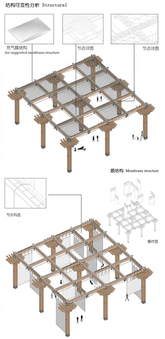
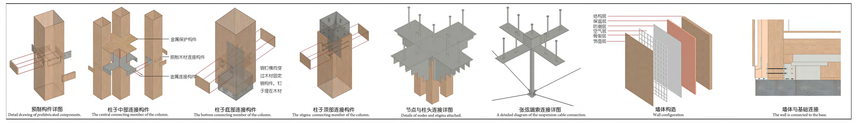
结构可变性分析 Structural





基地选址：Site Location

位于广东省深圳市南头古城南门入口前的空地，深圳经过30余年的发展，已成功跻身为国际大都市。同时，南头古城有1700年的建城史，见证深圳的前世今生。

Site location is in south gate of ancient city in front of the entrance space.Shenzhen, Guangdong Province, China.After more than 30 years of development, Shenzhen has successfully entered into international metropolis, at the same time, Nantou Ancient City has more than 1700 years history,witnessing the development of Shenzhen.

发展契机：Development Opportunity

第七届深港双年展在南头古城举行，本次活动旨在提升居民生活品质和增兴本土文化，如何重造城市历史街区，是我们探讨的话题。

The seventh CABB was located in the Ancient City of Nantou. It aims to promote residents' quality of life and revive local culture.Hopefully,We try to explore how to shape the historical and cultural city blocks.

现状分析：Status Analysis

南头是一座千年历史古城与当代城中村的共生合体。古城早已面颗皆非，主要街道格局仍清晰可辨。

Today's Nantou is a millennium historic city and contemporary village in the city of symbiosis, the ancient city has long been the face of the face, the main street pattern is still vaguely variable.

建筑密度大，层数不一，缺乏公共空间

The density of buildings is high and the types of buildings are mixed.

城中村的道路需要长期维修维护

The ancient buildings in the city need long term repair and maintenance.

居民需要公共活动场，提高生活质量。

Residents long for public places to improve the quality of life.

材料选择：Materials Selection

钢木结构——交错层压木材（CLT），钢构件

优势：Advantages：

古城现存的传统建筑，木是主要的建筑材料。Wood is the main building materials. CLT性能稳定，易于装配。CLT has good performance and is easy to assemble

优化结构体系，抗震性好。Optimized structure system, good seismic resistance.

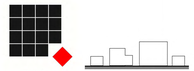
元素提取：Element extraction

古城内的建筑多为矩形

Most of the buildings are rectangular.

村内建筑是为功能性，高度不一

Most of the buildings in the village are still built, with different



基本单元体

Basic unit

建筑体块高度错落，与城中村的海景呼应

Buildings echo the background of the village with various height

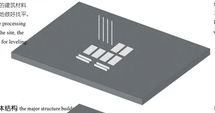
考虑与基地周围建筑的尺度相呼应，并且便于装配，采用600mm为模数，以4m见方为单元盒子，有序组装。

Considering the scale of the building around the base, it is convenient to assemble, and adopts sixteen as modules, and 4m square is the unit box, which is assembled in order.

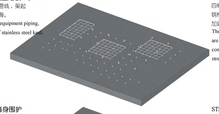
装配化建造：

每块 CLT 木板长宽比都是 2:1，工厂预先加工，现场直接组装，操作方便 The length and width ratio of each CLT board is 2:1, the factory is preprocessed, the site is assembled directly, and the operation is convenient.

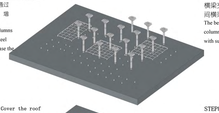
STEP1 找平地面 Level the ground
运输加工好的建筑材料
到现场，基地做好找平。
Transport the processing materials to the site, the base is ready for leveling.



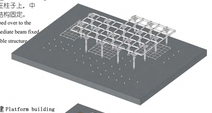
STEP2 架空地板 Uplift the floor
铺设设备管线，安装
不锈钢龙骨。
Laying of equipment piping, erection of stainless steel



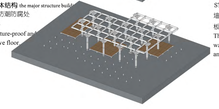
STEP3 柱子搭建 Column building
四根加工好的柱子通过
钢构件结合到一起，增
加建筑强度。
The four finished columns are combined with steel components to increase the strength of building.



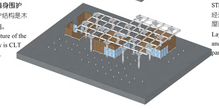
STEP4 屋架搭建 roof frames building
横梁交叉搭接在柱子上，中
间横梁用悬索结构固定。
The beam was lapped over the column and Intermediate beam fixed with suspension cable structure



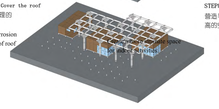
STEP5 主体结构 the major structure building
铺设防过防潮的楼板
Lay a moisture-proof and anticorrosive floor



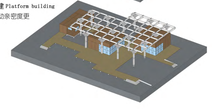
STEP6 墙身围护
墙身围护结构是木
板和玻璃。
The structure of the wall body is CLT and glass.



STEP7 覆盖屋面 Cover the roof
铺设防腐防潮处理的
屋面板。
Laying of anti-corrosion and moisture-proof roof panels



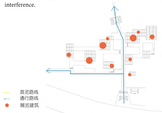
STEP8 平台搭建 Platform Building
最后与室内活动亲密度更
高的空间。



流线分析：Traffic analysis：

游览路线和行路线分离，有一定的联系同时减少互相干扰。

Tour routes and routes separated, there are certain links while reducing mutual interference.



植被分析：Vegetation analysis：

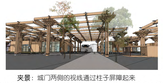
原地地势比较高，建筑分布其中，屋顶形式保持植物的生长。

The green rate of the original site is high, and the buildings are distributed among them, and the wood frame roof retains the growth of plants.

视线分析：Sight analysis：

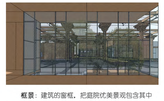
在原花园线上参考中国园林的构景手法，移步换景，墙洞观赏示趣，今使用者流连忘返。

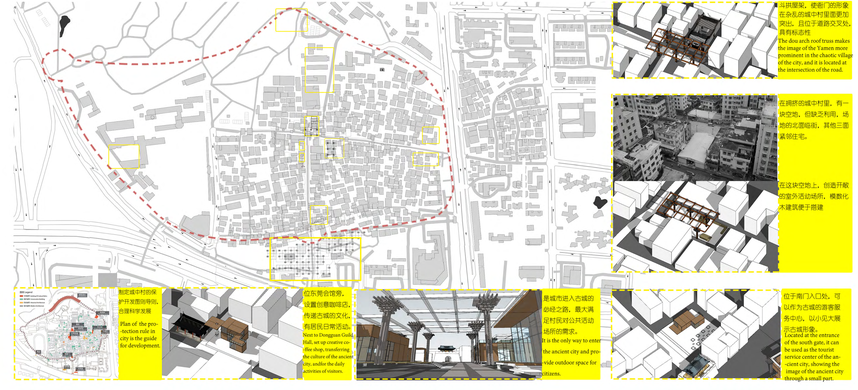
The tour route refers to Chinese gardens' construction technique.Tourists move to change the scenery, increasing the ornamental pleasure and causing them to forget to return.



夹景：两侧的视线通过柱子屏障起来

Clip view: the line of sight on both sides of the gate rises through the pillar barrier



框景：建筑的窗框，把最原优美景观包含其中

Frame view: the window frame includes the beautiful landscape of the courtyard.