

Chengdu Museum, 2008-12

DESIGN RESEARCH

10.10.2012

Charlie Sutherland and Charlie Hussey

Sutherland Hussey Architects

General Description

1.0

Project Details

Date: 2007-2012

Location: Chengdu, Sichuan, China

Project: Design of a new Museum for Chengdu

Contract value: £240m (in collaboration with Pansolution international design)

The Project:

Sutherland Hussey Architects, in collaboration with Pansolution, were awarded first prize in the international competition for the design of the new City Museum for Chengdu, Sichuan, China.

The Museum requirements extend to over 70,000m² of development and will include exhibition space for Natural History, History and Folk, and Chinese Shadow Play as well as a large area for Temporary Exhibition.

The Site:

The proposed site for the new Museum sits along the full extent of the west edge of Tian Fu Square. It is approximately 180 metres long and 70 metres wide and is separated from the main Square by a five lane road, lined with large, mature trees. It is a hugely significant site, forming one complete edge of the most important Square in the city and what was once the forbidden city.

Project Description:

The New City Museum will be the most important cultural building in Chengdu and needs to assert itself on the Tian Fu Square against a backdrop of ever-increasing commercial development. As part of our overall masterplan for the square we proposed an agreed datum corresponding to the adjacent Mayor's building be established for three sides of the square, whilst along the southern edge, commercial developments are allowed to go significantly higher. With this in mind our proposal obeys strict adherence to a 36 metre datum along the full length of the front façade.

The proposal includes the creation of a new undercover outdoor space opposite the Mosque (which is situated to the rear of the site) - a monumental opening through the building, offering a large, covered outdoor space opposite the City Mosque where people can gather, cultural events can take place, and the market stalls can extend into, with the intention of giving the Mosque a large civic forecourt appropriate to its cultural status.

Aside of an interest in the urban condition we were also intrigued by the importance of symbolism in Chinese culture - that the architectural language should not just be a manifestation of a set of functional requirements (as it so often is in European architecture) but also should have symbolic value. We became interested in the historic artefacts of the Sichuan province and the use of precious materials such as gold and jade.

Jade is a stone ingrained in Chinese art, culture and history, stretching 9,000 years back into the ancient and enormous Chinese empire. Jade has always been a special stone, used not just for fine objects but also as material for grave goods for the imperial family. It is believed to be a link between both the physical and the spiritual worlds, and is the only material that completely encapsulates both the yin and yang qualities of Heaven and Earth, earning it the moniker The Stone of Heaven. Likewise Gold as well as the golden colour has always been considered to be a symbol of lavishness in the Chinese culture. We developed our proposal to encapsulate these two qualities:

-The outer carapace made from solid brass alloy panels, patinated to reflect the passing of time and the effects of weather, and alluding to the ancient bronze containers.

-This carapace wraps around a translucent 'veil' made from a perforated brass alloy mesh, giving the external skin an intense golden colour. At night the mesh becomes more transparent and transmits a golden glow alluding to the Sichuan tradition of shadow-play.

-The glass enclosure of the entrance foyer which will appear 'jewel-like', as if made of jade, as it nestles within the golden wrapping of the main body of the building.

Research Questions

2.0

1. The Architectural challenges of designing museums in China - the cultural differences and the significance of symbolism.
2. How the we transfer information across the world adequately and retain control of quality.
3. The Skin - an study of geometry, materials and light

Aims and Objectives

3.0

1. *The Architectural challenges of designing museums in China - the cultural differences and the significance of symbolism.*

2. *How the we transfer information across the world adequately and retain control of quality.*

3. *The Skin - an study of geometry, materials and light*

Context

4.0

The context for this project is the rapid changes that have taken place in China over the last 15 years and the role that foreign design companies such as ourselves have to play in this social, political and cultural revolution.

Research Methods

5.0

This passage will address the following

The logistics for carrying out this project are daunting.

dealing with distance - monthly flights, daily emails, 24 hour working because of time difference.

communication between the client, collaborators and various consultants and overcoming the cultural divide - the importance of dinner and drink!

Understanding the site and brief - site visits, client meetings, sketch models and drawings, transfer of information and the role of computer modelling, internet and infranet for efficient transfer of information

Dissemination

6.0

EXHIBITIONS

2007 The project was exhibited in the Mayor's Hall along with all the other competition submissions.

AWARDS

2007 International competition -First price

PUBLICATIONS

12.06.12 BD magazine - 'Sutherland Hussey's Chinese masterpiece takes shape' - article on project as it gets underway on site.

12.12..07 World Architecture News - 'Top prize for Sutherland Hussey' - article on competition win.

10.12.07 Scottish Architecture.com - article about the project.

06.12.07 Building Design Magazine- Sutherland Hussey's museum gem' - article on Chengdu competition-Page 2

06.12.07 The Architects Journal - 'Sutherland Hussey unveils China Museum' - article on Chengdu competition-Page 24

05.12.07 BD magazine - 'Sutherland Hussey wins Chinese museum in international competition' - article and images

03.12.07 The Times - 'Design sketched on a sheet of A4 wins £240m museum for Scots architects' - article on Chengdu competition-Page 24

Esteem Indicators**7.0**

In her publication for the British Council Penny Lewis (a lecturer at Robert Gordon University and architectural journalist) wrote the following:

"One interesting exception is Sutherland Hussey Architects, a practice of a dozen staff based in Leith; the majority of their work is front end design work in China. The two Charlies, the founding partners, were educated at the Mackintosh School of Architecture and worked for James Stirling and Michael Wilford in London before setting up practice in Scotland in 1997. The work closely with Pansolution, a young Chinese practiced formed by students from Beijing's Tsinghua University. In 2007 SHA and Pansolution won the competition for a 70,000square metres city Museum for Chengdu, the capital of Sichuan, a large province in central of China. The £240 million museum, which is currently under construction forms one side of the city's central Tian fu square. Although SHA is not supervising the work they have had more control over the development of the project than is common. SHA is responsible for the conceptual co-ordination of the design, the detailed production drawings are produced by the Chinese for the local construction industry which is becoming increasingly technically skilled, SHA provide tectonic principles, a guide to how the skin should be detailed. The practice is working on a number of other projects in Chengdu, the City Mayor has commissioned them to produce a city development plan and they have master-planned a New Town to the East of the city, drawing on some urban design traditions developed through the Enlightenment expansion of Edinburgh. A good working relationship with Pansolution gives SHA a particular insight into Chinese client's expectations. The Chinese understand the European sensibility in particular SHA's interest in working at a particular scale and the making of streets, an enthusiasm strongly associated with the Mackintosh School in Glasgow.

"Our belief is that architecture is always driven by context" says Hussey. "China is a leap into a whole other context in the broadest sense of the word. Unlike European modernist design, Chinese projects often start with little in terms of programmatic demand, urbanistically and sculpturally there is a huge emphasis on visual impact. China has a very sophisticated visual culture. It's clear from their calligraphy that this is a country that loves symbols and symbolism."

Location



Sichuan Province in relation to China



Sichuan Province



Chengdu City

CHENGDU MUSEUM, SICHUAN PROVINCE, CHINA

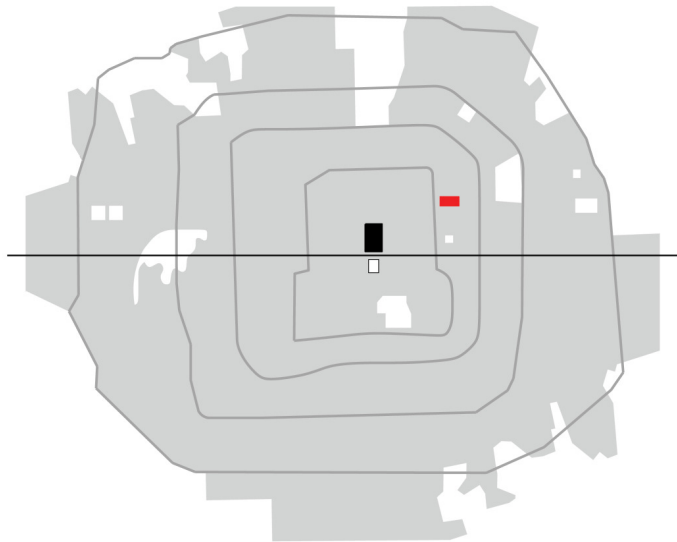


Arial view of the site and its surroundings

CHENGDU MUSEUM, SICHUAN PROVINCE, CHINA



Tian Fu Square

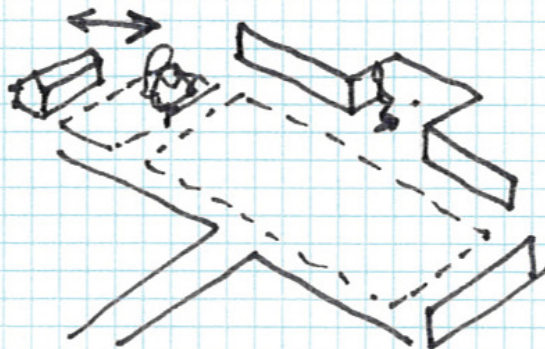


Diagrammatic organisation of Chengdu City

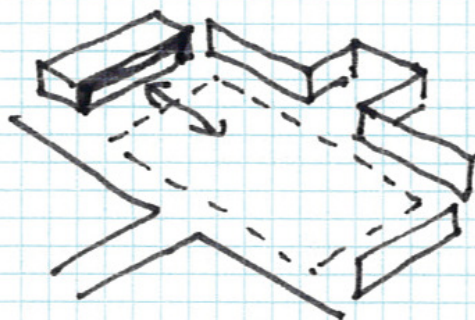
Strategy



ESTABLISHING A
DATUM

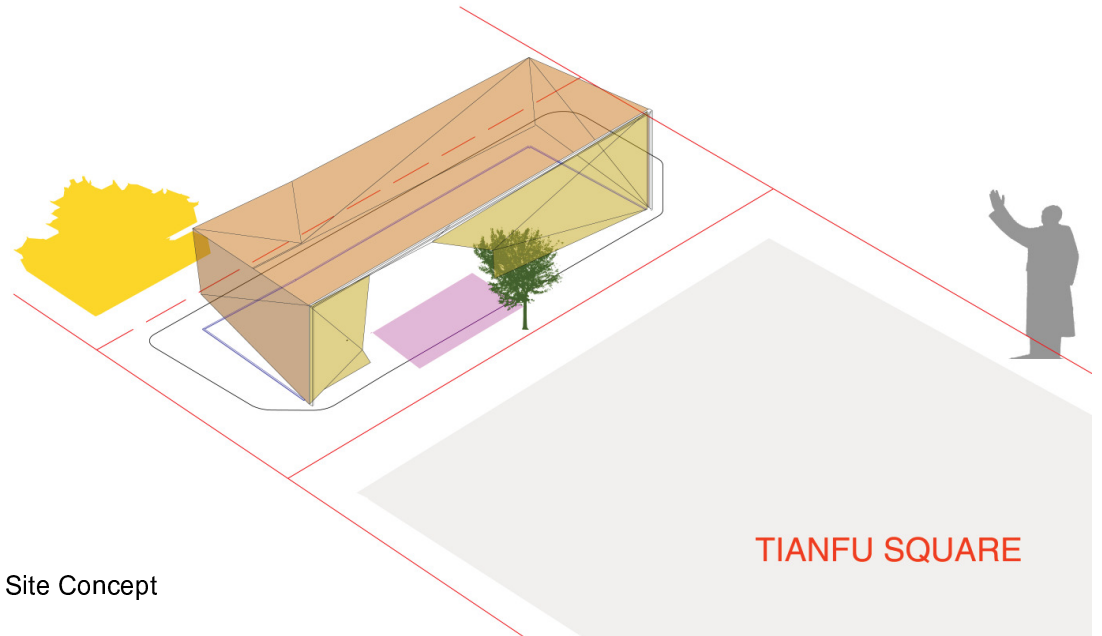


CONNECTING.

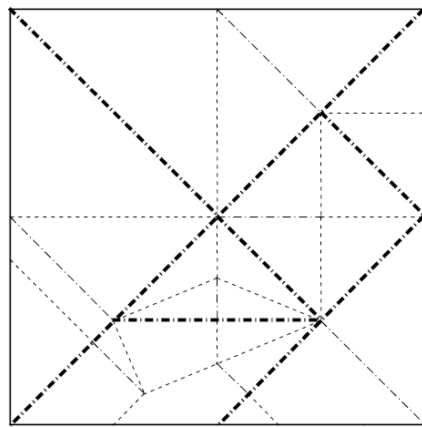


FRAMING
THE SQUARE

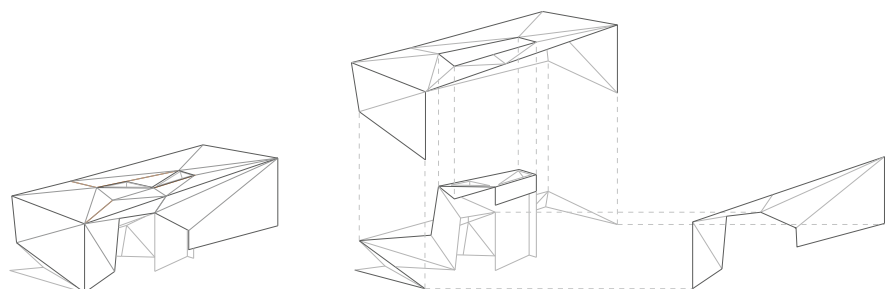
Concepts



Site Concept

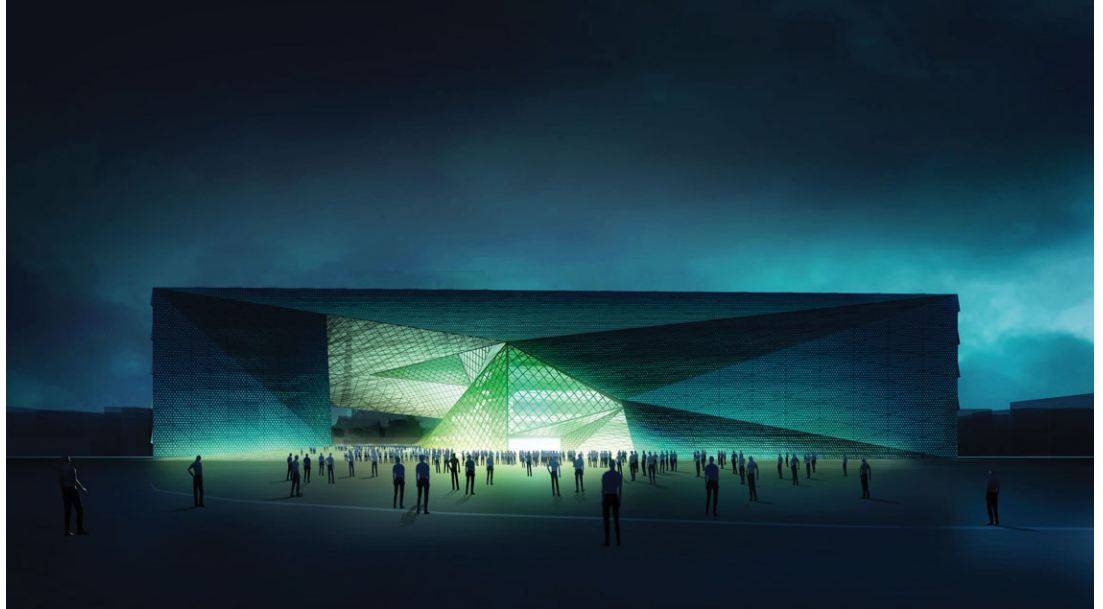


The Tangram



The Folded skin

Competition images

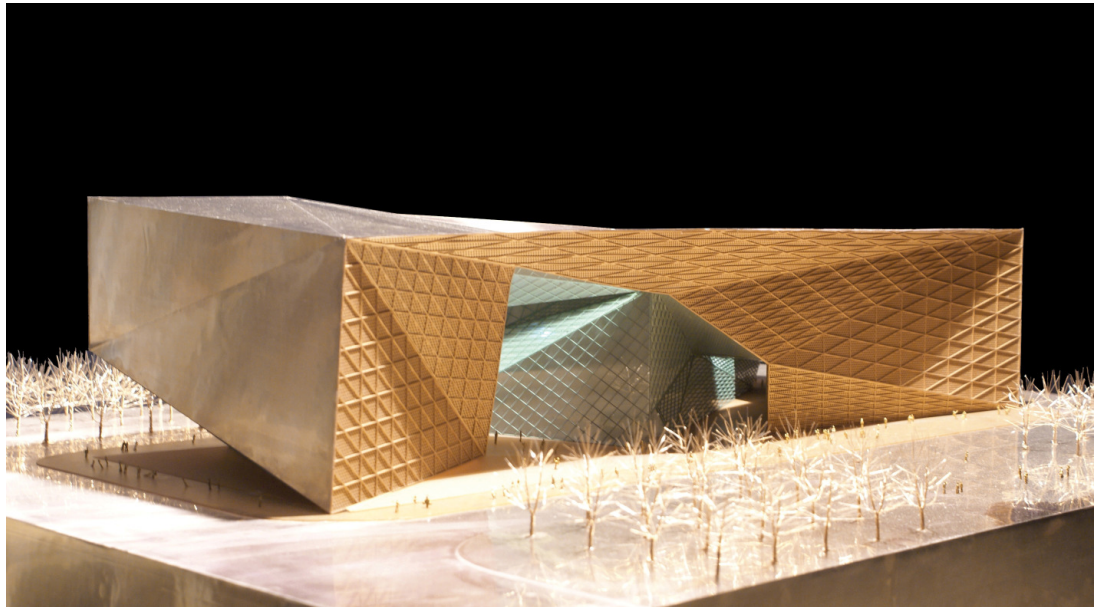


Competition entry CGI night view

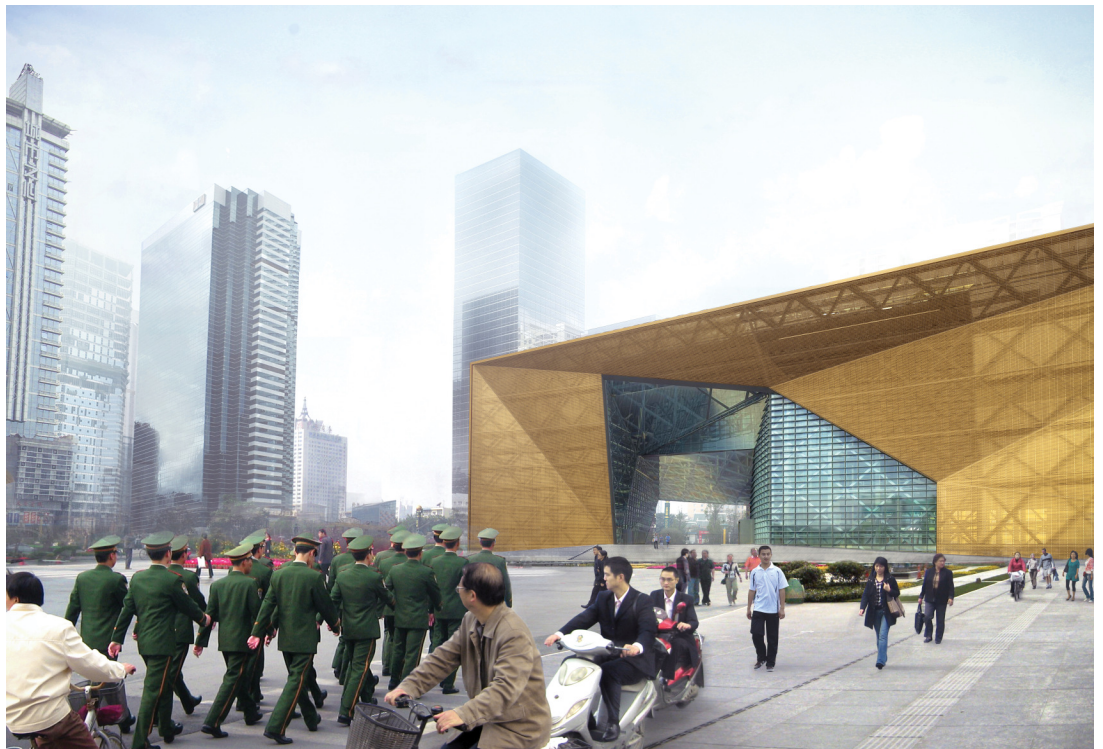


Physical Model night view

Early Computer study and model

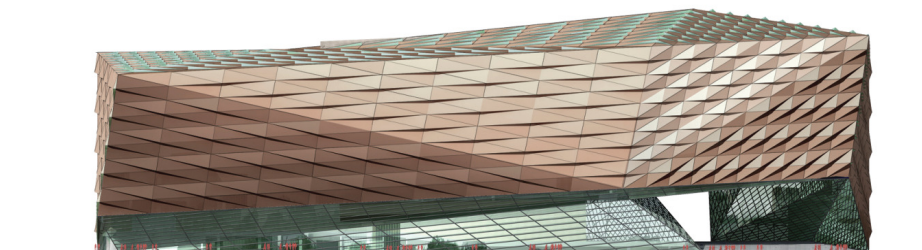
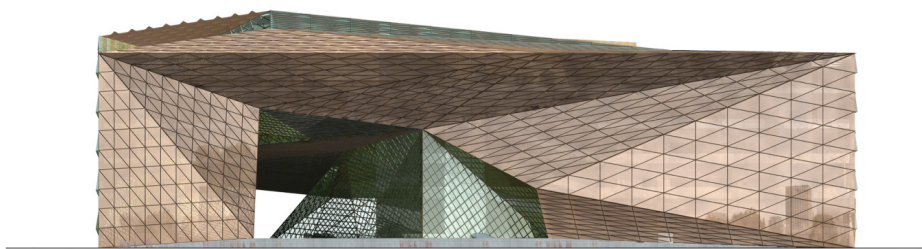
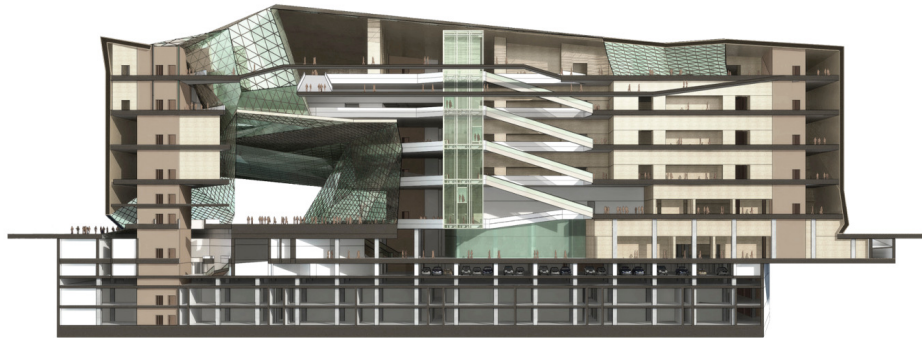
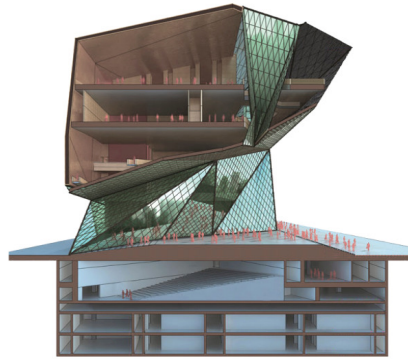


Competition submission concept model

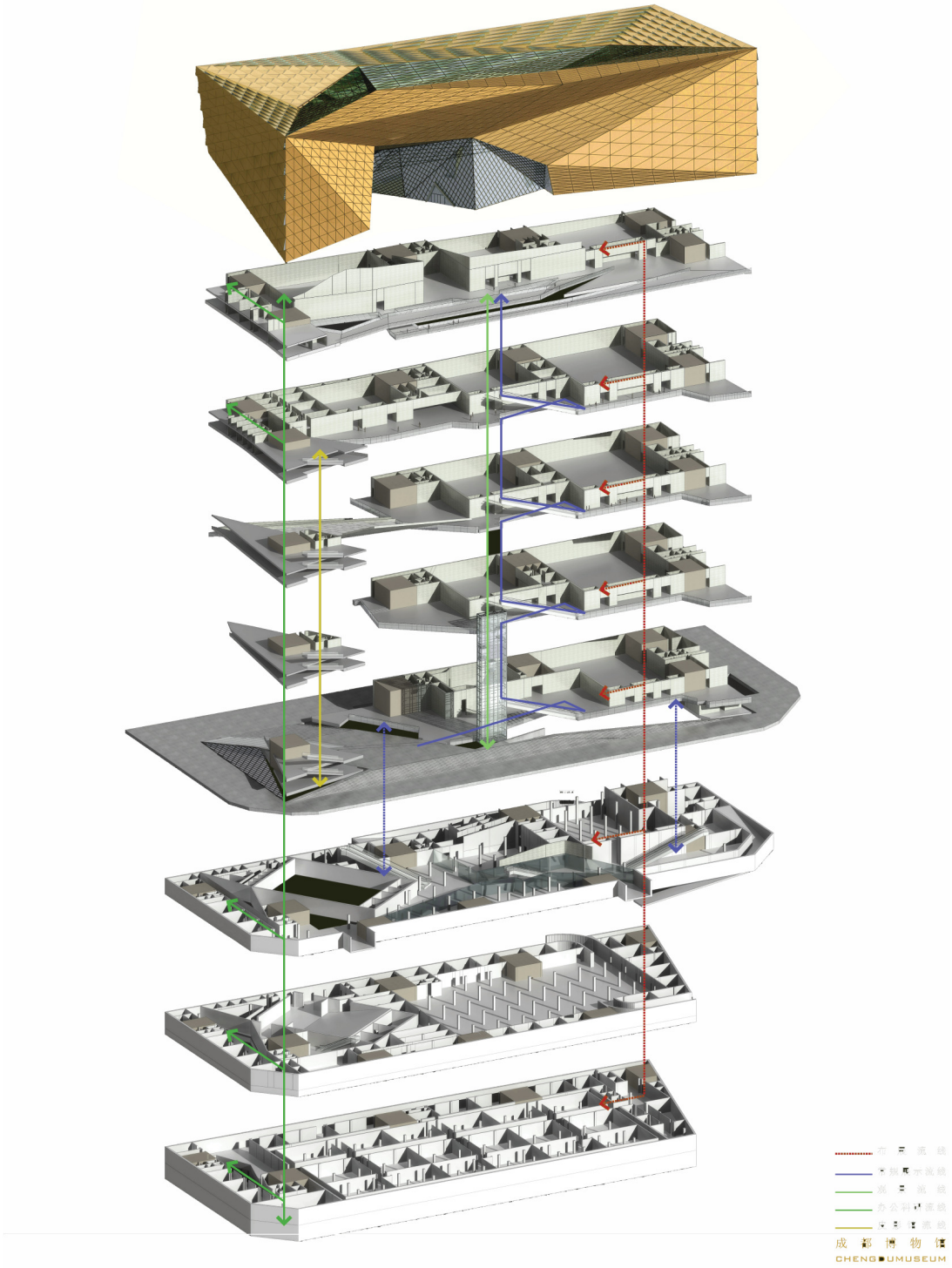


Competition submission perspective from square

Early design drawings

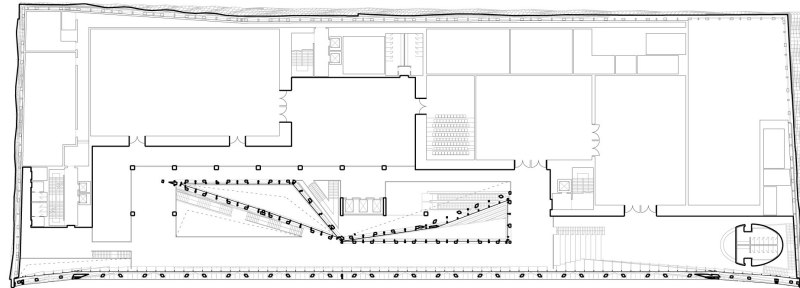


Elevation and section studies

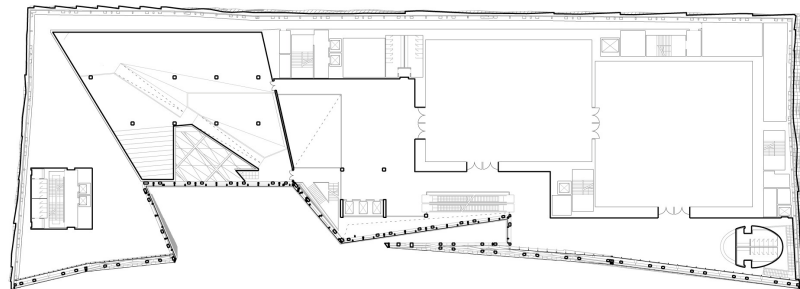


Exploded isometric

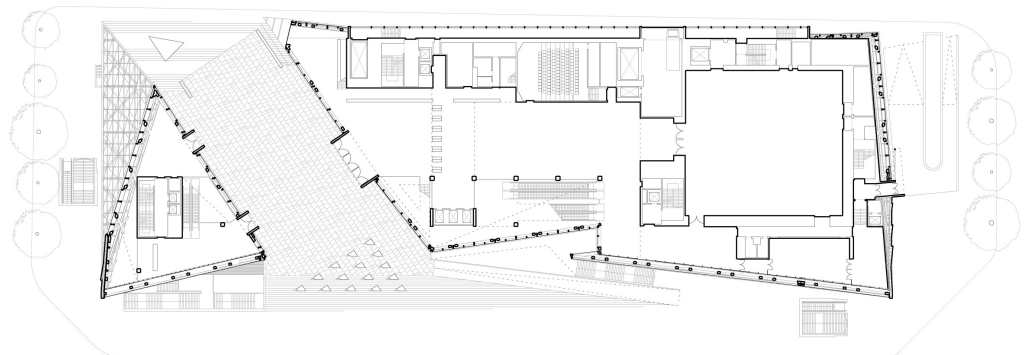
Detailed design drawings



Upper level plan

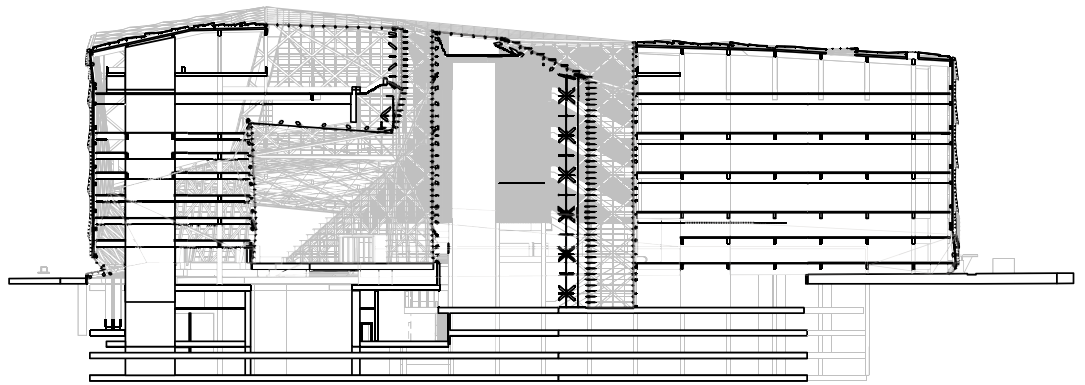


Third Floor plan

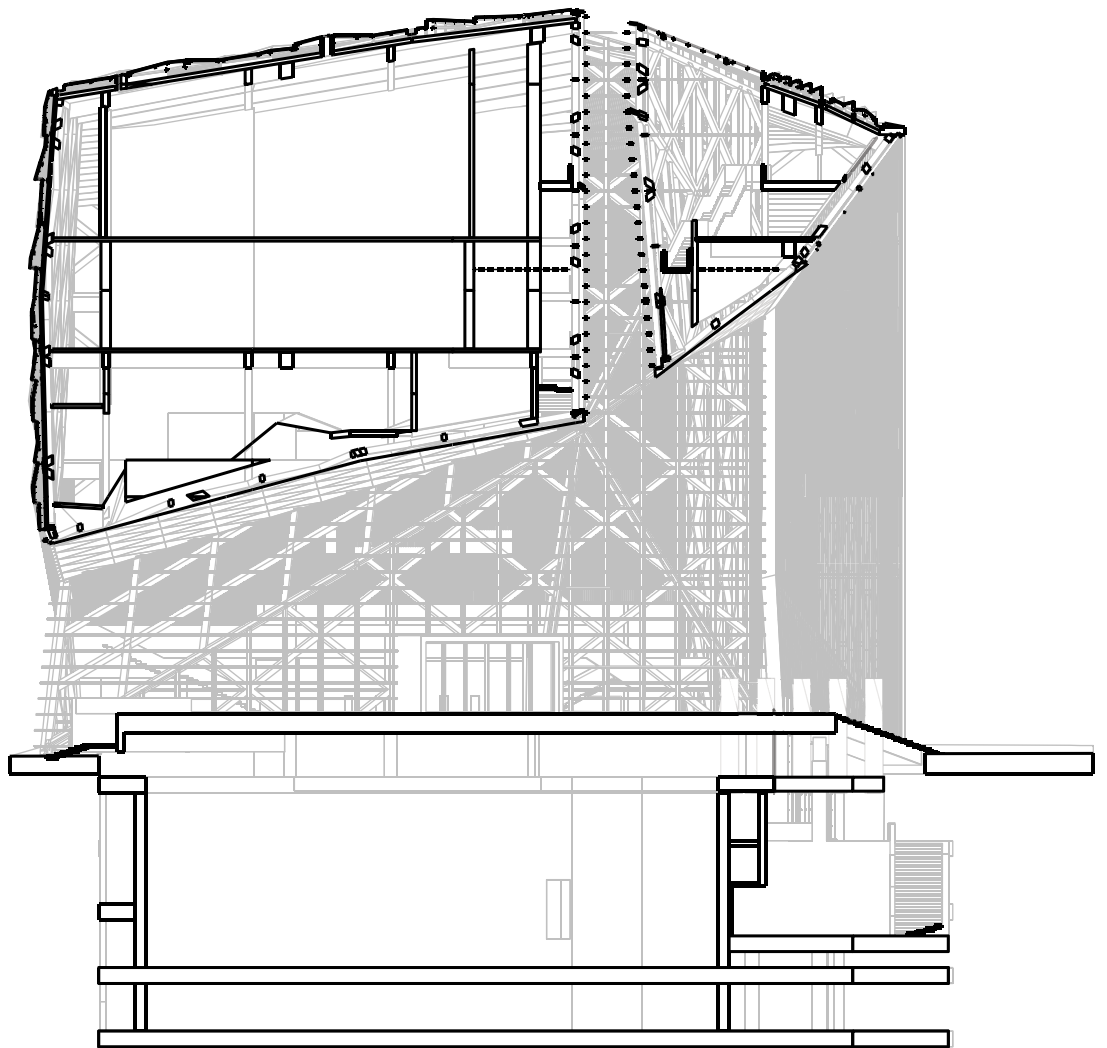


Ground floor plan

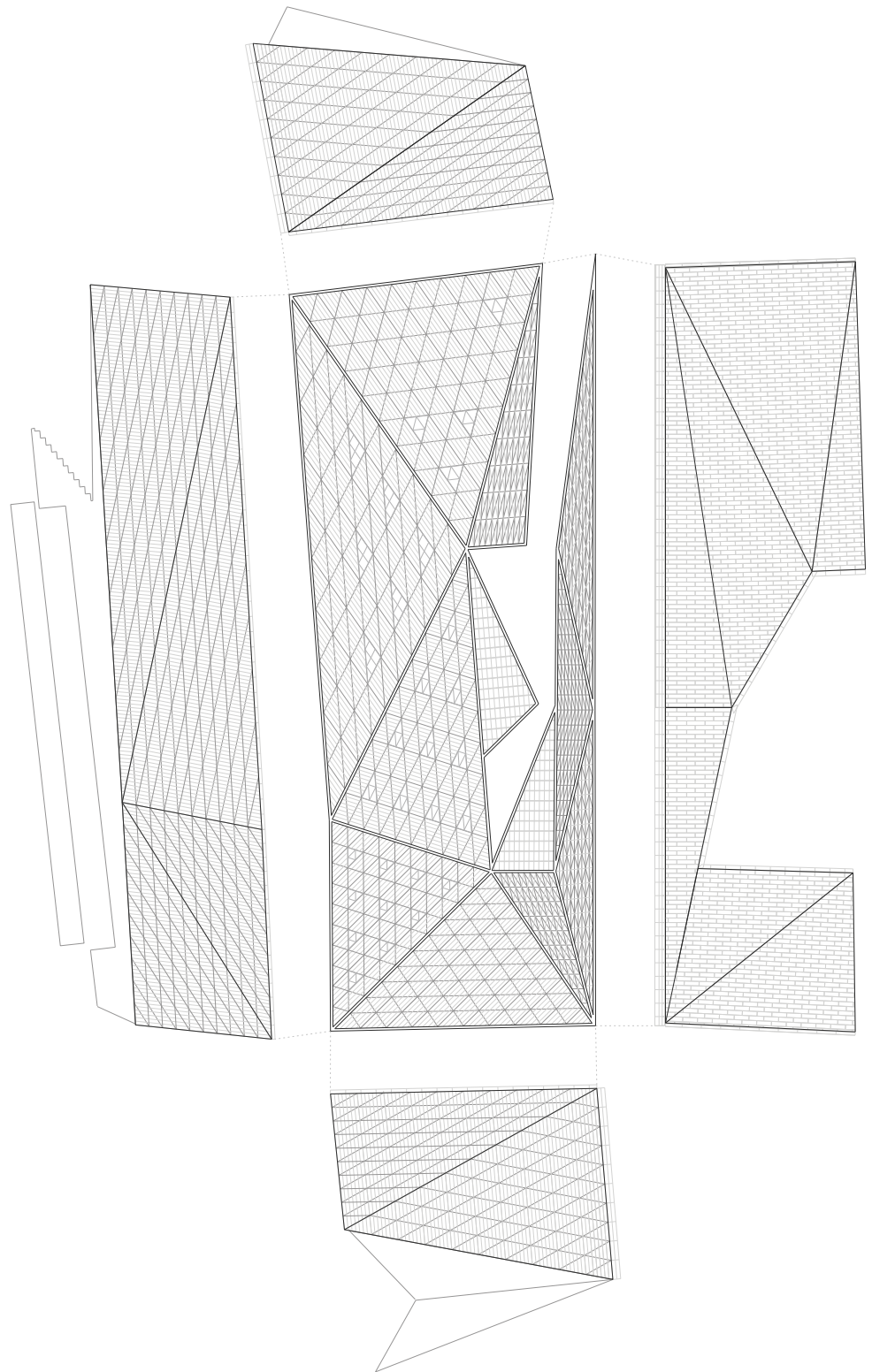
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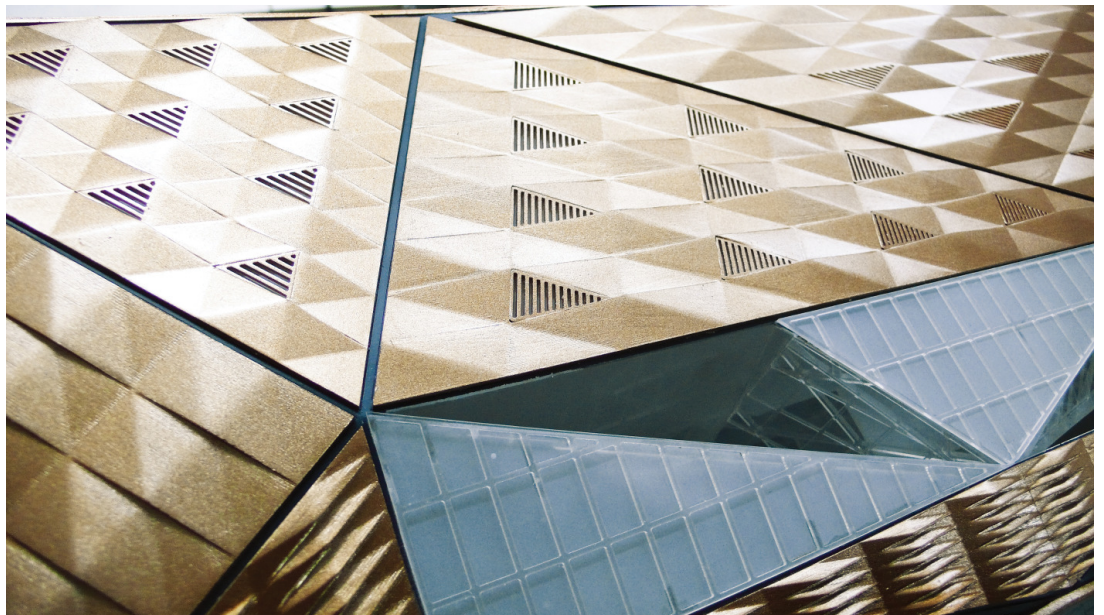
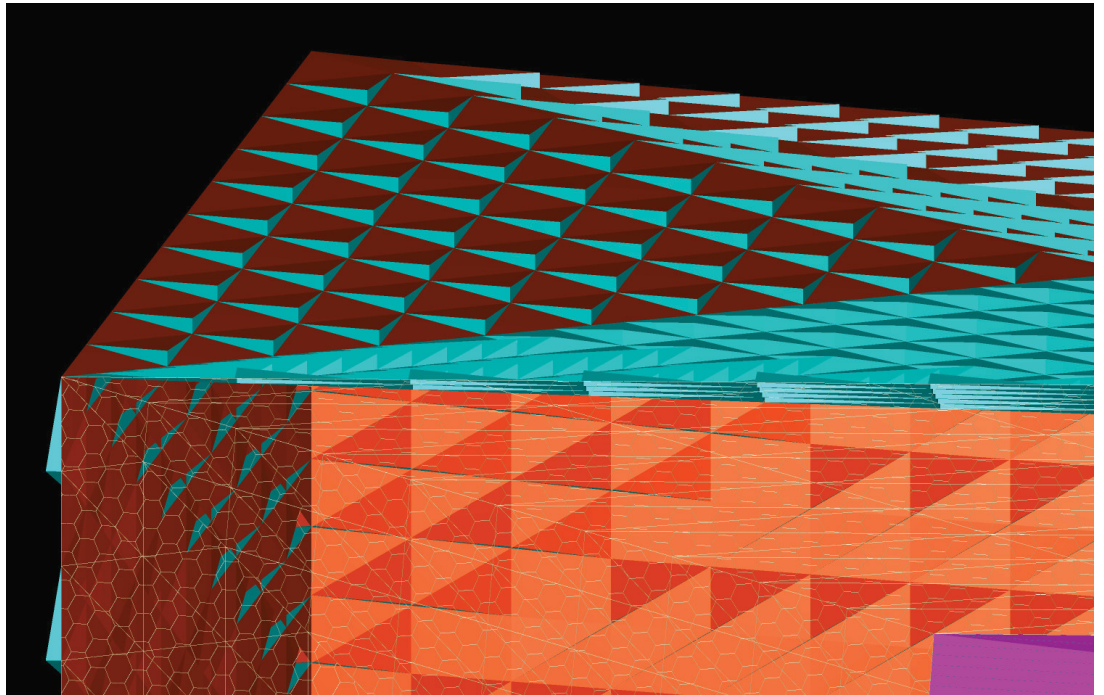
Long Section



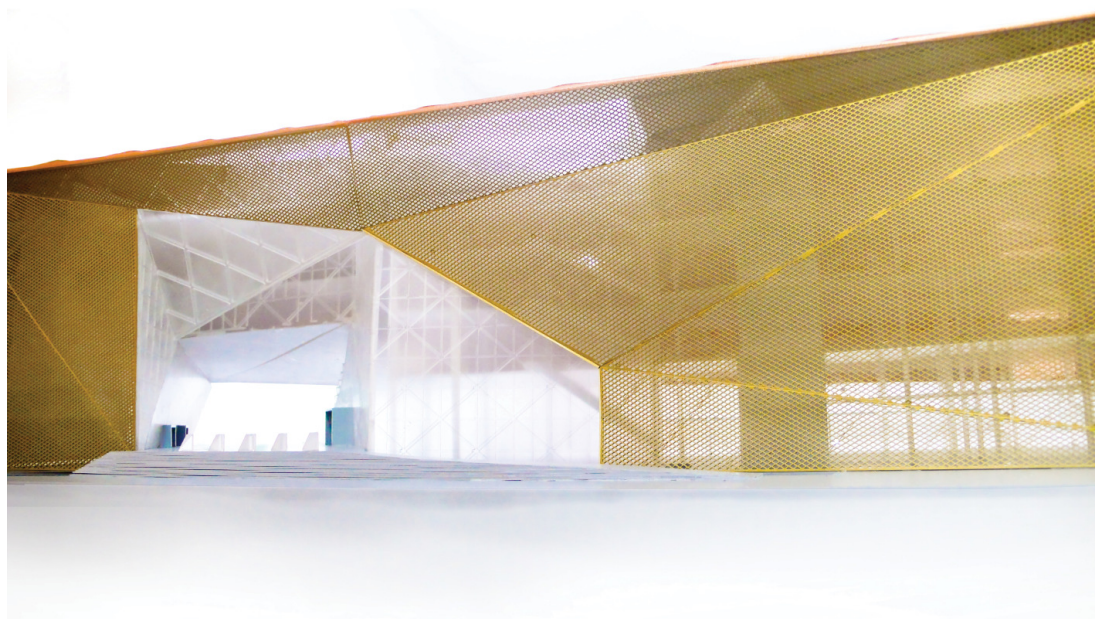
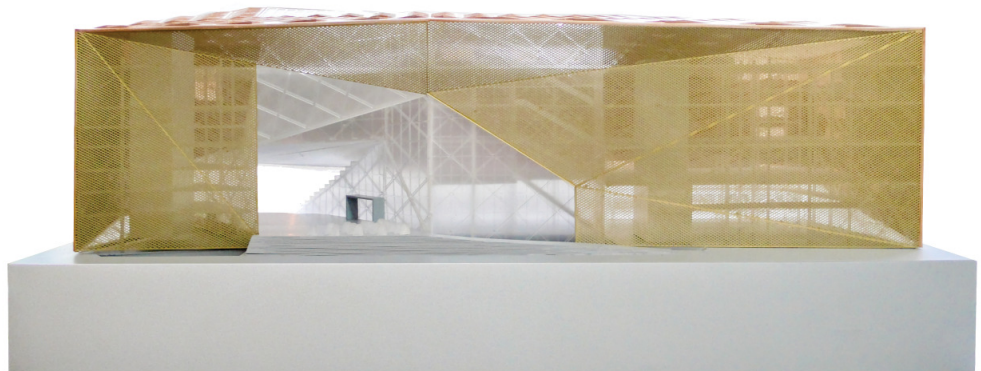
Cross Section



The Skin

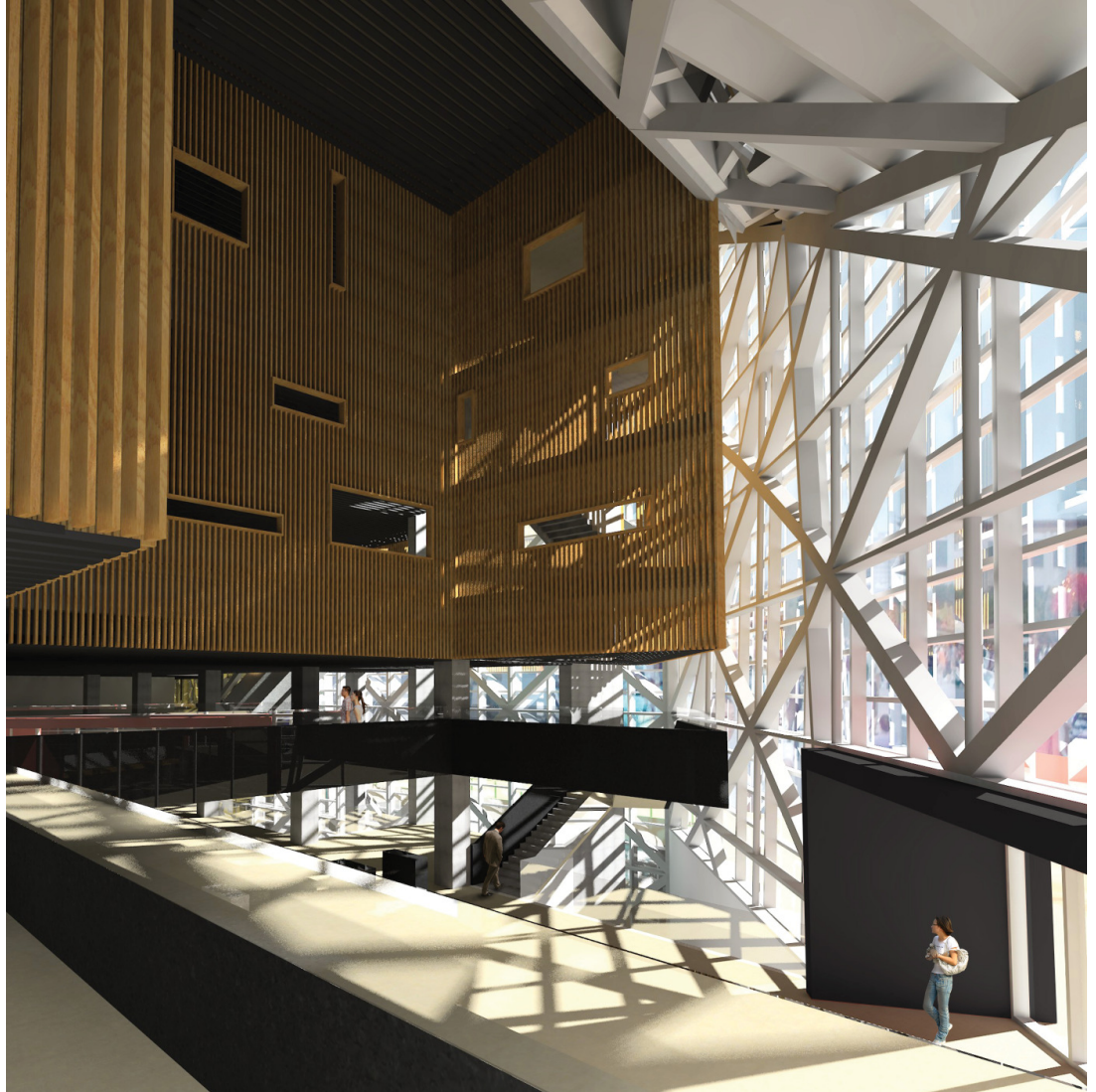


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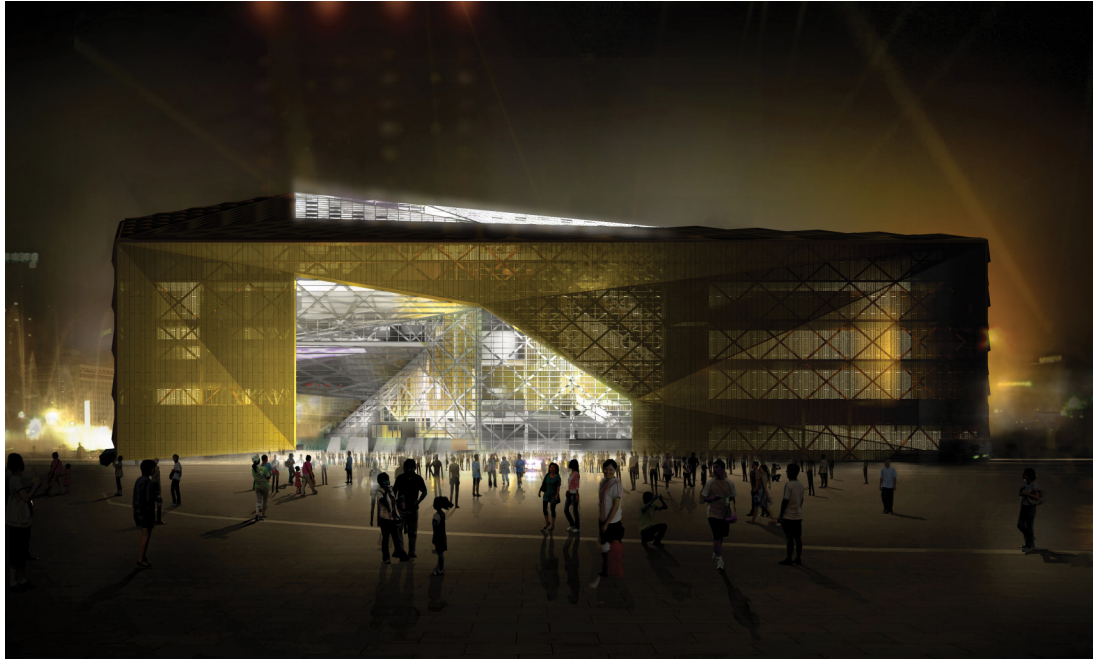
The Skin - Model studies

Final Computer images

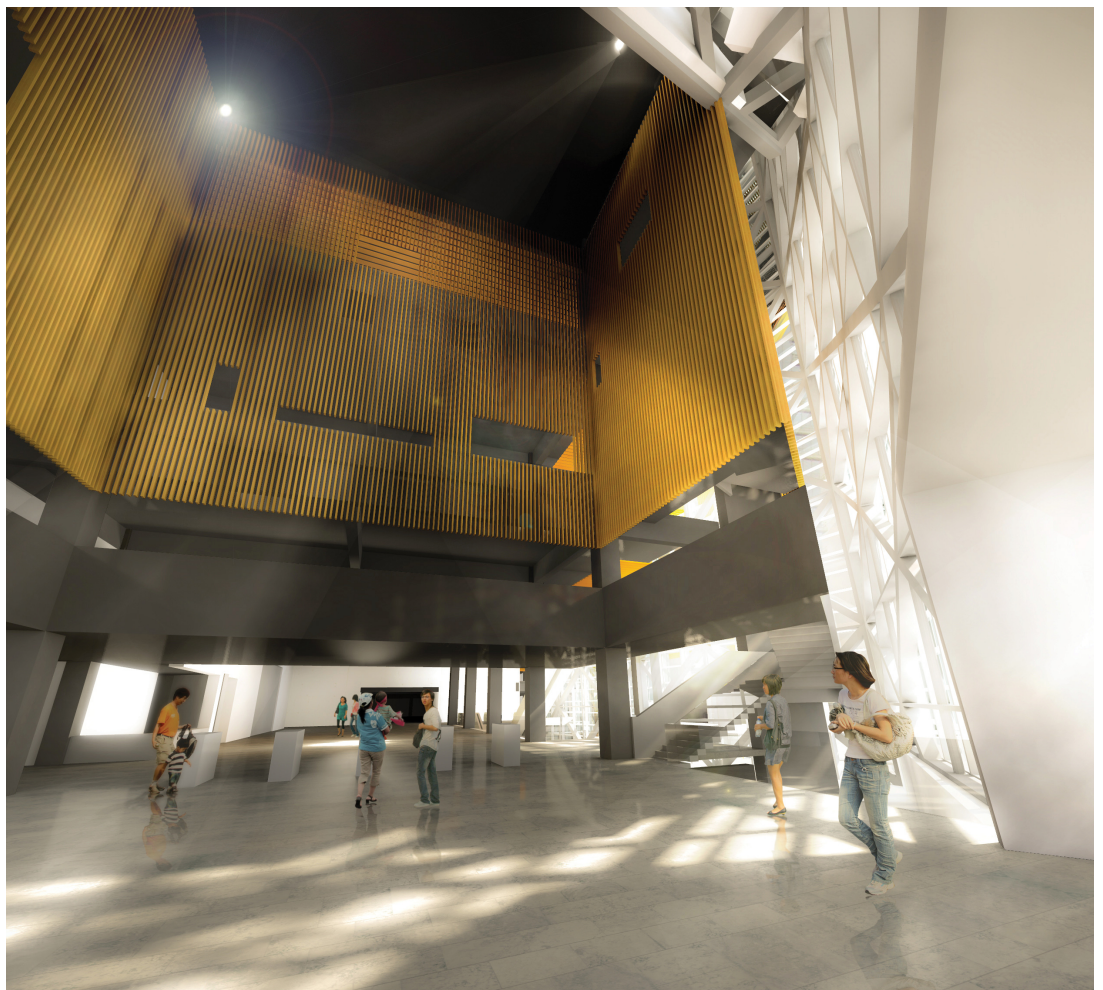


Interior view of Entrance Hall

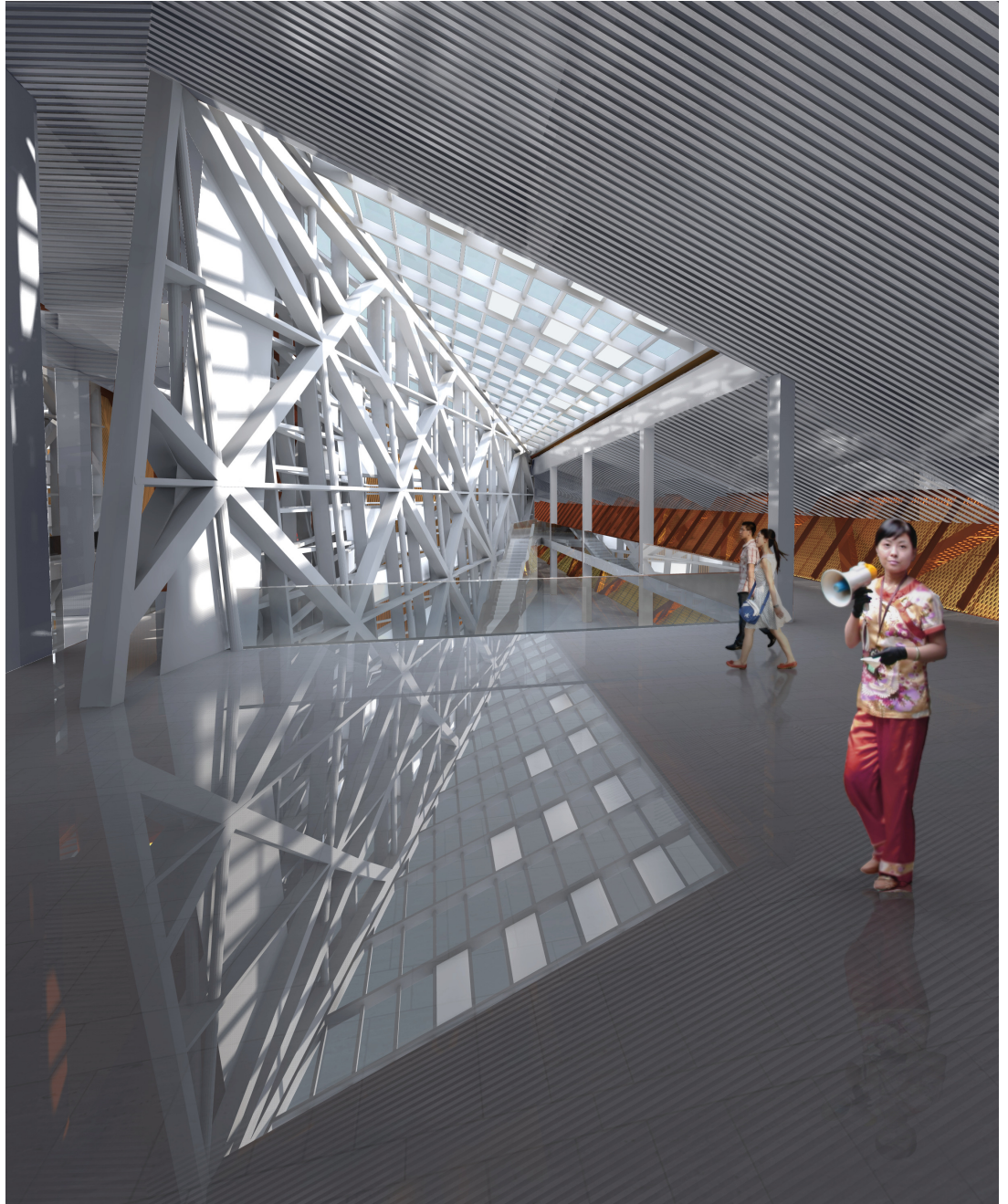
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Night view from square



Interior view of Entrance Hall



Interior view of upper foyer

Construction on site



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Views from approach