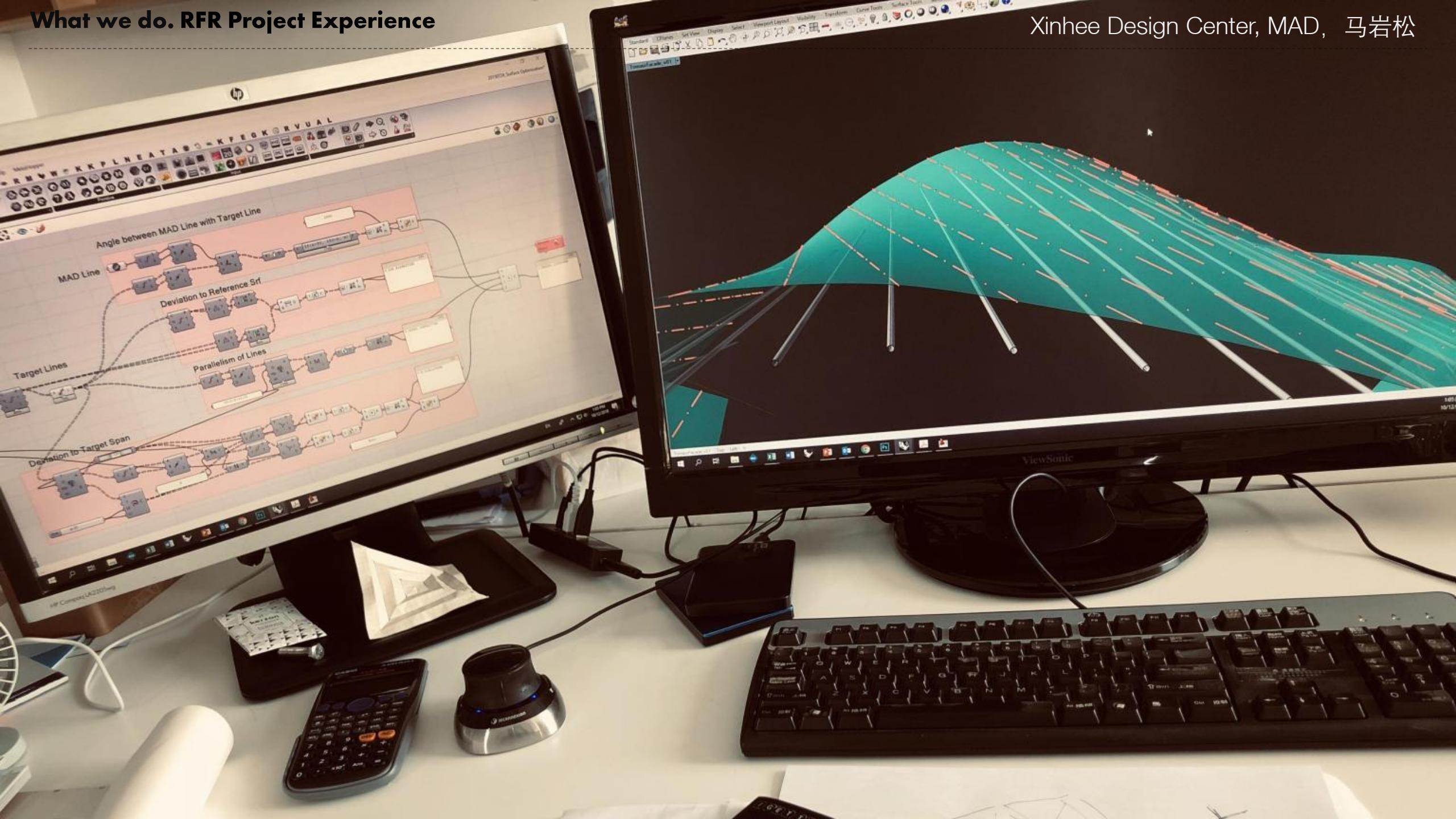
RFR Project Experience

- + Project Management
- + Geometry Optimization
- + Structural Design
- + 3D Model for fabrication



What we do. RFR Project Experience

Xinhee Design Center, MAD, 马岩松

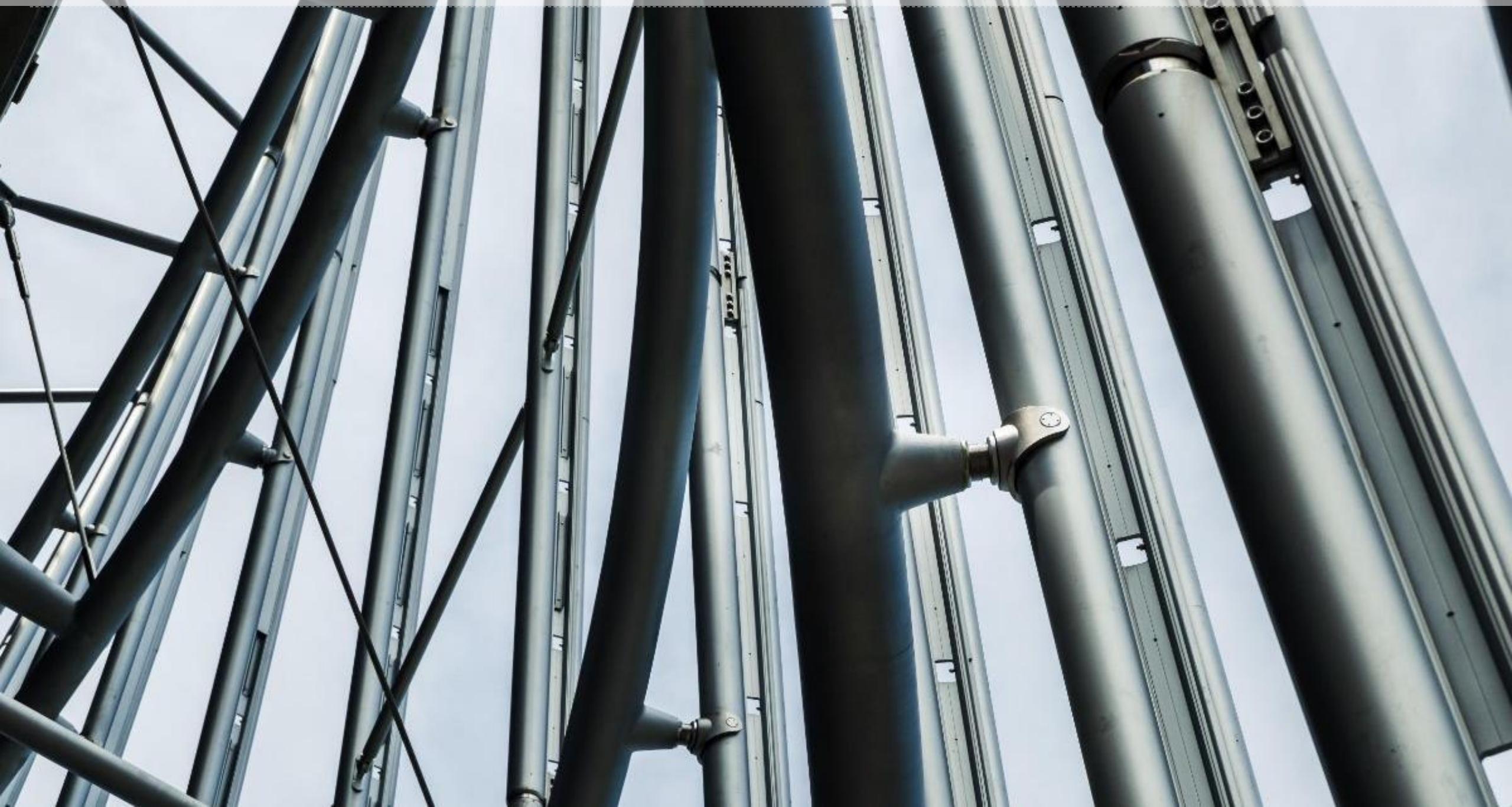


What we do. RFR Project Experience

Xinhee Design Center, MAD, 马岩松





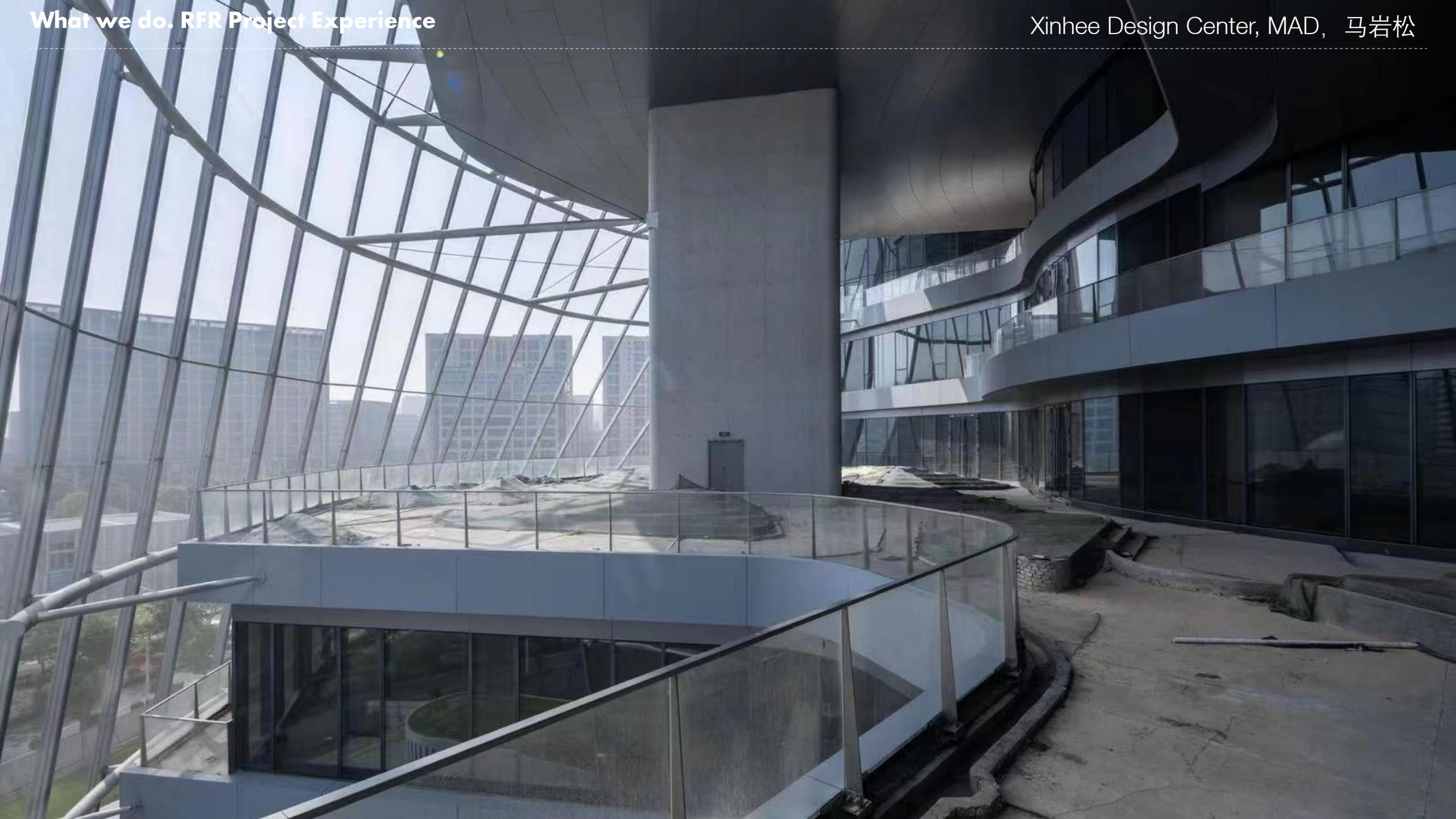




What we do. RFR Project Experience

Xinhee Design Center, MAD, 马岩松









What we do. RFR Project Experience

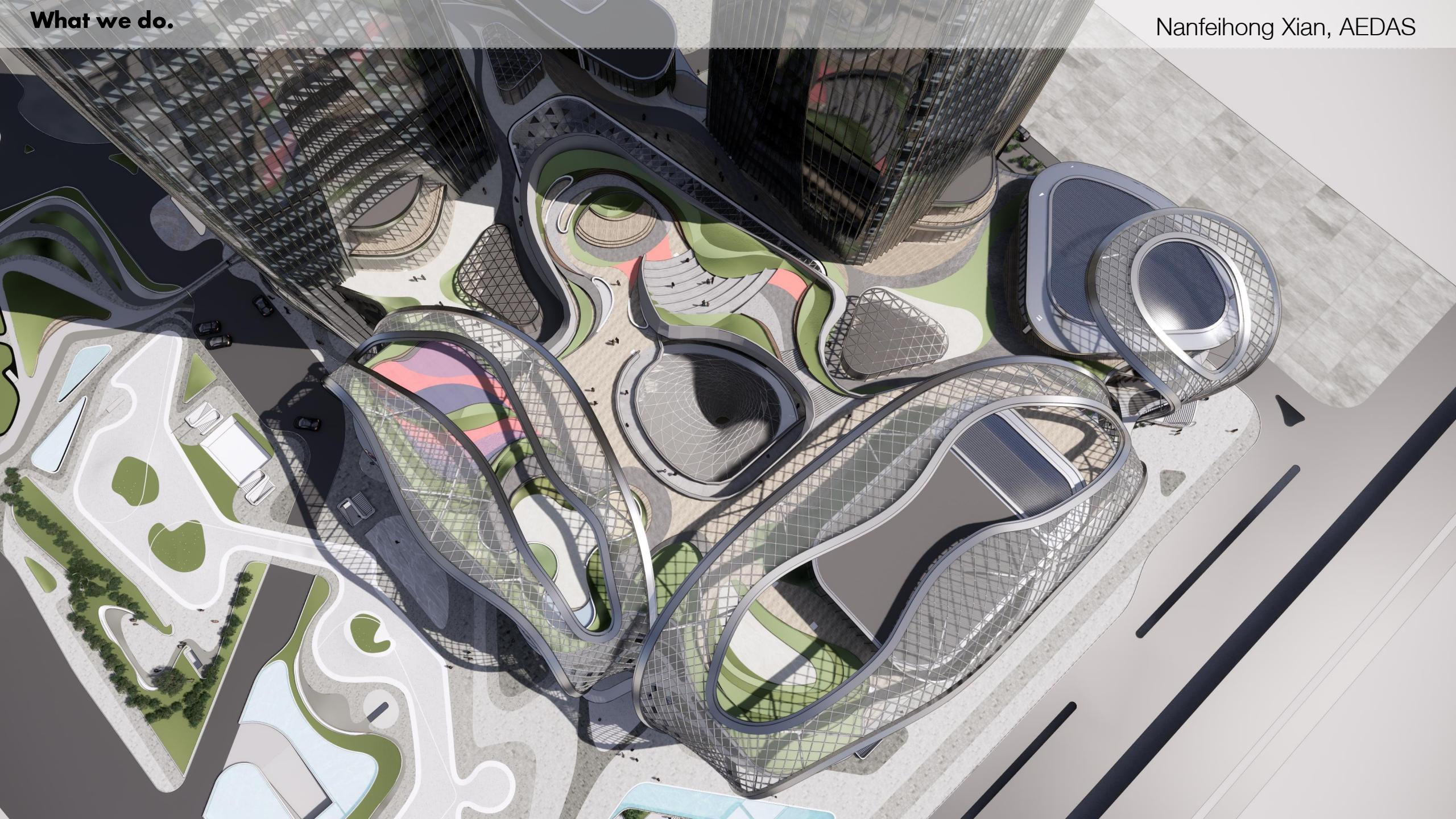
Xinhee Design Center, MAD, 马岩松

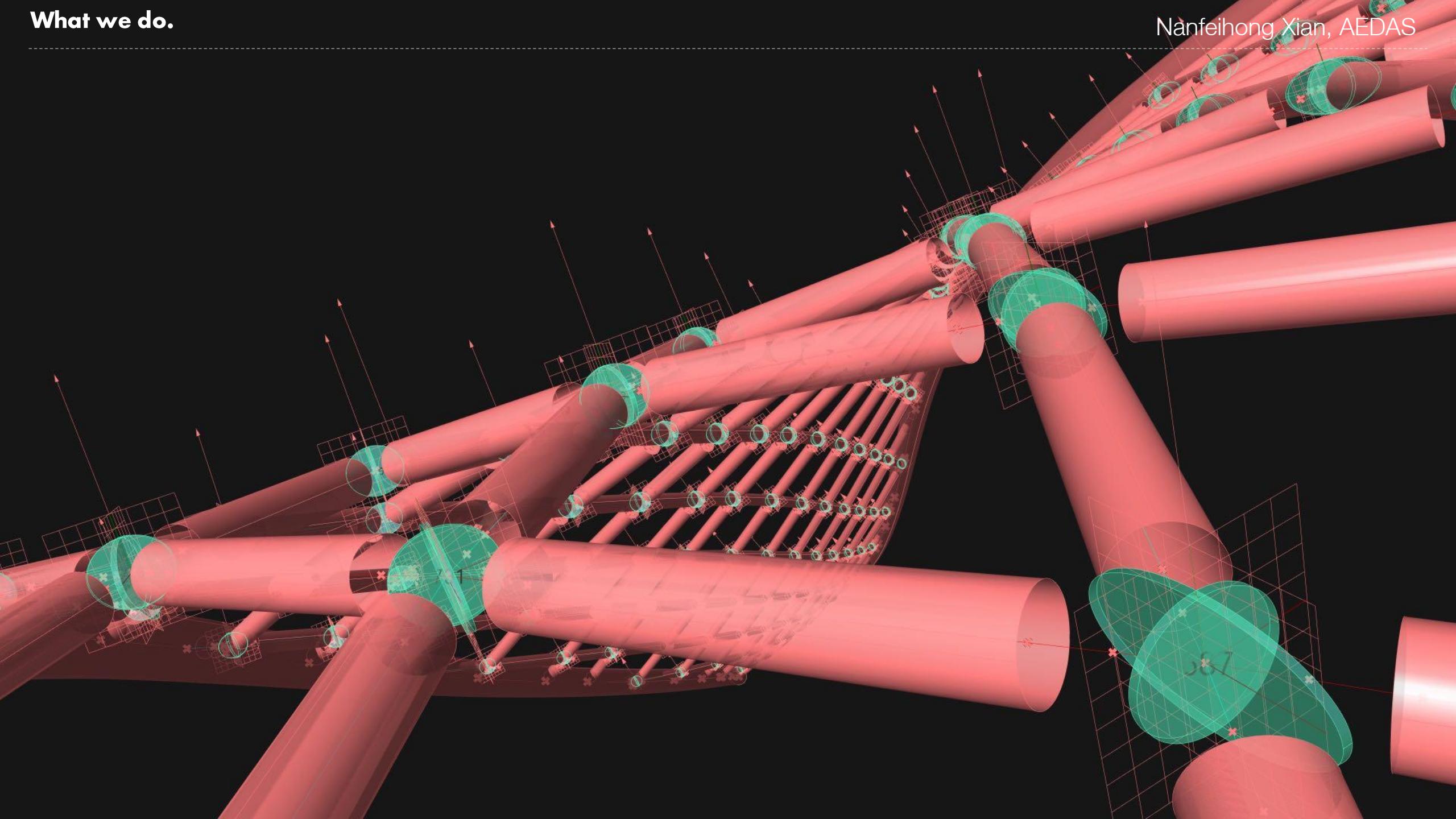




What we do.

Nanfeihong Xian, AEDAS

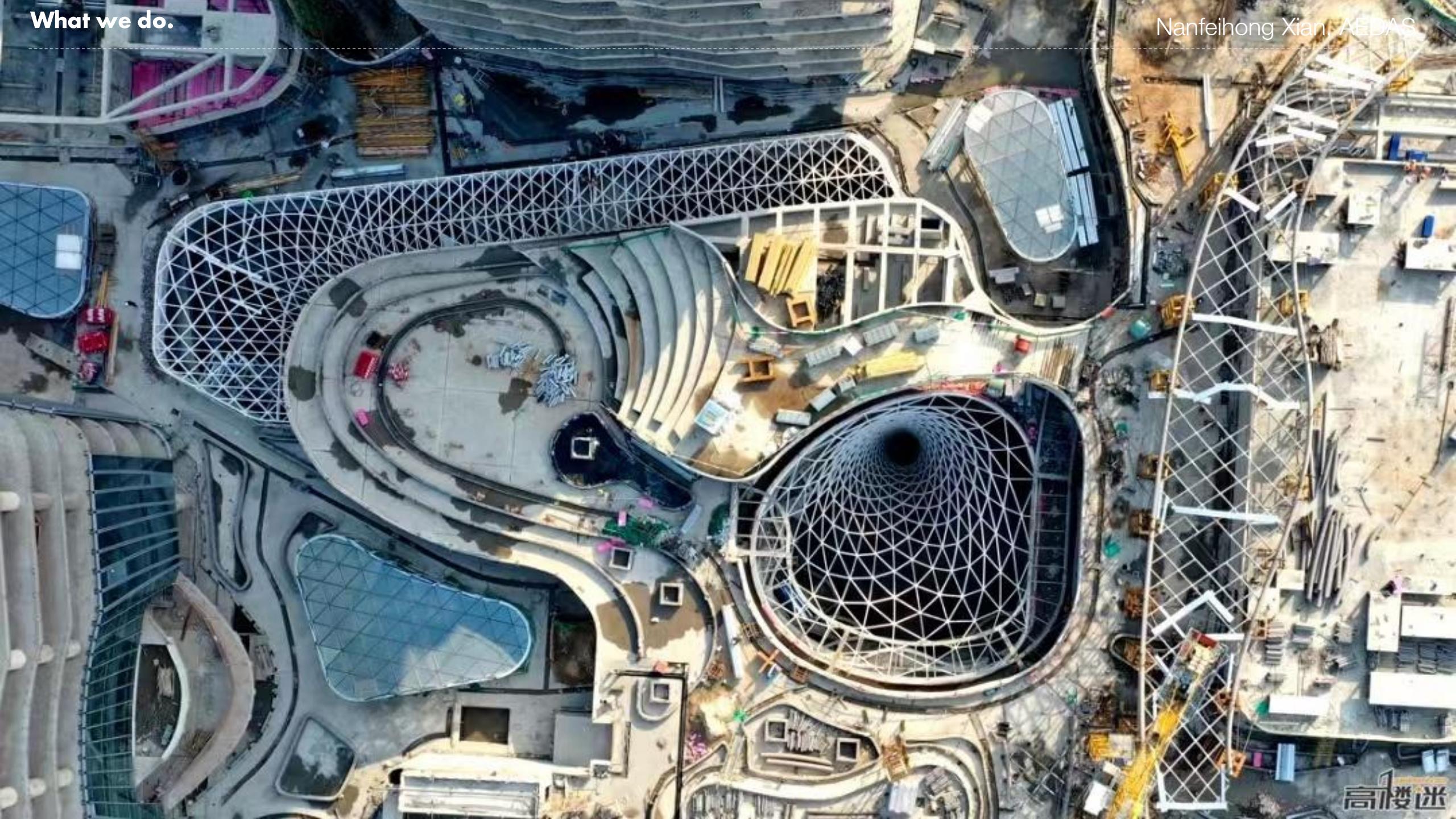






What we do.

Nanfeihong Xian, AEDAS



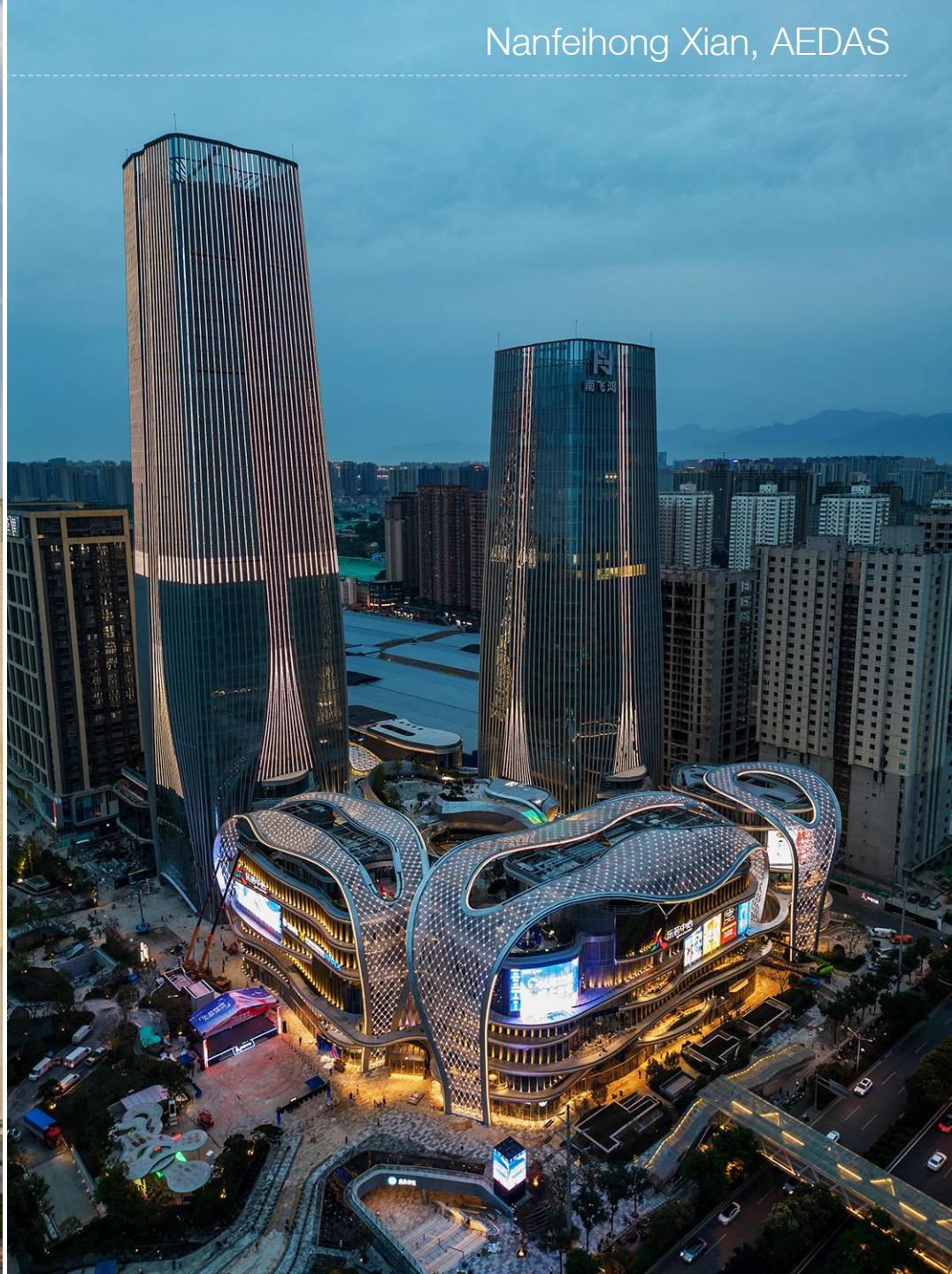
What we do.



Nanfeihong Xian, AEDAS

What we do.

Nanfeihong Xian, AEDAS





What we do.



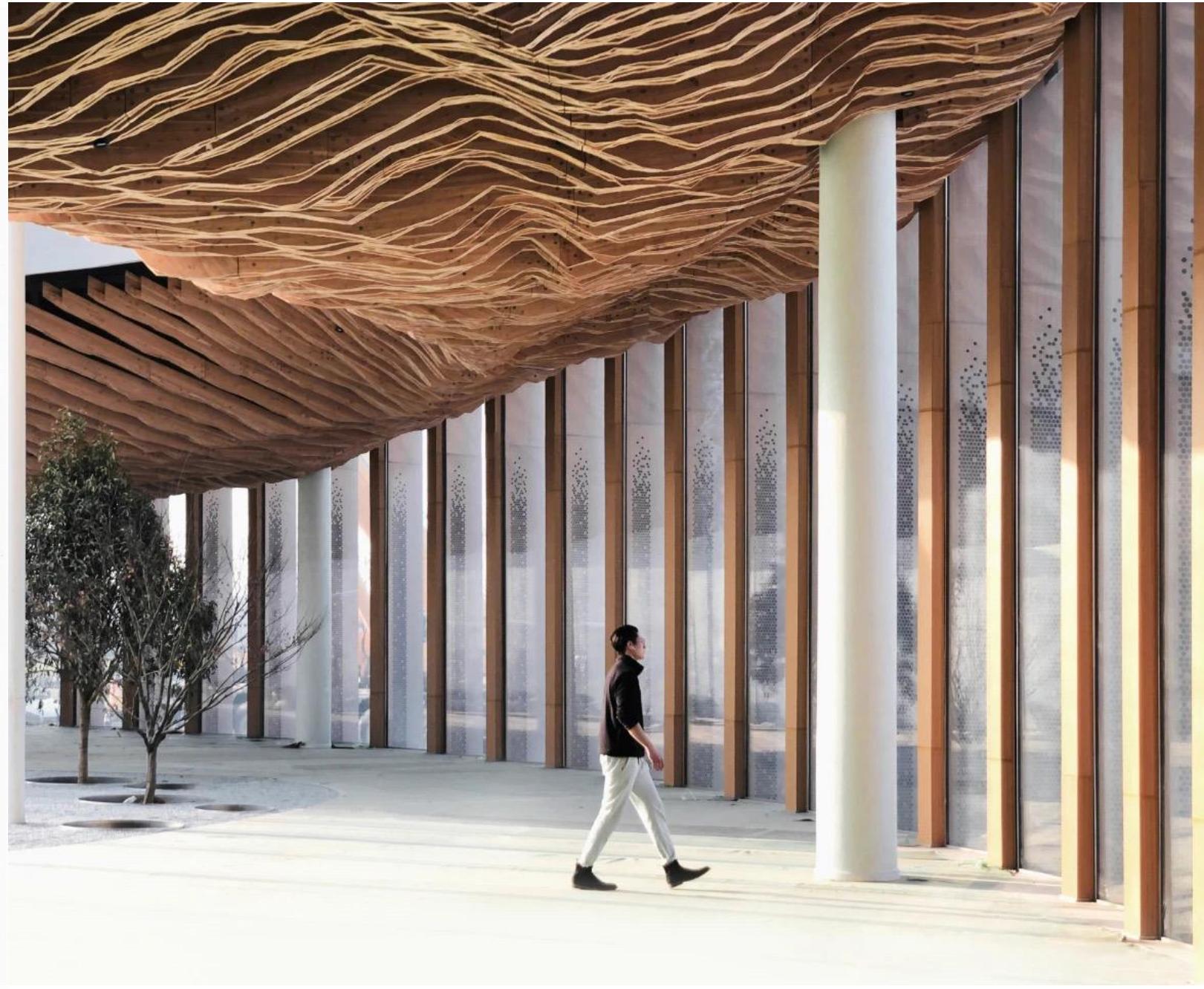
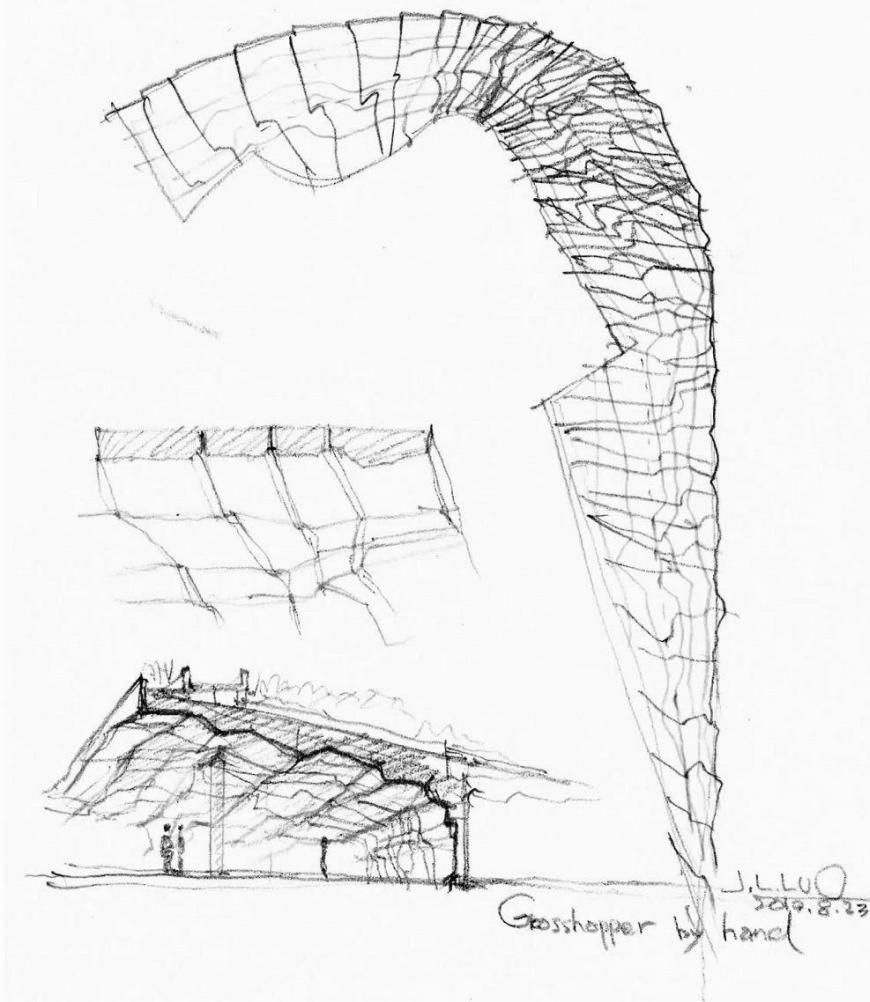
Nanfeihong Xian, AEDAS

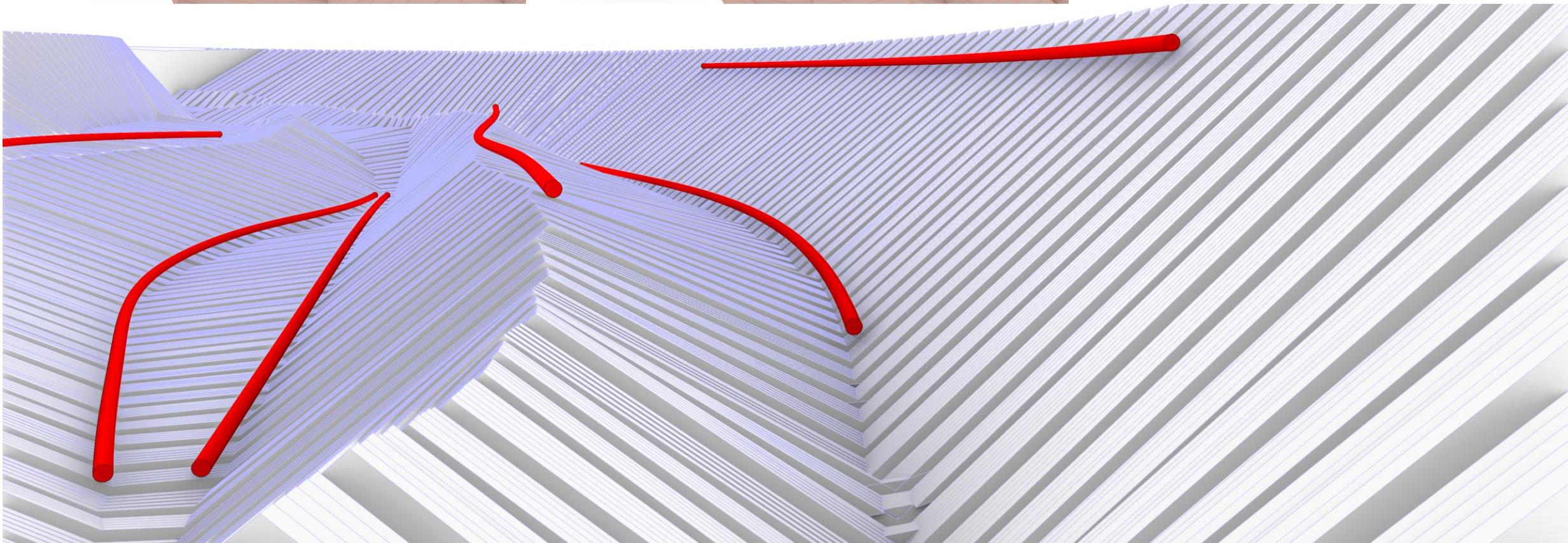
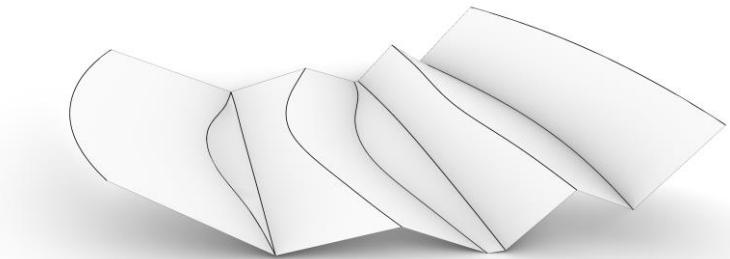
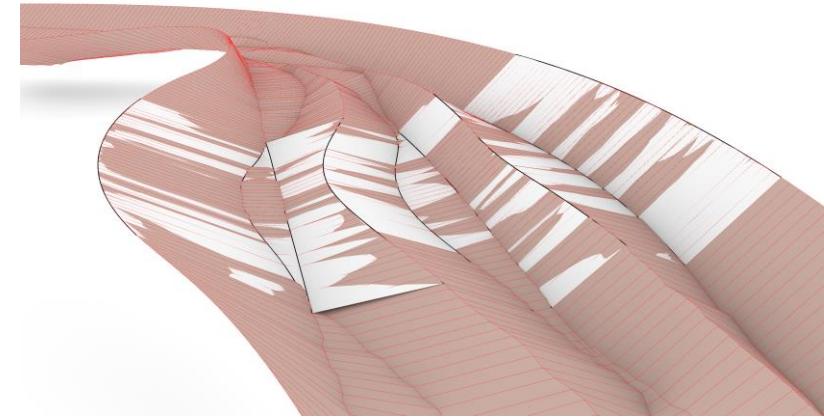
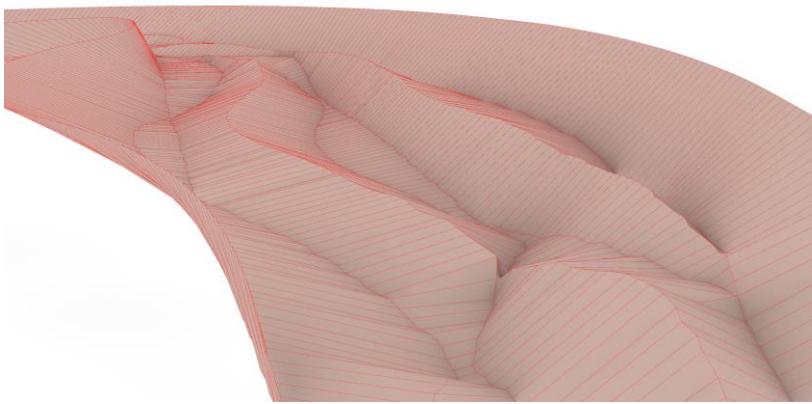
What we do.

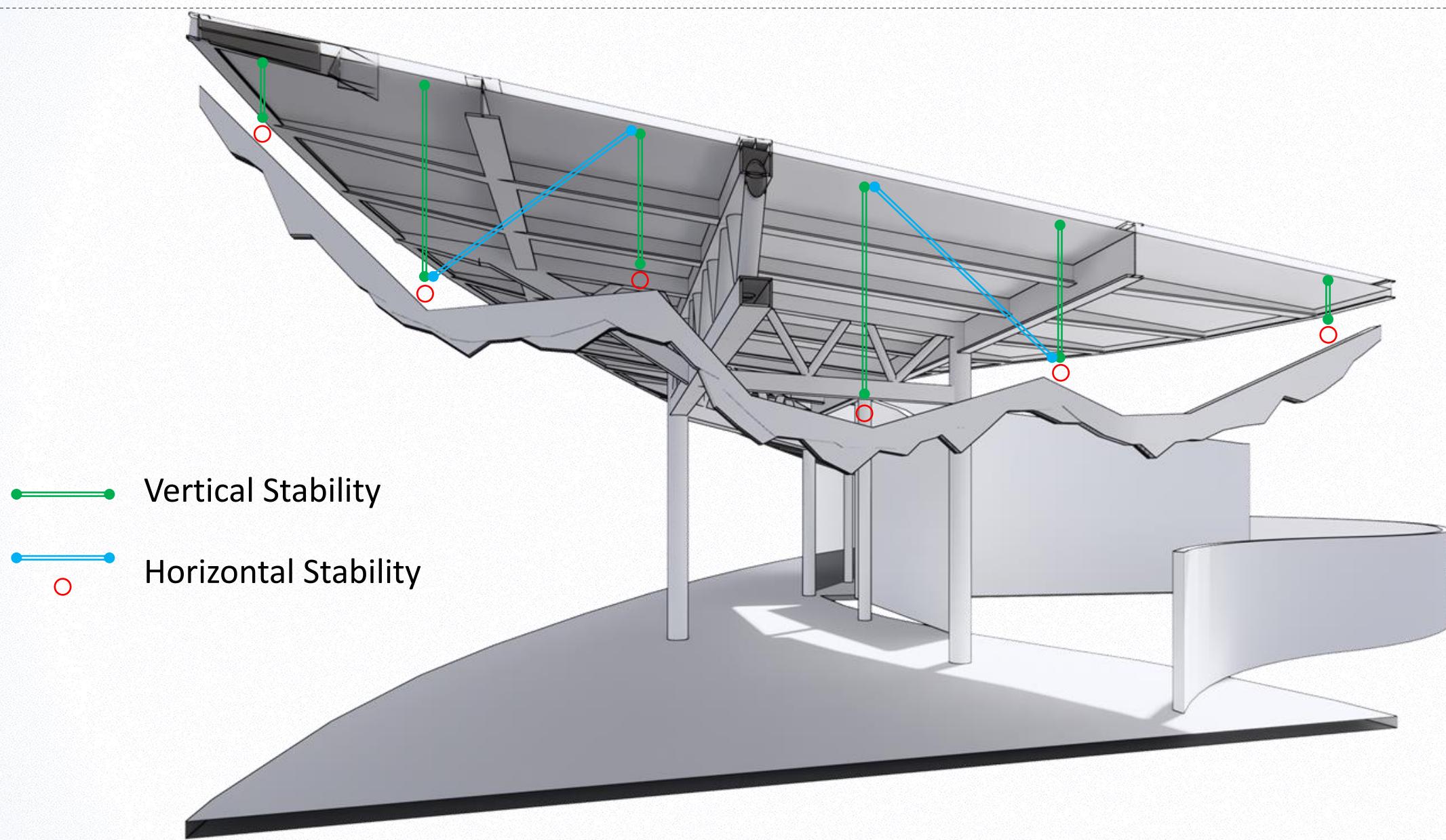


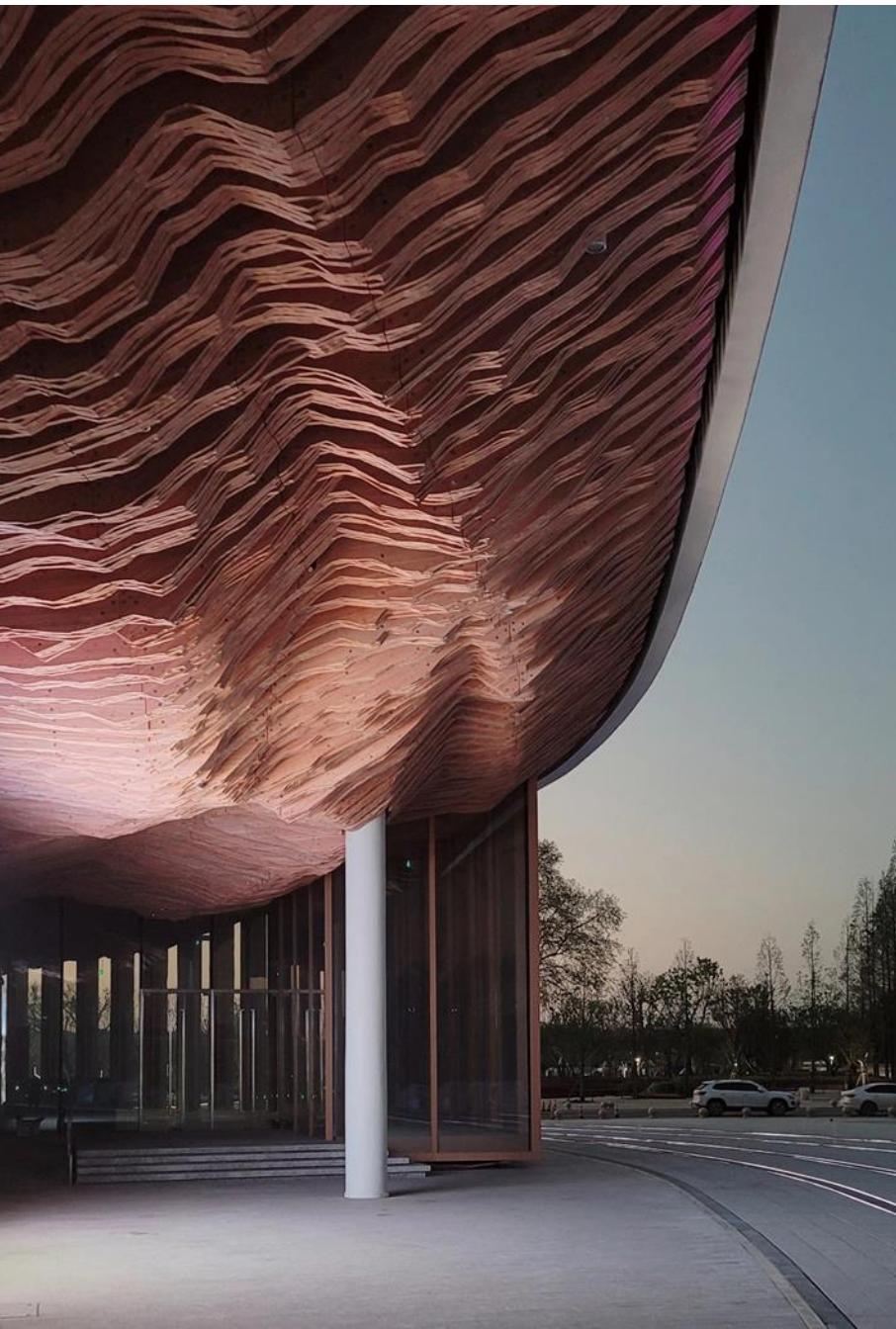
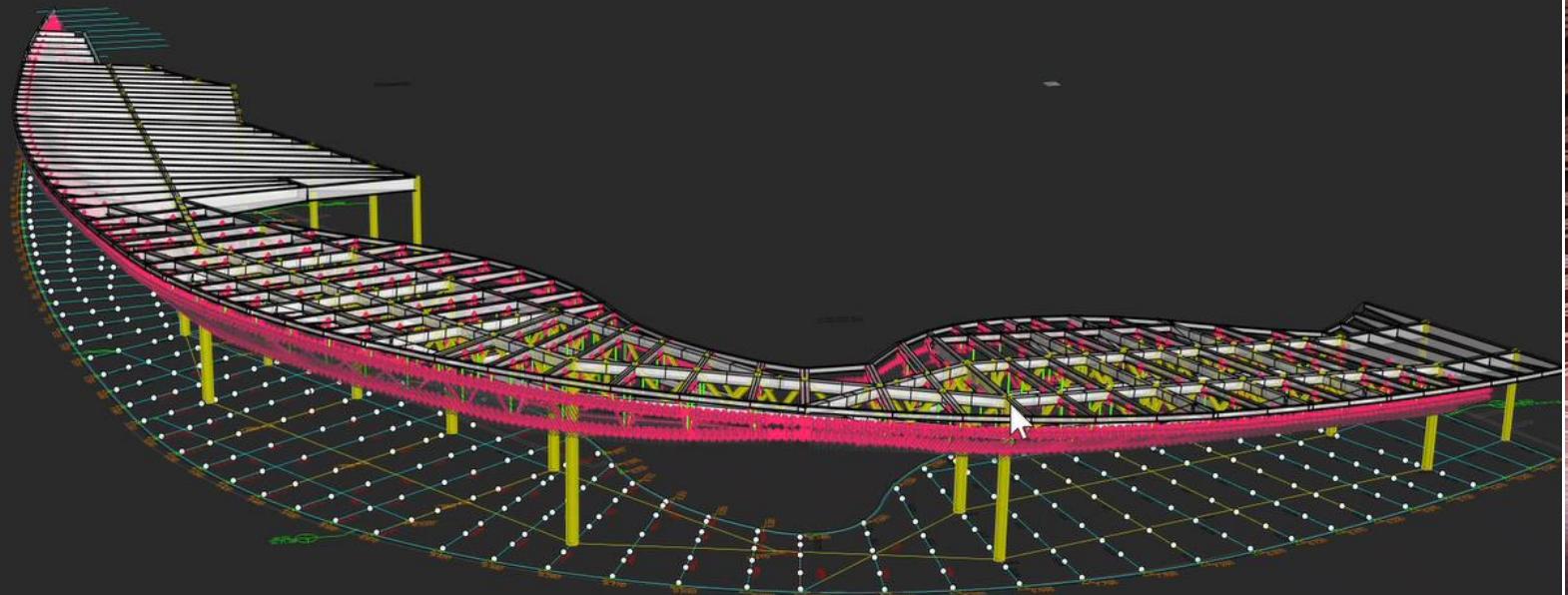
Nanfeihong Xian, AEDAS

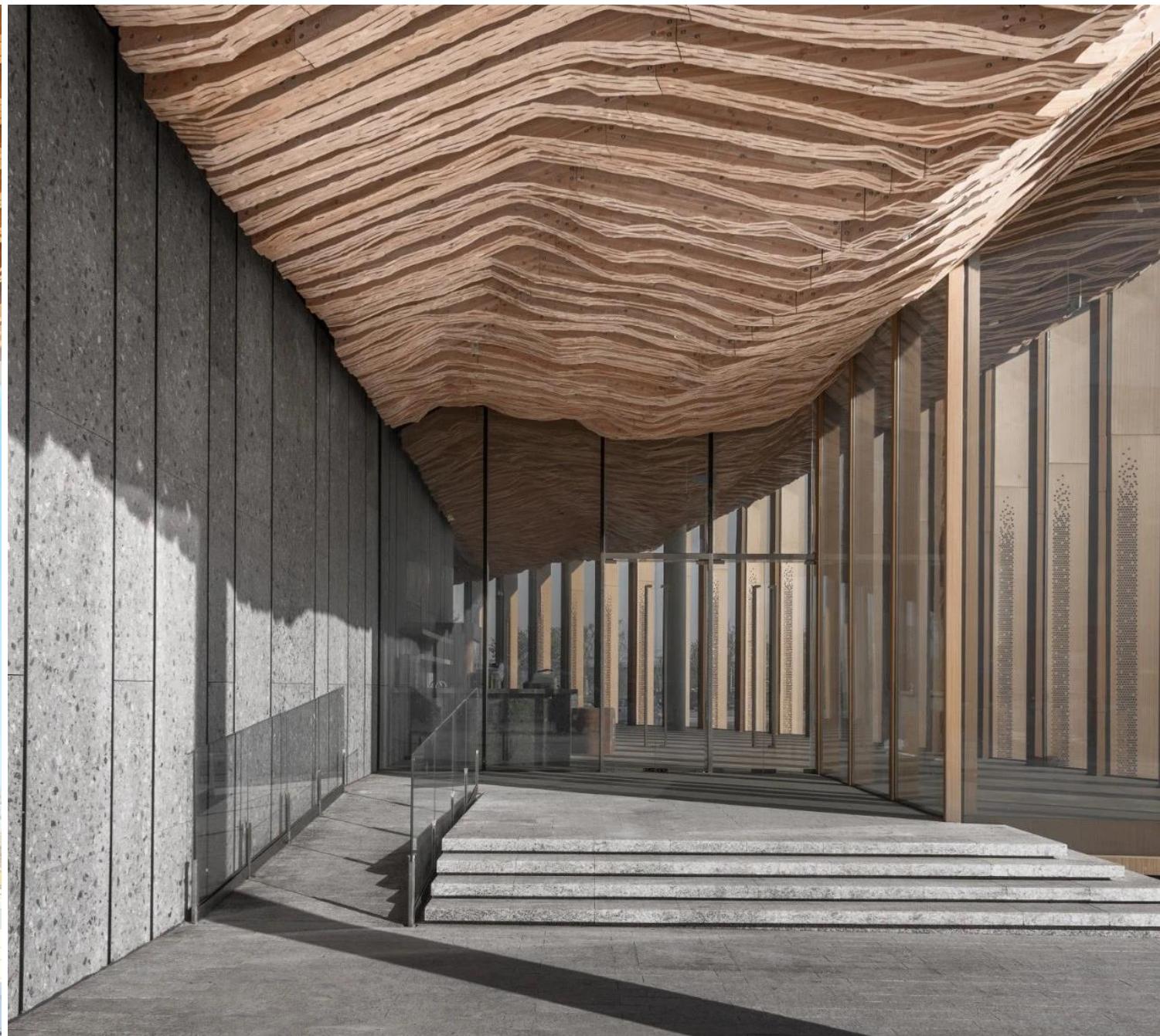






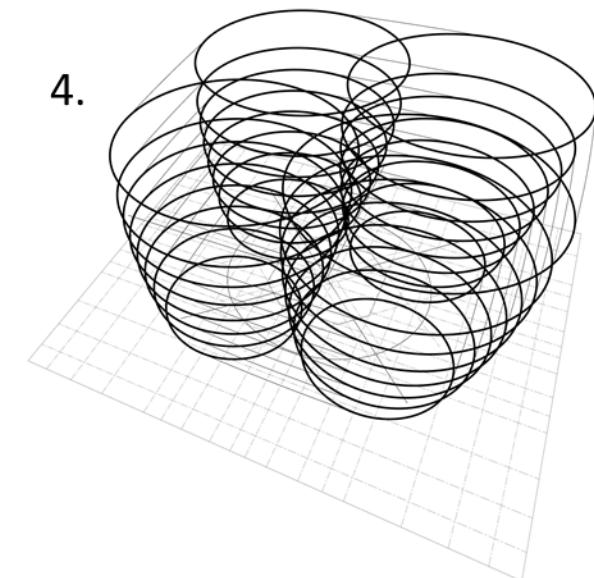
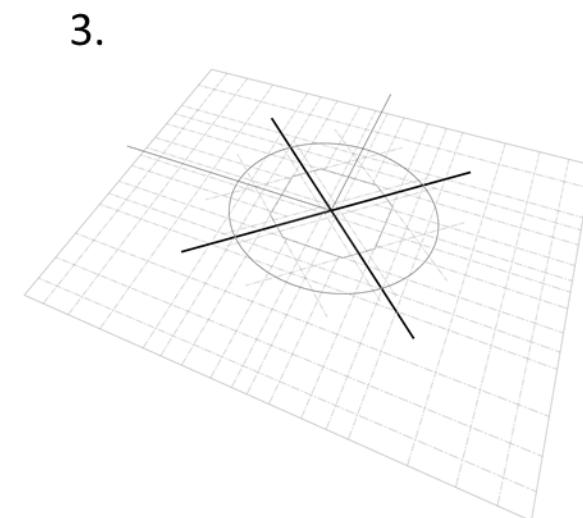
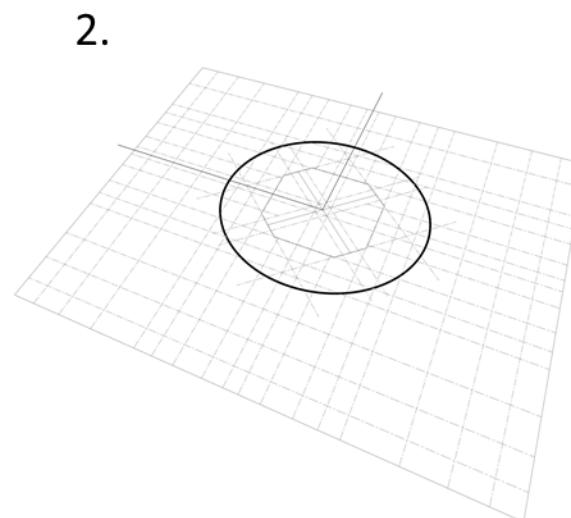
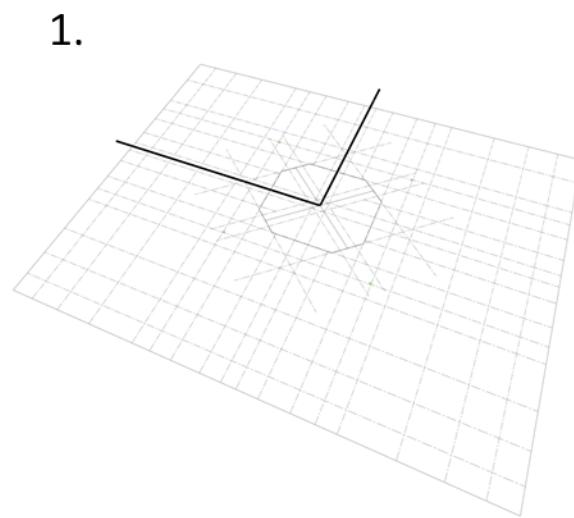
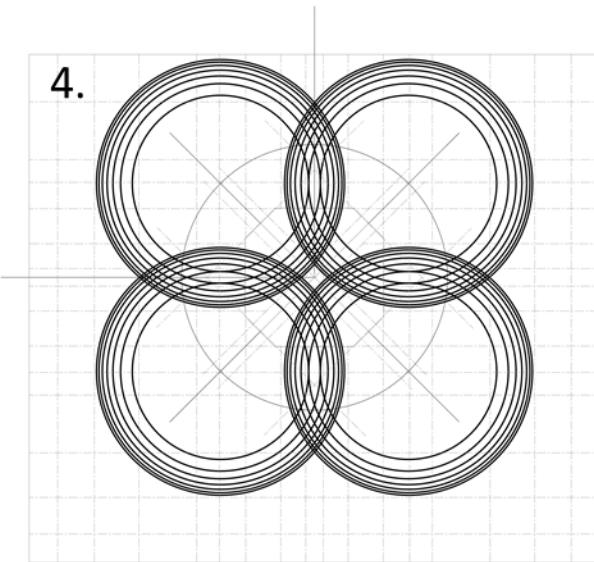
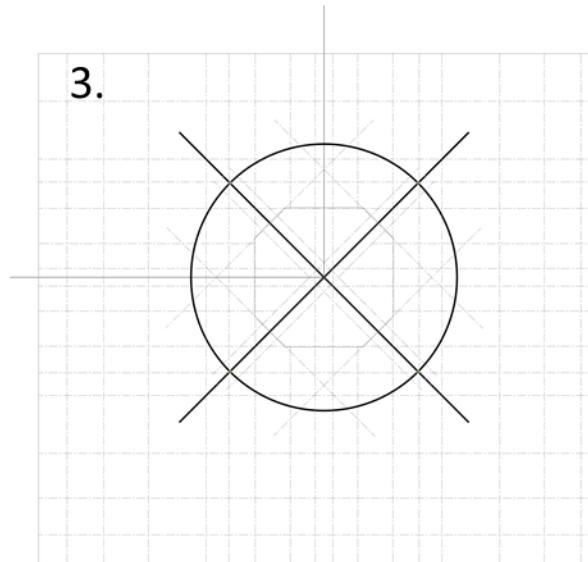
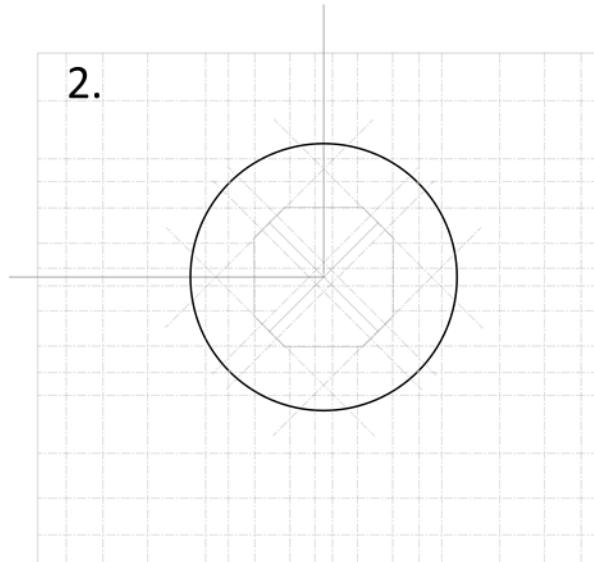
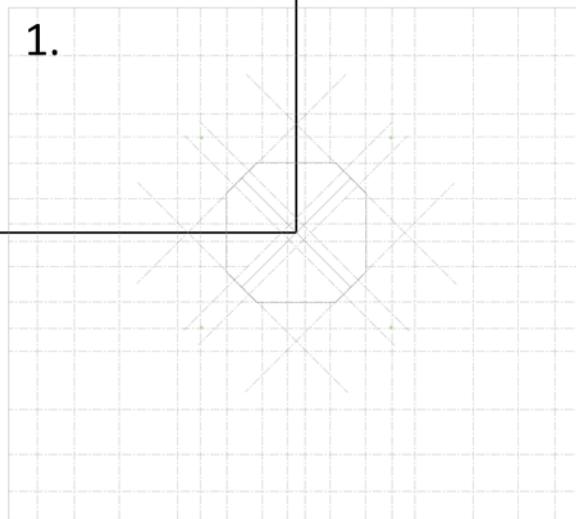




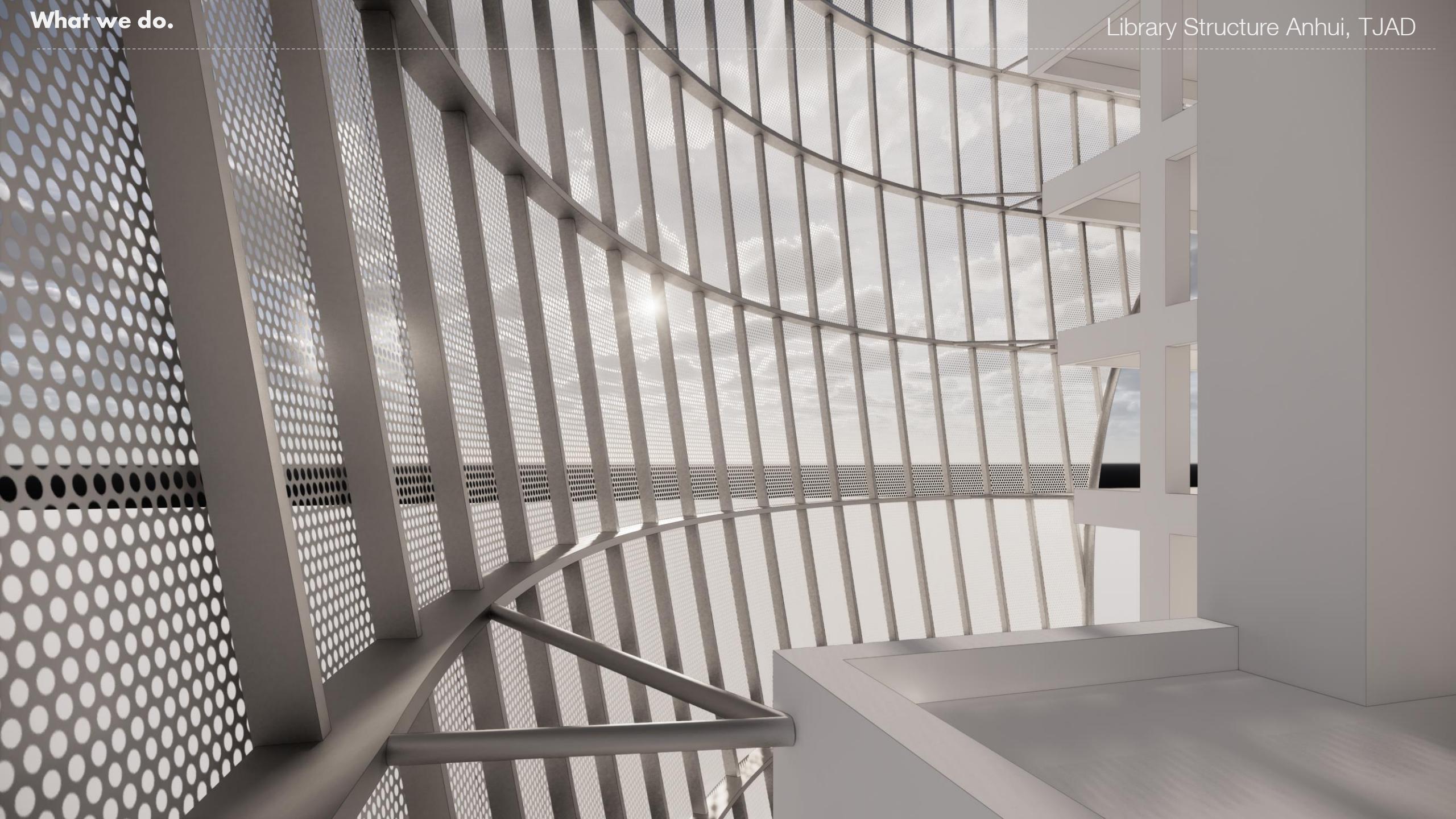


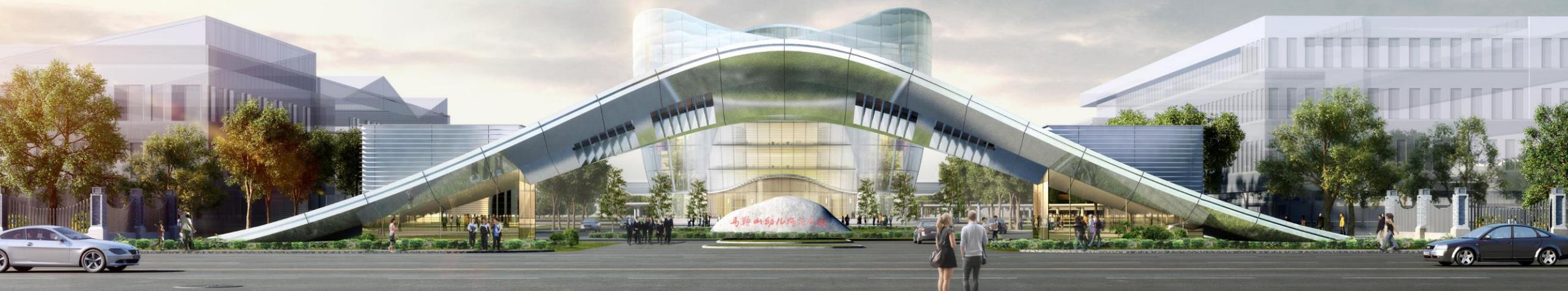




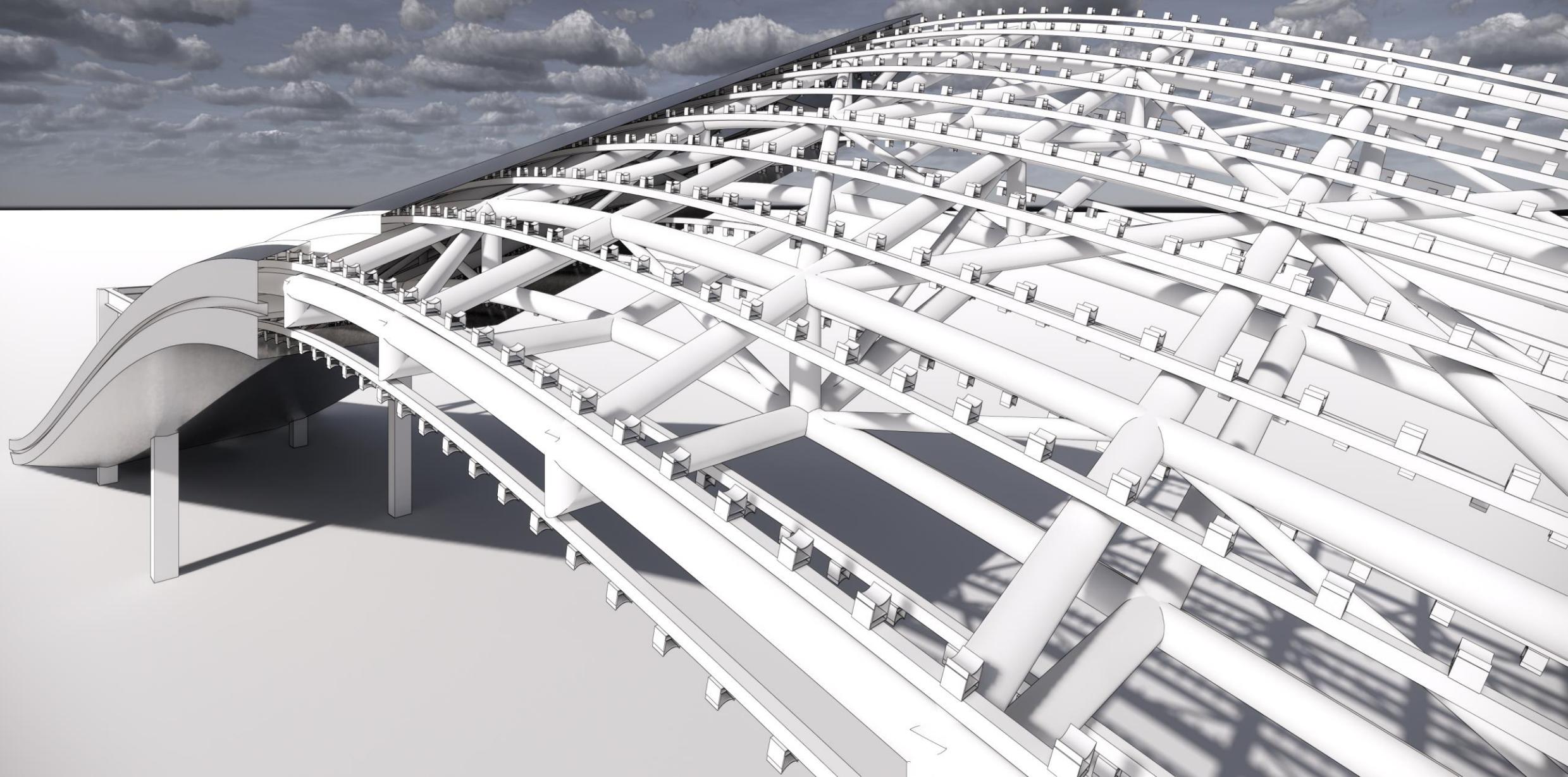


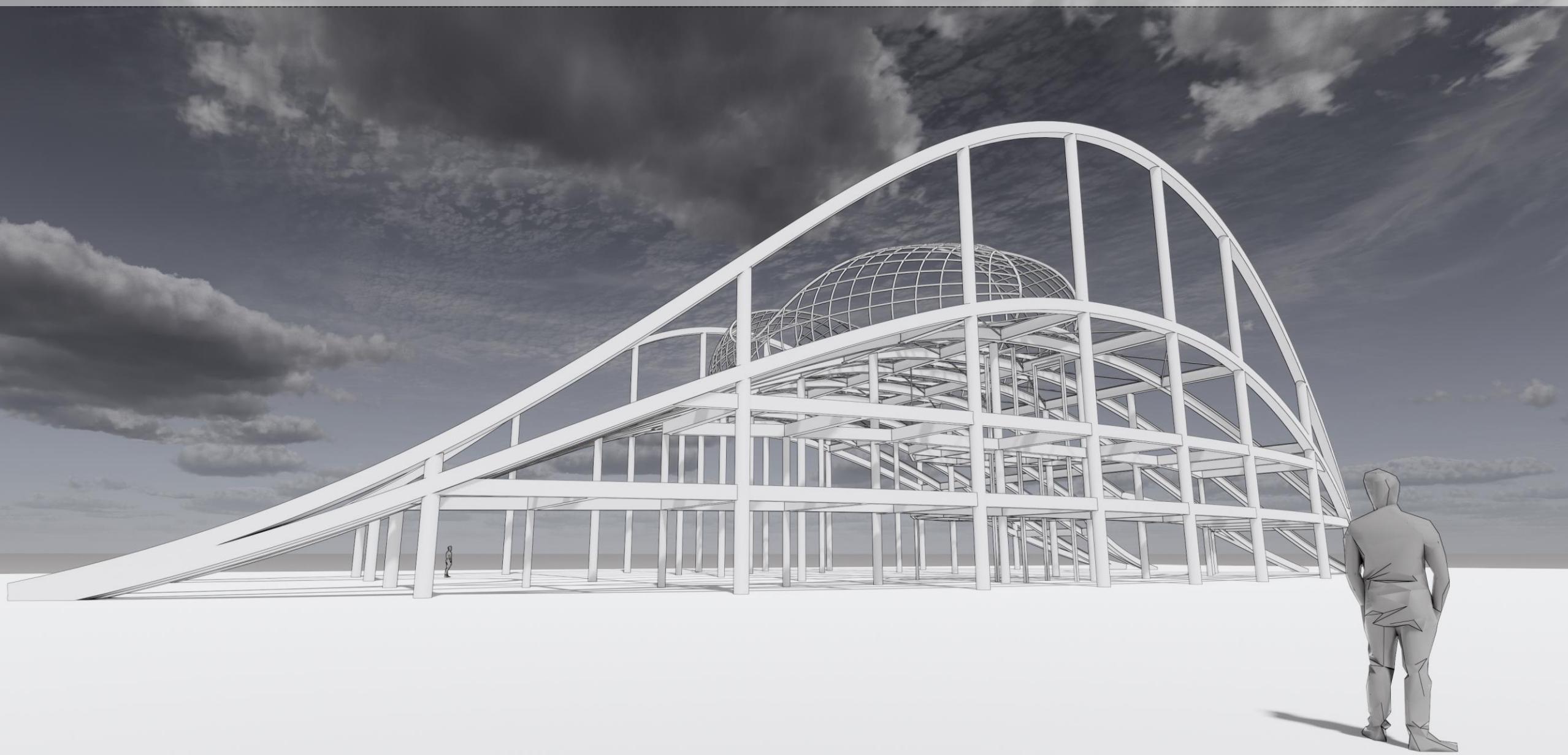






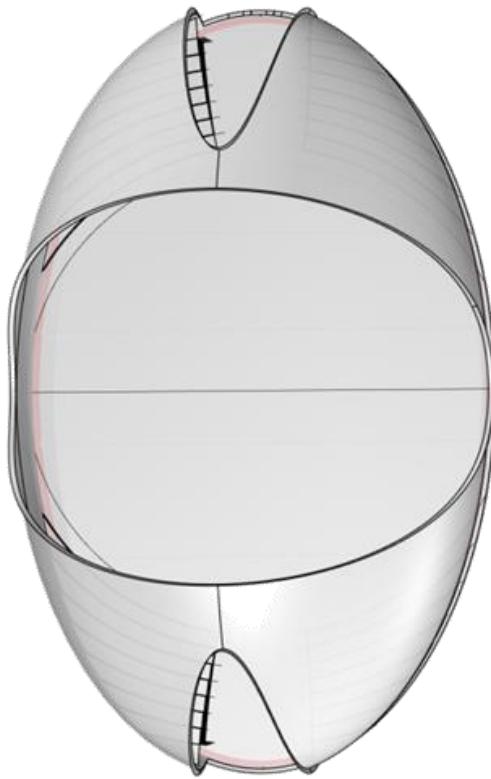






Architectural Model

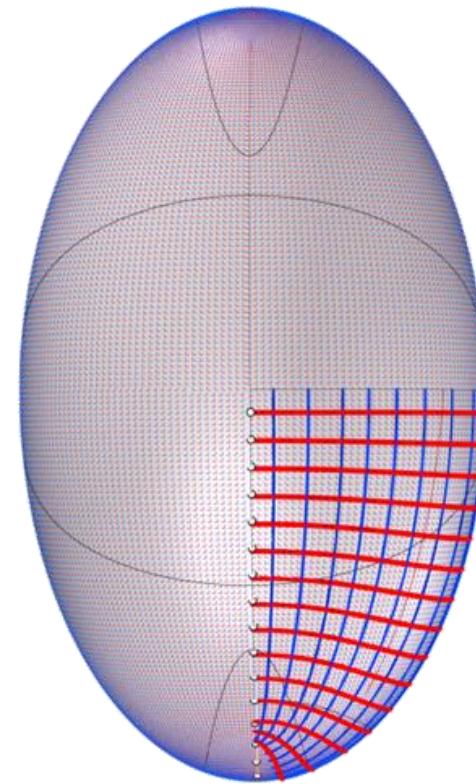
建筑模型



1.

Geometry generation according to principal curvature directions

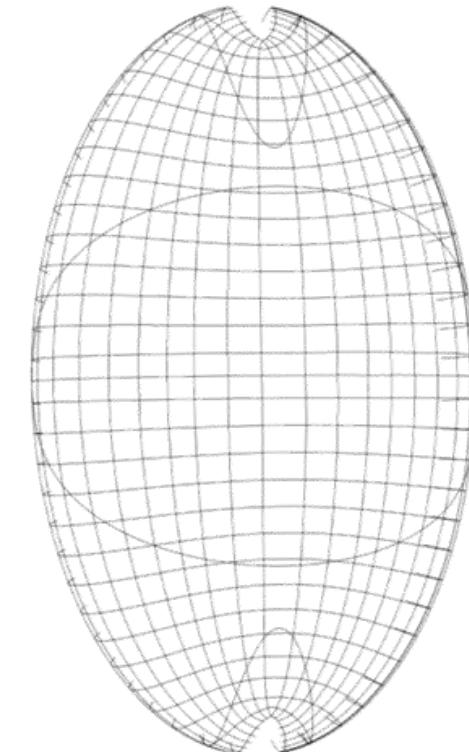
根据主曲率方向建立的几何形状



2.

Structural Mesh

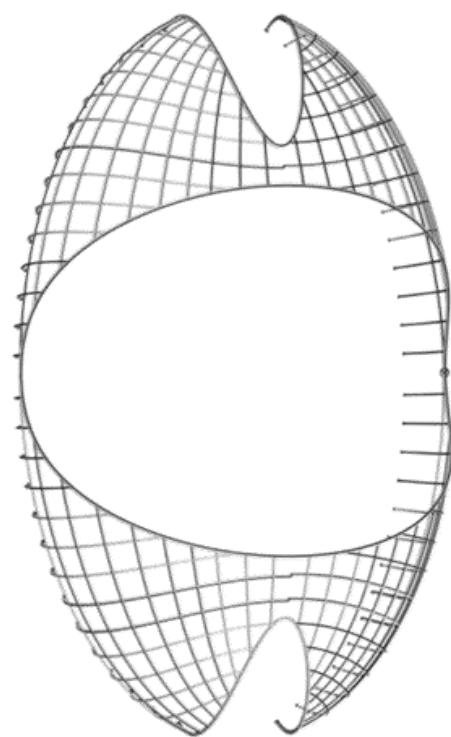
结构网格



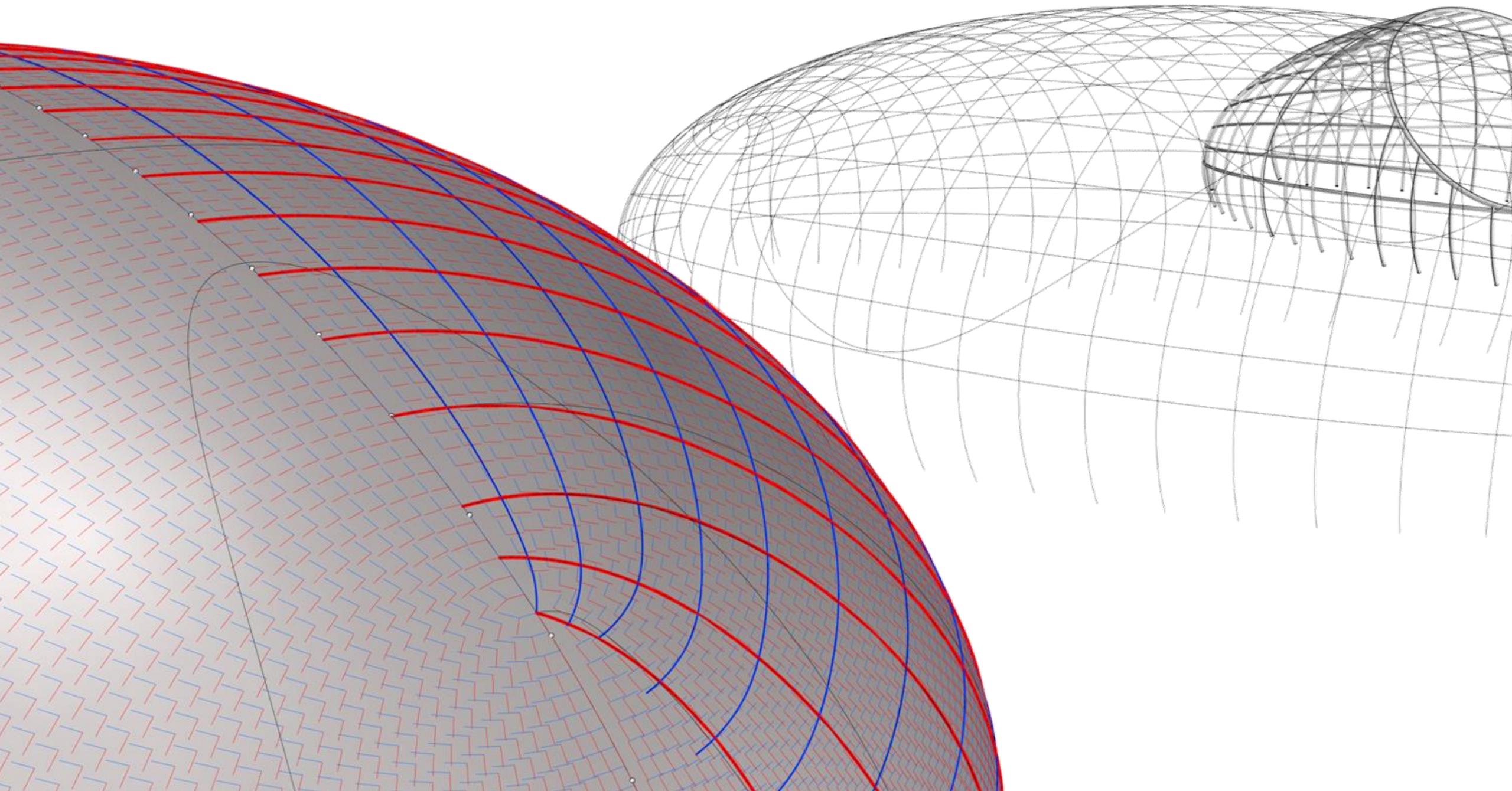
3.

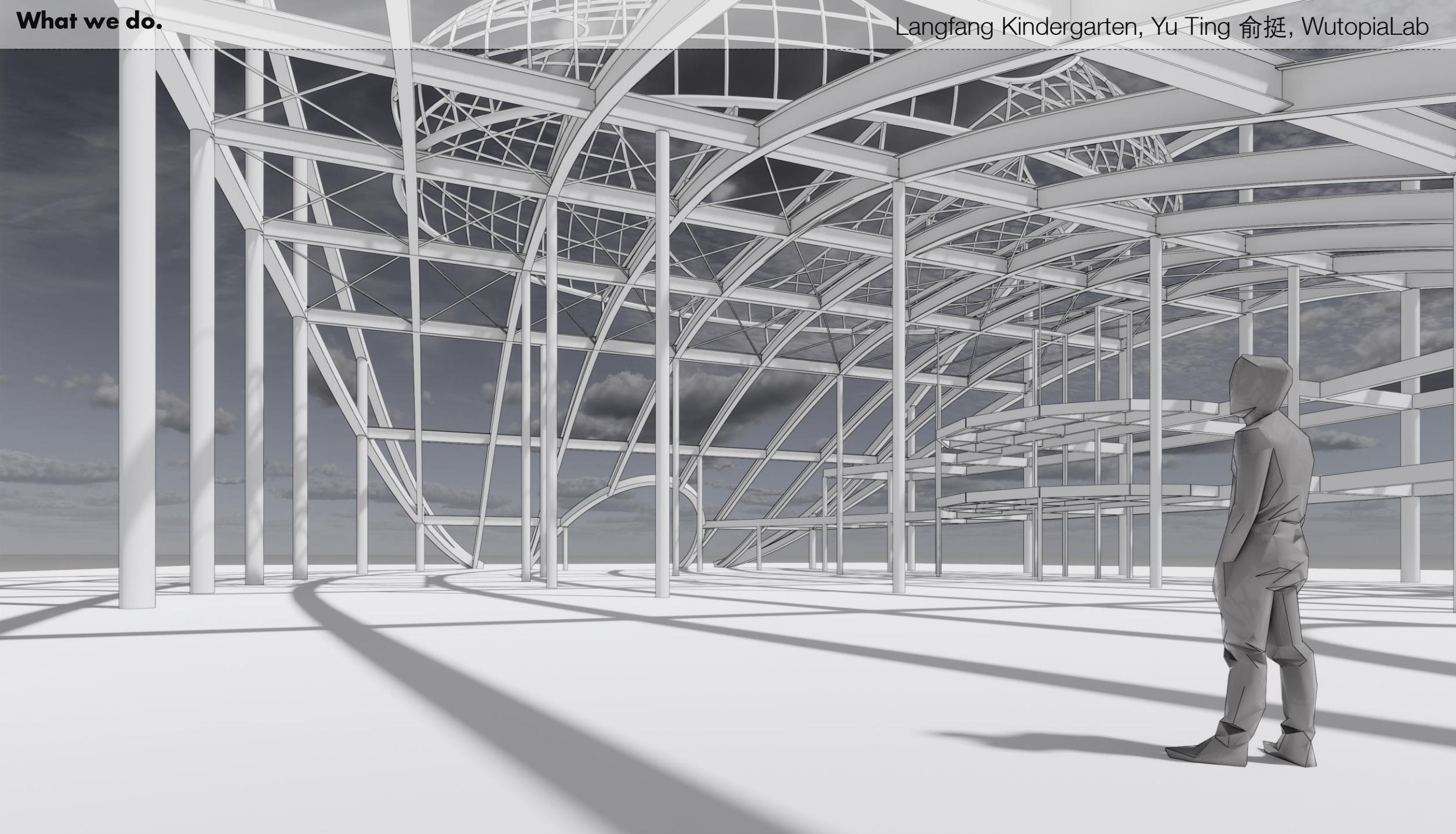
Structural Mesh with openings

开孔结构网格



4.







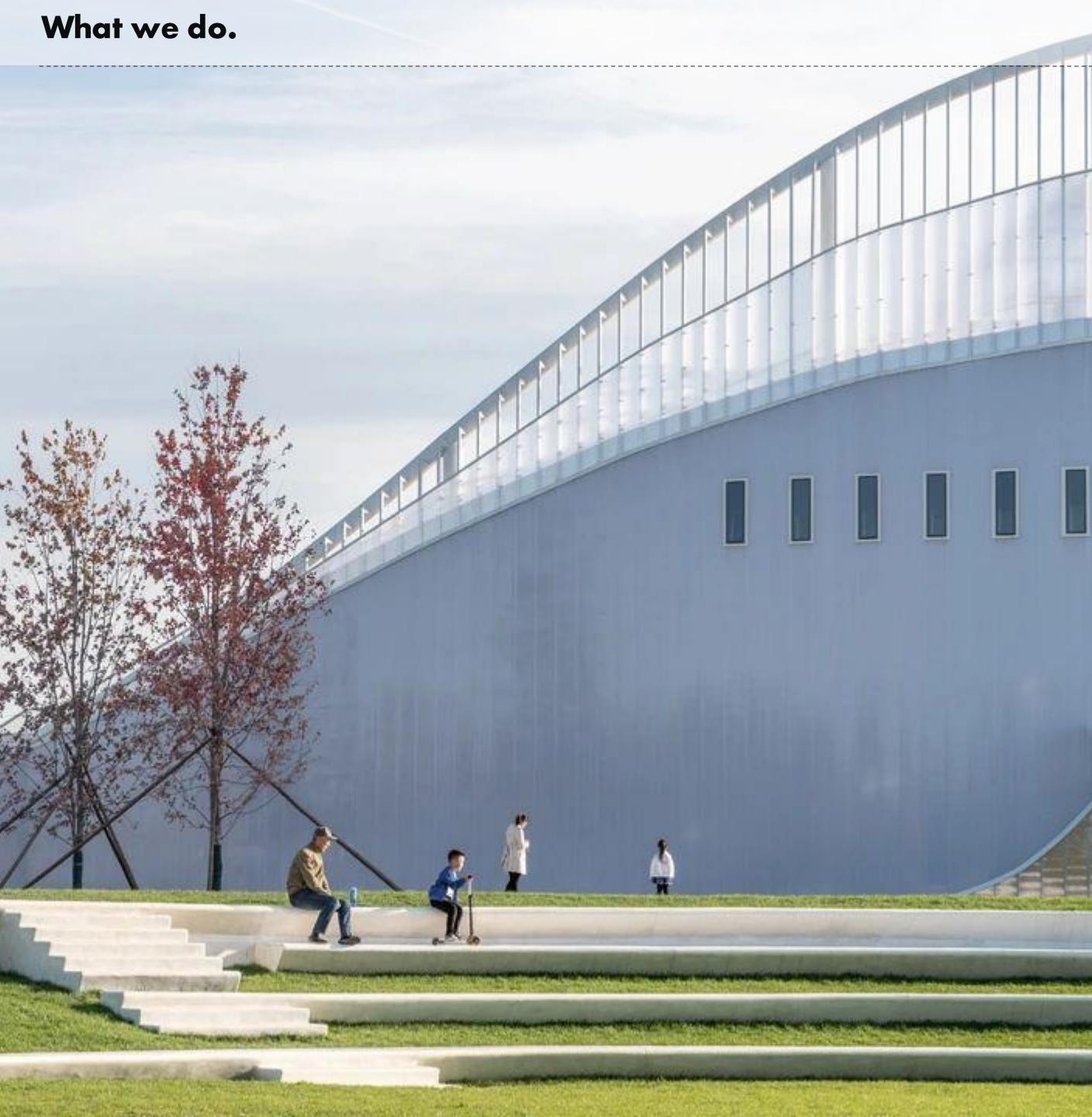


What we do.



Langfang Kindergarten, Yu Ting 俞挺, WutopiaLab

What we do.



Langfang Kindergarten, Yu Ting 俞挺, WutopiaLab

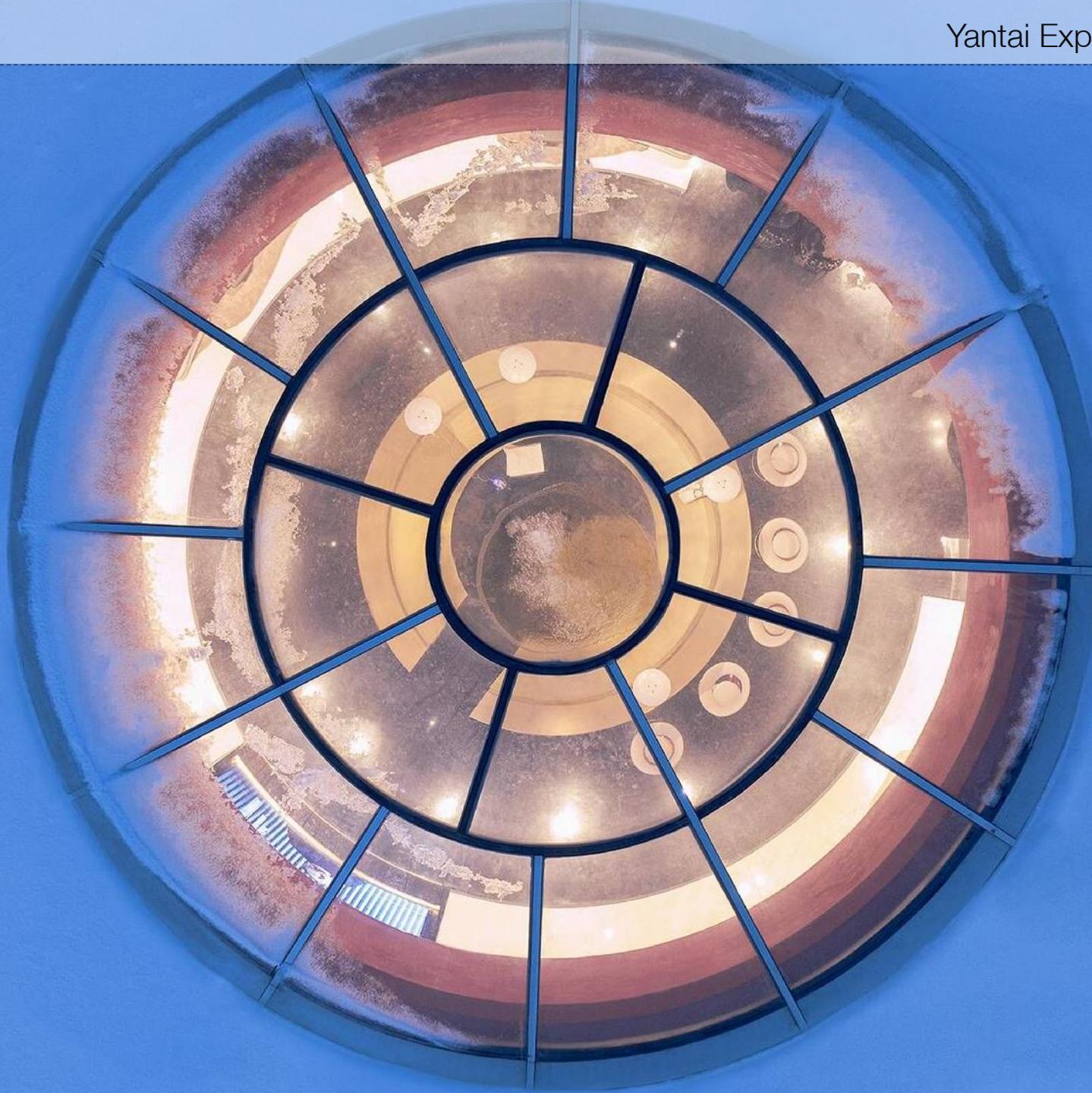


What we do.

Yantai Experience Sales Center, MDO









What we do.

Yantai Experience Sales Center, MDO



What we do - Architectural Intention 建筑效果图

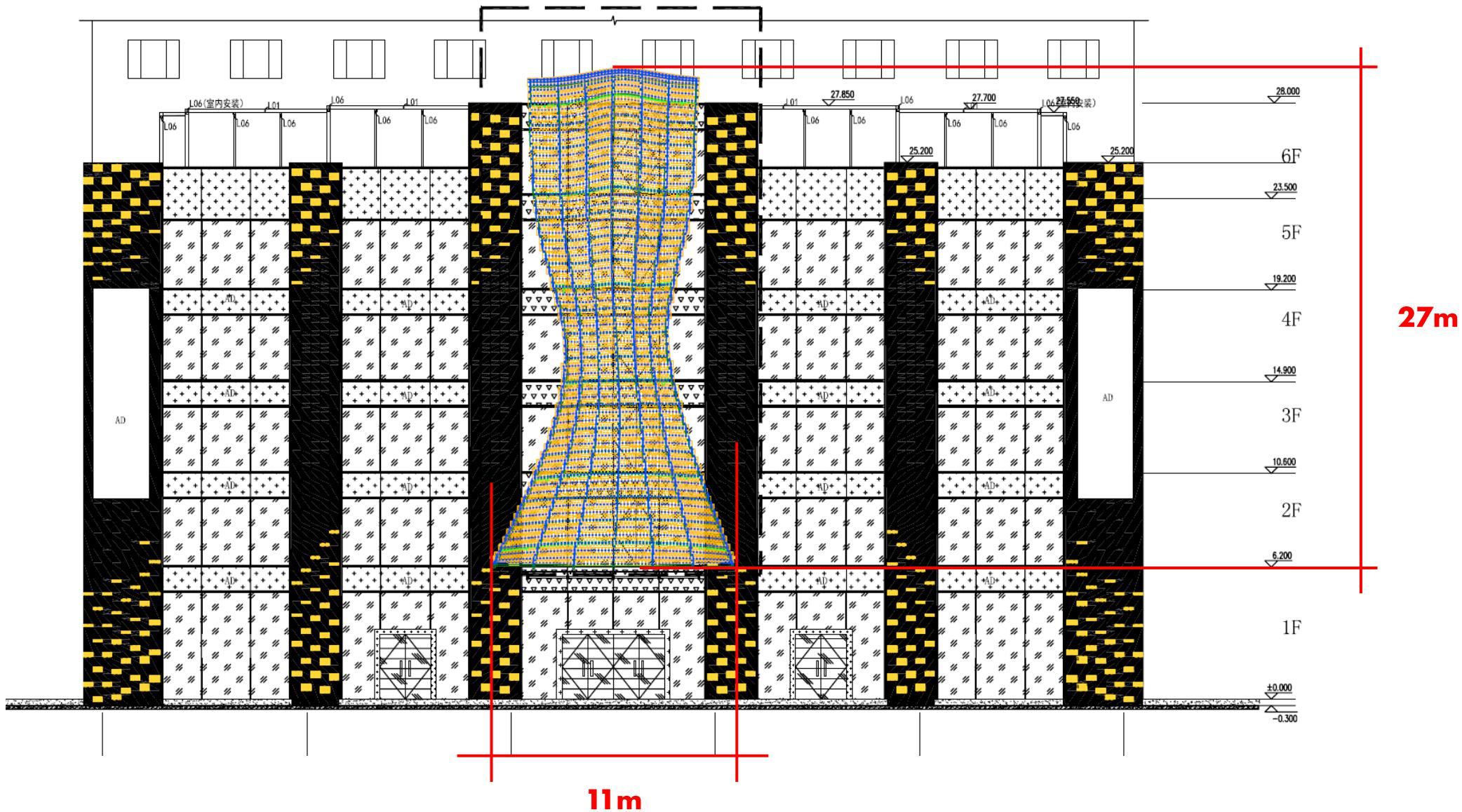
818 Plaza LED Wave Structure 南京西路818异形灯幕



What we do - Structure Dimensions 结构尺寸

818 Plaza LED Wave Structure 南京西路818异形灯幕

The new LED Wave Structure is 27m high and 11m wide and is located on top of the main entrance of the newly renovated 818 Plaza Mall
异形灯幕高度27米，宽度最大尺寸11米，位于南京西路818 广场主入口位置



What we do - Initial Site Conditions 现场情况

Initial site conditions before installation of the structure start are shown on the pictures below. Some façade cladding panels were necessary for the structural connections to the main building concrete structure.

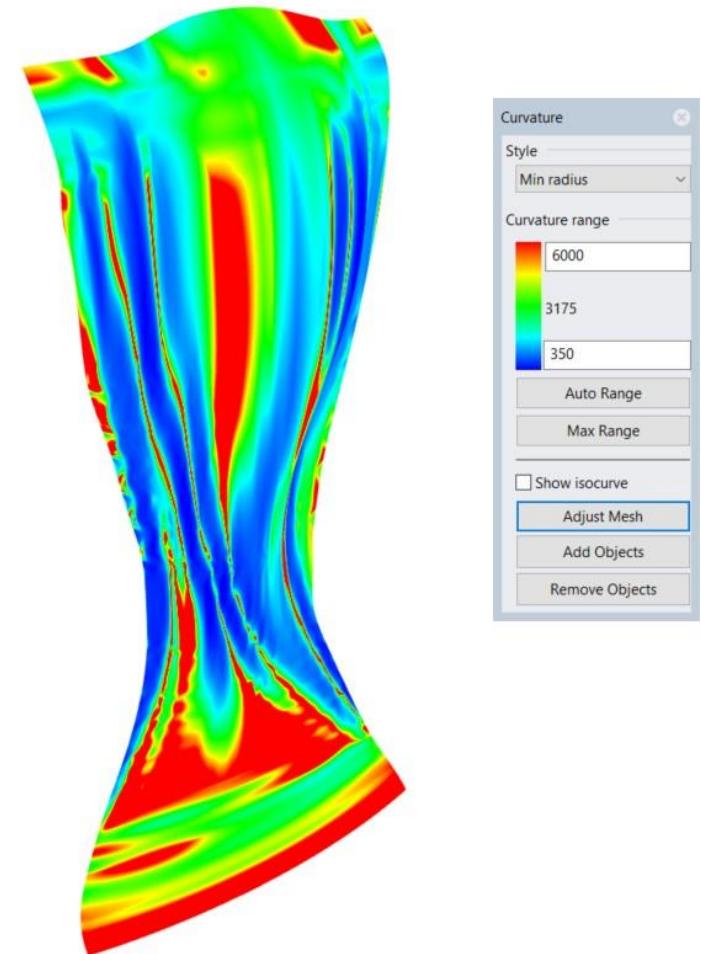
改造之前的818初始现场情况如下图所示，一些外立面覆盖板对于与主要建筑混凝土结构的结构连接是必要的。

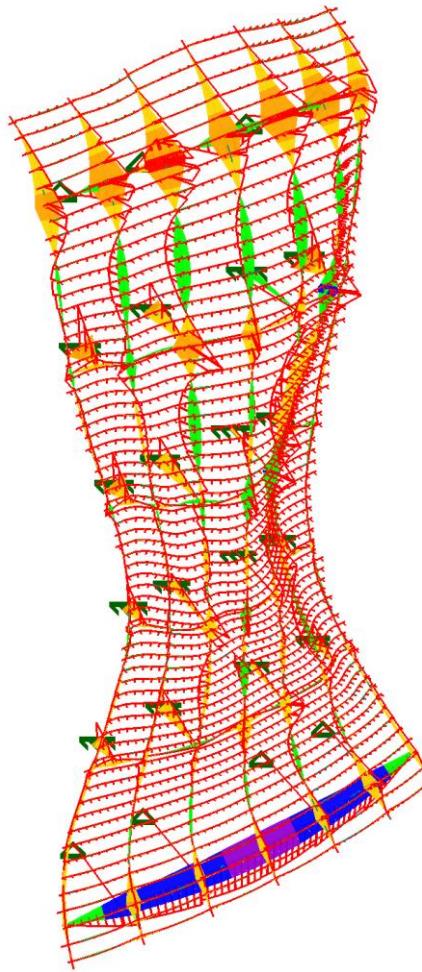


818 Plaza LED Wave Structure 南京西路818异形灯幕

Architectural Reference Surface shows high degree of double curvature which increase a lot the challenges for fabrication. The reference surface also has very small radius curvature up to 350mm which increase the difficulty for fabrication.

建筑曲面显示此几何高度双曲，这给建筑制造带来了很大的挑战。最小曲率半径达到350毫米，增加了制作难度。

Mirror Reflection Simulation 镜面反射模拟**Curvature Radius Analysis** 曲率分析

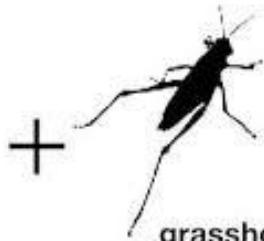


Due to the complex geometry of the structure, the structural model has been generated from Parametric tools in Rhino and Grasshopper to make the link between different Structural Analysis Software such as GSA and Karamba.

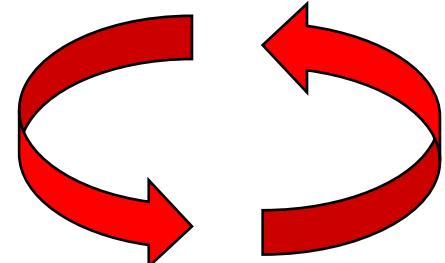
由于结构几何的复杂性，通过GH+犀牛创建几何，同时把几何模型和结构分析软件关联起来，如GSA和Karamba，达到计算和几何更新同步。



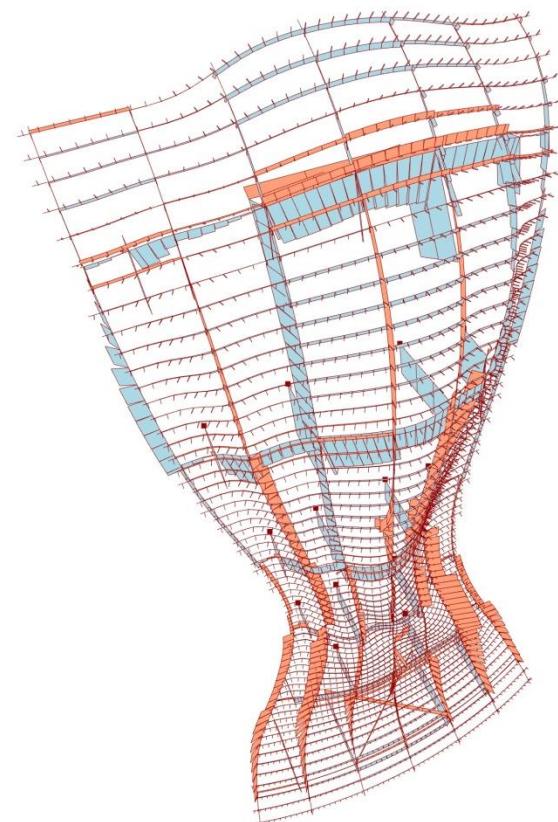
Rhinoceros
NURBS modeling for Windows



grasshopper



Karamba
parametric engineering



What we do - Structure Hierarchy 结构体系

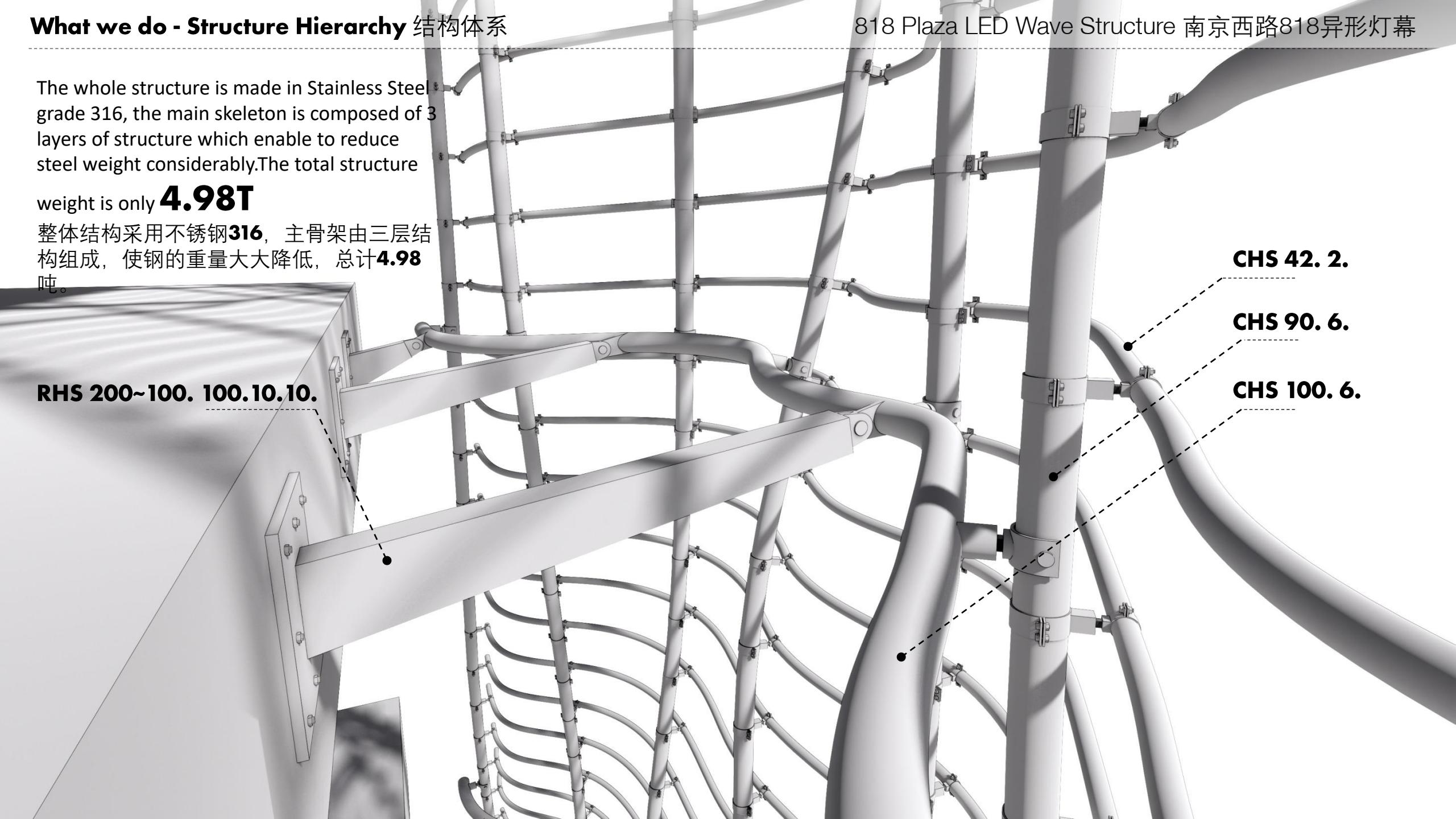
818 Plaza LED Wave Structure 南京西路818异形灯幕

The whole structure is made in Stainless Steel grade 316, the main skeleton is composed of 3 layers of structure which enable to reduce steel weight considerably. The total structure weight is only **4.98T**

整体结构采用不锈钢**316**, 主骨架由三层结构组成, 使钢的重量大大降低, 总计**4.98**吨。

RHS 200~100. 100.10.10.

CHS 42. 2.
CHS 90. 6.
CHS 100. 6.



What we do - Detailing Strategy_Geometrical Rule 细节处理-几何原则

818 Plaza LED Wave Structure 南京西路818异形灯幕

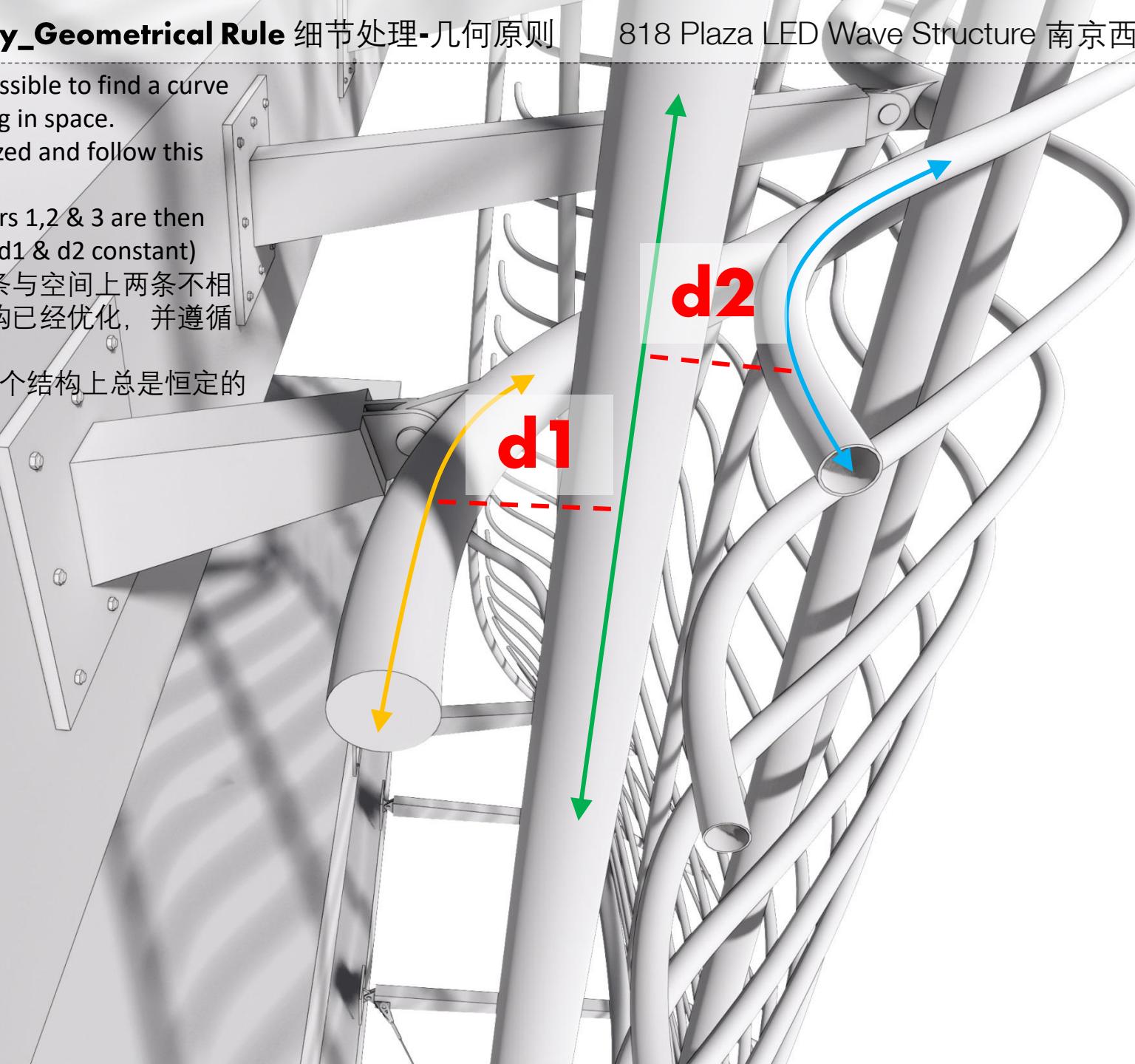
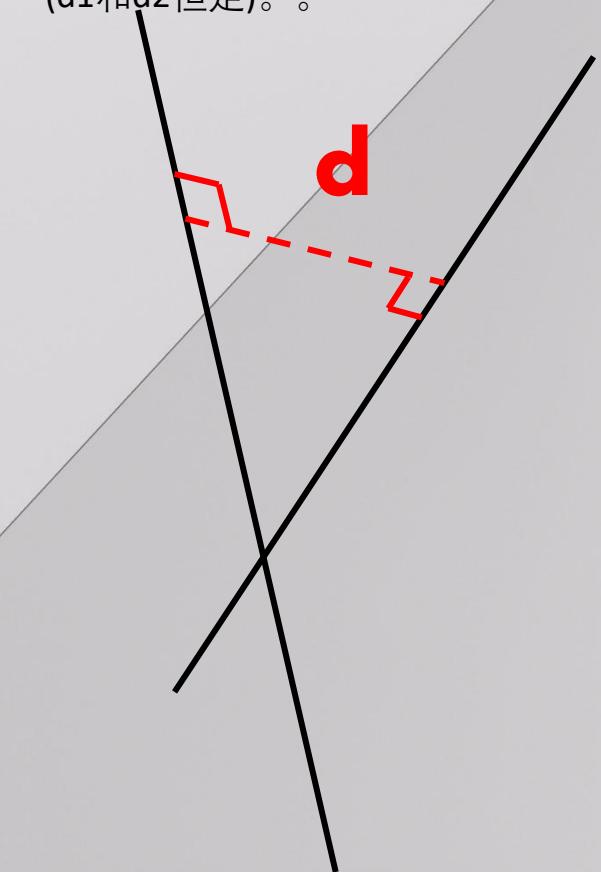
As a general geometry rule, it's always possible to find a curve perpendicular to 2 curves not intersecting in space.

The structure geometry has been optimized and follow this rule.

The distance between the structural layers 1,2 & 3 are then always constant on the whole structure (d_1 & d_2 constant)

通用的几何准则，总是有可能找到一条与空间上两条不相交的曲线垂直的曲线。结构的几何结构已经优化，并遵循这一规则。

因此，结构层1、2和3之间的距离在整个结构上总是恒定的(d_1 和 d_2 恒定)。



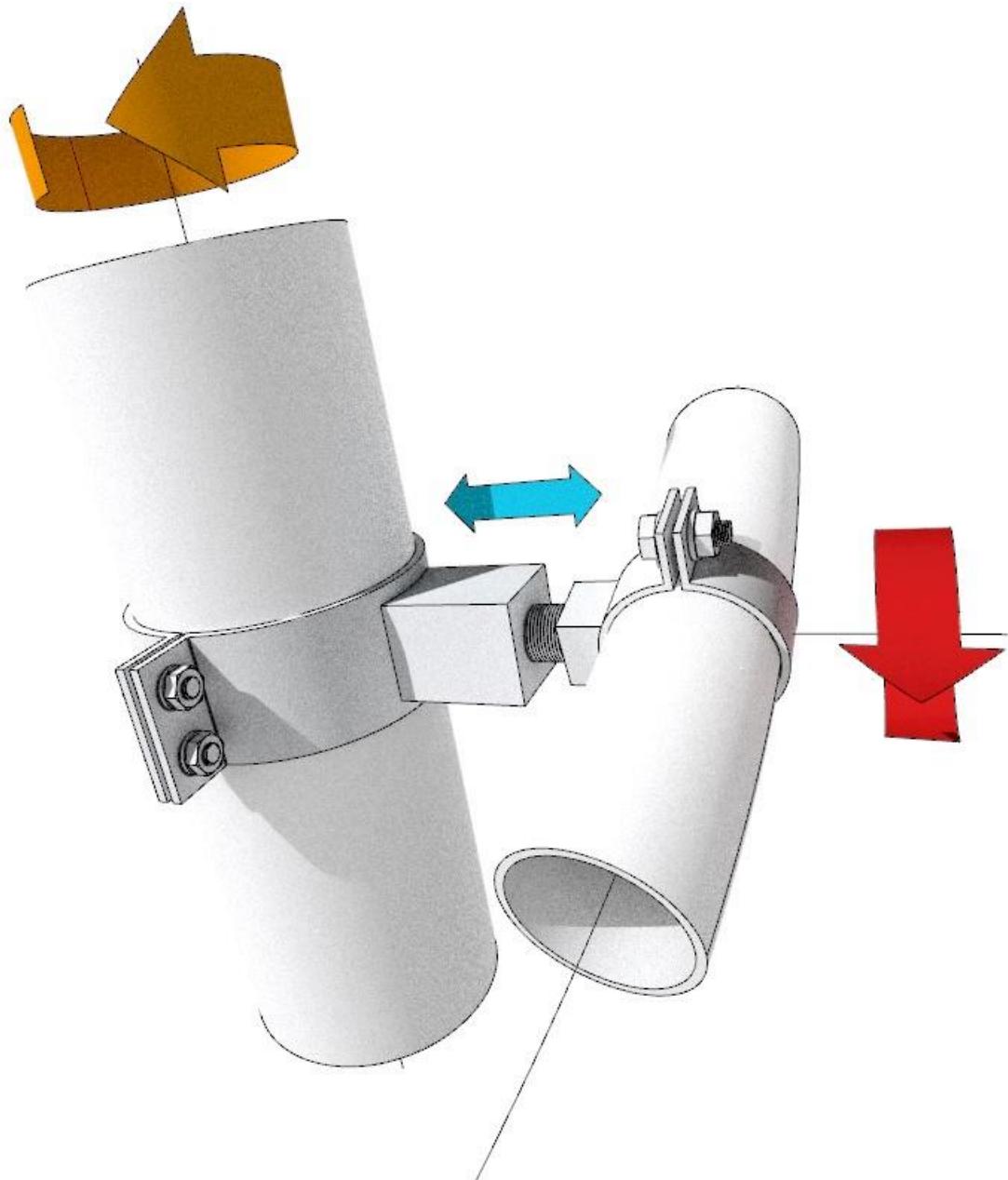
A simple connection has been designed to be able to adjust all tolerance angle and deviation from fabrication tolerances.

The connection is composed of 2 open rings in stainless steel that are connected together with a threaded bar of 16mm diameter.

The rings are closed and tighten with bolts and nuts that make the connection very easy and practical to install.

The stainless steel rings and stainless steel structural pipes are working together with contact friction.

设计了一个构造简单但却适用性广泛的节点，可以调整不同的角度、进出位、以及加工的误差。节点有两个不锈钢环扣组成，通过直径为16mm的螺纹杆连接在一起。环扣通过螺栓和螺母紧固，便于安装且具有实用性。通过特殊几何形态和环扣摩擦力就能满足结构承载力要求。



What we do - Detailing Strategy 细节处理

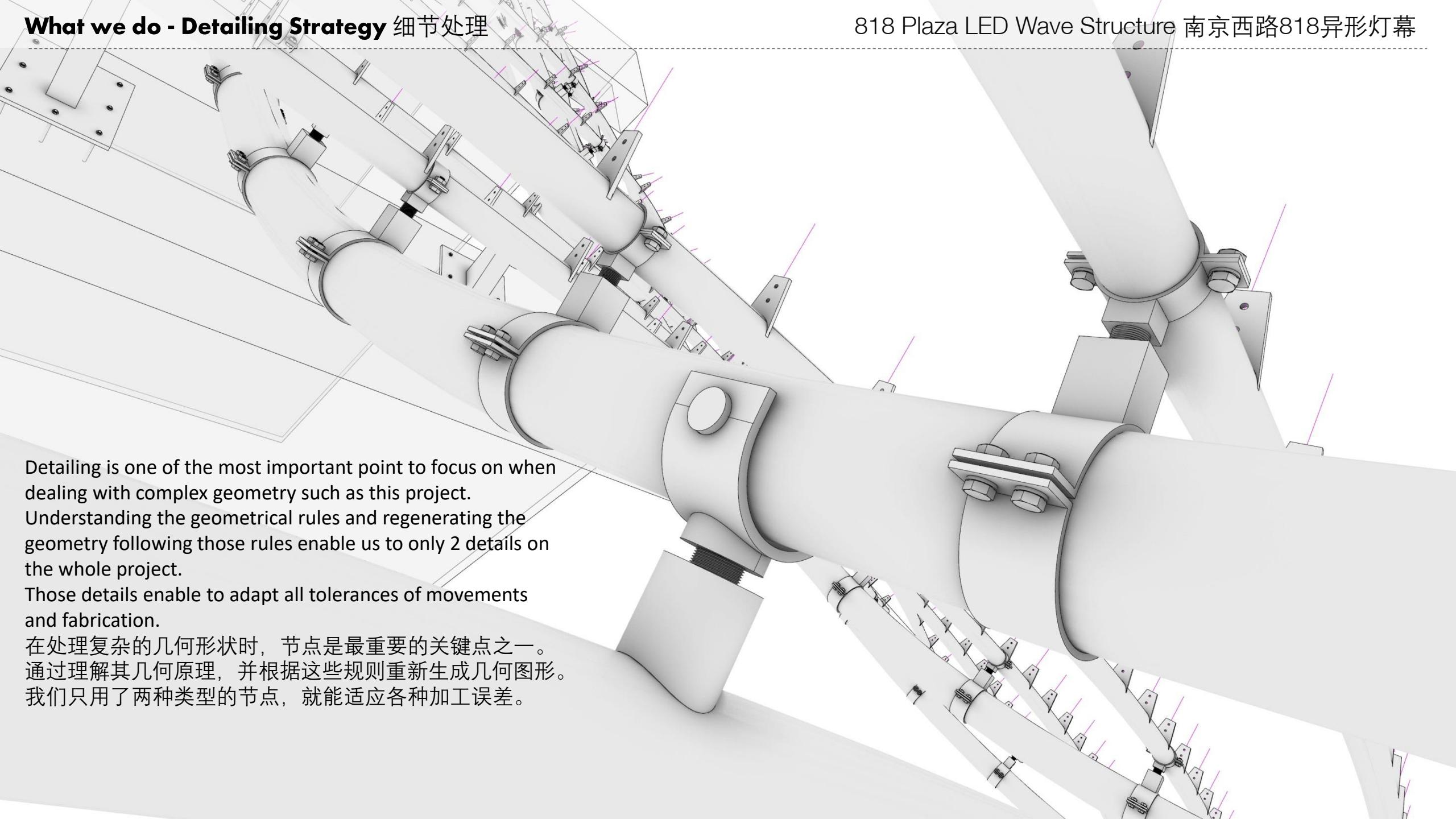
818 Plaza LED Wave Structure 南京西路818异形灯幕

Detailing is one of the most important point to focus on when dealing with complex geometry such as this project.

Understanding the geometrical rules and regenerating the geometry following those rules enable us to only 2 details on the whole project.

Those details enable to adapt all tolerances of movements and fabrication.

在处理复杂的几何形状时，节点是最重要的关键点之一。
通过理解其几何原理，并根据这些规则重新生成几何图形。
我们只用了两种类型的节点，就能适应各种加工误差。



The curves extracted from initial architect geometry show a continuous curvature graph which means that radius is gradually changing all the way along the profile.
从最初的建筑几何中提取的曲线显示出一个连续的曲率图，这意味着沿着剖面的半径是逐渐变化的。

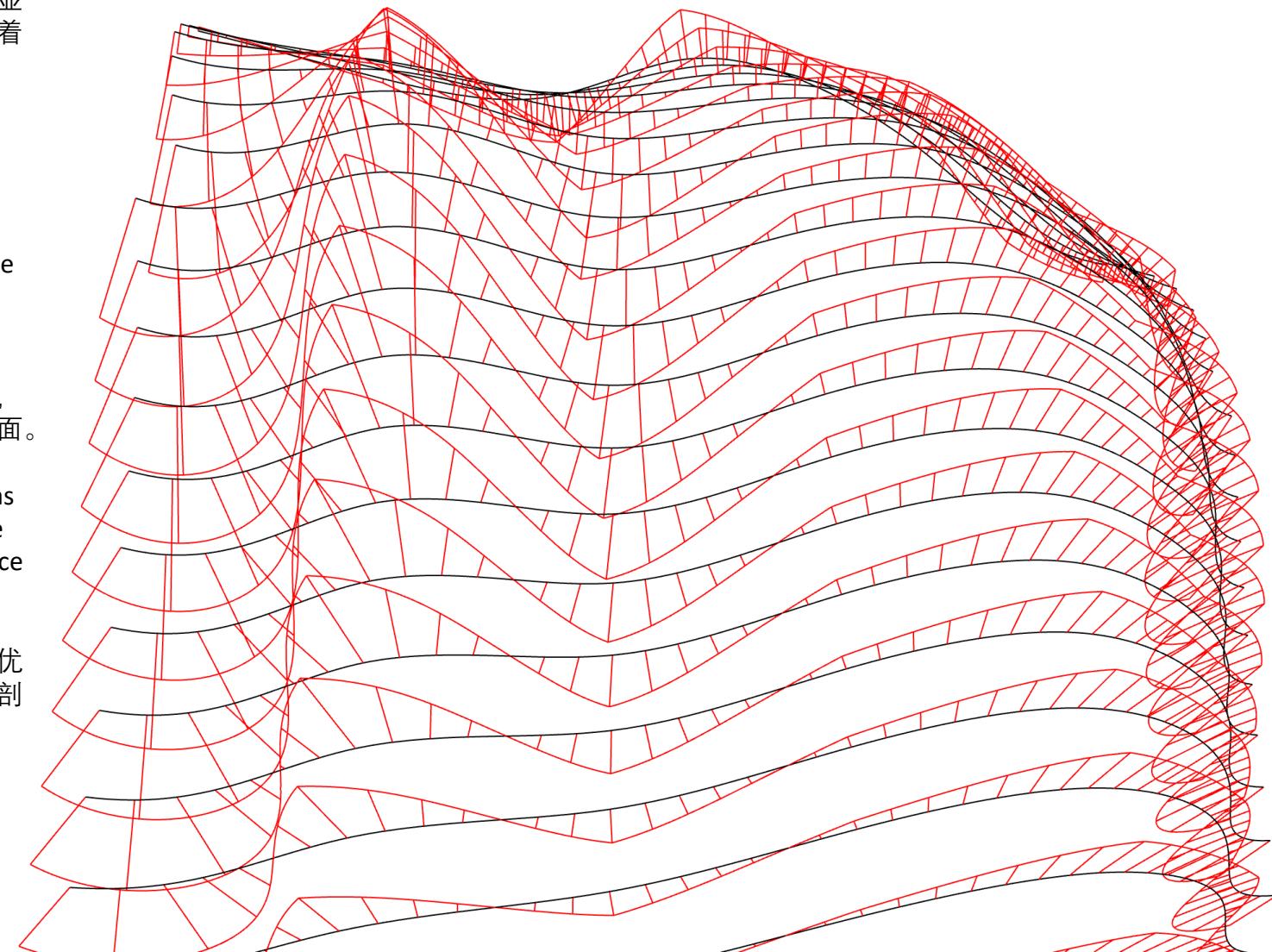
This is not easy for fabrication and very expensive.
这并不容易制造且非常昂贵。

Moreover, very few factory have the specific machine which is able to bend profiles with radius changing gradually.
此外，很少有工厂有专门的机器，可以弯曲轮廓半径逐渐变化的截面。

Therefore, an optimization work has been done on all the profiles of the structure in order to fit the reference curves with profiles that can be fabricated.

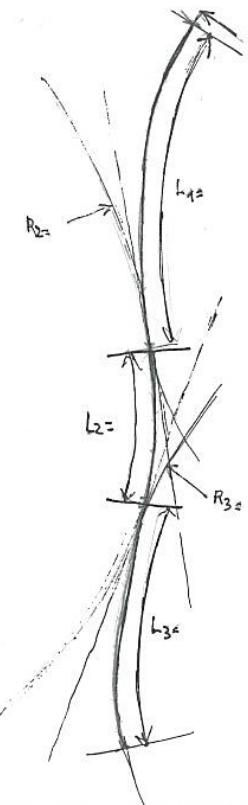
因此，对结构的所有剖面进行了优化工作，使参考曲线与可加工的剖面相吻合。

Initial Curves extracted from Architect Reference Surface 从建筑参考面提取初始曲线



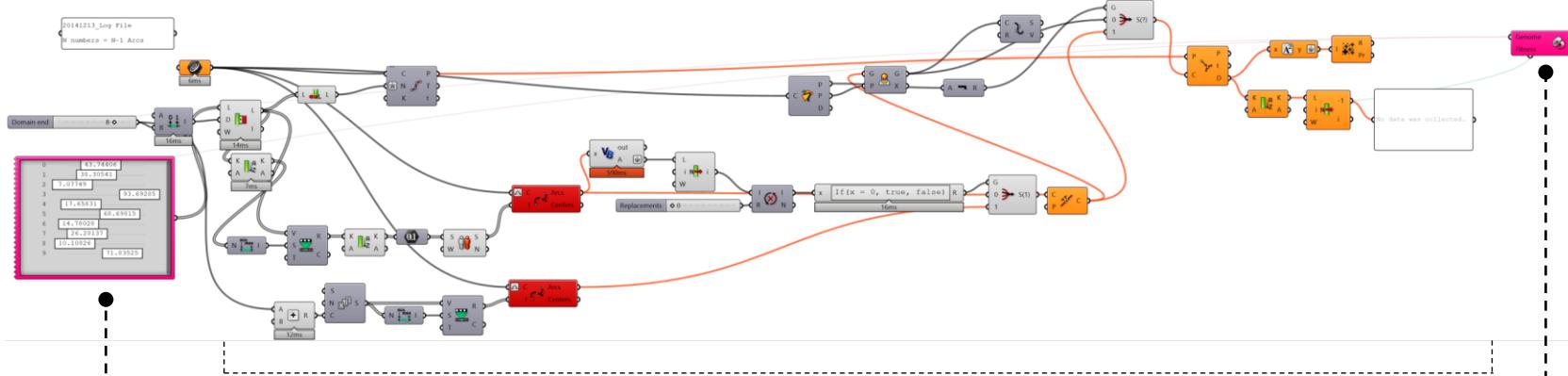
Insight about our custom developed Polyarc fitting algorithm

因此我们对所有的结构进行了优化，以适应我们自定义开发的多弧拟合算法



Number of Arcs

弧线数量



Parameters of tangent arcs on the reference curve to optimize

对参考曲线上的切弧参数进行优化

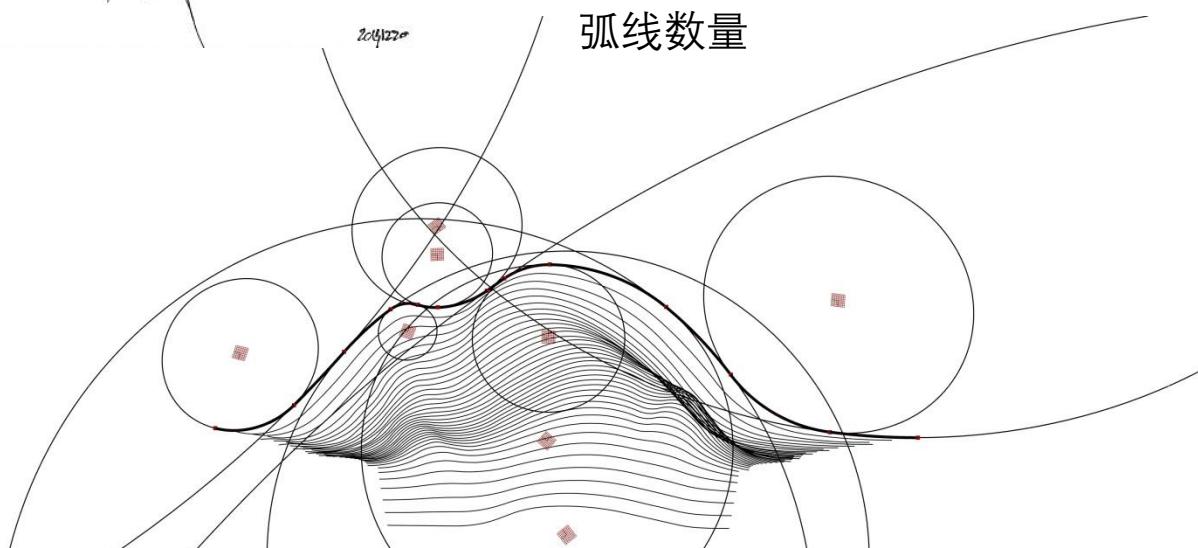
Computation of the tangent polyarc and calculation of the deviation from reference curve to fit

计算切线多弧和计算从参考曲线到拟合的偏差

Genetic Algorithm Solver to find best solution according to different Parameters combinations

遗传算法求解器根据不同的参数组合寻找最佳解

A target deviation of maximum 10mm has been set between the reference architect curves and the optimized geometry for fabrication.
在参考建筑曲线和优化的几何结构之间设置了最大10mm的目标偏差。



The optimized geometry show tangent poly-arcs that approximate the reference geometry.

优化后的几何图形显示近似参考几何图形的切线多弧。

Poly-arcs are still continuous and does not have any kink and they are composed of planar arcs with single radius.

多弧是连续的，没有任何扭结，由单半径的平面弧组成。

Thus it is easy and economic to fabricate.

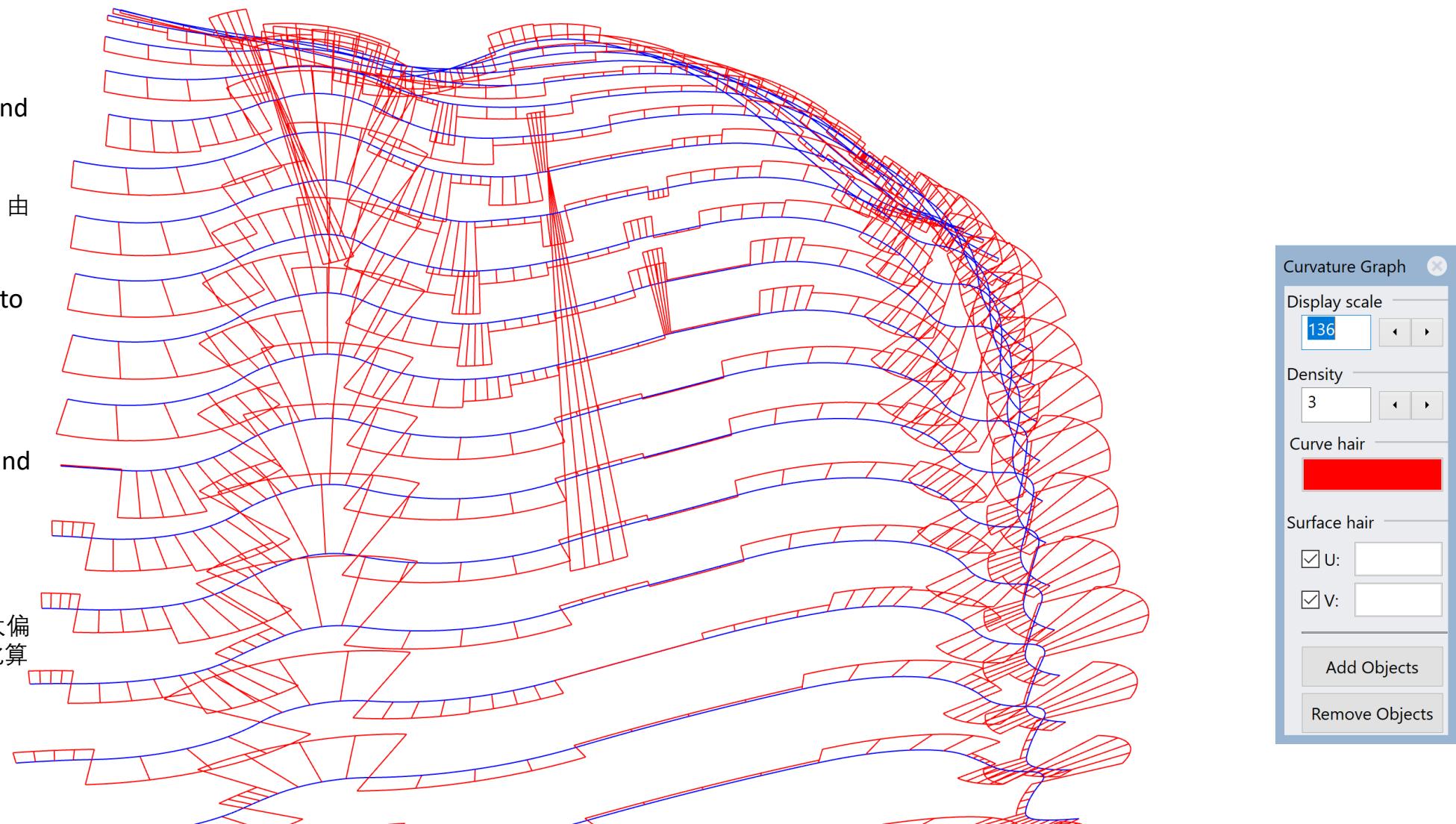
因此它易于制造且有经济效益。

The maximum deviation between optimized profiles and reference curves is 10mm maximum (as a parameter of the optimization algorithm explained earlier).

优化曲线与参考曲线之间的最大偏差为10mm(作为前面介绍的优化算法的参数)。

Optimized Curves fitted with Tangent Poly-Arcs

优化曲线拟合切线多弧

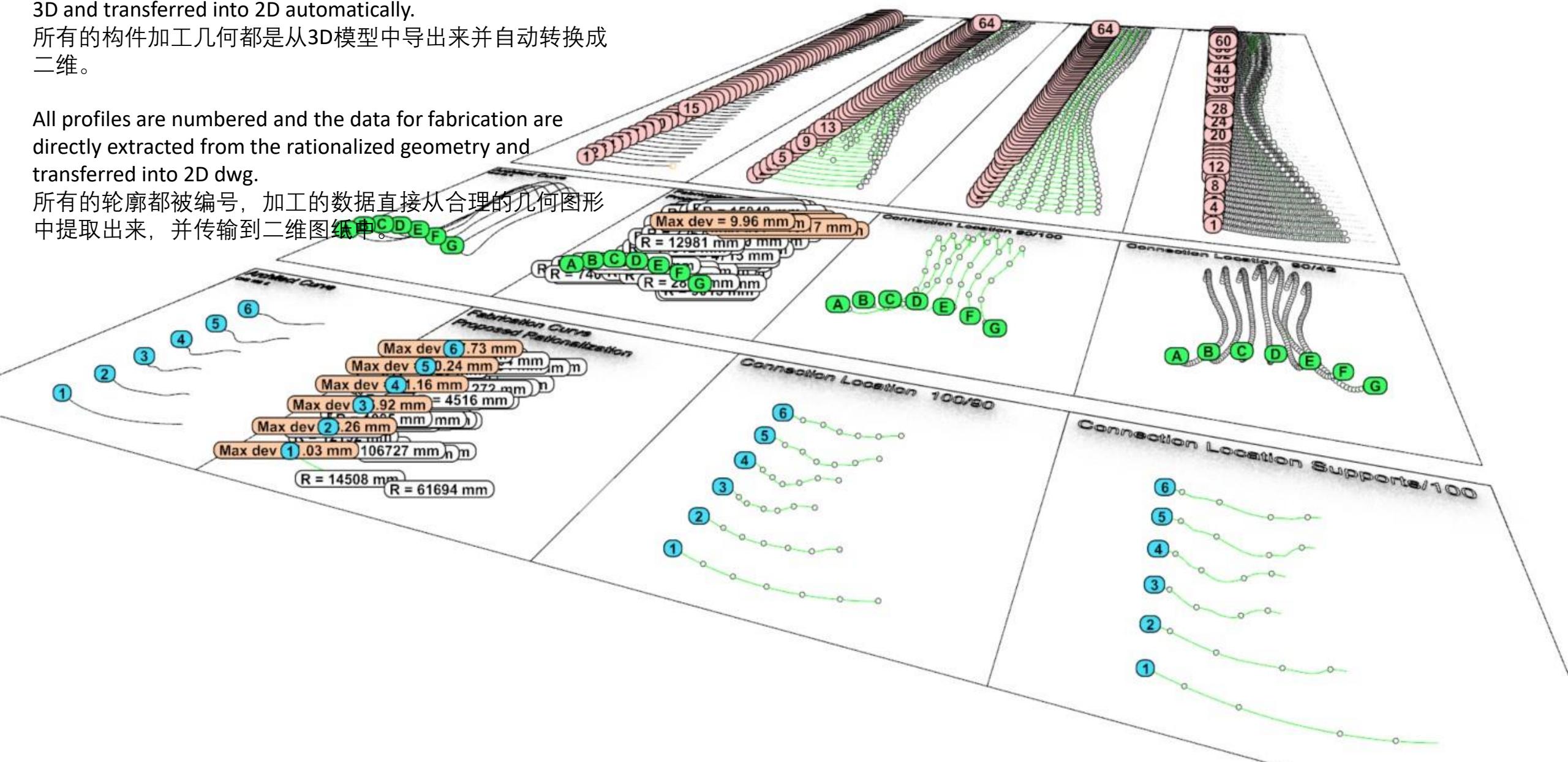


All the profile fabrication geometry have been extracted from 3D and transferred into 2D automatically.

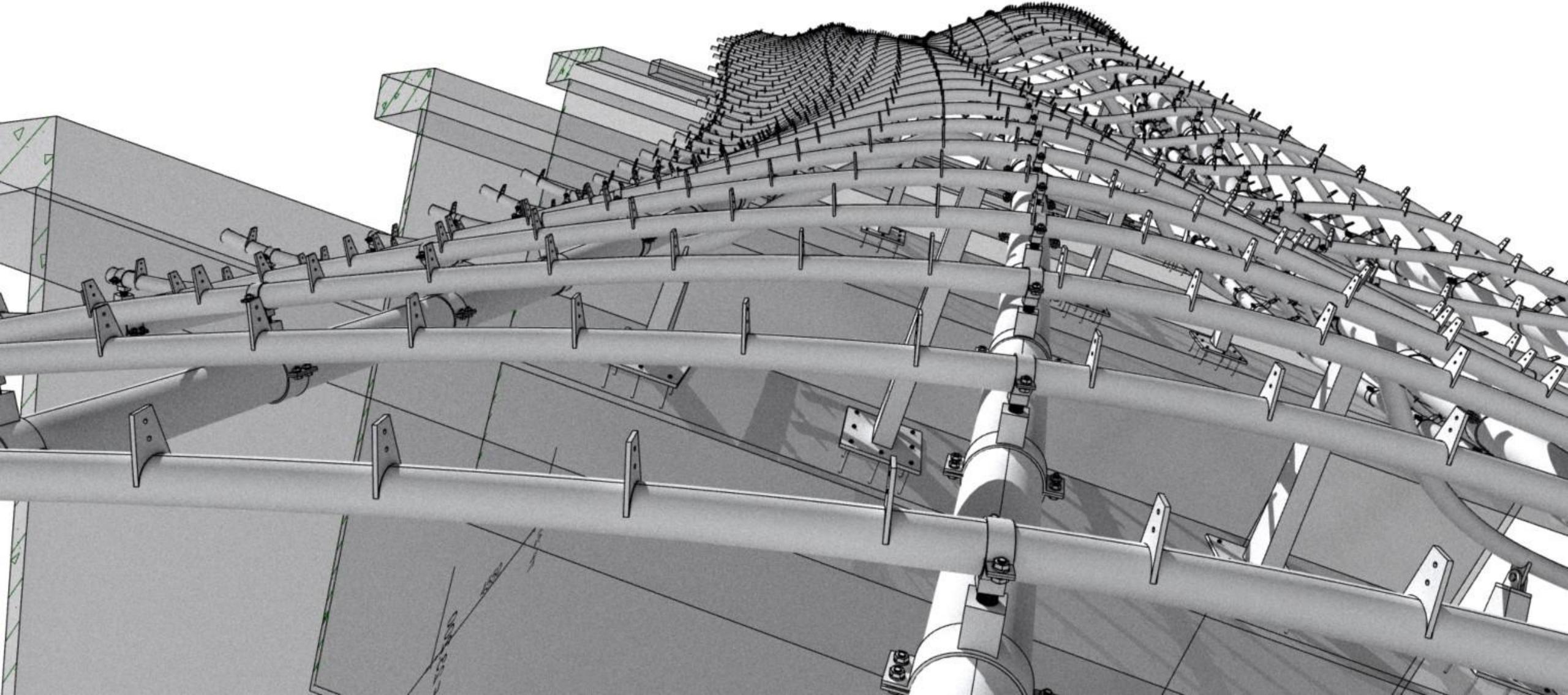
所有的构件加工几何都是从3D模型中导出来并自动转换成二维。

All profiles are numbered and the data for fabrication are directly extracted from the rationalized geometry and transferred into 2D dwg.

所有的轮廓都被编号，加工的数据直接从合理的几何图形中提取出来，并传输到二维图纸中。



A complete model have been built at a LOD 400 model to ensure the final optimized geometry match with architect intention and fit well to the site conditions.
结合现场土建结构，建了LOD400BIM模型，以确保最终优化的几何形状符合建筑师的意图，并用于指导加工和安装。



What we do - Fabrication & Factory Pre-Assembly 工厂预拼装



All the members have been optimized with some custom scripts to ensure they can be fabricated from a series of tangent arcs segments. A tolerance of 10mm deviation from initial architect geometry has been setup and the script find by itself the best fitting geometry.

The complete structure has been preassembled in factory to ensure the fit and fabrication precision.

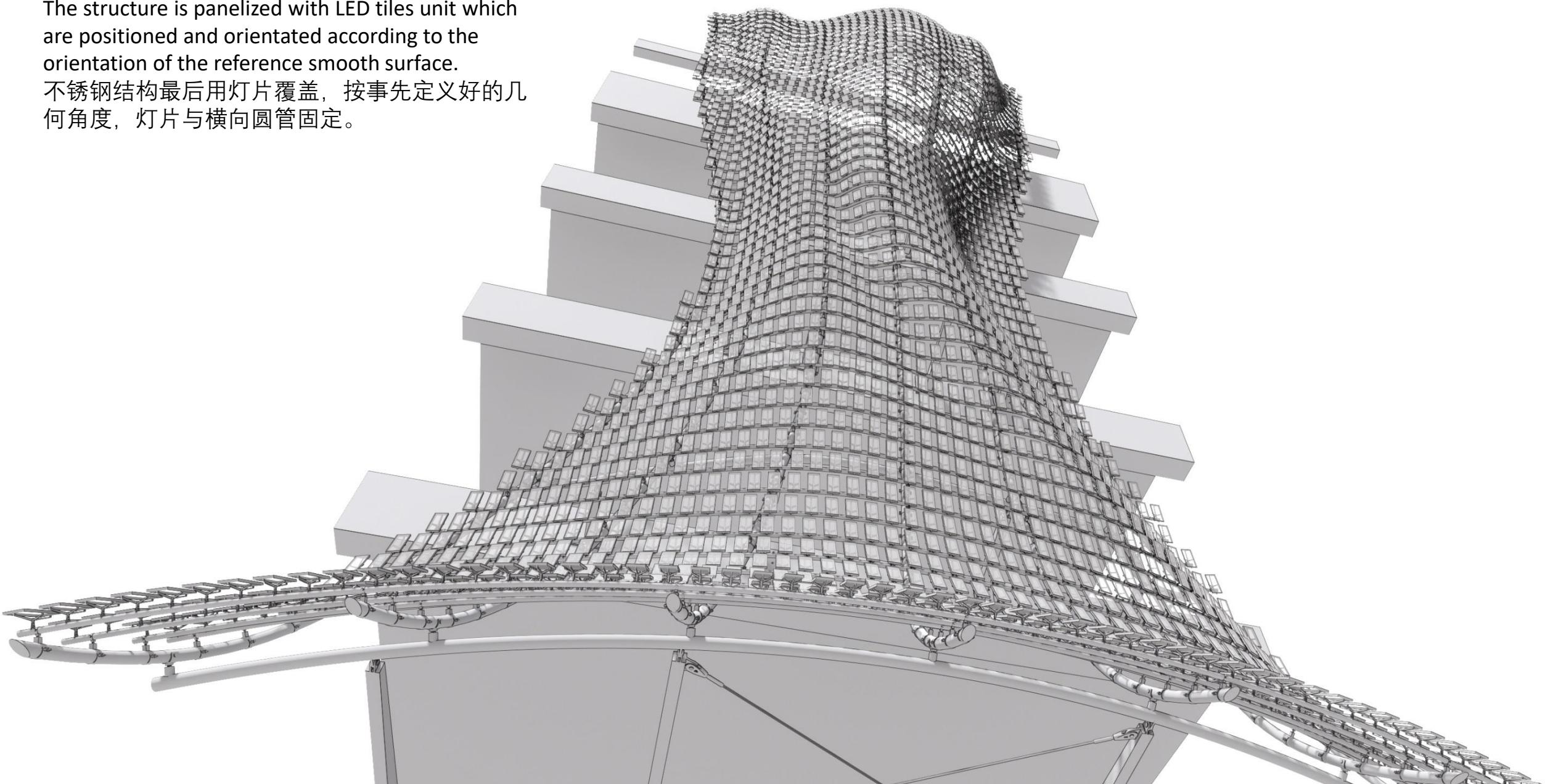
所有的构件都已经通过自定义来优化，以确保他们可以从一系列切线弧段来支座。与初始架构的几何图形有10mm的偏差，通过优化找到了最佳的几何图形。
完整的结构已在工厂预先组装，以确保配合和制造精度。

818 Plaza LED Wave Structure 南京西路818异形灯幕



The structure is panelized with LED tiles unit which are positioned and orientated according to the orientation of the reference smooth surface.

不锈钢结构最后用灯片覆盖，按事先定义好的几何角度，灯片与横向圆管固定。

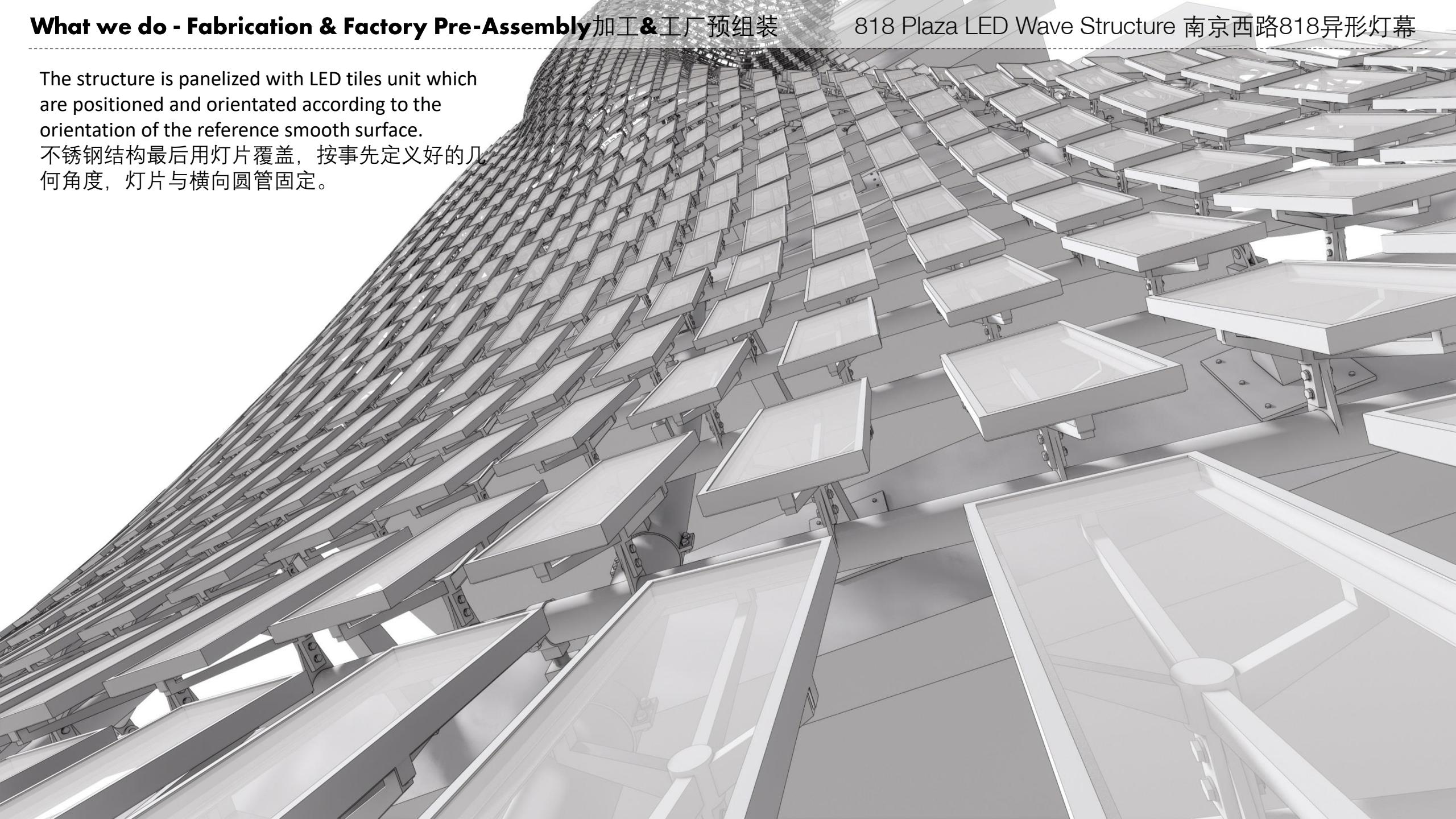


What we do - Fabrication & Factory Pre-Assembly 加工&工厂预组装

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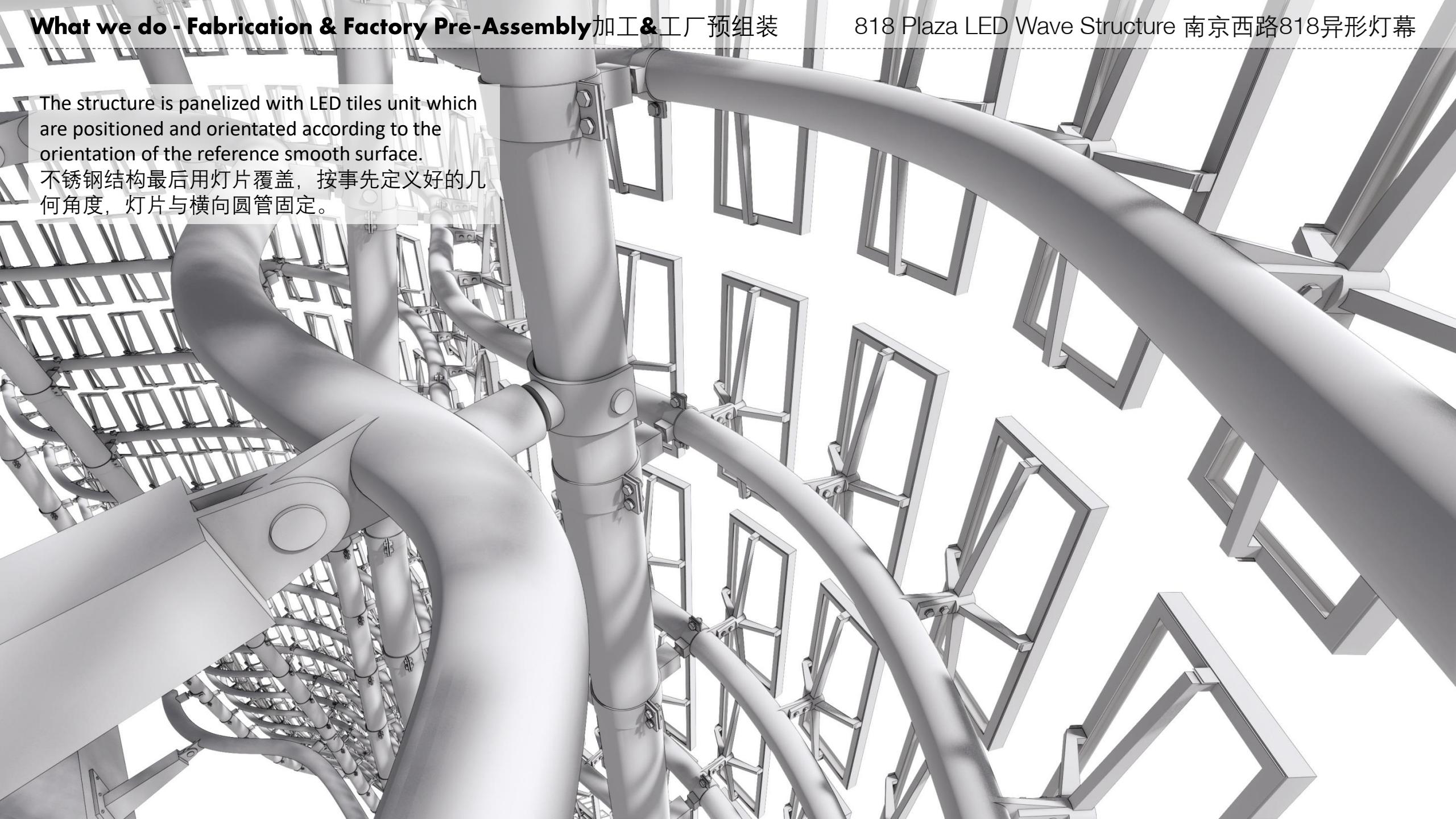


What we do - Fabrication & Factory Pre-Assembly 加工&工厂预组装

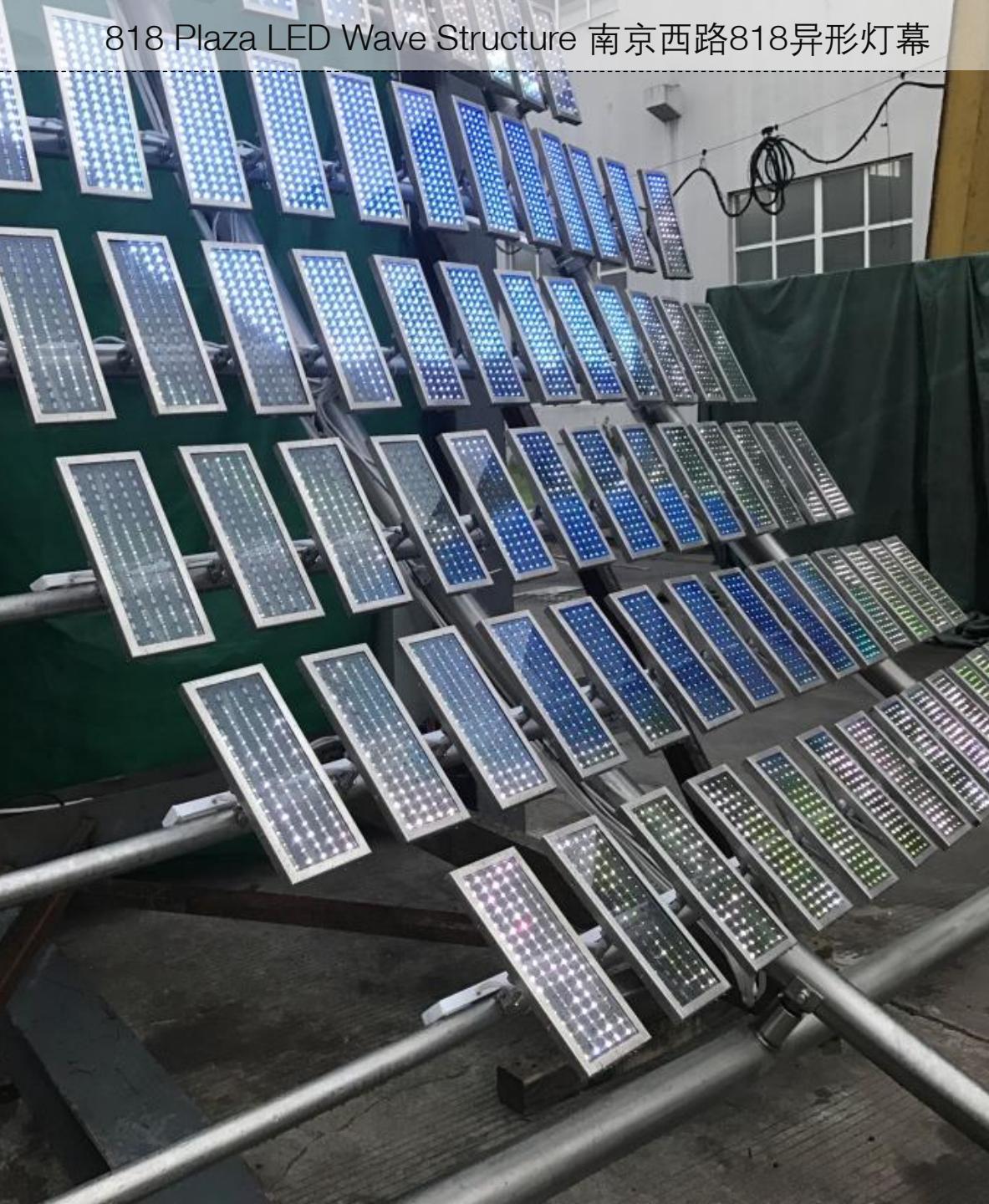
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What we do - Visual Mockup 视觉样板



A visual mockup has been built in factory for client and architect validation.
The structure is covered with 100x300mm LED tiles.
工厂已经为客户和建筑师构建了一个可视化模型。
视觉样板铺设了100毫米X300毫米灯片

818 Plaza LED Wave Structure 南京西路818异形灯幕

What we do - Visual Mockup 视觉样板



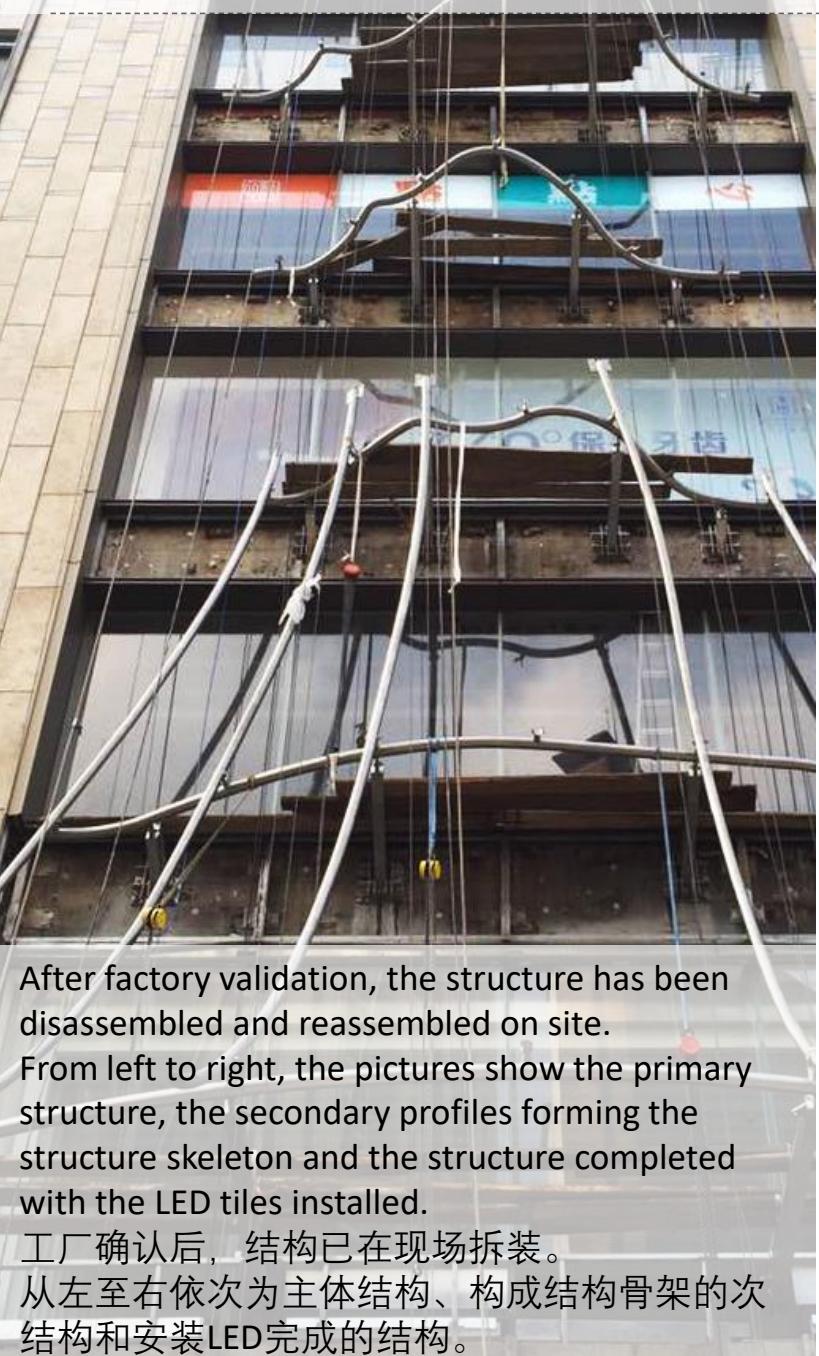
818 Plaza LED Wave Structure 南京东路818异形灯幕



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视觉样板铺设了100毫米X300毫米灯片

What we do - Site Installation Progress

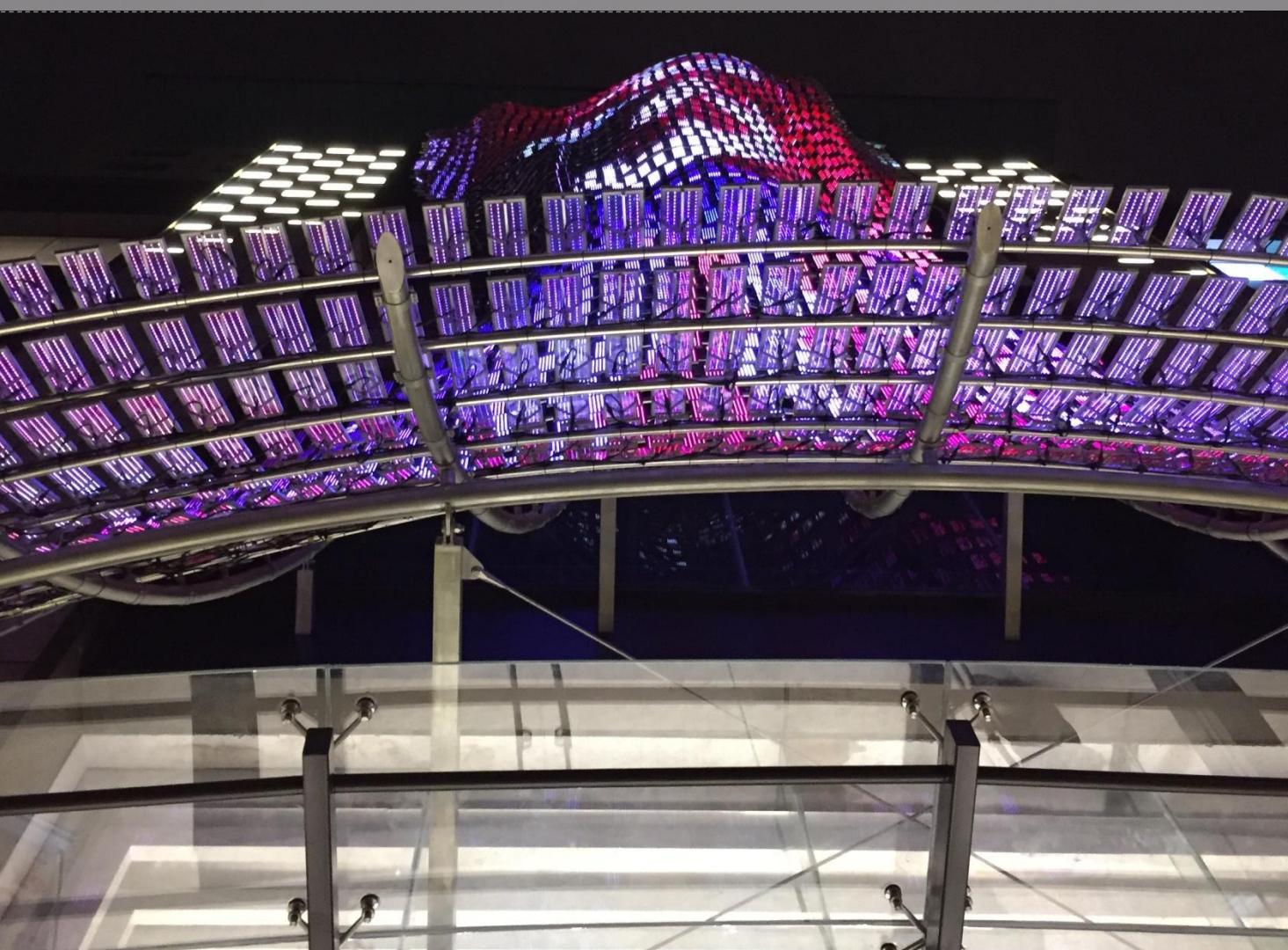
818 Plaza LED Wave Structure 南京西路818异形灯幕



What we do - Night effect, LED Screen

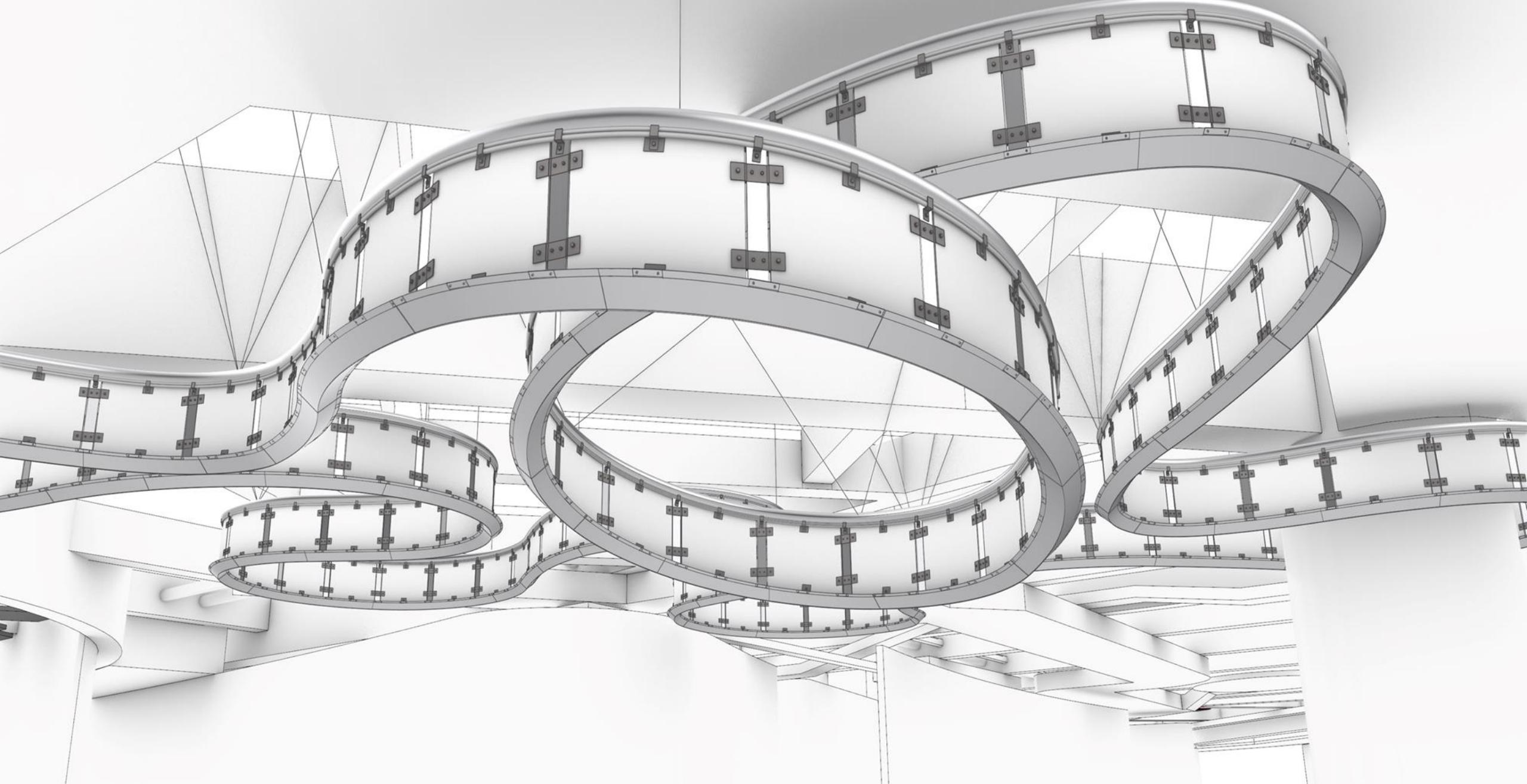


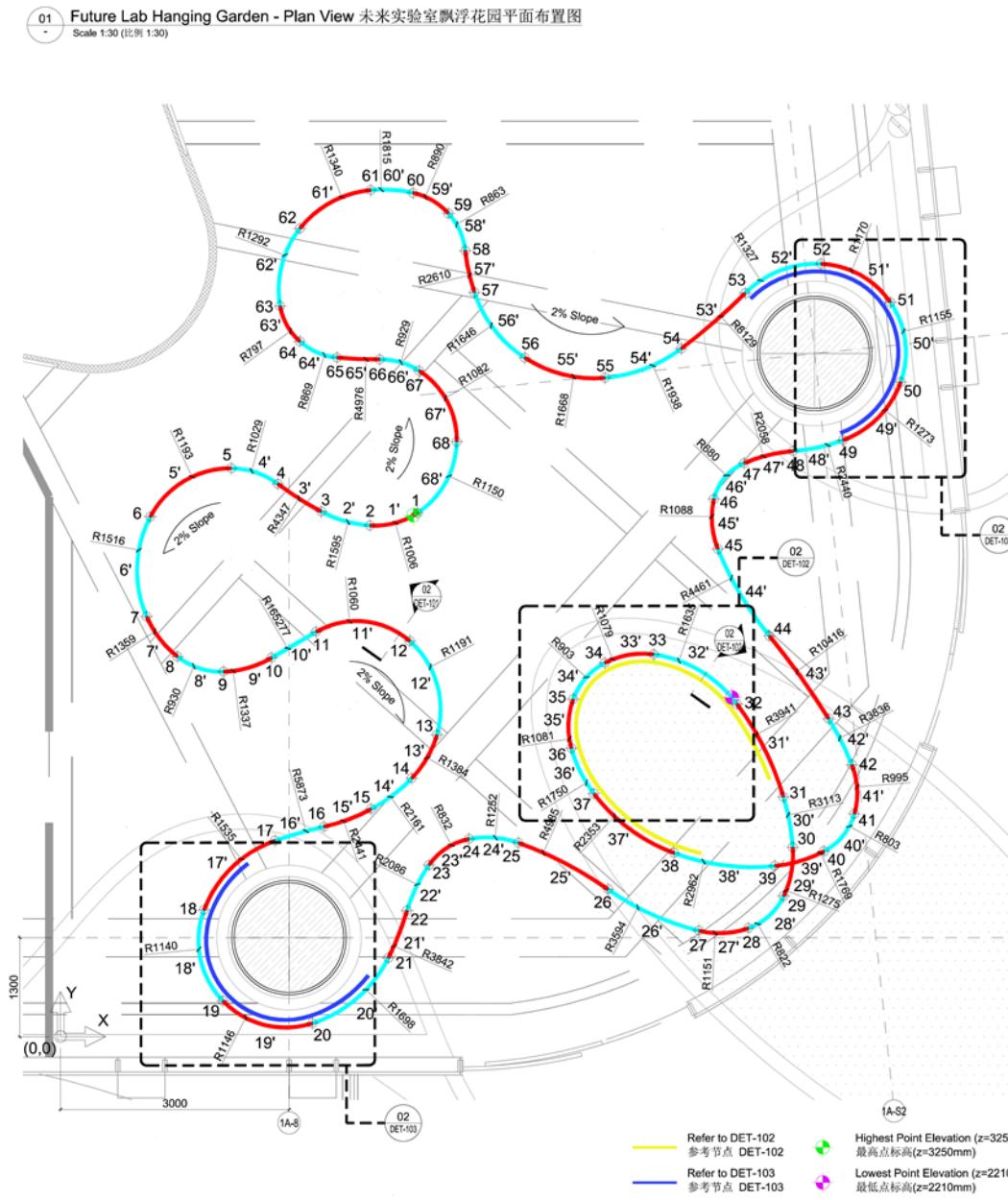
818 Plaza LED Wave Structure 南京西路818异形灯幕



The structure is the most impressive by night when LED tiles are turned on. All the tiles are interconnected with each other so the complete structure can serve as a giant screen as well as an art piece structure on top of the newly renovated 818 plaza shopping mall. 晚上打开LED灯时，这种结构最令人印象深刻。所有的灯幕都相互连接，因此整个结构可以作为一个巨大的屏幕，也可以作为一个艺术作品结构，位于新装修的818广场购物中心的顶部。

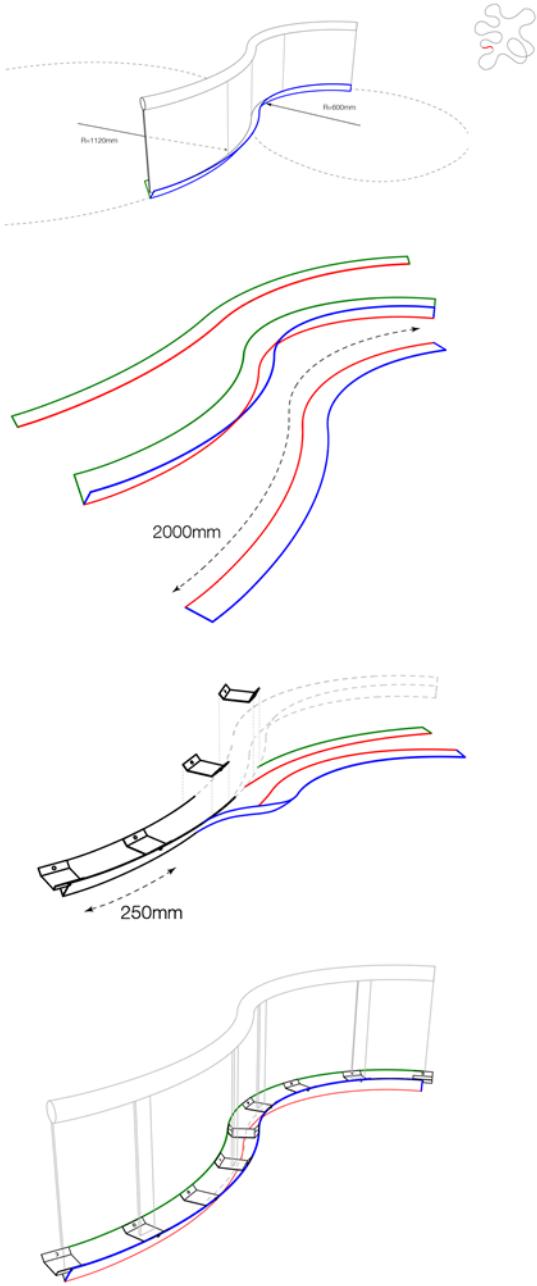
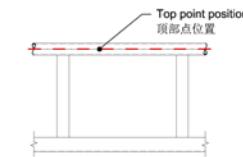




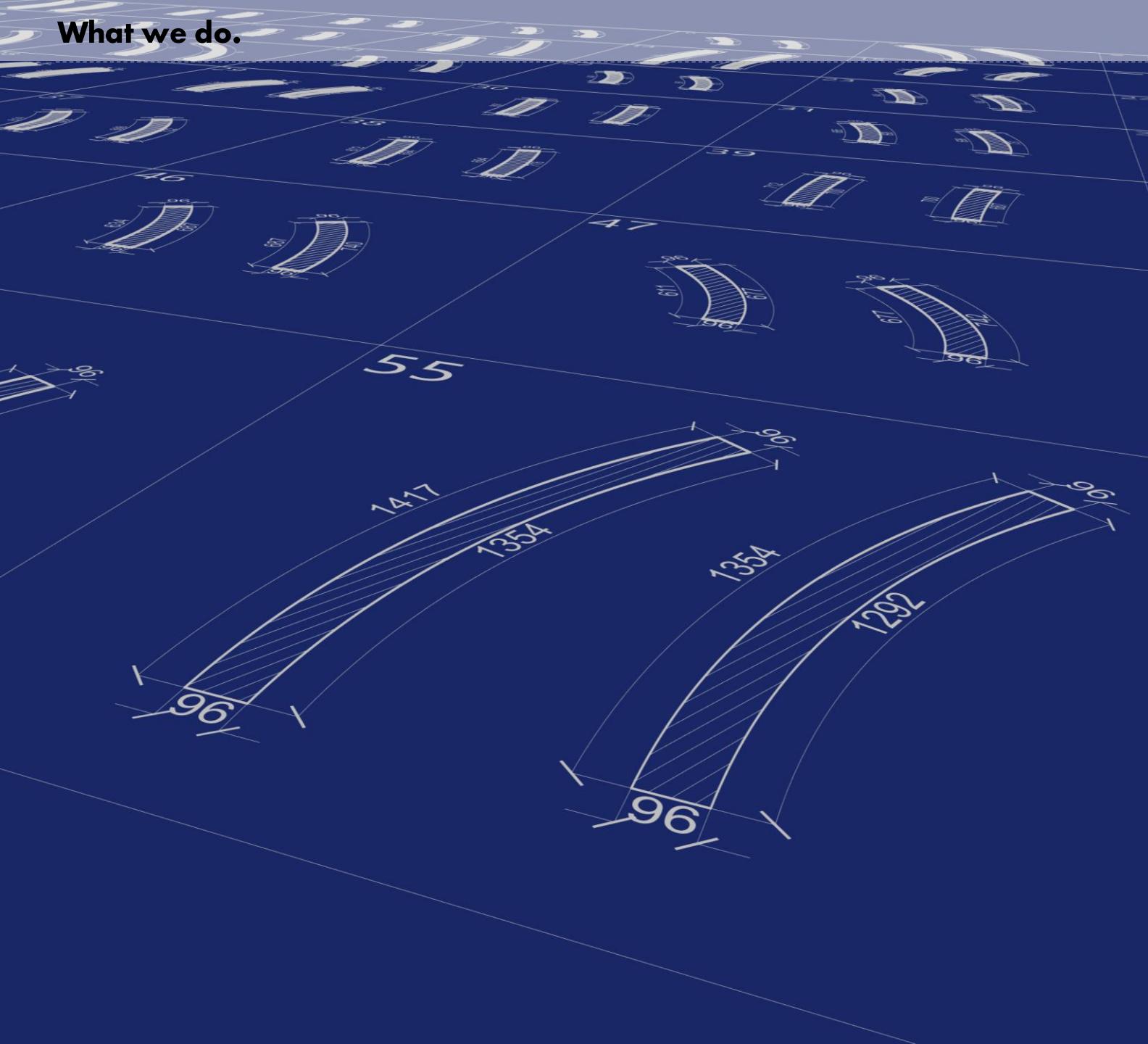


	Curve length 弧長(l/mm)	Angle 角度(a/degree)	Radius 半径(R/mm)
1'	655	37	1.00
2'	670	24	1.59
3'	677	9	4.34
4'	656	37	1.02
5'	1,305	63	1.19
6'	1,355	51	1.51
7'	668	28	3.55
8'	654	40	9.2
9'	662	28	1.33
10'	676	0	165.27
11'	1,320	71	1.06
12'	1,354	65	1.19
13'	664	27	3.38
14'	671	18	2.16
15'	665	16	2.44
16'	668	7	5.87
17'	1,346	50	1.53
18'	1,284	65	1.14
19'	1,276	64	1.14
20'	1,351	46	1.69
21'	670	10	3.84
22'	666	18	2.08
23'	645	44	8.3
24'	663	30	1.25
25'	1,339	15	4.98
26'	1,331	21	3.59
27'	663	33	1.15
28'	646	45	8.2
29'	661	30	1.27
30'	673	12	3.11
31'	1,371	20	3.94
32'	1,310	46	1.63
33'	667	35	1.07
34'	659	42	9.0
35'	661	35	1.08
36'	674	22	1.75
37'	1,331	32	2.39
38'	1,344	26	2.96
39'	678	22	1.76
40'	648	46	8.0
41'	656	38	9.9
42'	679	10	3.83
43'	1,339	7	10.41
44'	1,331	17	4.46
45'	668	35	1.08
46'	638	54	5.4
47'	669	19	2.05
48'	671	16	2.44
49'	1,110	50	1.27
50'	1,096	54	1.15
51'	1,081	53	1.17
52'	1,098	47	1.32
53'	1,114	8	8.12
54'	1,086	32	1.93
55'	1,105	38	1.66
56'	1,104	38	1.64
57'	563	12	2.61
58'	546	35	86
59'	546	35	89
60'	559	18	1.81
61'	1,087	46	1.34
62'	1,082	48	1.29
63'	541	39	7.9
64'	544	36	86
65'	561	6	4.97
66'	546	34	92
67'	1,102	58	1.08
68'	1,113	55	1.15

Φ	X坐标 (mm)	Y坐标 (mm)	Z坐标 (mm) (Top)(横幅)
1	4,685	6,872	3,250
2	4,062	6,709	3,242
3	3,423	6,892	3,226
4	2,852	7,254	3,199
5	2,342	7,461	3,199
6	1,178	6,822	3,173
7	1,130	5,513	3,146
8	1,534	4,989	3,133
9	2,142	4,790	3,120
10	2,771	4,972	3,106
11	3,395	5,312	3,093
12	4,585	5,192	3,067
13	4,942	3,960	3,039
14	4,611	3,392	3,031
15	4,078	2,988	3,013
16	3,458	2,756	2,999
17	2,816	2,573	2,886
18	1,883	1,663	2,810
19	2,131	471	2,933
20	3,306	177	2,980
21	4,304	1,033	2,880
22	4,549	1,656	2,871
23	4,837	2,253	2,886
24	5,362	2,595	2,810
25	6,011	2,545	2,737
26	7,188	1,935	2,578
27	8,382	1,391	2,410
28	9,030	1,424	2,324
29	9,494	1,944	2,261
30	9,614	2,486	2,231
31	9,492	3,146	2,221
32	8,862	4,366	2,210
33	7,788	5,017	2,276
34	7,147	4,907	2,368
35	6,730	4,429	2,485
36	6,706	3,787	2,586
37	7,002	3,190	2,648
38	8,057	2,641	2,713
39	9,379	2,241	2,740
40	10,024	2,434	2,750
41	10,423	2,923	2,797
42	10,391	3,566	2,777
43	10,086	4,172	2,790
44	9,308	5,260	2,817
45	8,631	6,400	2,886
46	8,579	7,055	2,857
47	8,974	7,526	2,870
48	9,621	7,685	2,883
49	10,275	7,828	2,897
50	11,031	8,591	2,919
51	10,896	9,637	2,943
52	9,984	10,143	2,963
53	8,990	9,758	2,985
54	8,149	9,029	3,007
55	7,148	8,646	3,029
56	6,096	8,910	3,051
57	5,433	9,767	3,073
58	5,314	10,316	3,084
59	5,093	10,805	3,095
60	4,628	11,074	3,106
61	4,073	11,110	3,117
62	3,143	10,607	3,139
63	2,882	9,589	3,162
64	3,140	9,126	3,173
65	3,630	8,912	3,184
66	4,190	8,889	3,195
67	4,707	8,741	3,206
68	5,202	7,809	3,233



What we do.



Zhongzhou Future Lab, QUAD / Patrick Blanc



What we do.

Zhongzhou Future Lab, QUAD / Patrick Blanc





What we do.

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What we do.



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Highest C FUTURE LAB - THE JUNGLE DRAGON DANCE - SHENZHEN

15 Anthurium White
20 Asparagus densiflorus
25 Adenia scandens speciosa
25 Molina recurvata
15 Philodendron scandens
25 Polypodium aureum
20 Dischidia ruscifolia
30 Nematanthus gregarius
25 Nephrolepis exaltata
30 Sedum morganianum
25 Pilea nummularia
25 Dischidia nummularia

10 Anthurium dennerlei
10 Asparagus densiflorus
10 Anthurium pink
15 Anthurium Dakar
15 Tradescantia spathacea
15 Zamioculcas zamiifolia
15 Schefflera
20 Ficus repens
15 Chlorophytum comosum
25 Philodendron scandens
30 Rhipsalis 'Red Coral'
40 Sedum morganianum
25 Hoya bella

articularis
15 Anthurium Dakar
10 Molina recurvata
10 Anthurium clarinervium
25 Adiantum raddianum
15 Philodendron Kandian
Hoya
15 Syngonium
saxorum
30 Rhipsalis baccifera
30 Adiantum Kisa
30 Dischidia mucilaginosa

30 Asperagus myriodoides
20 Anthurium 'Amalia'
15 Billbergia nutans
15 Zamioculcas zamiifolia
25 Soleirolia soleirolii
50 Cyrtanthus boliviensis
15 Episcia cupreata
20 Dischidia nummularia
30 Nematanthus gregarius
25 Scindapsus pictus
30 Rhipsalis 'Red Coral'
40 Adelmannia
low level
Pink Star (Velvet)
15 Anthurium clarinervium
25 Adiantum raddianum
30 Anthurium Red
15 Polypodium aureum
50 Soleirolia
Mona Lisa
25 Asperagus sprengelii
25 Scindapsus pictus
15 Platycerium bifurcatum
20 Dischidia ruscifolia
25 Zebrina pendula
15 Syngonium
Soleirolii Green
25 Begonia maculata
15 Tradescantia spathacea
10 Medinilla 'Paul Passion'
15 Anthurium clarinervium
pink flower
25 Hoya bella
20 Rhipsalis 'Red Coral'
15 chlorophytum
Dischidia nummularia
25 Nephrolepis exaltata
25 Asperagus M. Sprengelii

30 Pothos tigris maloide
25 Adenophorus spicatus
15 Anthurium White
10 Polypodium aureum
10 Billbergia nutans
10 Anthurium
25 Pilea nummularia
40 Rhipsalis baccifera
30 Adiantum Kisa
15 Syngonium
Saxorum
25 Zebrina

Arnoldi
20 Anthurium Pink
15 Molina recurvata
20 Tradescantia spathacea
25 Soleirolia Gold
15 Schefflera
Leucophlebia
30 Ficus repens
15 Platycerium bifurcatum
30 Dischidia ruscifolia
20 Rhipsalis 'Red Coral'
25 Dischidia nummularia
15 Syngonium
ricola
30 Peperomia pinguinella
25 Begonia maculata
30 Ficus vaccinoides
50 Ludisia discolor
25 Billbergia nutans
Anthurium
-gumii
-gumii Allura
40 Nematanthus gregarius
30 Sedum morganianum
15 Episcia cupreata
25 Philodendron scandens
30 Rhipsalis baccifera

Plants on
one face only
around corners

P. Bleeker
2nd November 2019
Highest

What we do.

Zhongzhou Future Lab, QUAD / Patrick Blanc



What we do.



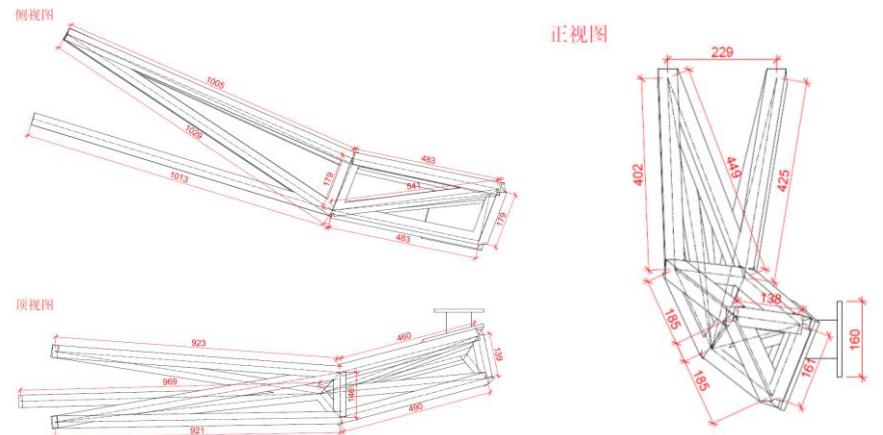
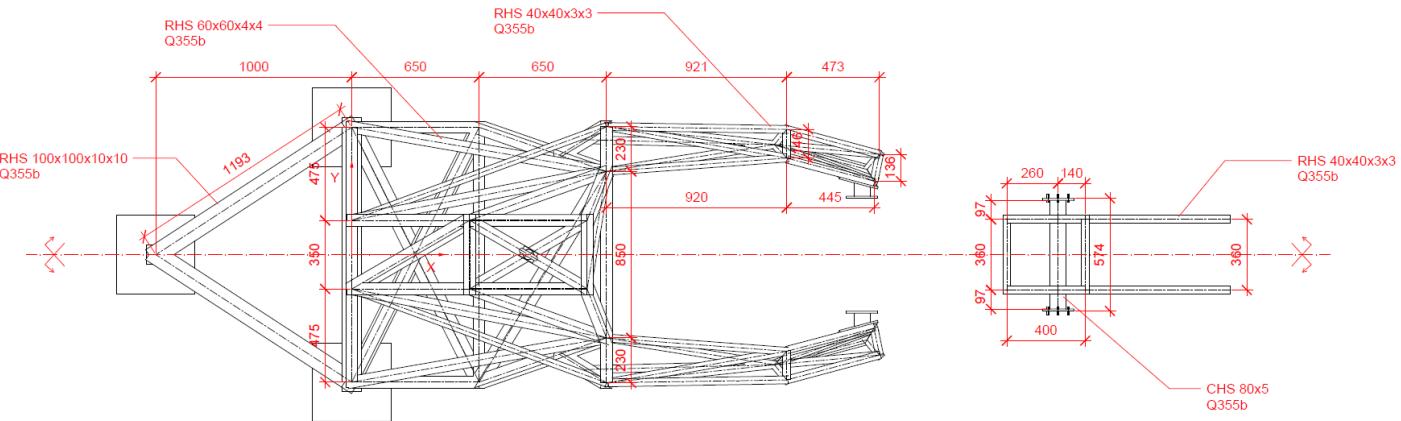
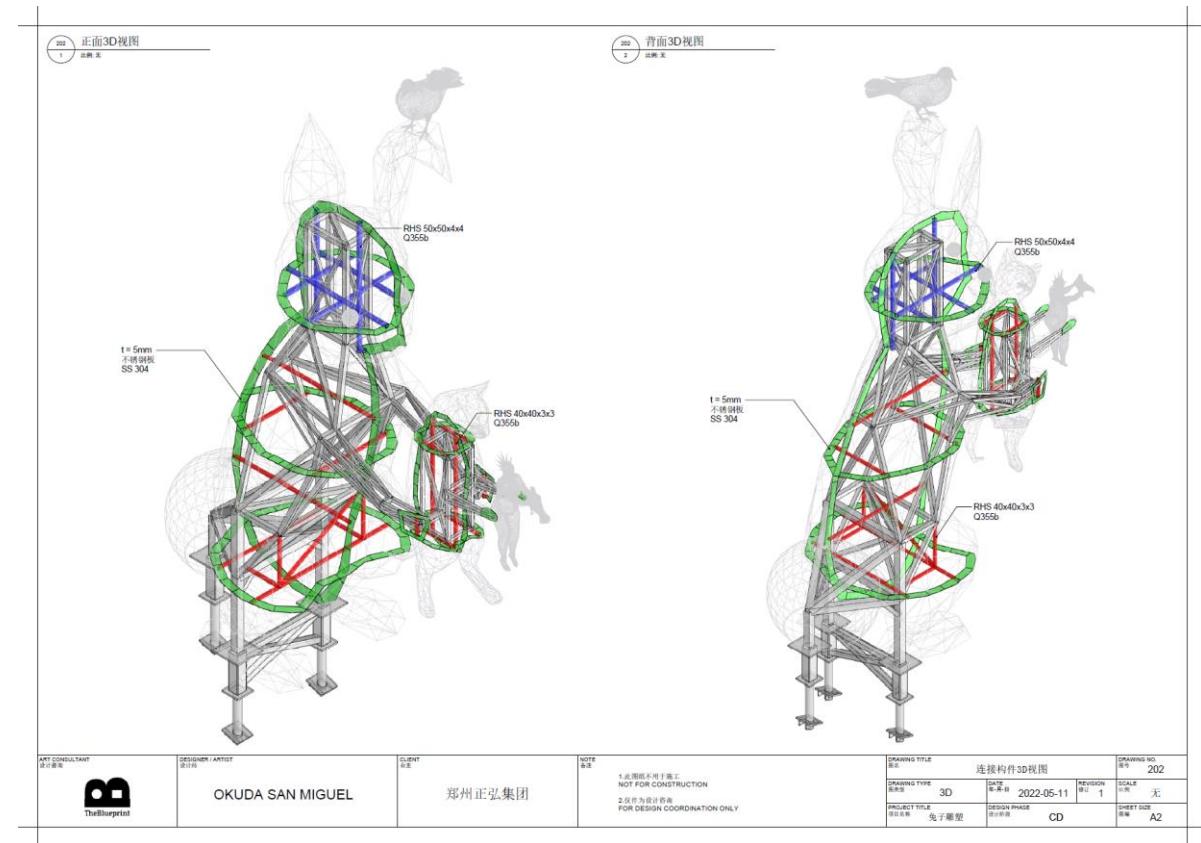
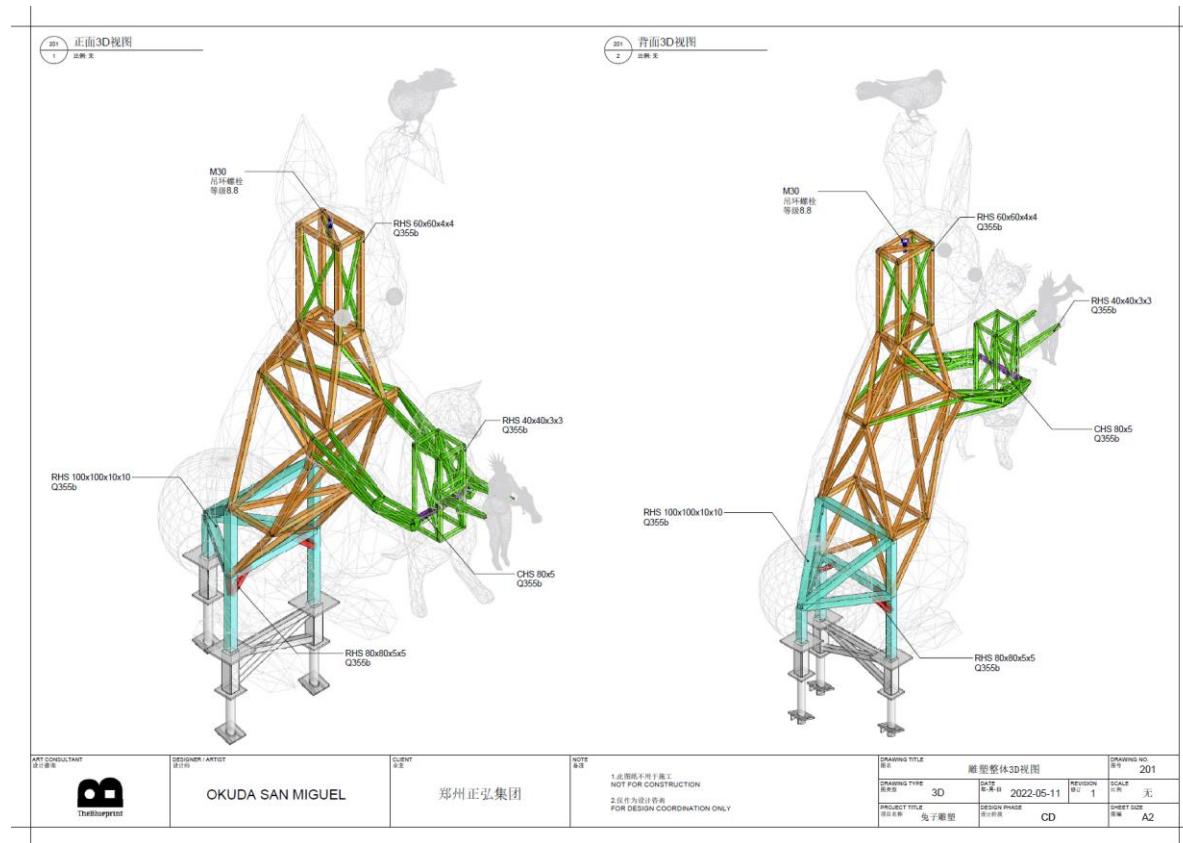
Zhongzhou Future Lab, QUAD / Patrick Blanc

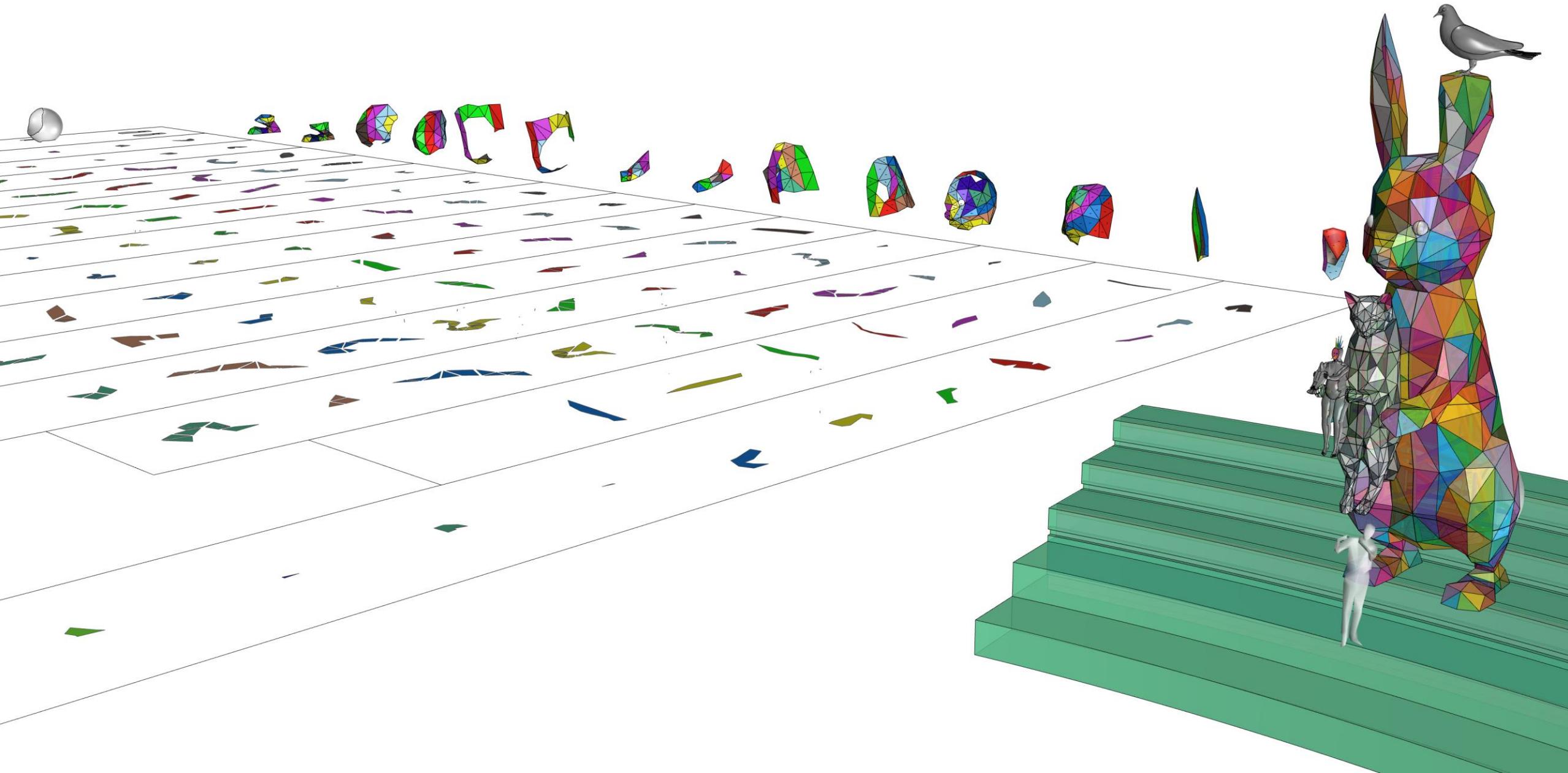




What we do.

Okuda, TheBluePrint, Zhengzhou



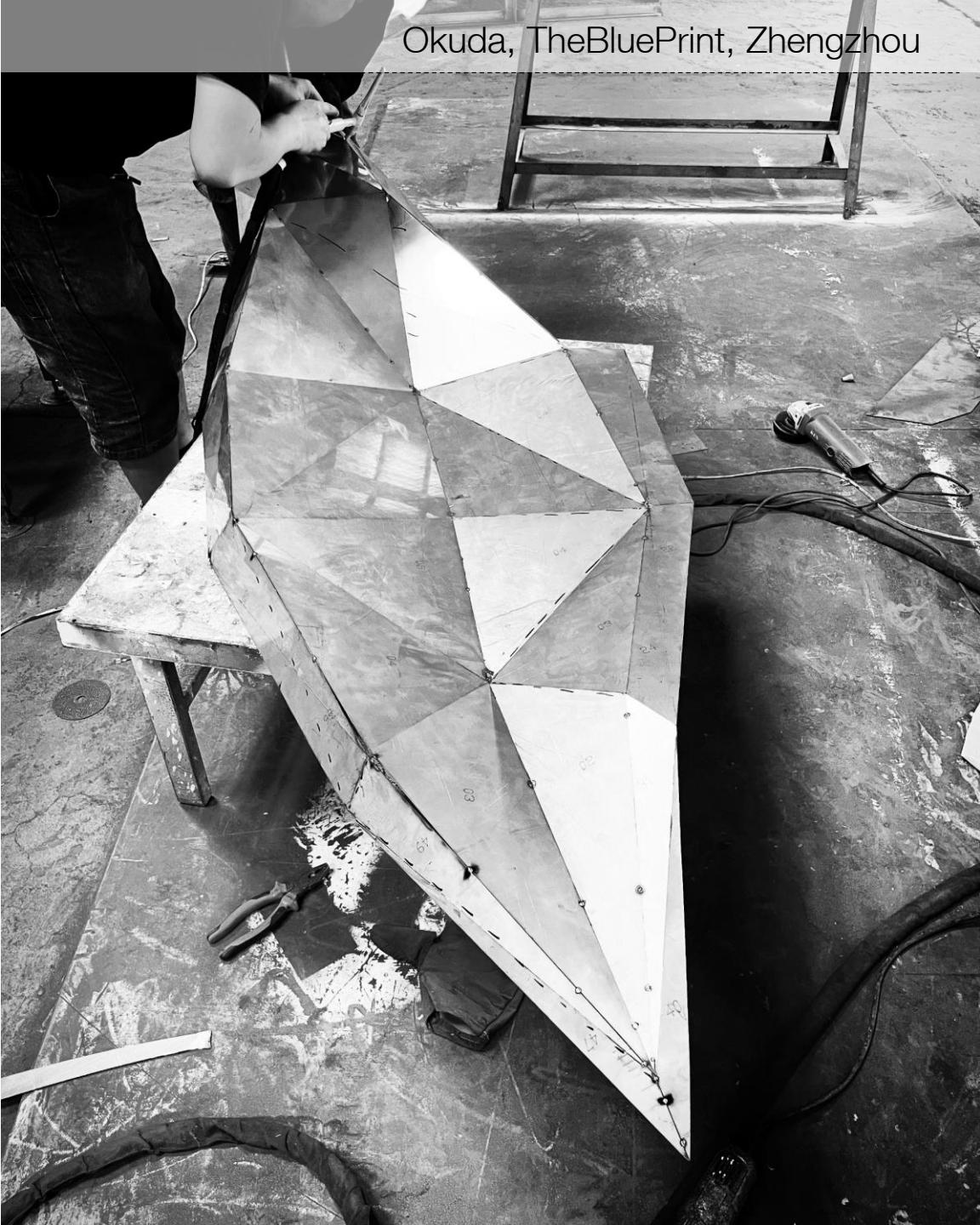


What we do.

Okuda, TheBluePrint, Zhengzhou



What we do.



Okuda, TheBluePrint, Zhengzhou

What we do.

Okuda, TheBluePrint, Zhengzhou

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GRISES											
Montana Pantone NCS	Blanco White S 0915-Y20R	Oris Stardust Cool Gray 1C S 1502-050Y	Oris Siberia 2330 C S 2002-B	Oris Rita 427 C S 3000-N	Oris Perla 427a C S 4005-B80G	Oris Londres 2332 C S 5000-N	Oris Lobo 431 C S 6005-R80B	Oris Icaro 7540 C S 7005-R80B	Oris Antracita 4280 C S 8005-R80B	Oris Metrópolis Black SC S 8602-B	Negro Black 6C S 9000-N
AMARILLOS											
Montana Pantone NCS	Ama Ipánema 461 C S 0915-Y20R	Ama Fiesta 2002 C S 0540-Y	Ama Canarias 107 C S 0560-Y	Ama Claro 7404 C S 0570-Y10R	Eldorado 116 C S 1070-Y10R	Ama Ysenite 110 C S 2050-Y20R	Verde Babel 111 C S 4040-Y10R	Verde Misión 7561 C S 5020-Y20R	Verde Maya 7554 C S 7010-Y10R		
VERDES											
Montana Pantone NCS	Verde Vespa 7485 C S 0515-640Y	Verde Psycho 381 C S 1040-670Y	Verde Soñar 390 C S 2040-670Y	Verde Laos 3561 C S 1040-G30Y	Verde Valle 2424 C S 2040-G20Y	Verde Esfíadi 7491 C S 4030-650Y	Verde Era 2427 C S 6030-610Y	V. Amazonas 2466 C S 8005-620Y			
TURQUESAS											
Montana Pantone NCS	Verde Demini 513 C S 1015-B80G	Verde Luz 4163 C S 2020-B70G	Verde Bali 7472 C S 2040-B40G	V. Esmeralda 7473 C S 3030-B10G	V. Turquesa 7717 C S 3030-B50G	Az. Tramontana 3145 C S 3030-B20G	Az. Oloria 7719 C S 6030-B30G	Az. Pegasus 3165 C S 6020-B60G			
AZULES											
Montana Pantone NCS	Az1 2707 C S 0510-B30G	Az2 544 C S 2020-B	Az3 291 C S 1040-B	Az4 298 C S 1060-B	Az5 299 C S 2080-B	Az6 300 C S 2085-R90B	Az7 3015 C S 4085-R90B	Az8 303 C S 5090-R80B	Az9 303 C S 7020-R80B		
MORADOS											
Montana Pantone NCS	M1 263 C S 0520-R40B	M2 256 C S 2030-R50B	M4 2573 C S 2040-R60B	M5 Violeta Olímpico 2068 C S 4030-R60B	M6 Ultravioleta 2088 C S 3040-R60B	M7 Violeta Venus 2091 C S 5050-R60B	M8 Violeta Electra 275 C S 5050-R60B				
ROSAS											
Montana Pantone NCS	Z1 705 C S 0530-R20B	Z2 Rosa Tokyo 2036 C S 0540-R20B	Z3 Tuti Fruti 190 C S 1050-R10B	Z4 Erika 225 C S 1060-R20B	Z5 Magenta 226 C S 1070-R20B	Z6 Rojo Açaí 227 C S 3050-R30B	Z7 Rojo Rioja 228 C S 5050-R40B				
ROJOS											
Montana Pantone NCS	R1 Rojo Fielte 4058 C S 2060-R	R2 Rojo Sangre 4059 C S 2060-R	R3 Rojo Madrid 3517 C S 2070-190R	R4 Rojo Clandestino 1807 C S 3060-Y190R	R5 Rojo Ira 683 C S 6020-R30B	R6 Rojo Bárdeos 3523 C S 5040-R	R7 Rojo Táurus 690 C S 8010-R60B	R8 Rojo Cherokee 2449 C S 8005-R20B			
NARANJAS											
Montana Pantone NCS	N1 Naranja Dalai 2015 C S 1030-Y50R	N2 Nar Solar 156 C S 1050-Y50R	N3 Mandarina 3568 C S 1060-Y50R	N4 Naranja lava 3564 C S 1070-Y70R	N5 Naranja 165 C S 2070-Y60R	N6 Fénix 718 C S 4040-Y80R	N7 Marrón Interal 174 C S 5050-Y90R				
MARRONES											
Montana Pantone NCS	Ma1 Marrón Kraft 4006 C S 4020-Y30R	Ma2 Marrón Secuia 7575 C S 6010-Y30R	Ma3 Marrón Café 161 C S 6020-Y80R								



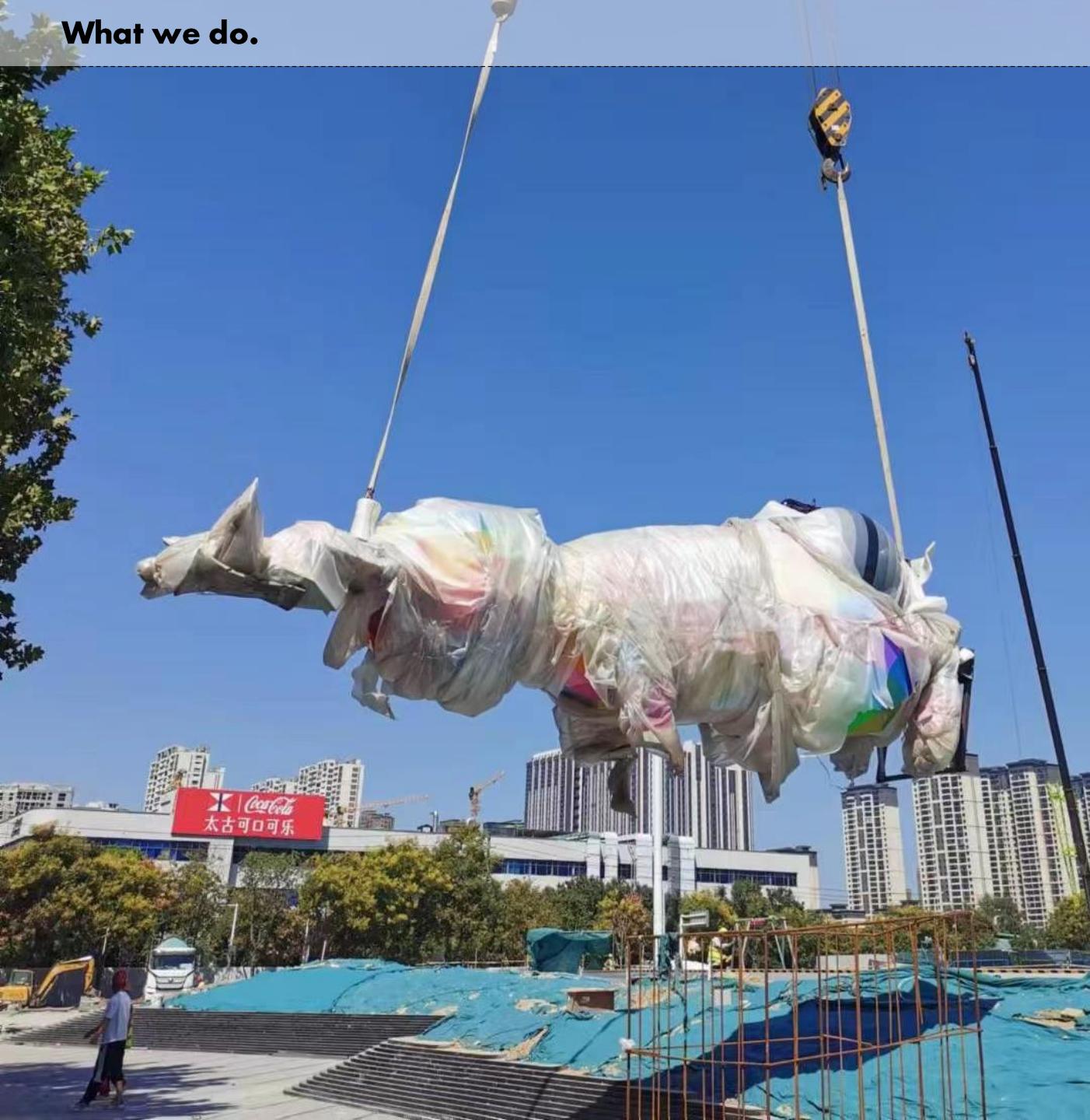
What we do.



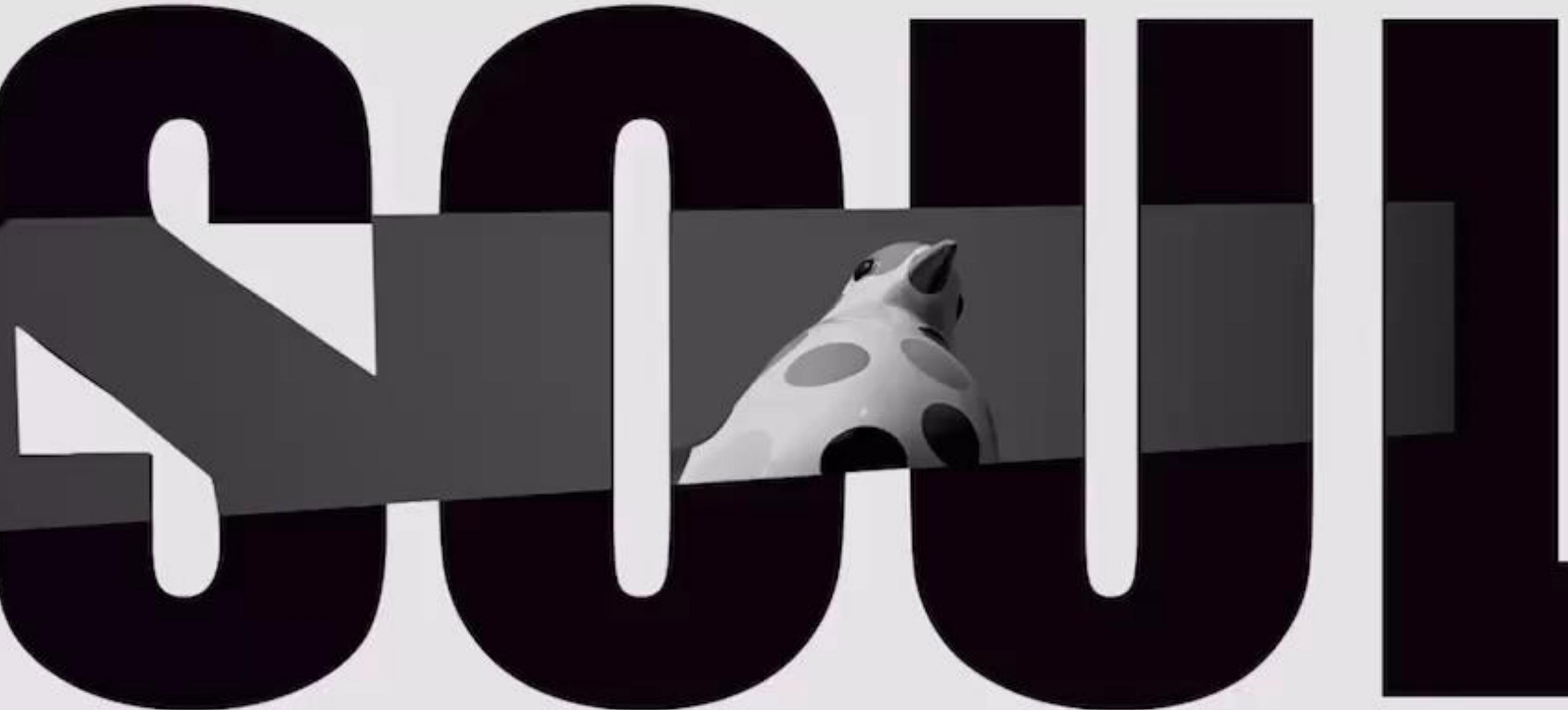
Okuda, TheBluePrint, Zhengzhou



What we do.



Okuda, TheBluePrint, Zhengzhou





Stuart Green

Stuart Green is a Perth based artist who has been facilitating public art for over 20 years. Stuart works vary in scales - producing architectural facade treatments, immense freestanding sculptures to smaller interactive and interpretive pieces. Green is inspired by the changes in the natural environment and the merging of both pattern and form.



Concept 01

Plotting the Movement
Thematic Approach

Energy tracked as lines in space are the starting point of thinking about this continuously looping work.

The eyes follow the line of form snaking through space, taking us on a journey that our bodies would thrill at undertaking. This spatial work is a combination of both graceful swooping lines, and more industrial or geometric and calculated turns. The combination of both characters of flow suggest a form at the edge of recognition - like a half remembered object on the tip of our tongue to describe but elusive.

The artwork straddles the path giving strong sight and desire lines within the park layout, and adding a drama and scale in its juxtaposition to the moving viewer as they walk past and through the artwork.

High key colour and colour breakup enliven the surface with parallel bands of colour emphasising the swoop and turns of the form.

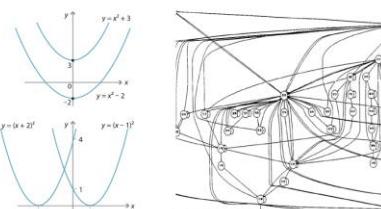
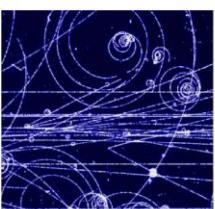
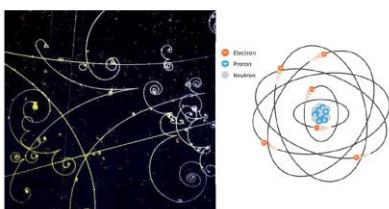


Richard Deacon

Stuart Green

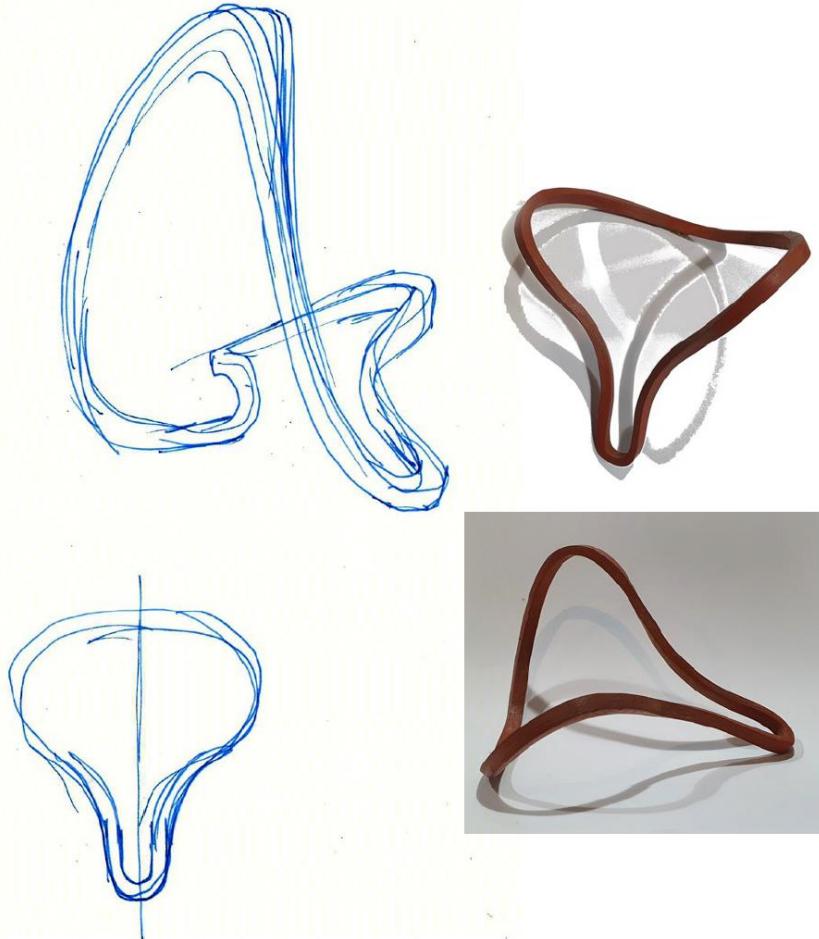
Stuart Green

Stuart Green

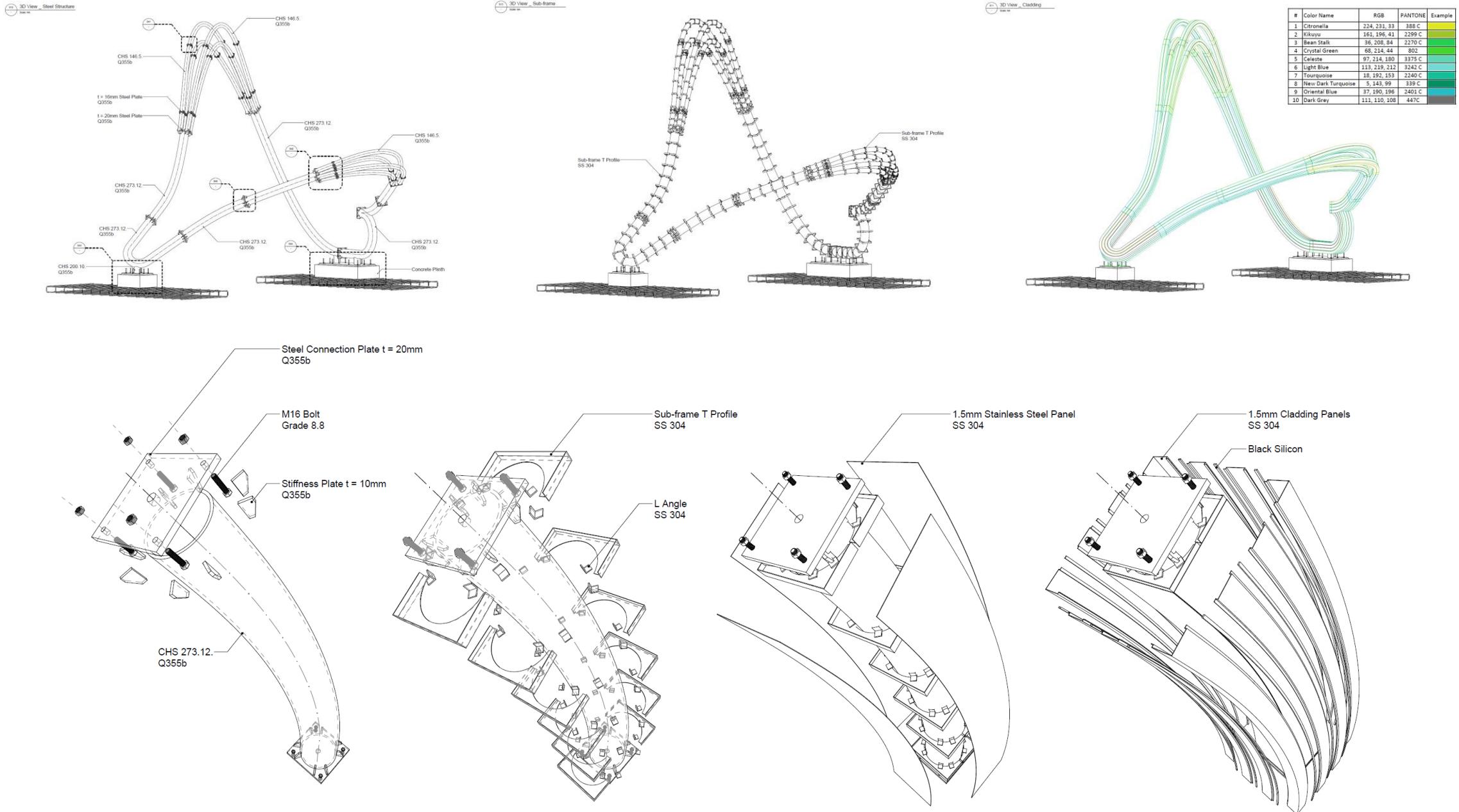


Concept 01

Plotting the Movement
Sketches



Stuart Green



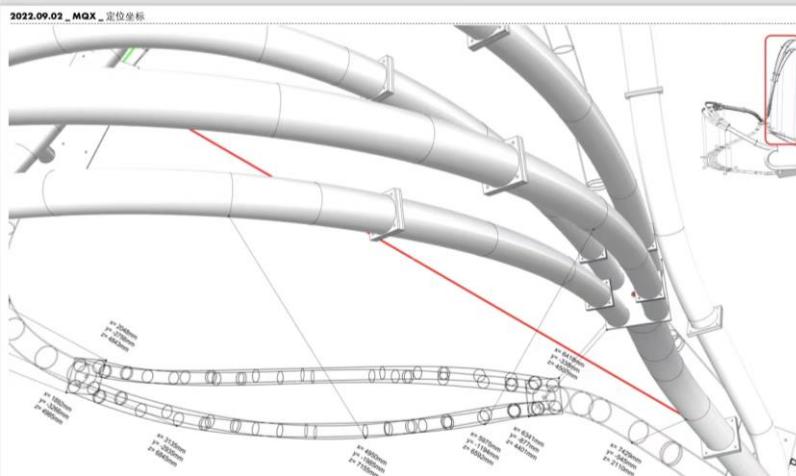
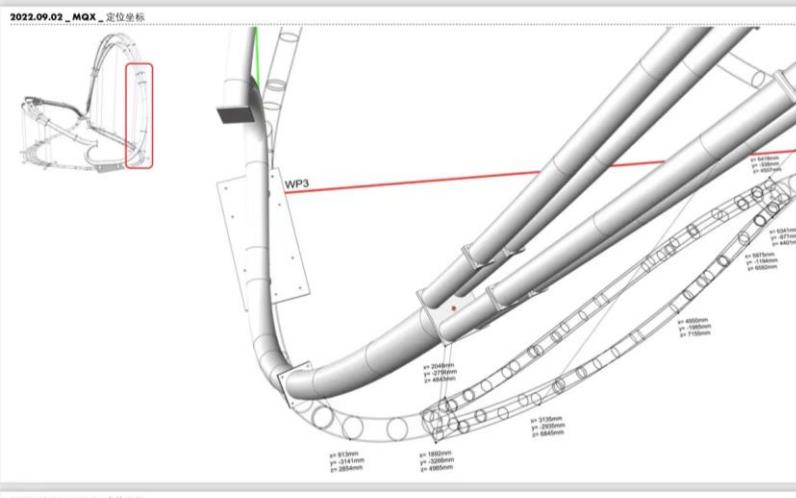
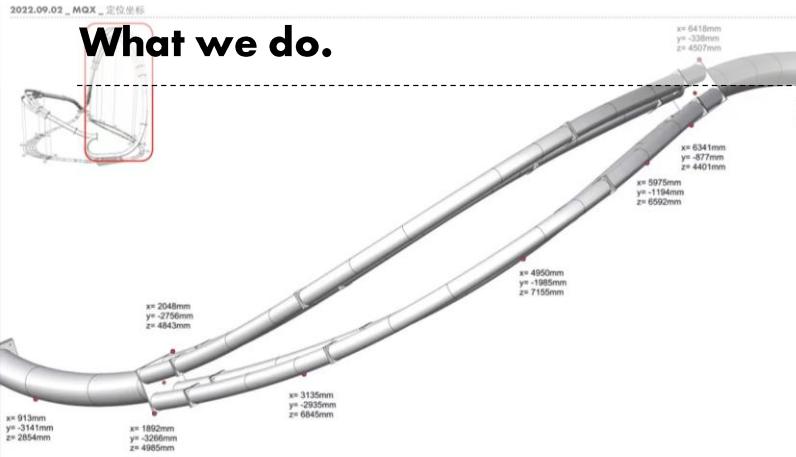


What we do.



MQX, Stuart Green, TheBluePrint, Sydney

What we do.







What we do.

MQX, Stuart Green, TheBluePrint, Sydney



What we do.

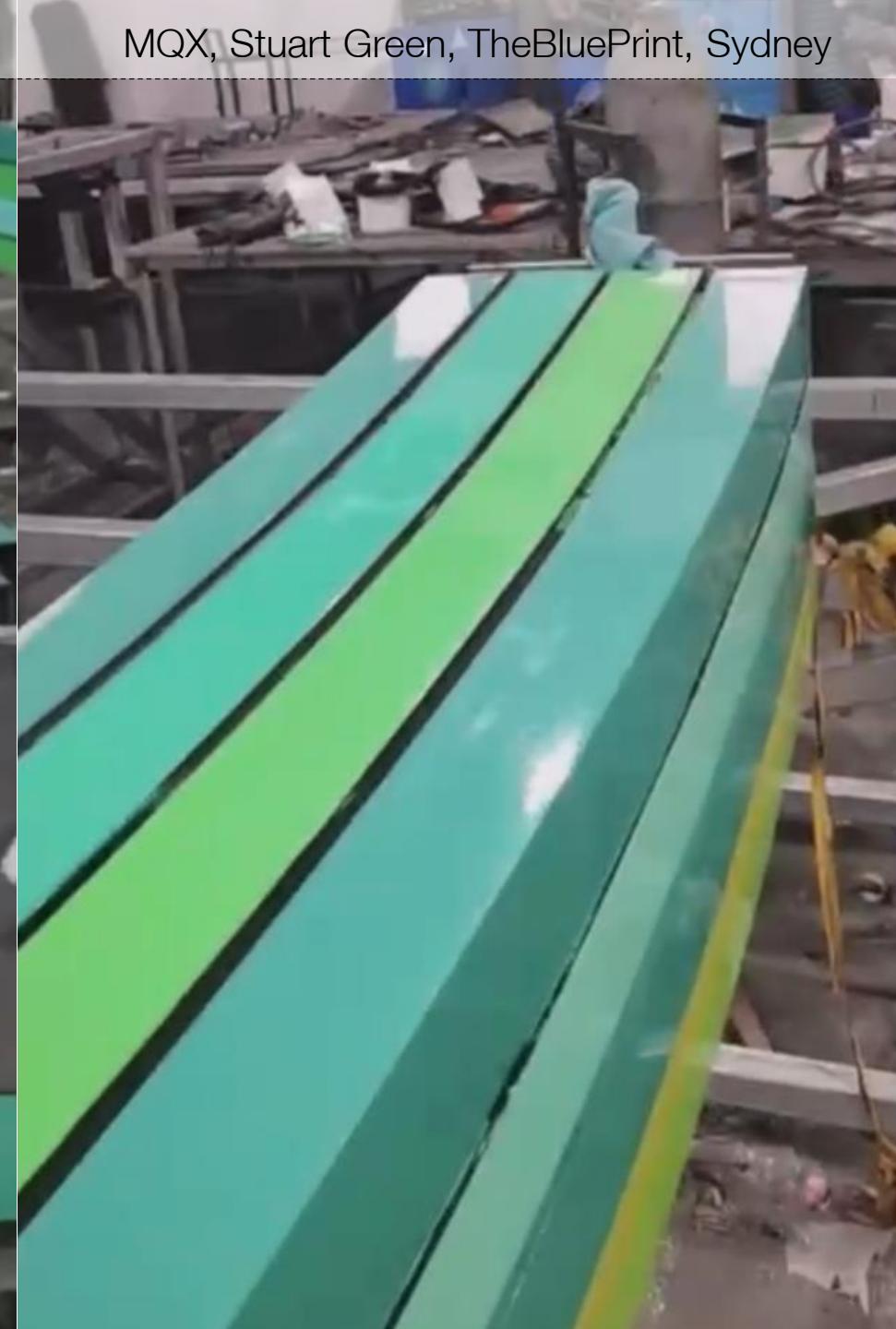


MQX, Stuart Green, TheBluePrint, Sydney

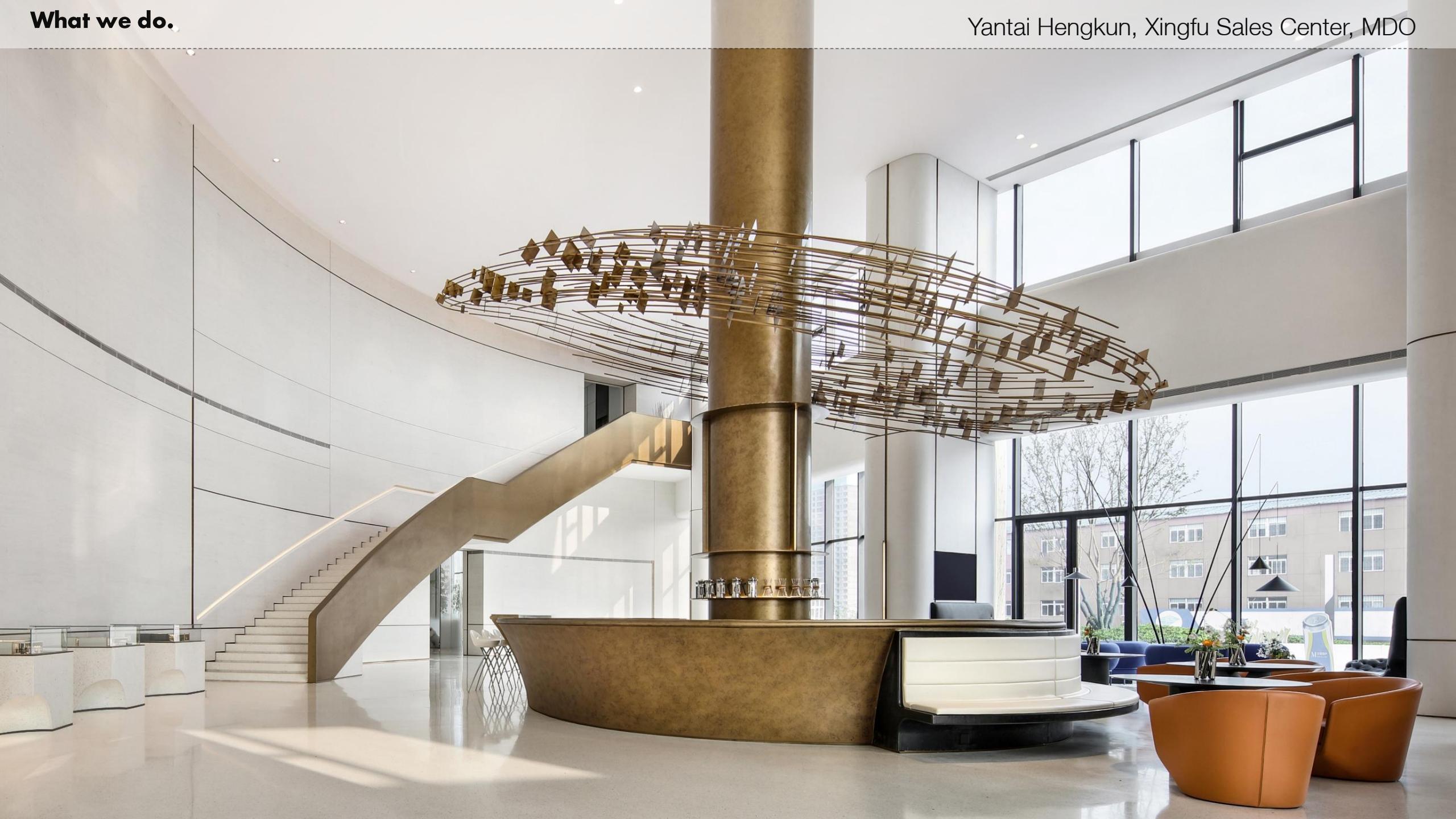


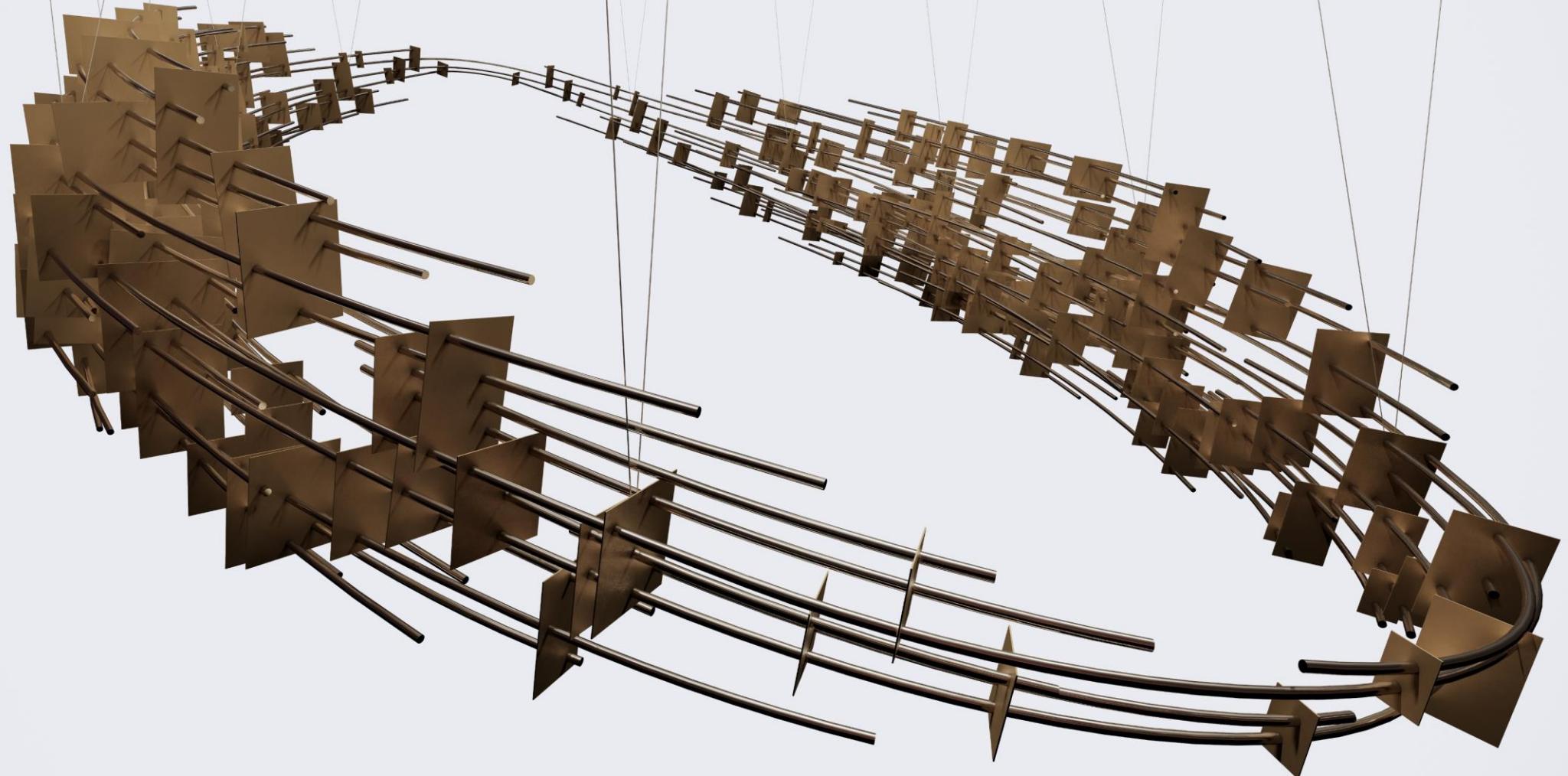
What we do.

MQX, Stuart Green, TheBluePrint, Sydney



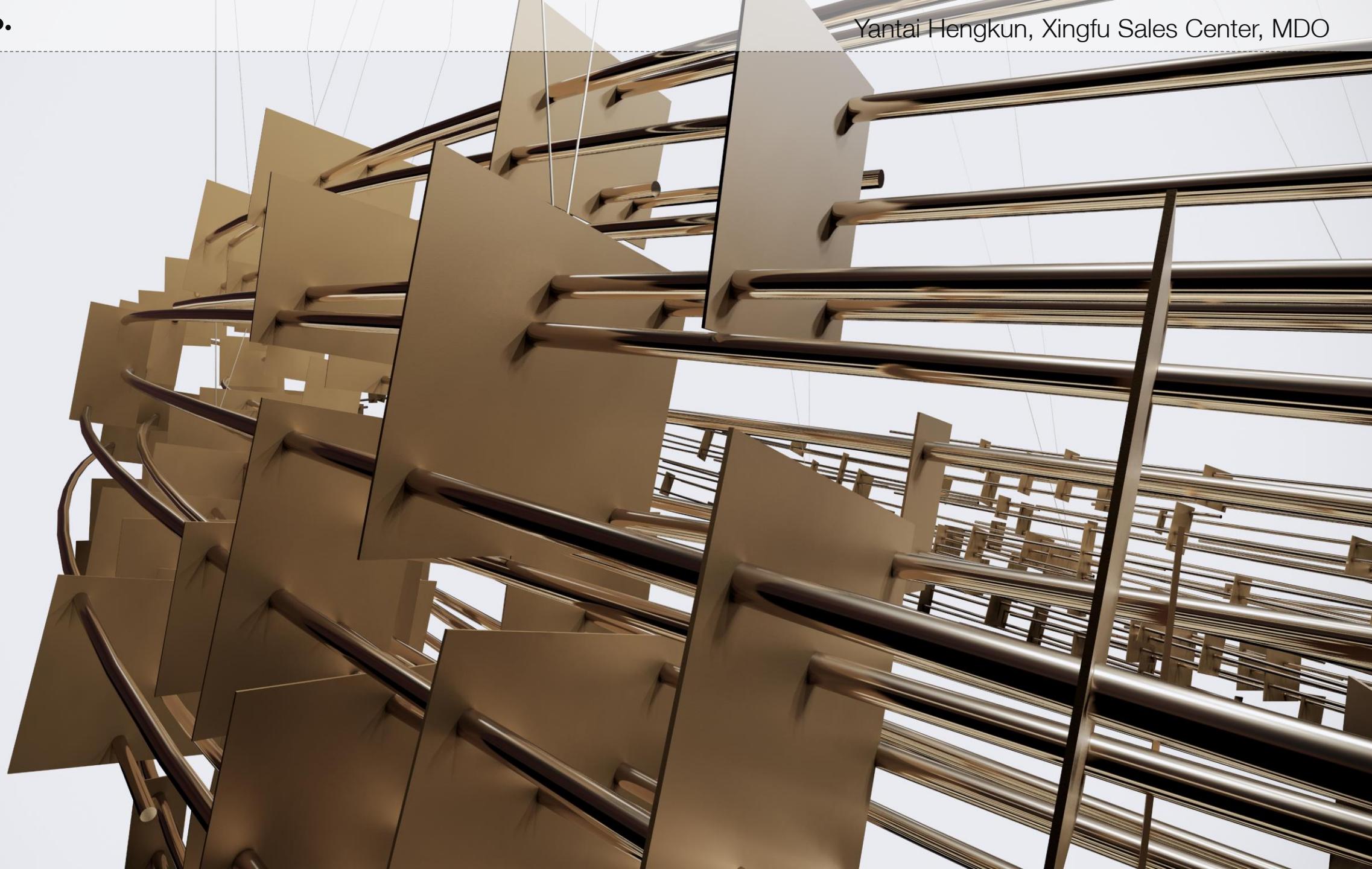


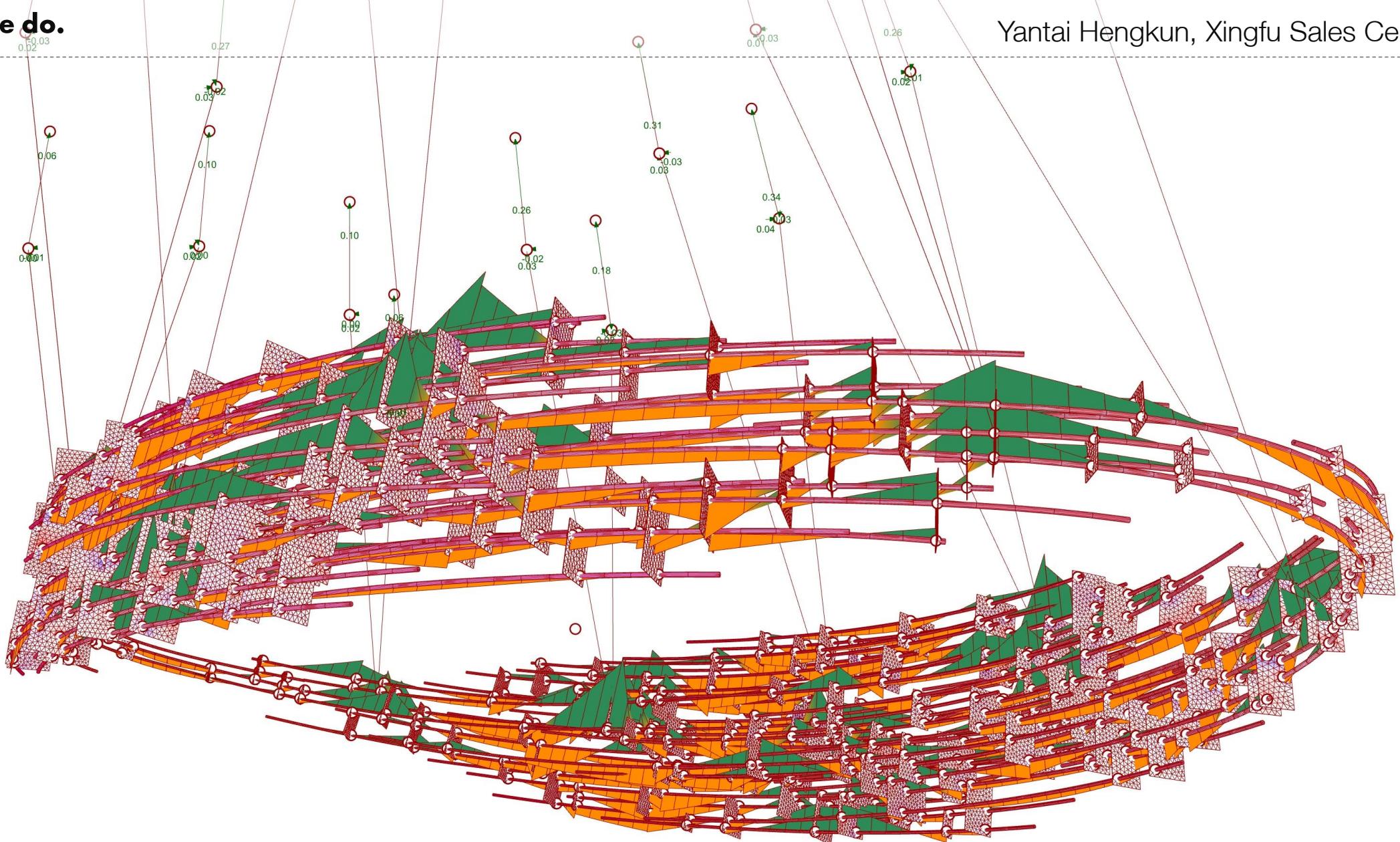




What we do.

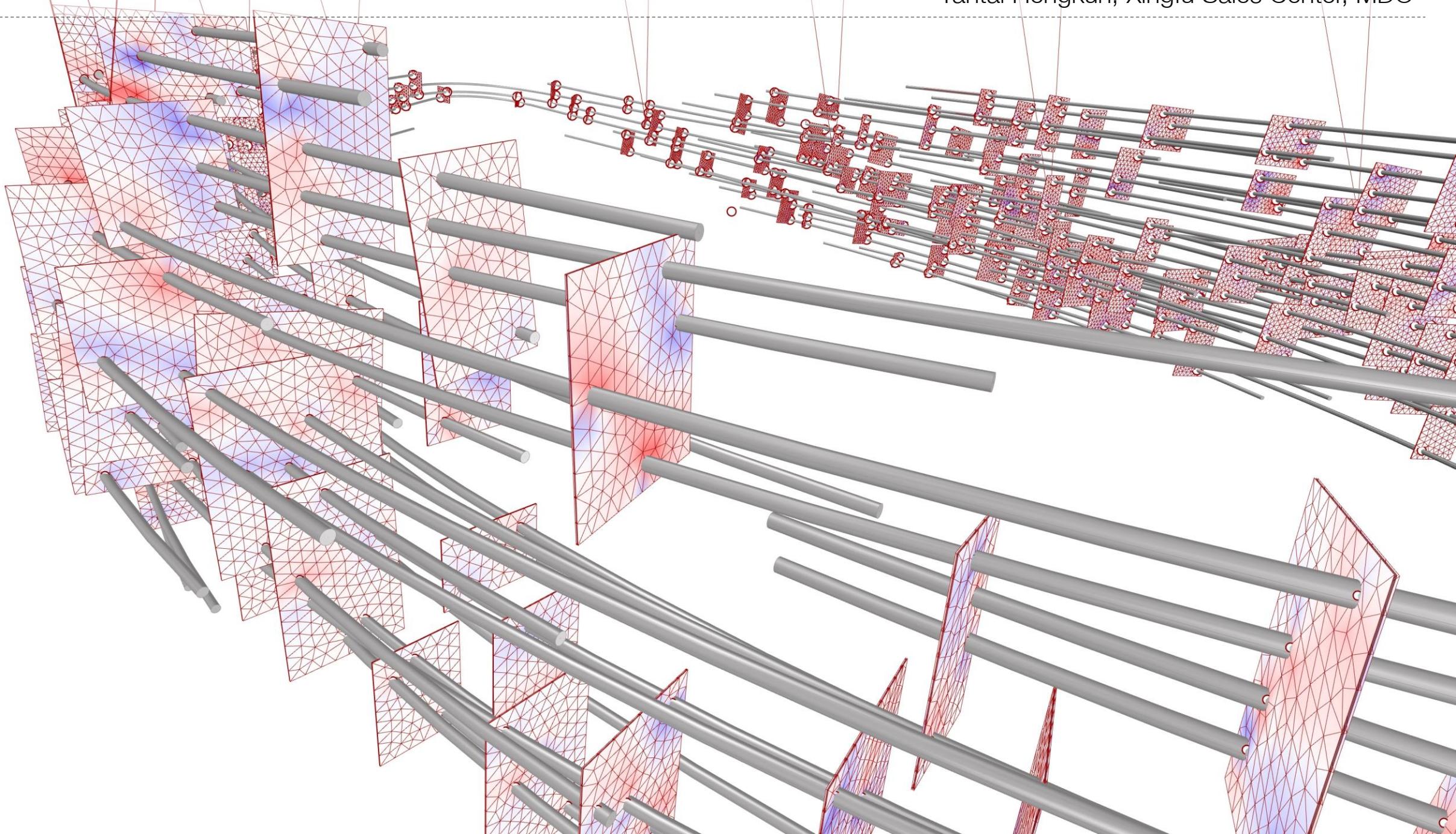
Yantai Hengkun, Xingfu Sales Center, MDO





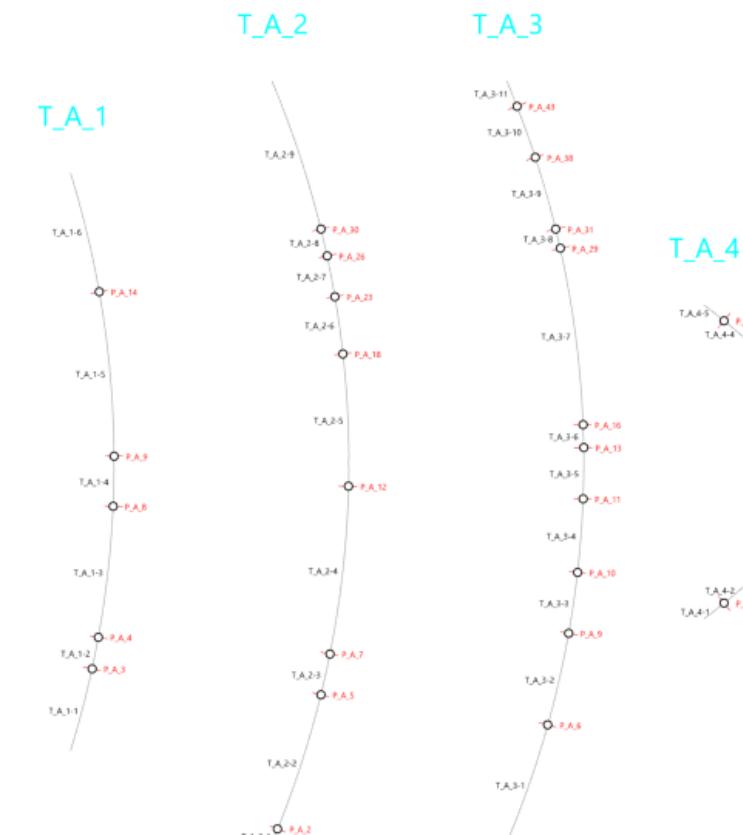
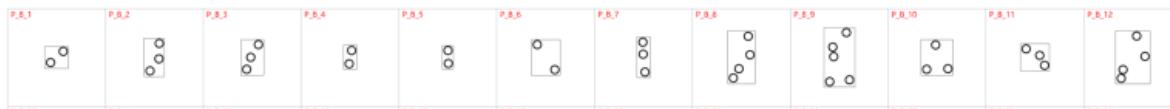
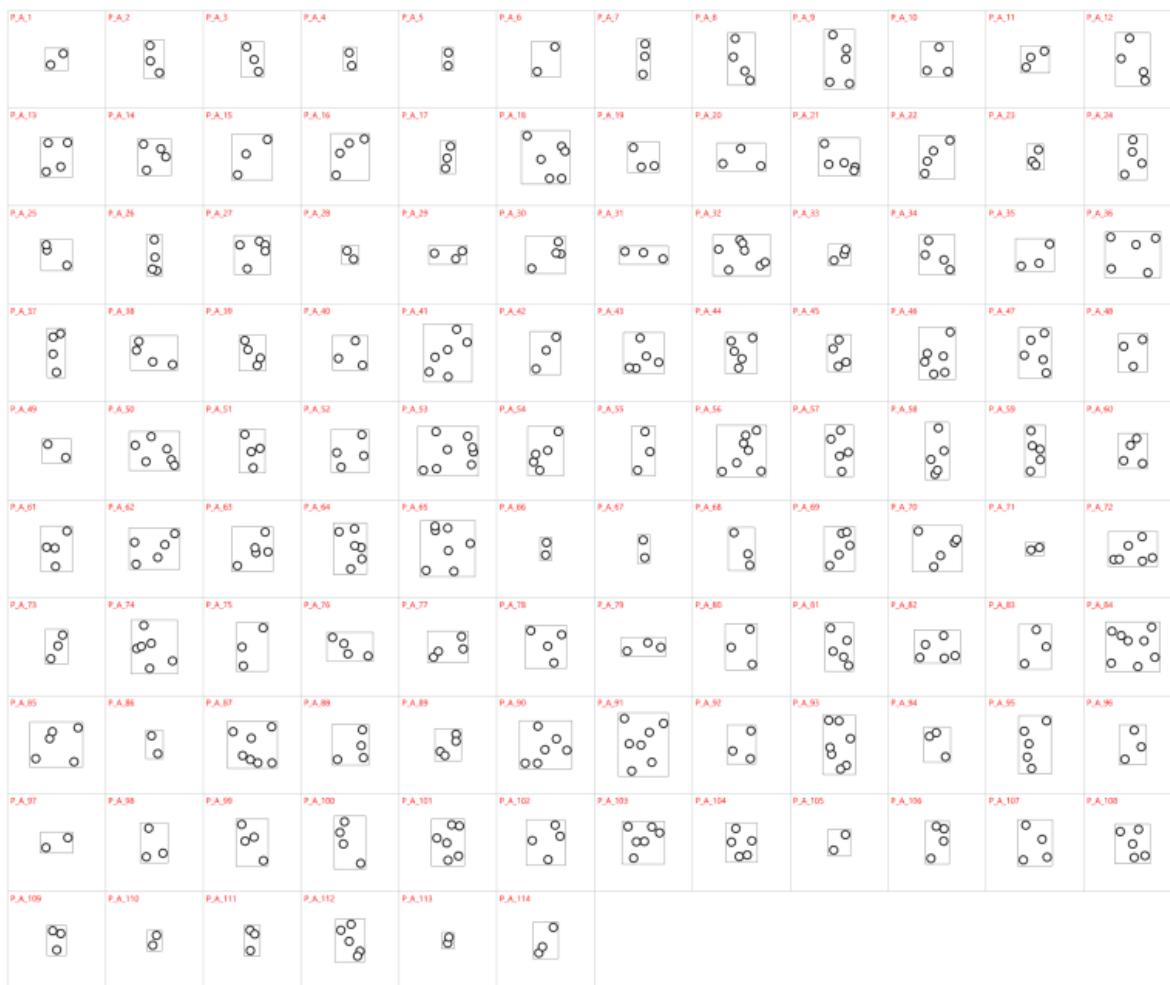
What we do.

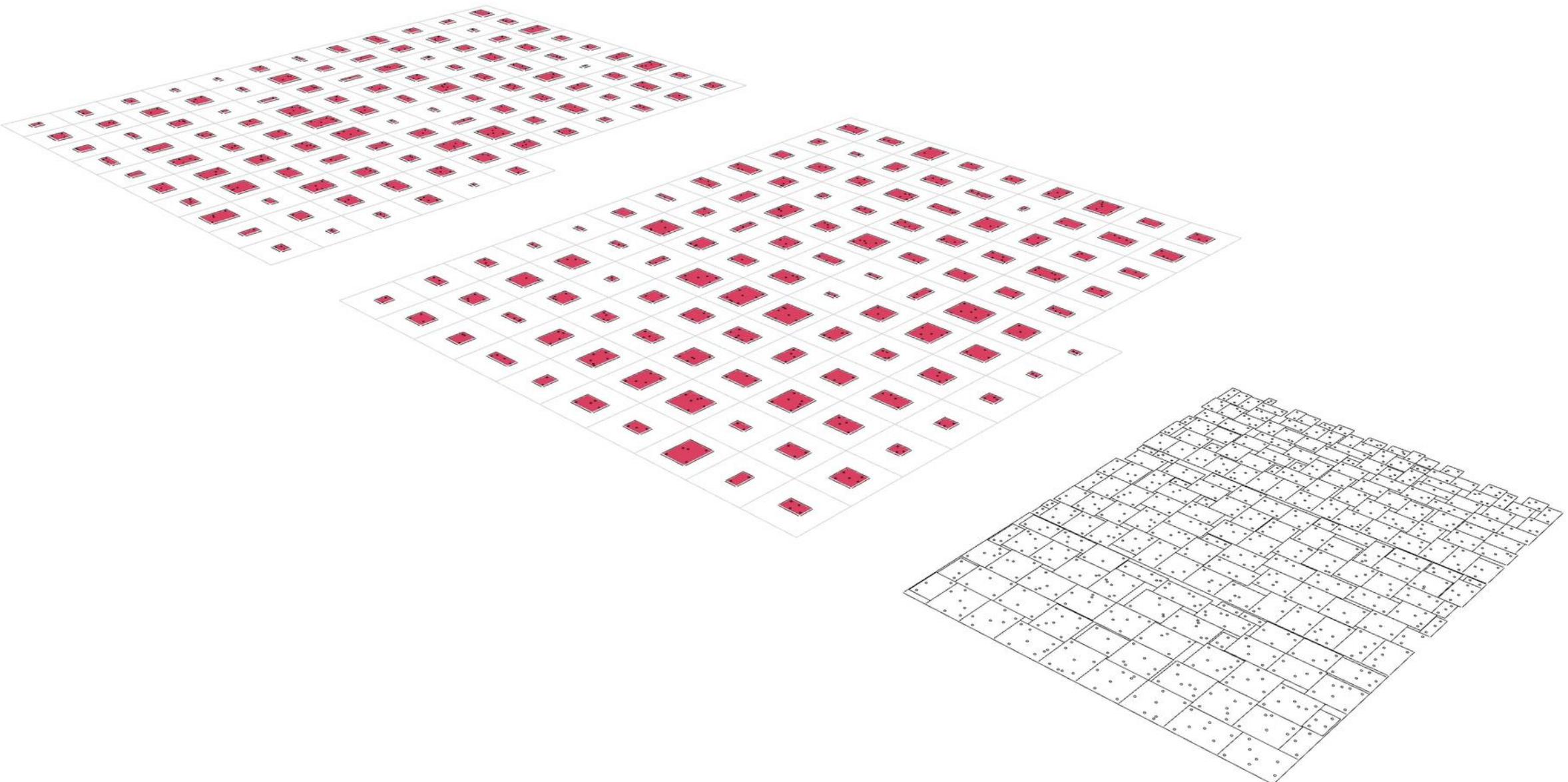
Yantai Hengkun, Xingfu Sales Center, MDO



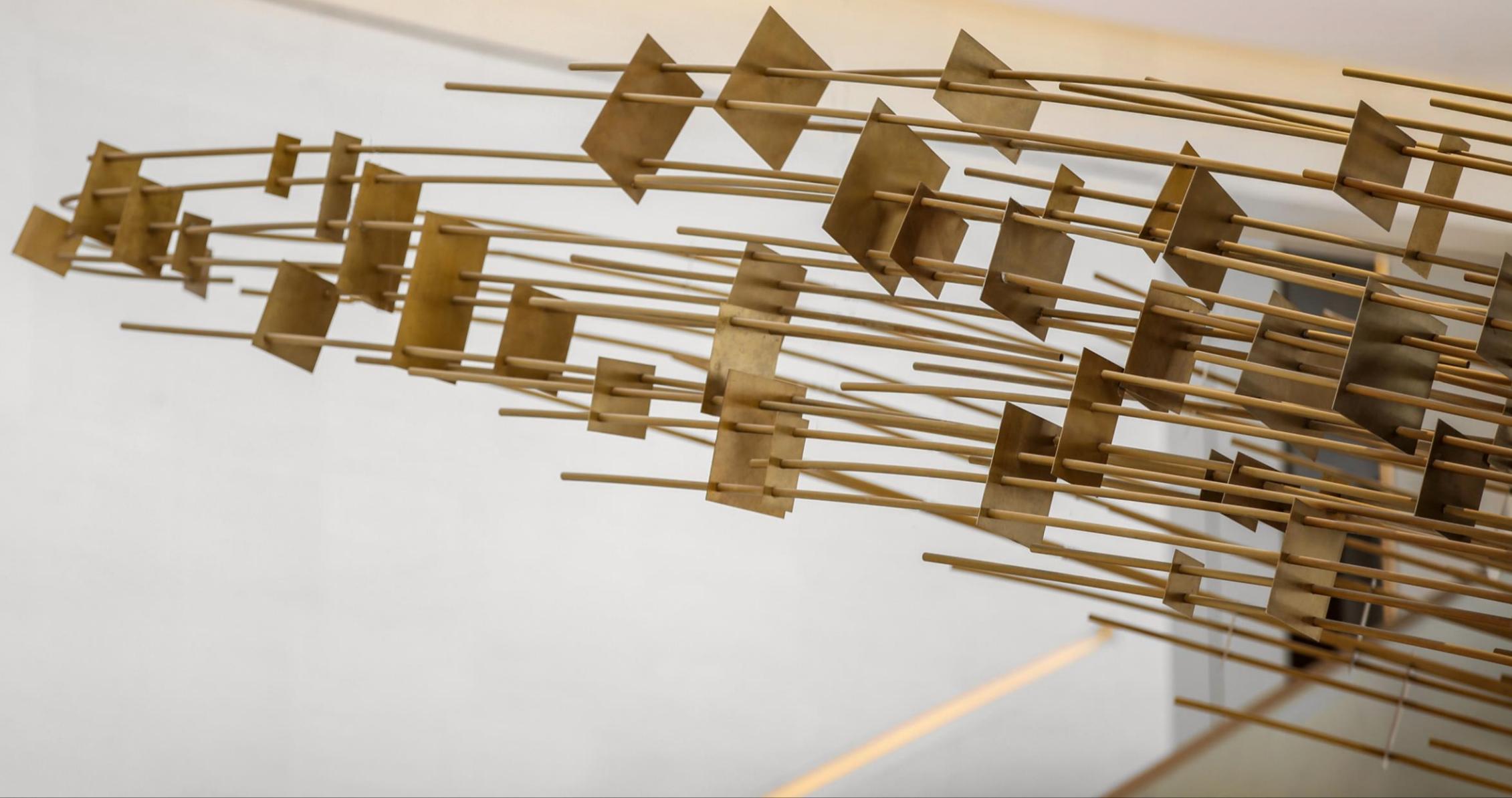
What we do.

Yantai Hengkun, Xingfu Sales Center, MDO



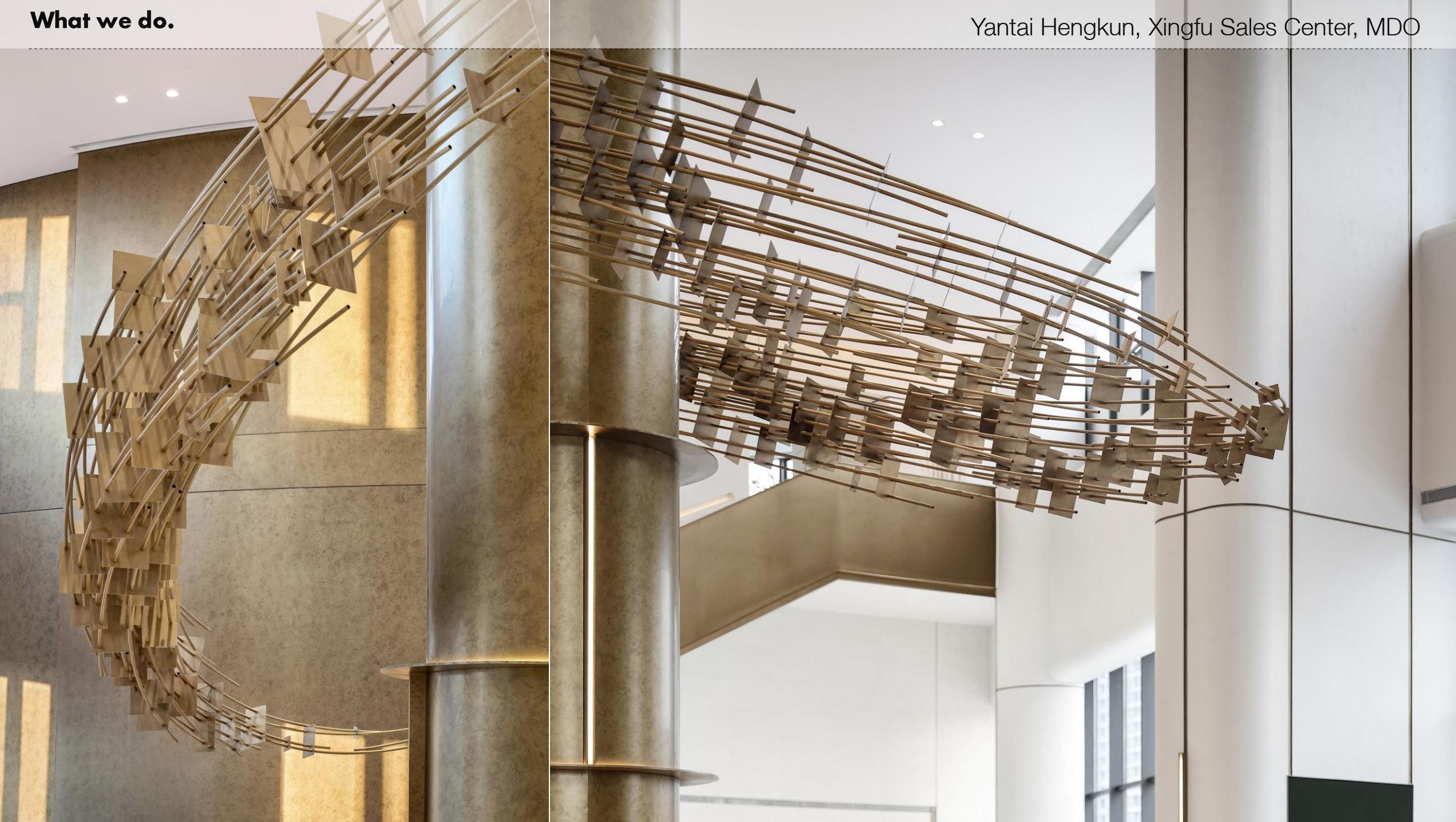


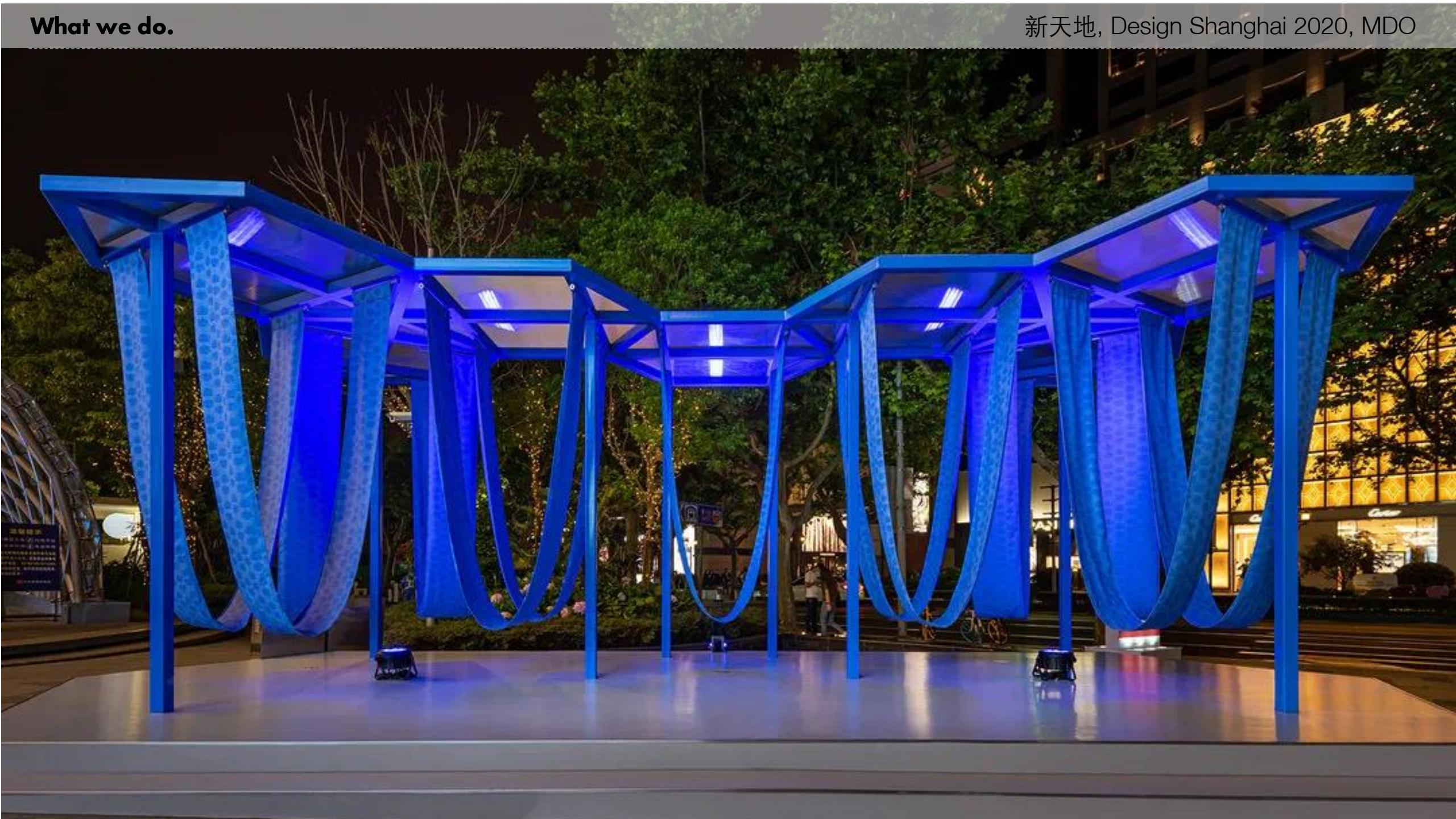




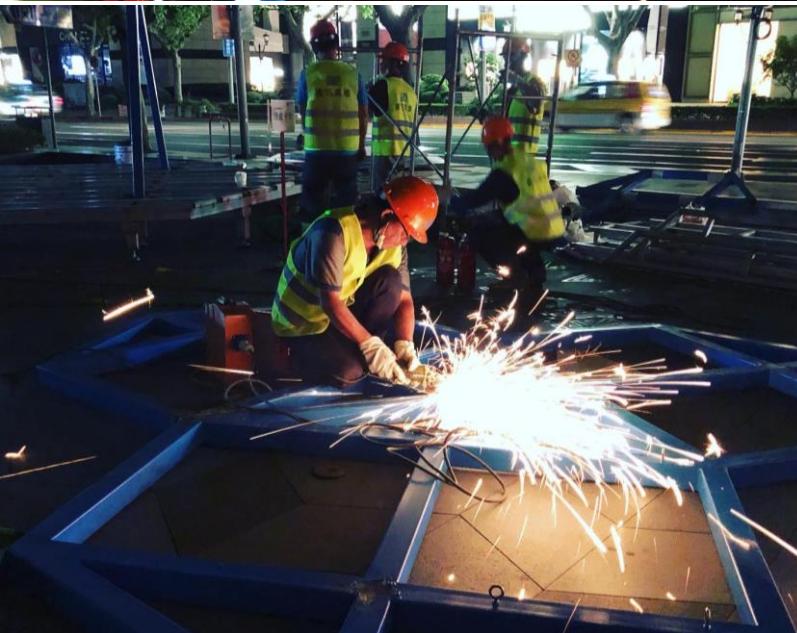
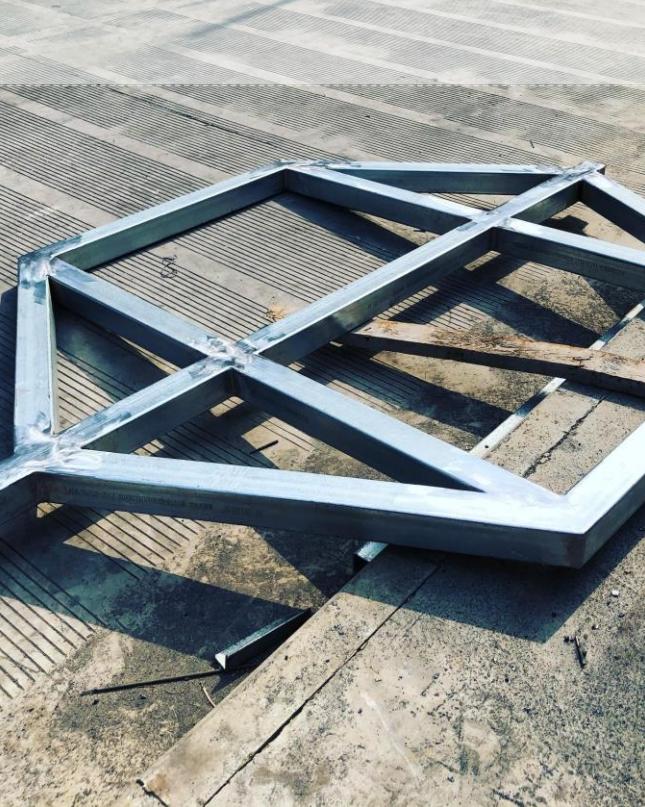
What we do.

Yantai Hengkun, Xingfu Sales Center, MDO





What we do.



新天地, Design Shanghai 2020, MDO

What we do.



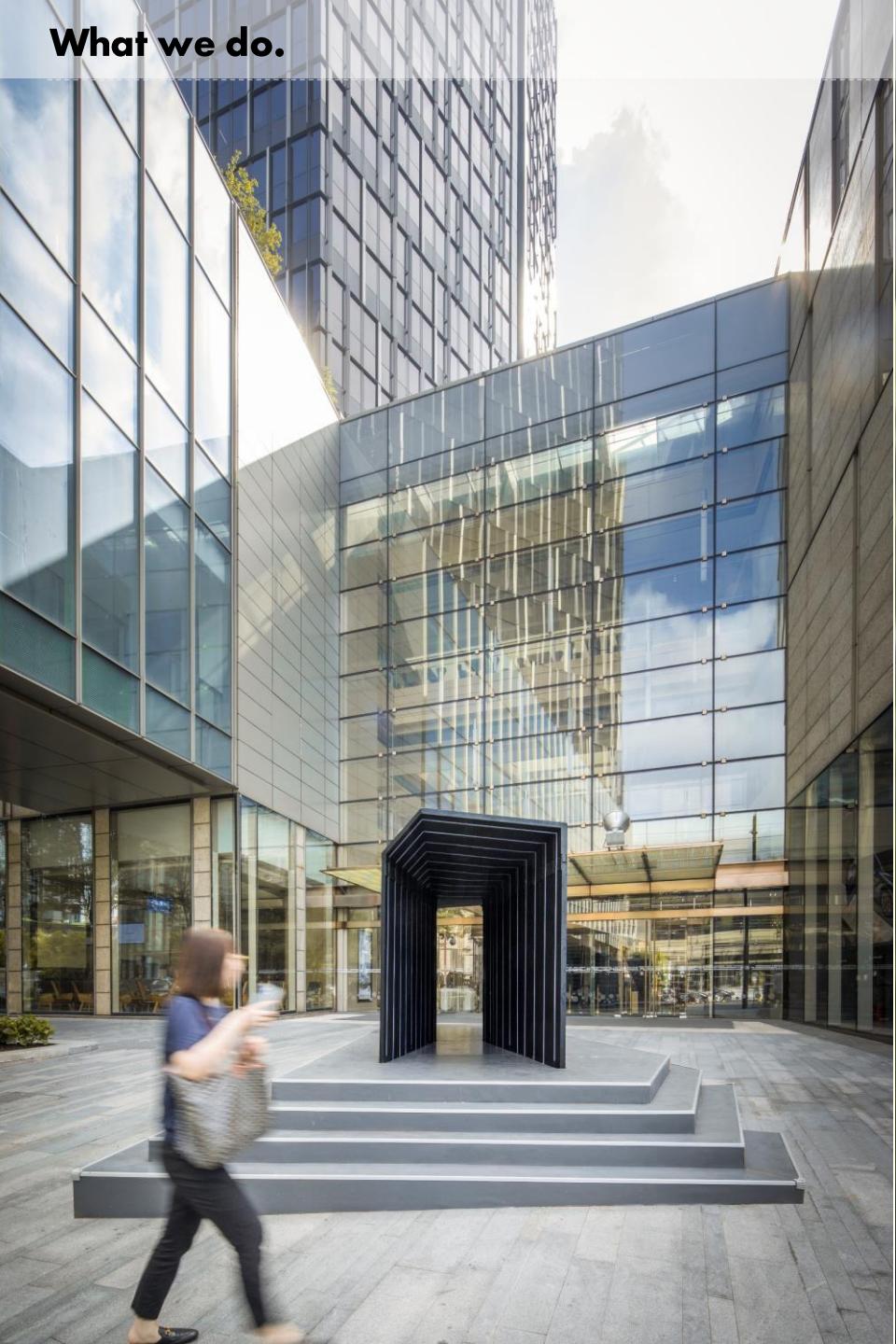
新天地, Design Shanghai 2020, MDO

What we do.

新天地, Design Shanghai 2021



What we do.



新天地, Design Shanghai 2021

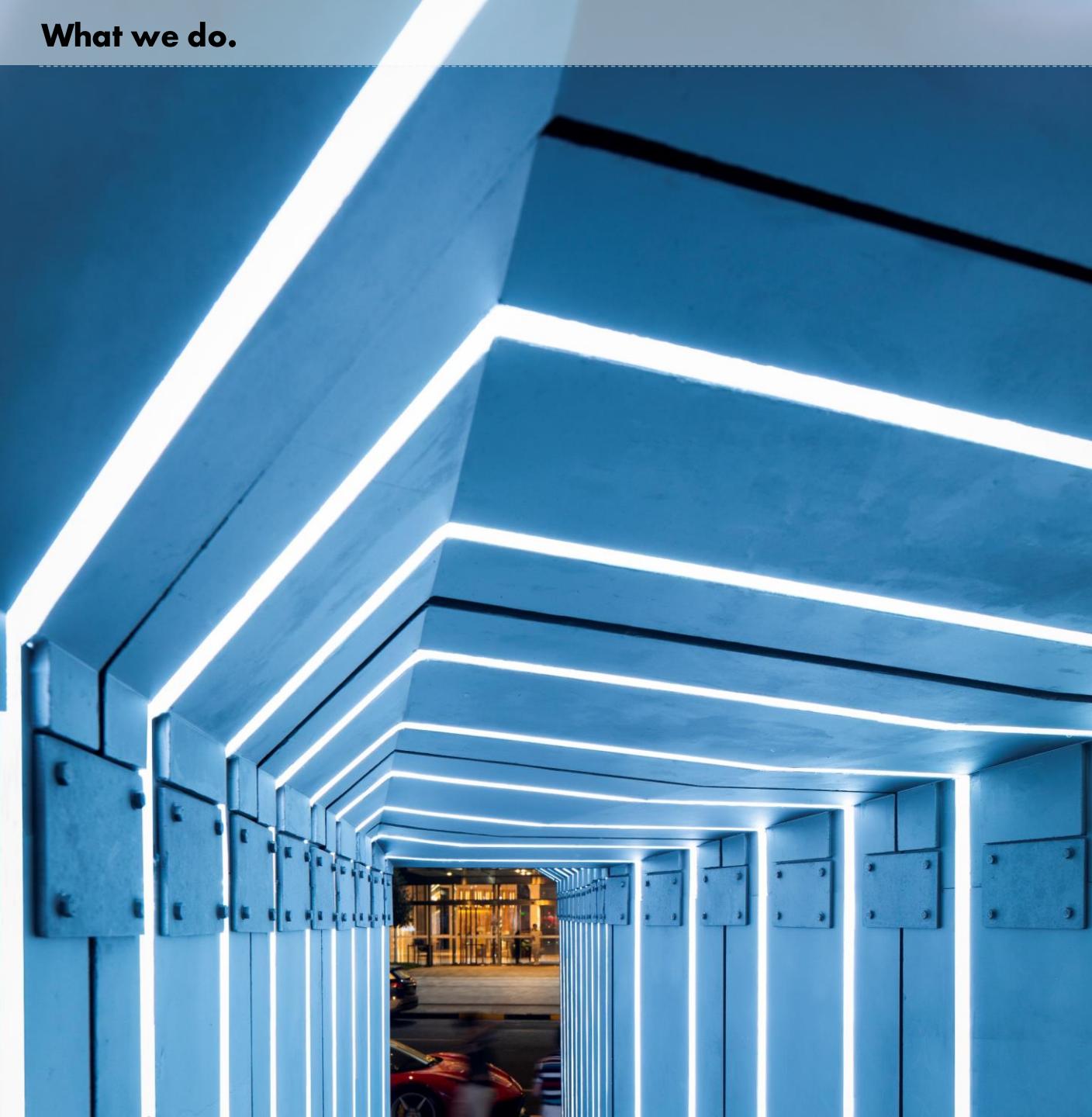
What we do.



新天地, Design Shanghai 2021

What we do.

新天地, Design Shanghai 2021



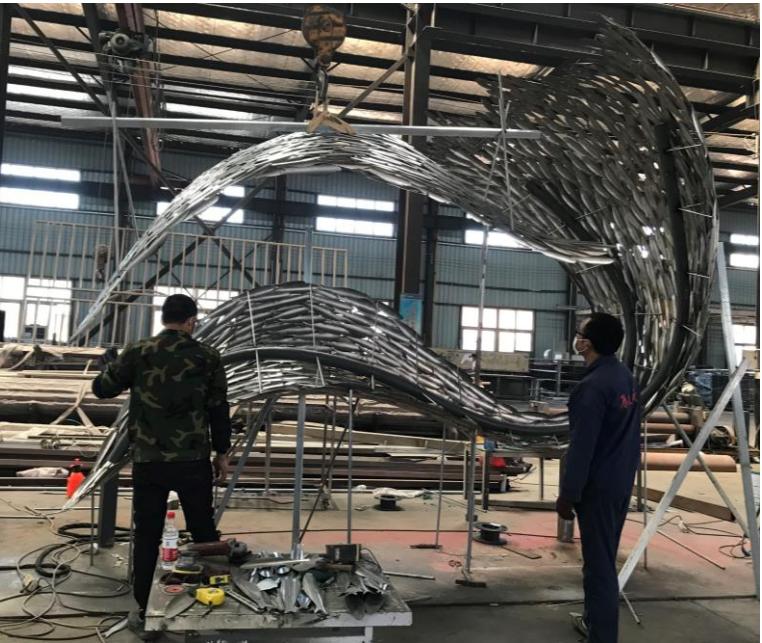
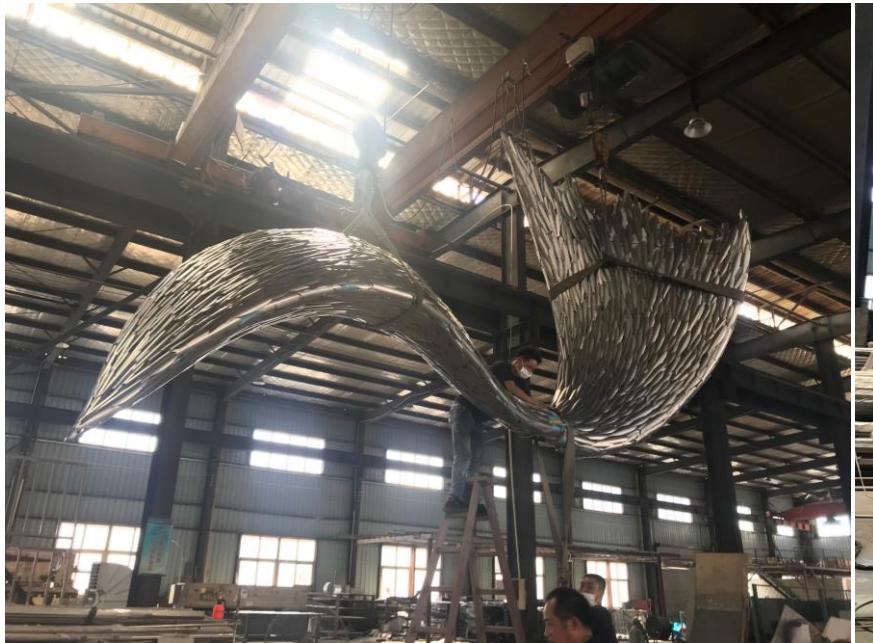
What we do.

The MixC, Vanke, 万科汕头



What we do.

The MixC, Vanke, 万科汕头

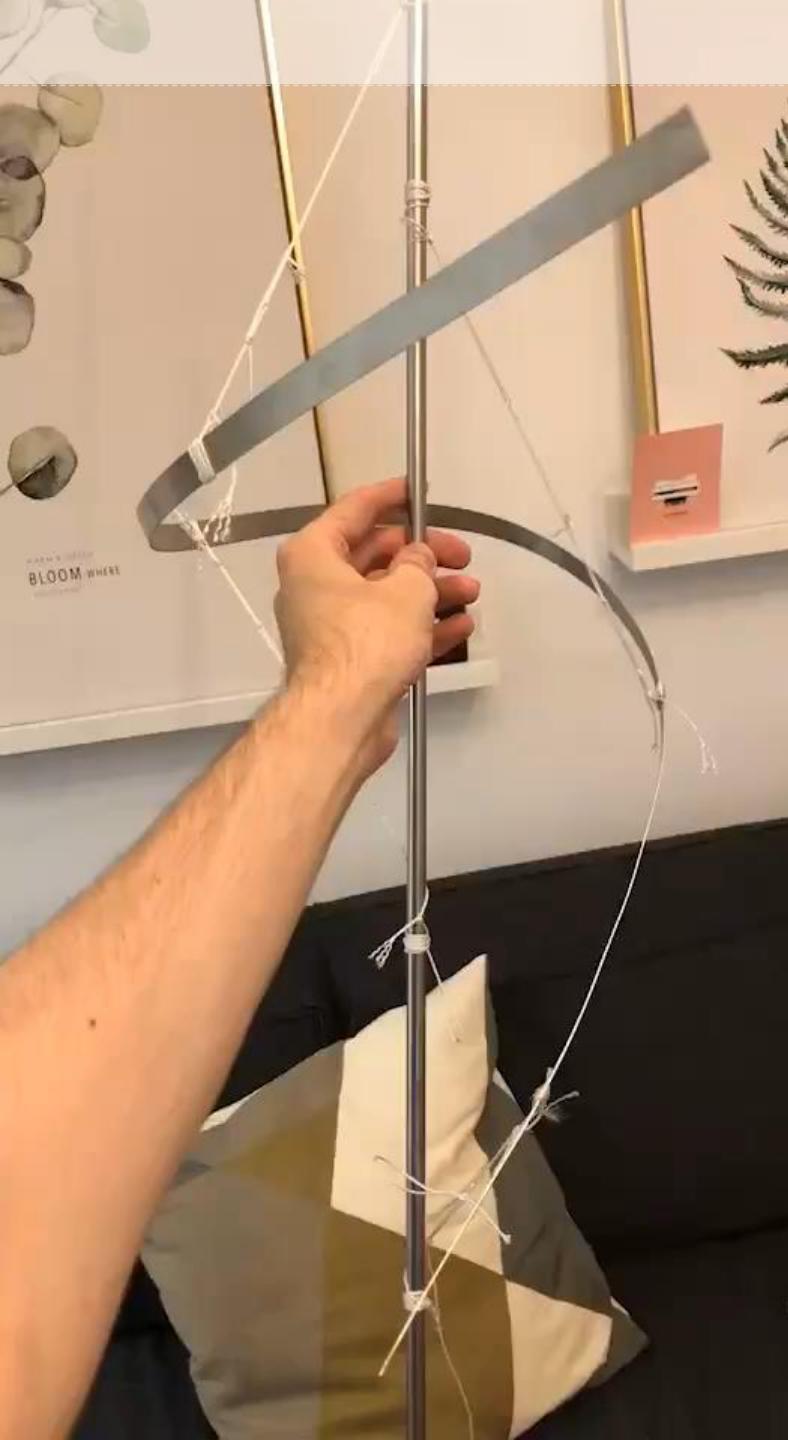
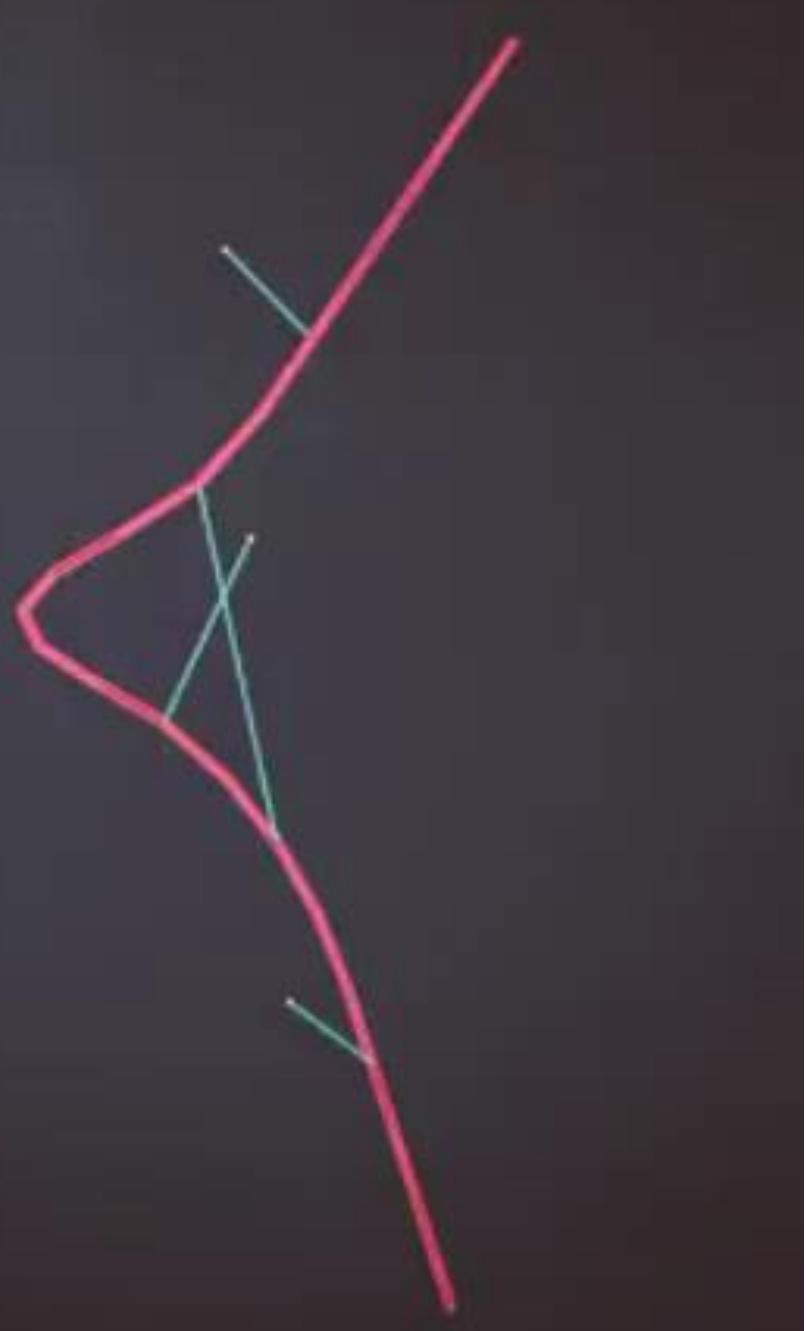


What we do.

The MixC, Vanke, 万科汕头



What we do.



杭州万科 Qinglong Art Piece, MDO

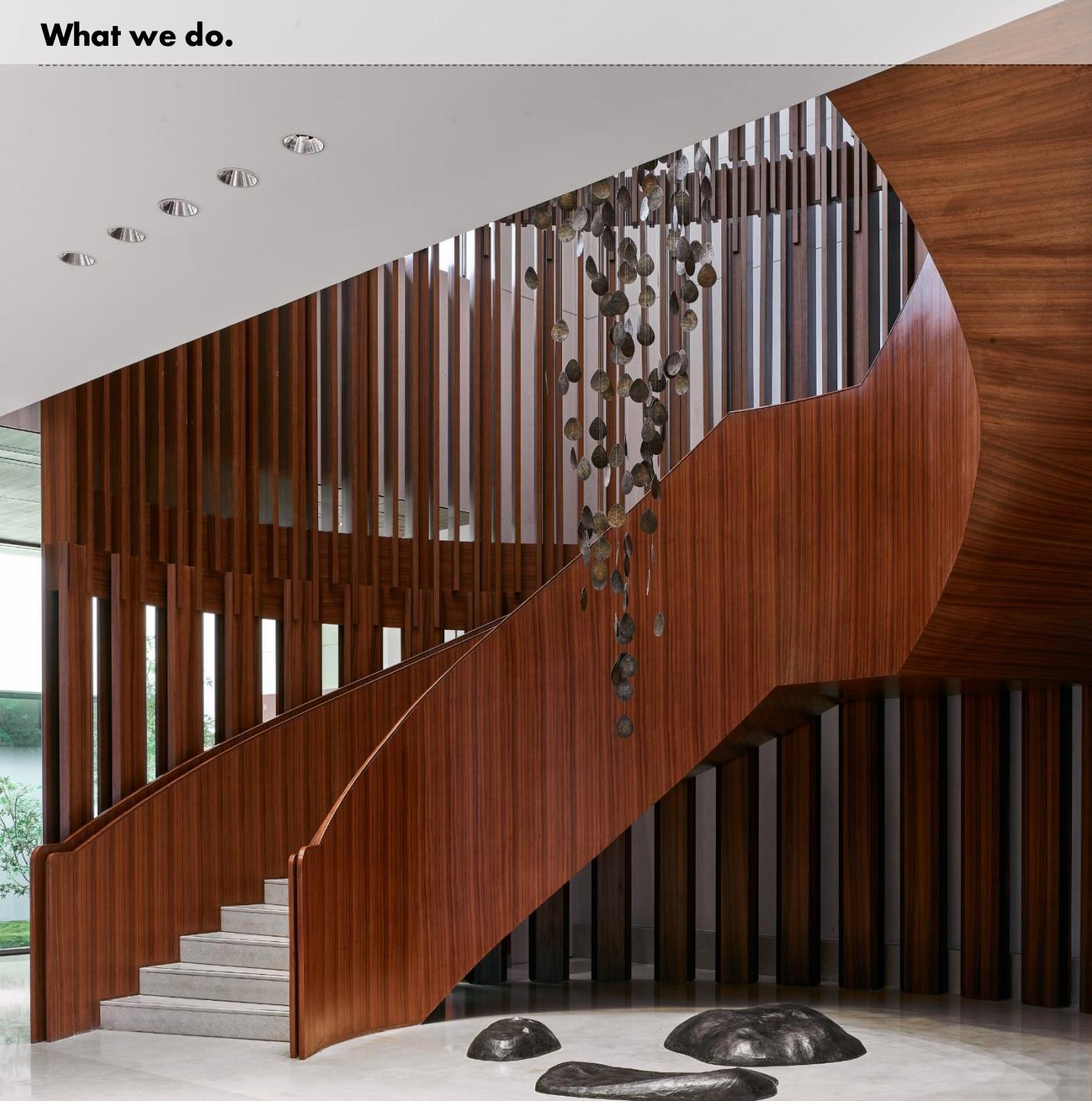
What we do.

杭州万科 Qinglong Art Piece, MDO

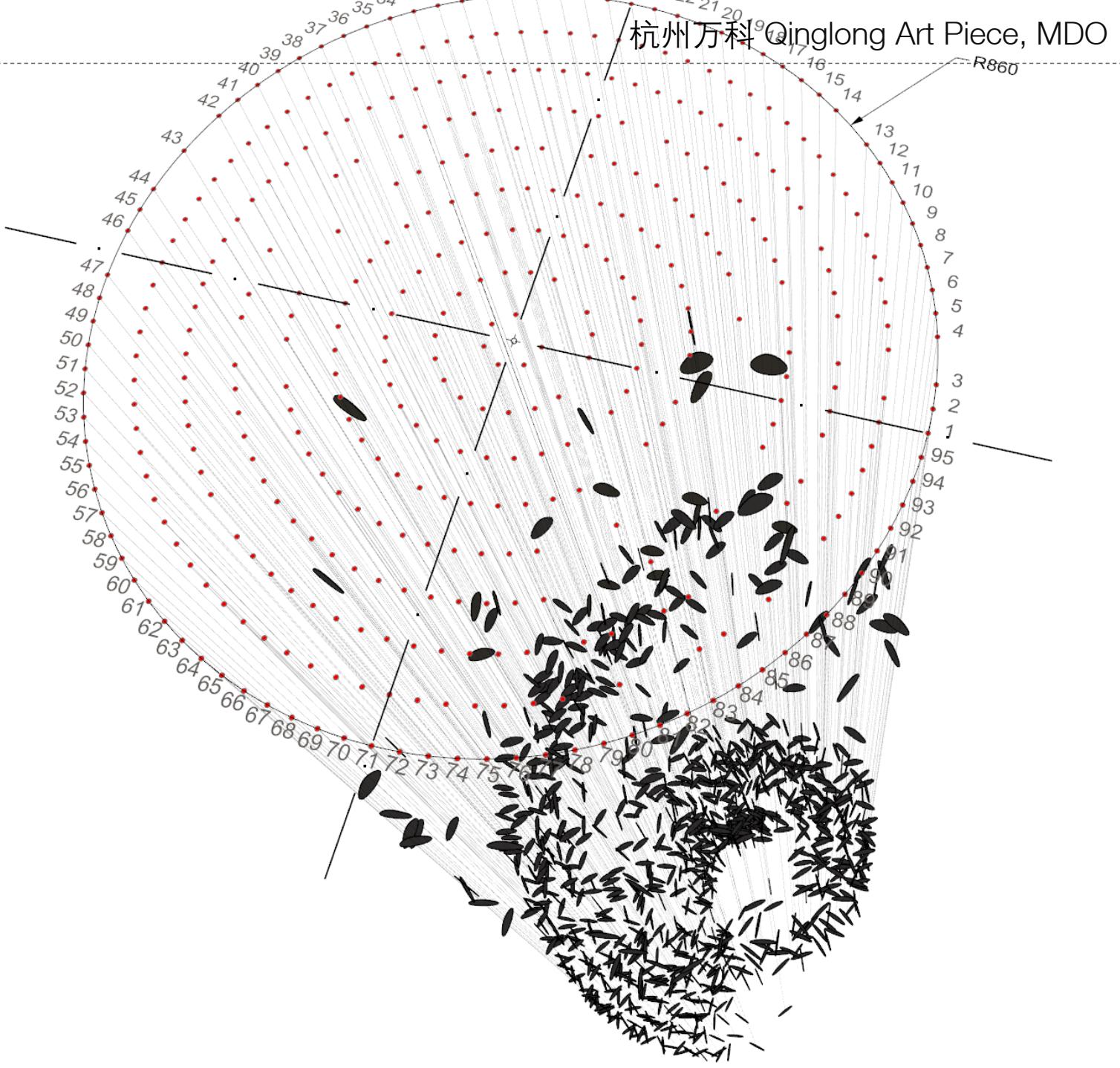
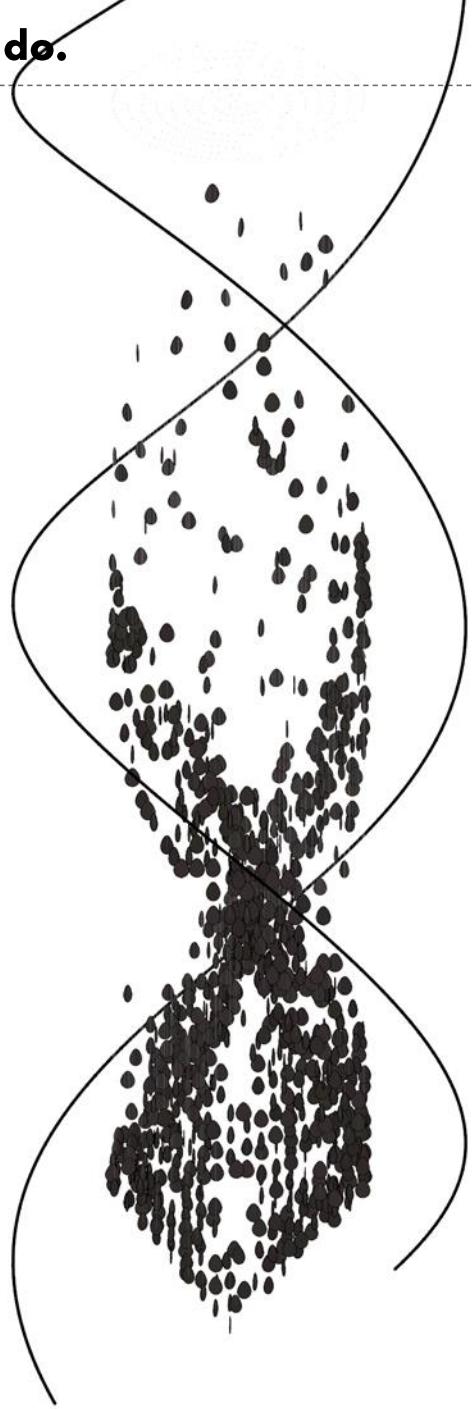


What we do.

杭州万科 Qinglong Art Piece, MDO



What we do.

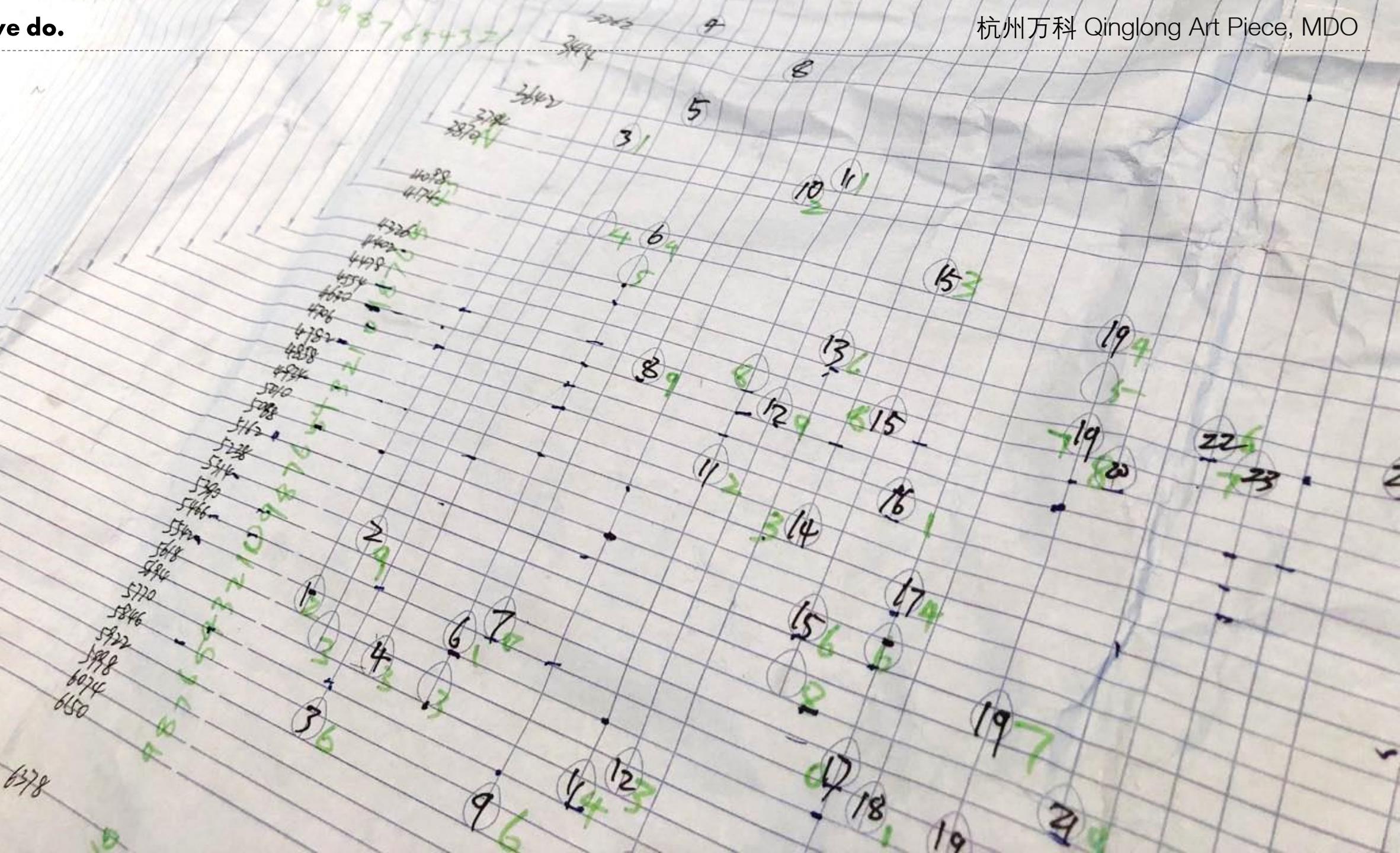




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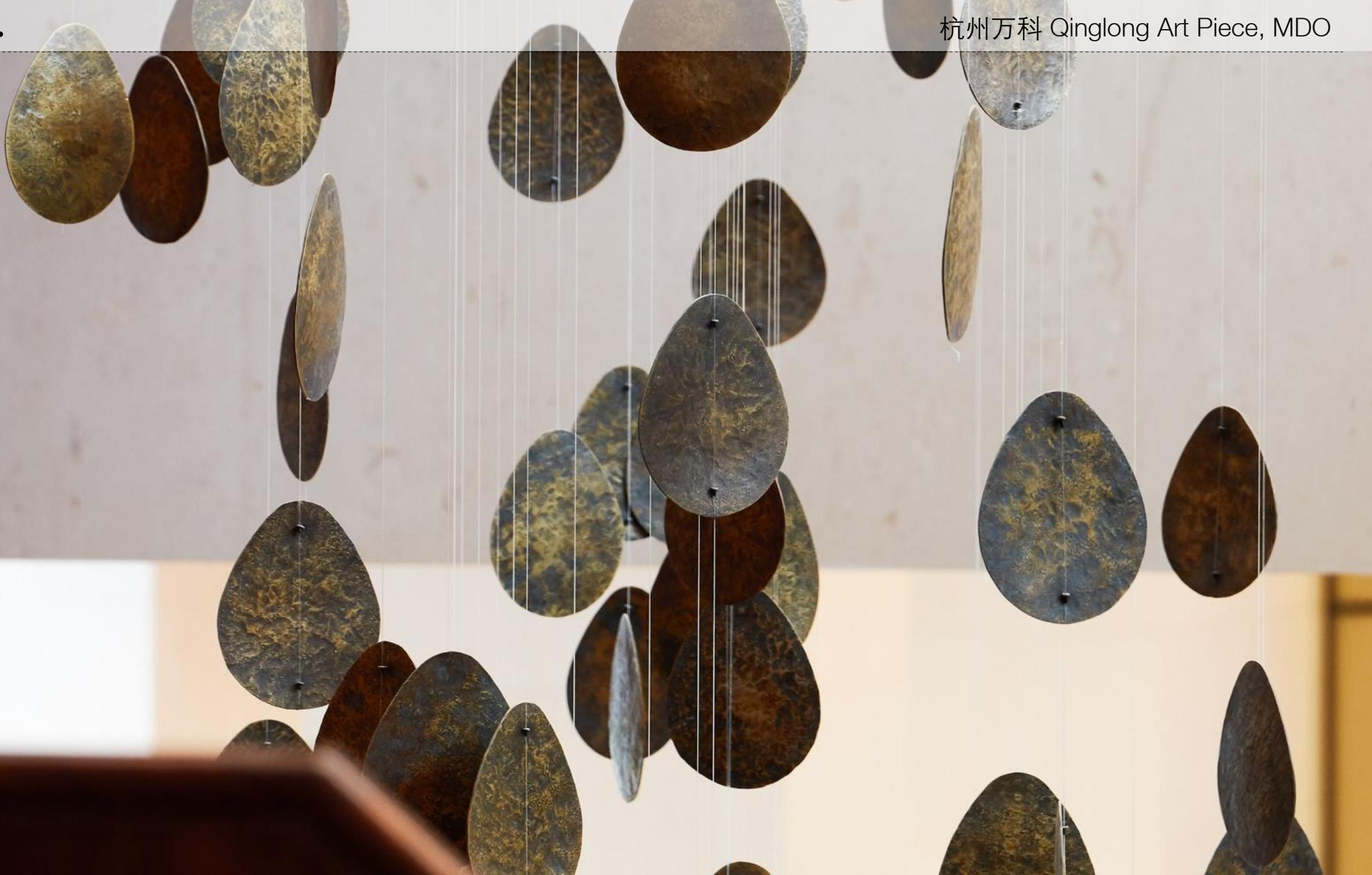


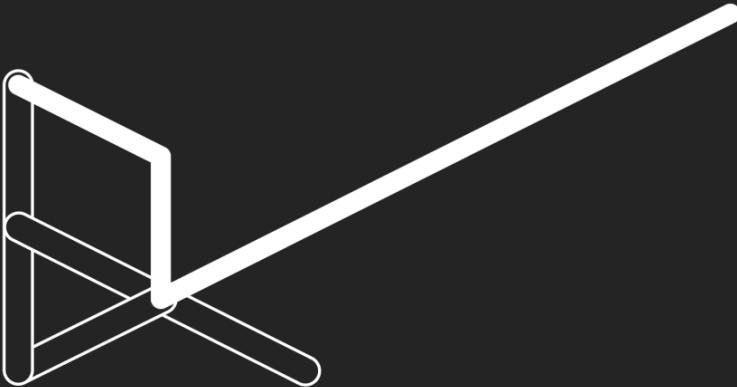
杭州万科 Qinglong Art Piece, MDO



What we do.

杭州万科 Qinglong Art Piece, MDO





bespoke.

bespoke. , Creative Engineering Studio
We think, design, experiment, research & optimize

