



Aedas

Aedas 凱達環球有限公司

www.aedas.com

David Fung 馮樹堅

主任建築師・信息化建築模型系統經理



Where are we now

Aedas



- the 5th largest architectural practice in the world with over 1,600 staff working from 24 offices 全世界第五大建築設計事務所, 散佈24 辦工室, 超過 1,600 人員
- the largest in HK with over 550 staff 香港最大建築設計事務所, 超過 550 人員





550 staff led by 18 directors

**High management ratio of
1 Director to 31 staff**

**225 Graduate Architects of
which 112 are Qualified
Architects**

**High Ratio of Qualified
Architects to Technical Staff**



Over 60 staff led by 5 directors

High management ratio of 1 Director to 12staff

Office stationed by qualified architects and technicians from Hong Kong

Day-to-day running of the office is supported through employment of local staff who is familiar with the local culture and environment



Established in 2002 to carry out projects for international clients

**An Wholly Owned Foreign Enterprise (WOFE)
Architectural Consulting Practice**

Staff Resources of 50 consists of both HK & local architects



**A branch office in Beijing
WFOE opened in December
2004**

**Allows additional capacity to
further expand business
opportunities to Shanghai
and the near regions**



Opened in September 2005.

A total 10 staff and will keep on expanding in order to cope with the growth of the city



**Incorporated in Singapore
since 1995**

**Over 110 staff in, of which 40
are fully graduated in
Architecture and of these 15
are Qualified Persons**



Established as Rep Office in 2004 and full registered in 2006

Currently 6 staff at the office

Ongoing Projects include:

- Ocean Heights I
- Ocean Heights II
- Dancing Tower
- Emaar Twin Towers
- U-BORA TOWER at Business Bay
- Oceanscape, Abu Dhabi
- Empire Island Tower, Abu Dhabi

Interiors Projects include:

- Emaar Twin Tower
- DMCC AL MAS Tower
- Bahrain World Trade Centre



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Aedas

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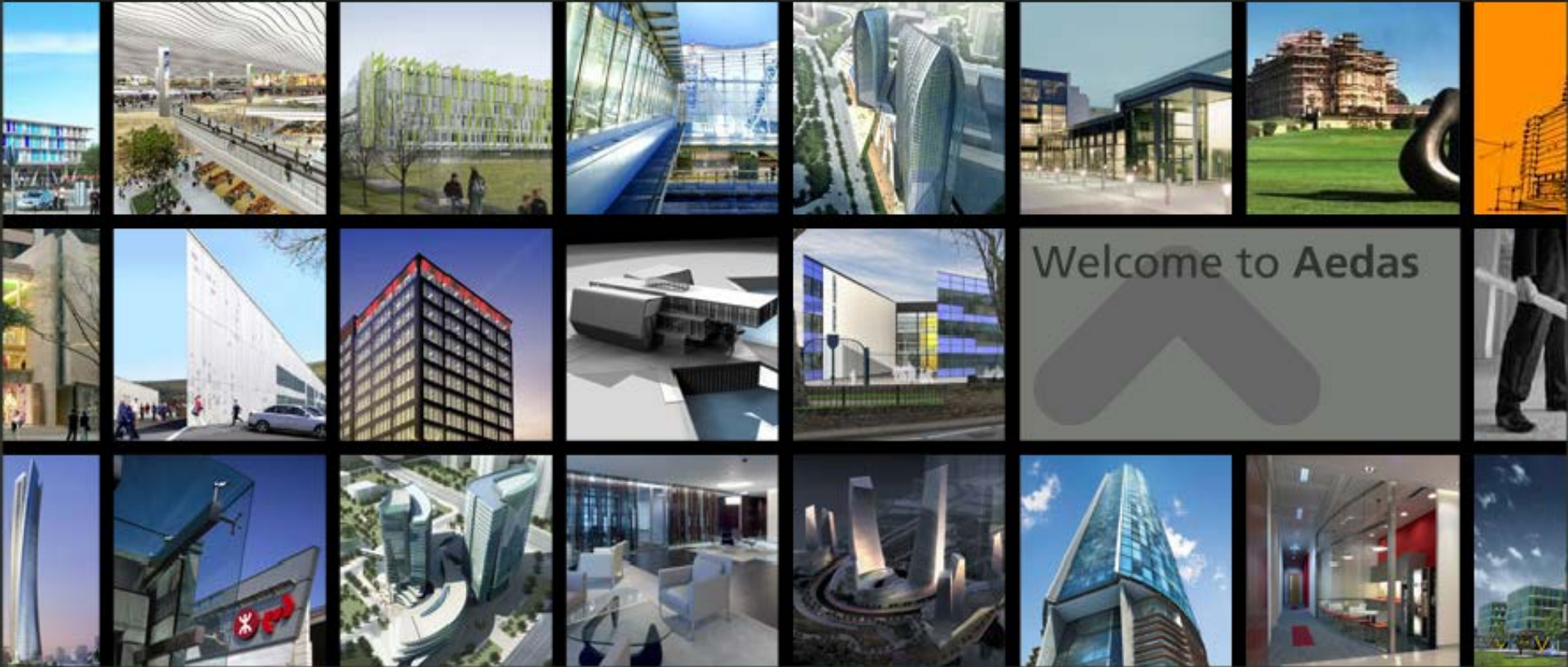
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公司简介

工程项目

服务范畴

发展机会

消息活动

各区地址

按项目类型分类

- 民用及社区建设
- 办公楼
- 国防建设
- 教育设施
- 医疗保健设施
- 酒店及渡假村
- 室内设计 - 办公室
- 室内设计 - 酒店、娱乐场所、及住宅
- 综合发展
- 制药及实验设施
- 住宅项目
- 零售商场
- 文娱及社区建设
- 科技工业及公共设施
- 交通运输设施
- 都市设计及总体规划

按服务范畴分类

按地域分类

办公楼

<< 返回

北京富力城

中国北京之商住发展项目

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财富中心第一期

大型综合性发展

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Emaar Towers, Dubai

办公楼

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中东阿布扎比 Dancing Towers

综合发展项目

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英国曼彻斯特Forty Spring Gardens

曼彻斯特Spring Gardens之Amethyst House

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英国伯明罕Parklands 1000号地块

英国伯明罕公园Parklands 1000号地块

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英国曼彻斯特 Quay St Rossetti Place

曼彻斯特 Quay Street 综合发展项目

[按此细阅详情 >>](#)

越南胡志明市西贡大楼

位于胡志明市



BIM —

Revolution in Design Process

設計過程的蛻變



AEC INDUSTRY 建築及建造業

Discipline

BIM

Architectural

Accuracy 準確性

Engineering

Efficiency 高效率

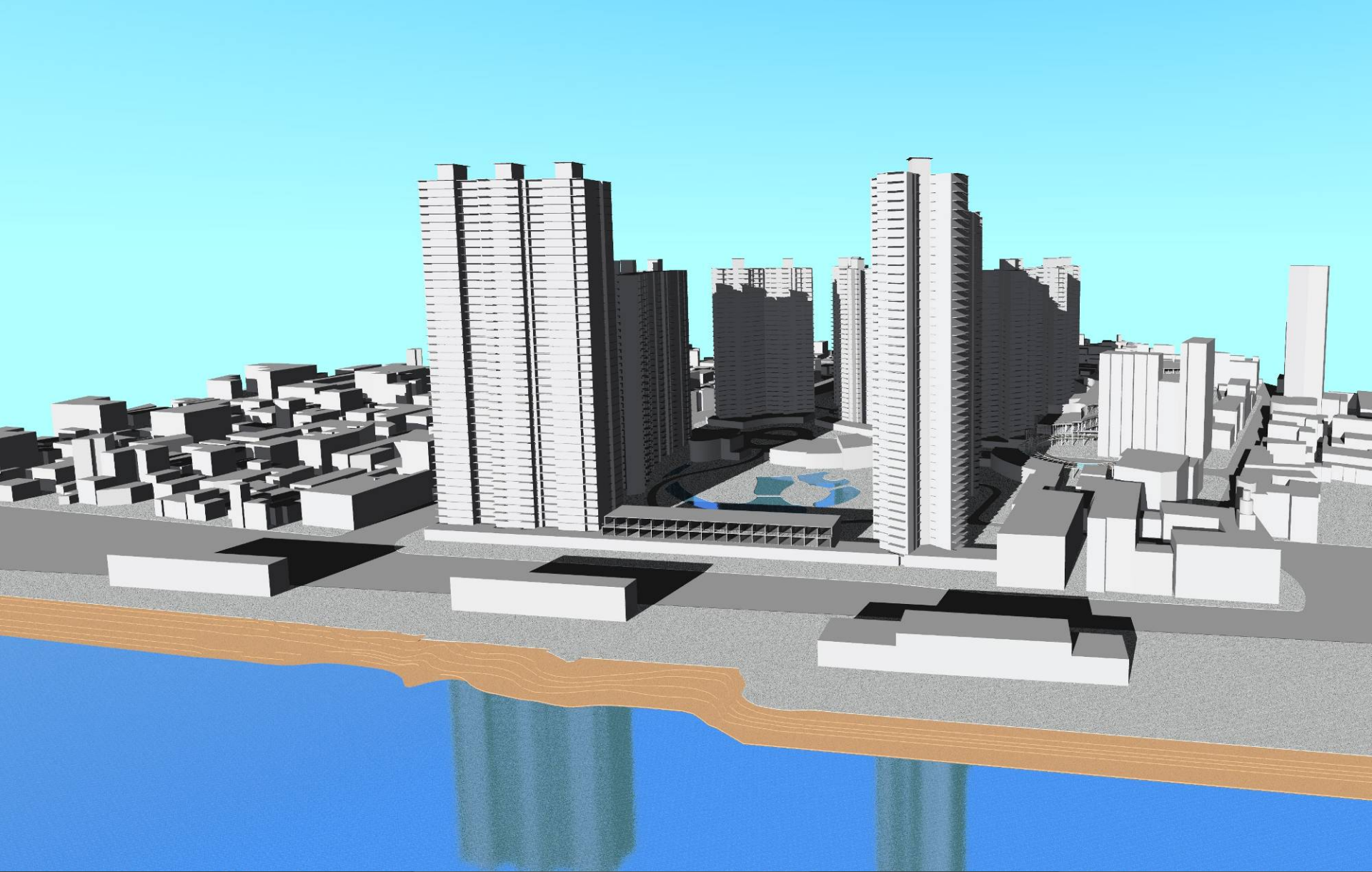
Construction

Creativity 創造性



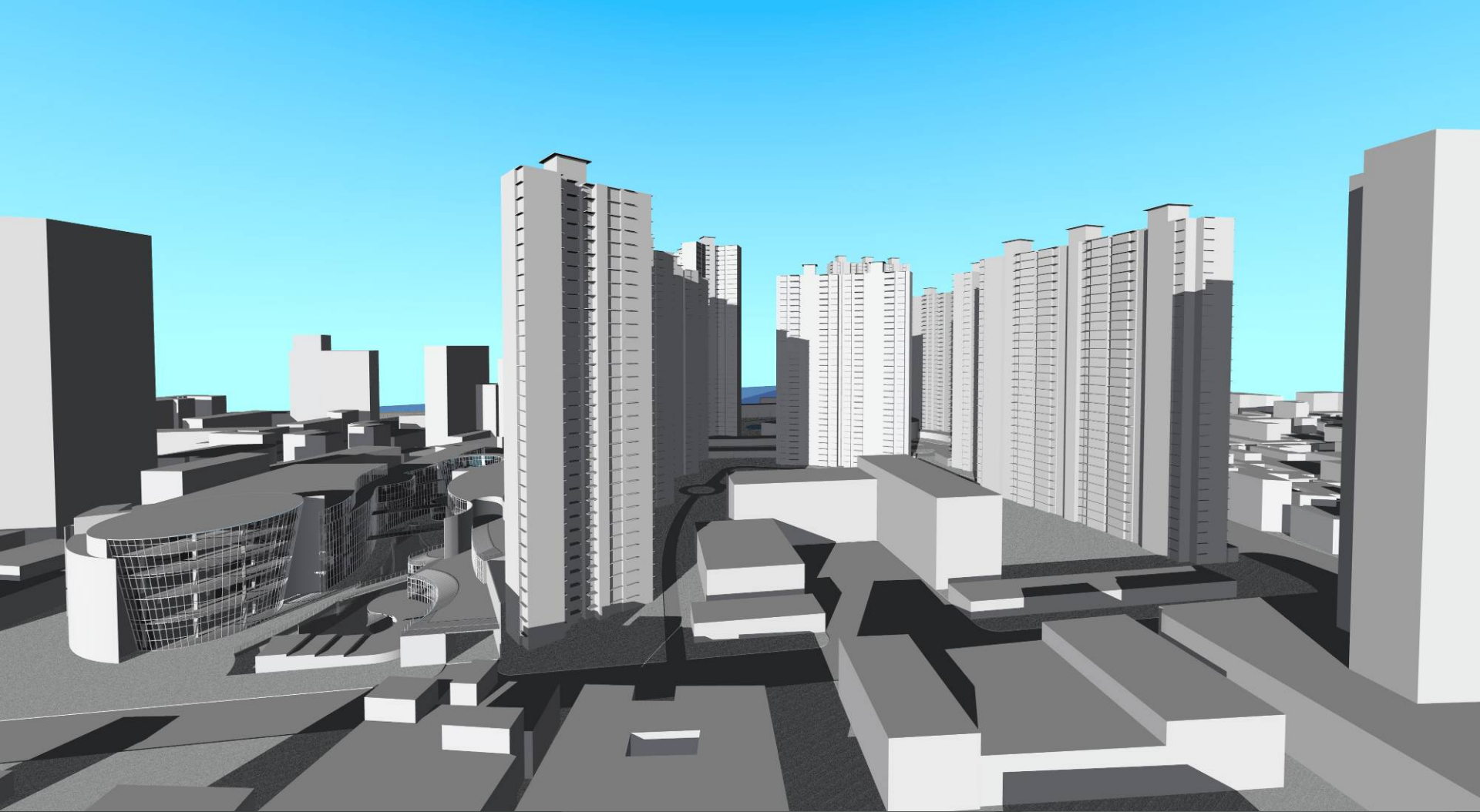
Accuracy 準確性





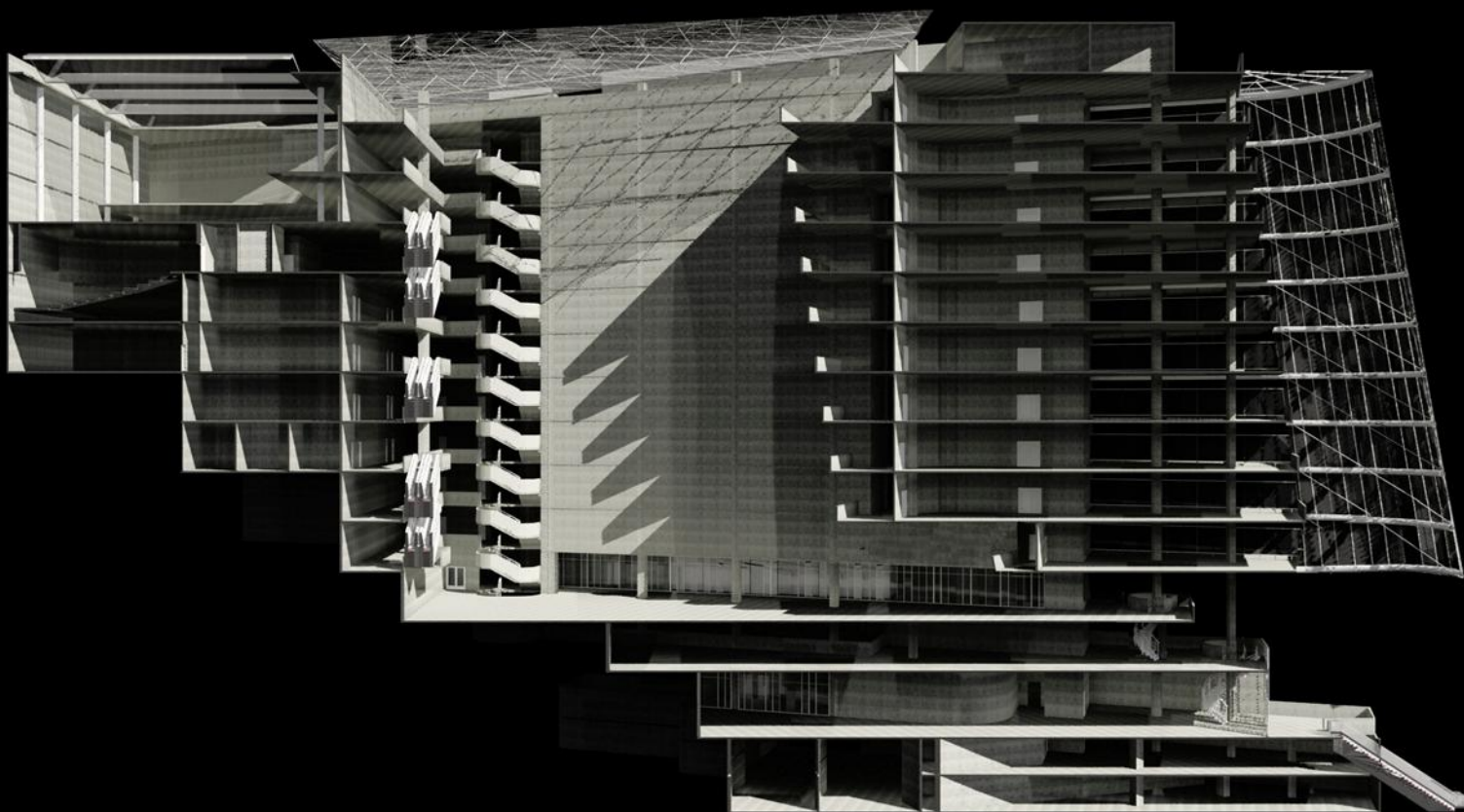
武漢住宅項目

BUILDING IN CONTEXT



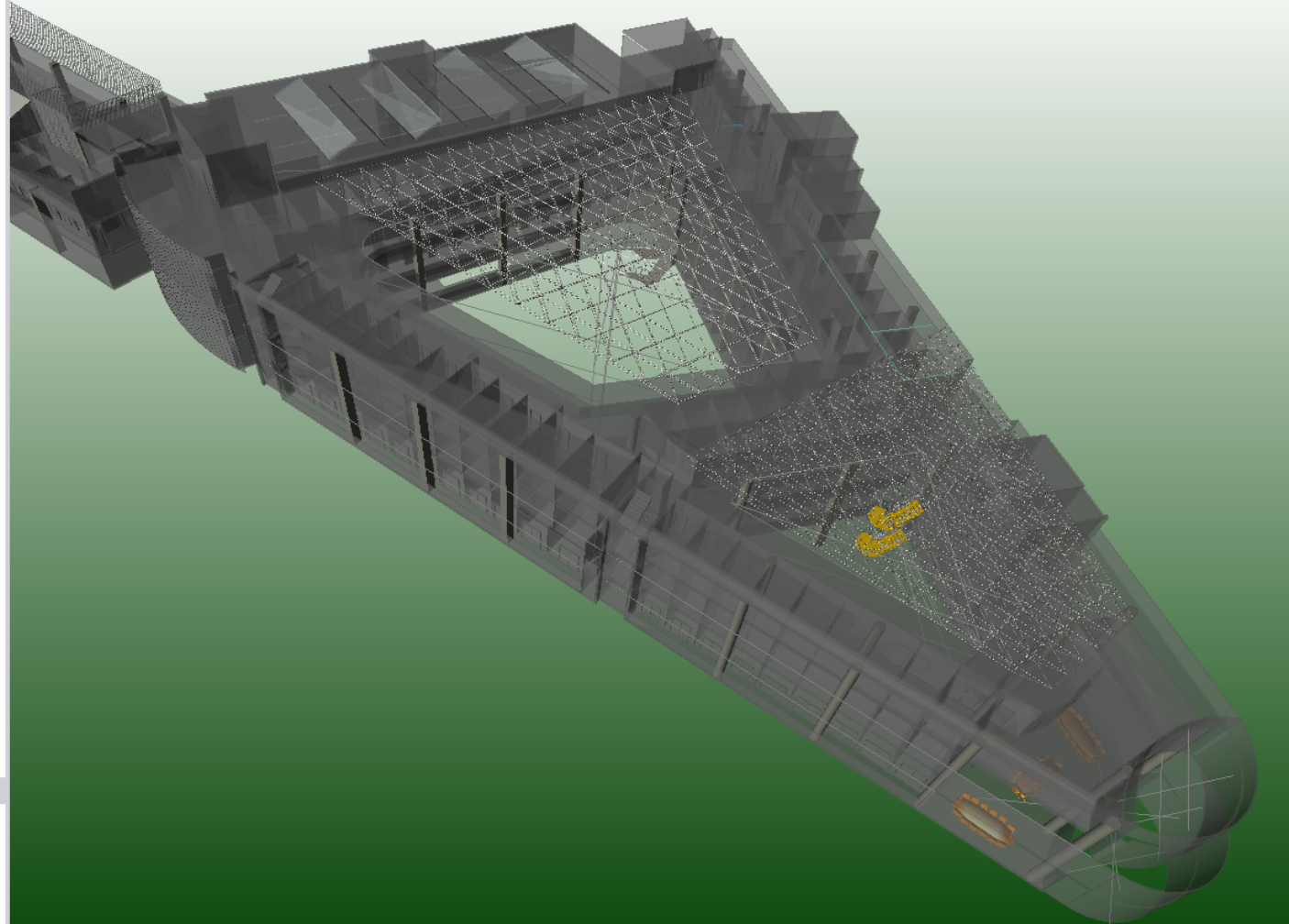
武漢住宅項目

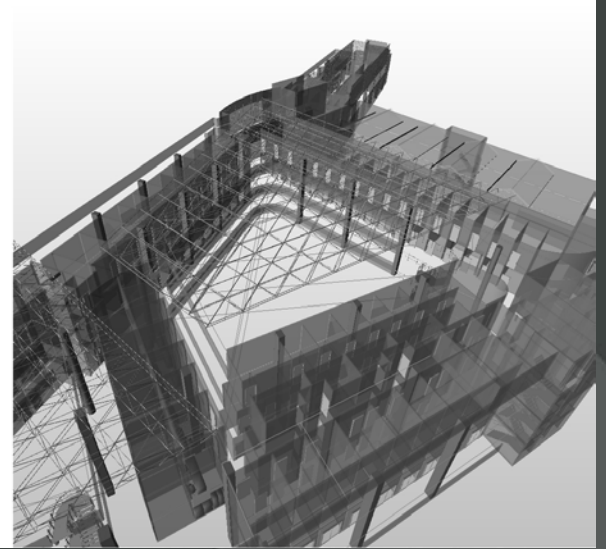
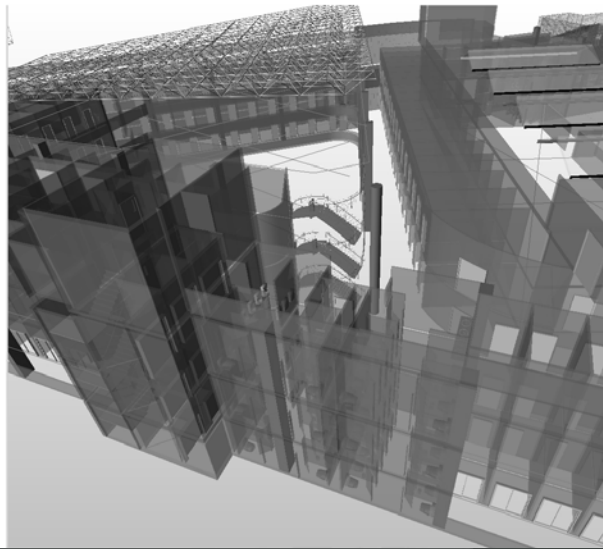
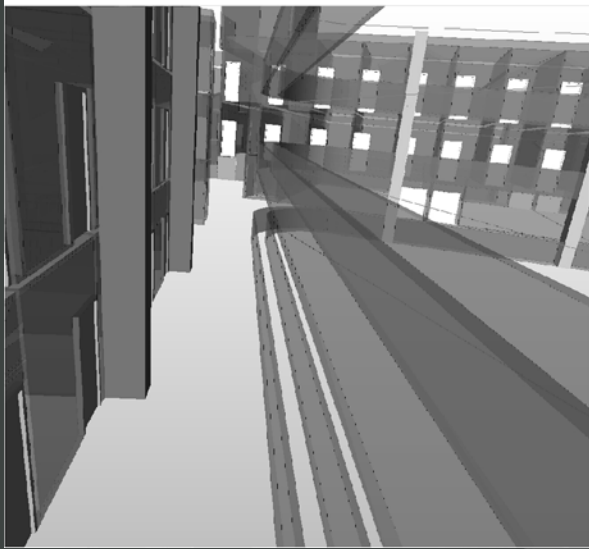
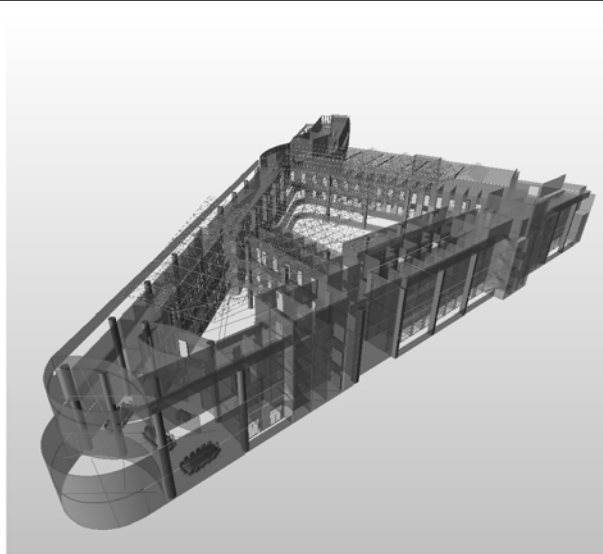
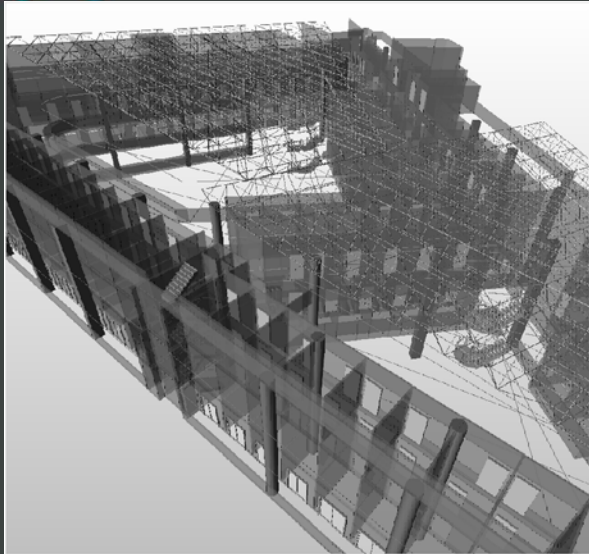
BUILDING IN CONTEXT



香港大學大樓項目

CUT AWAY PERSPECTIVE







深圳大學大樓項目

PERSPECTIVE

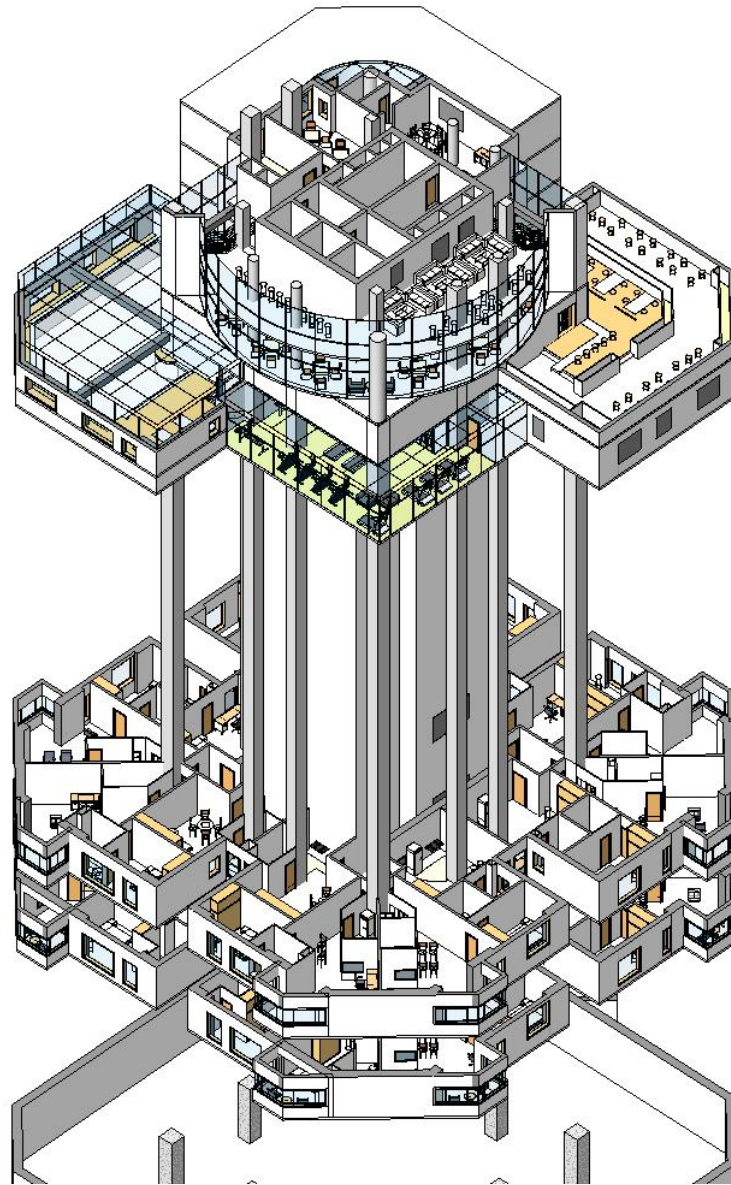




深圳大學大樓項目

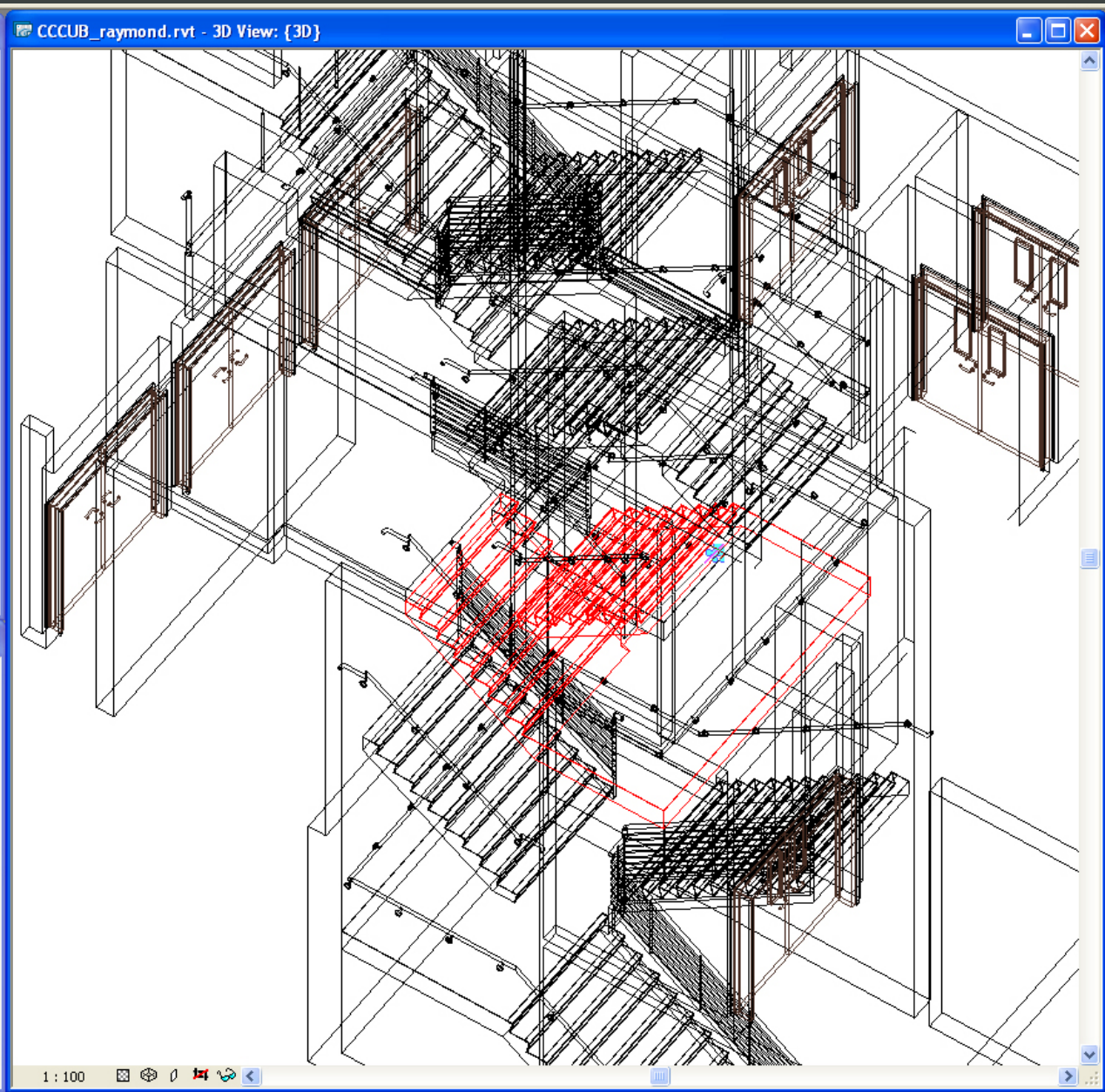
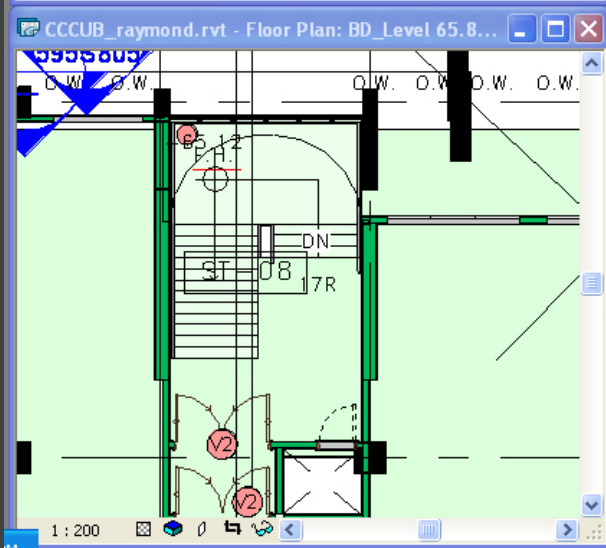
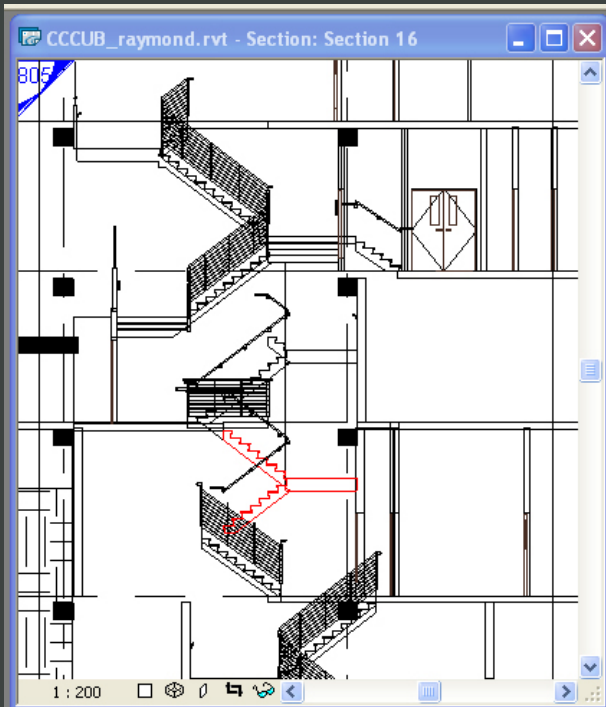
PERSPECTIVE

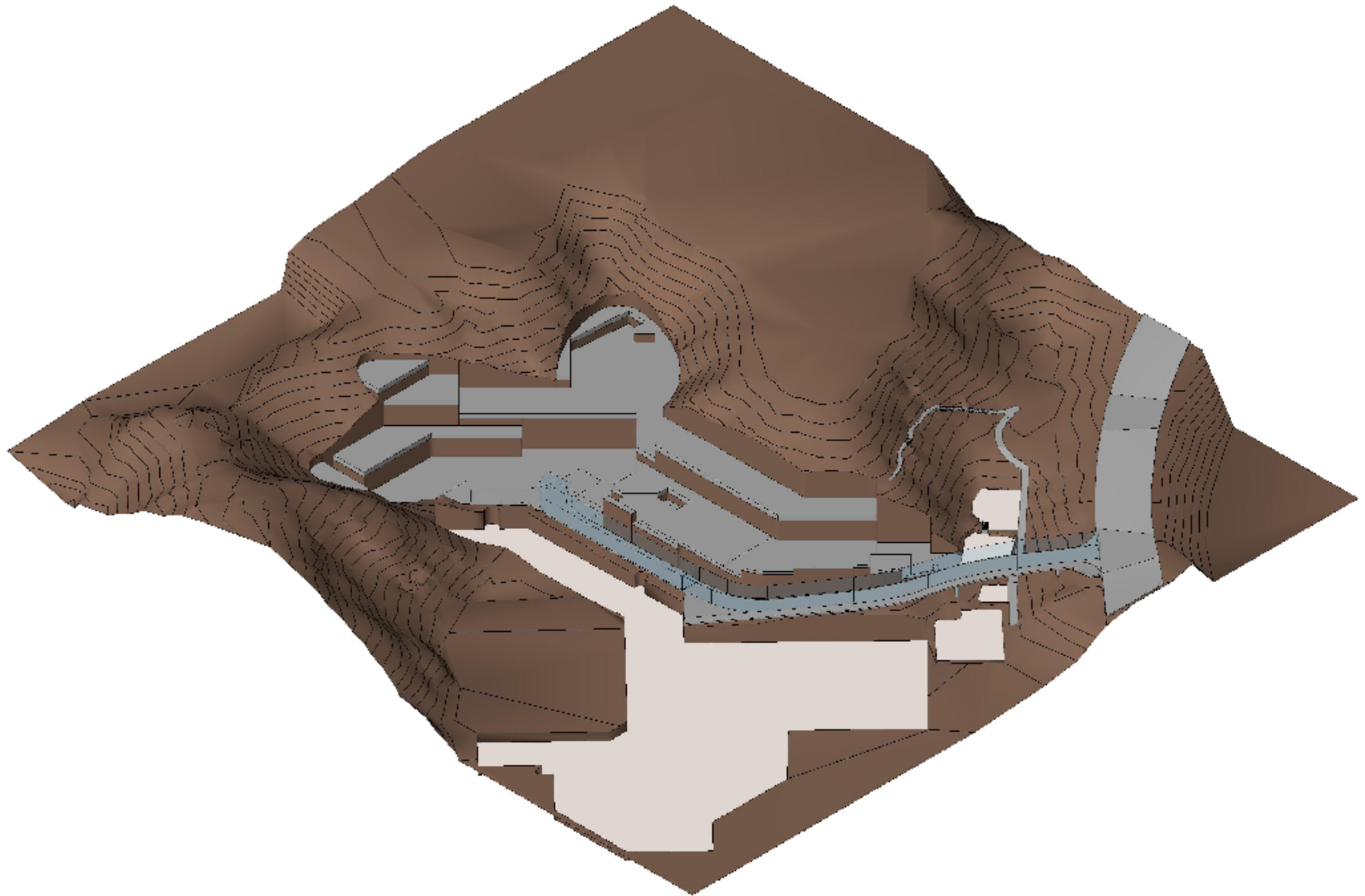




北京住宅項目

VERTICAL CO-ORDINATION

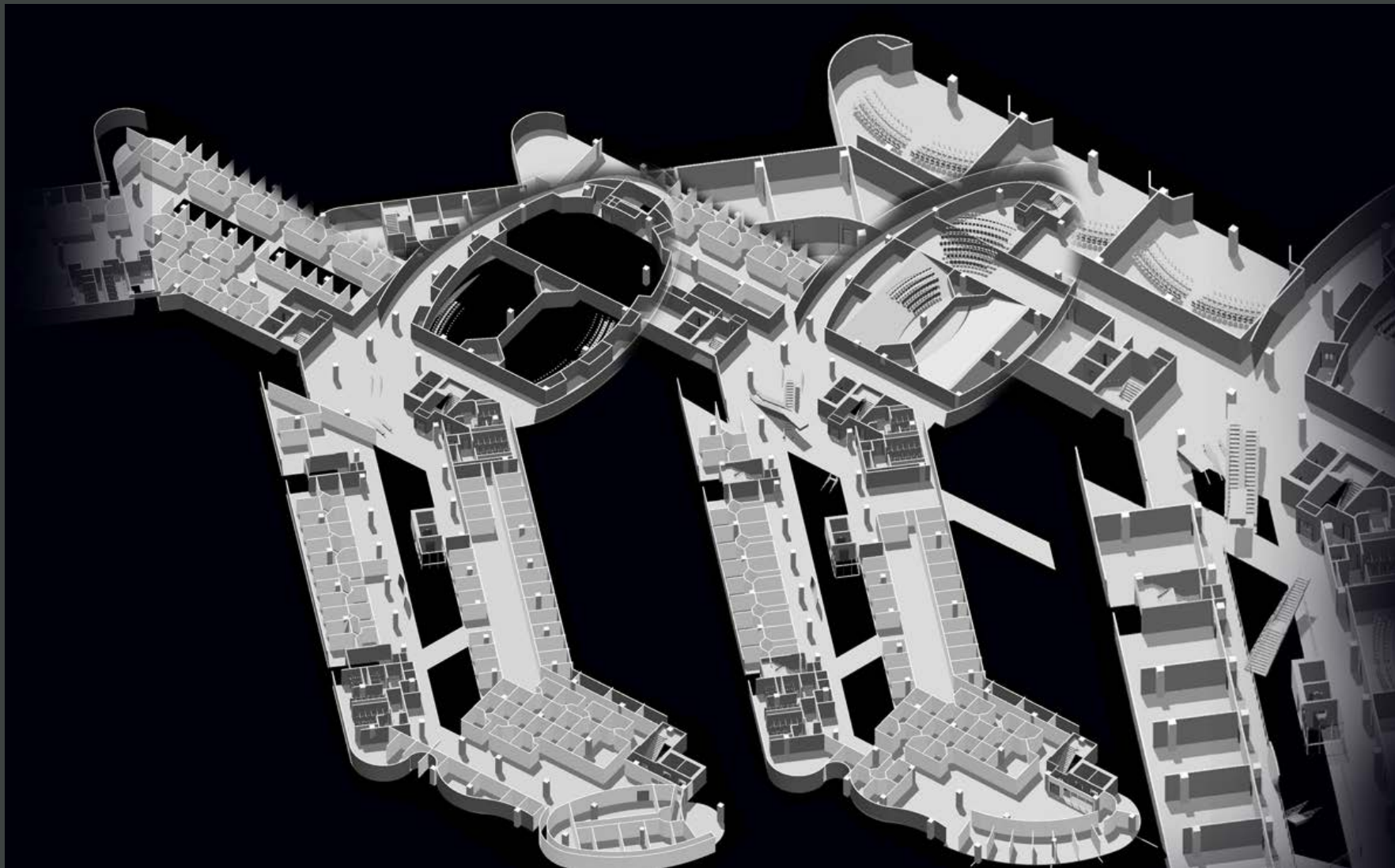




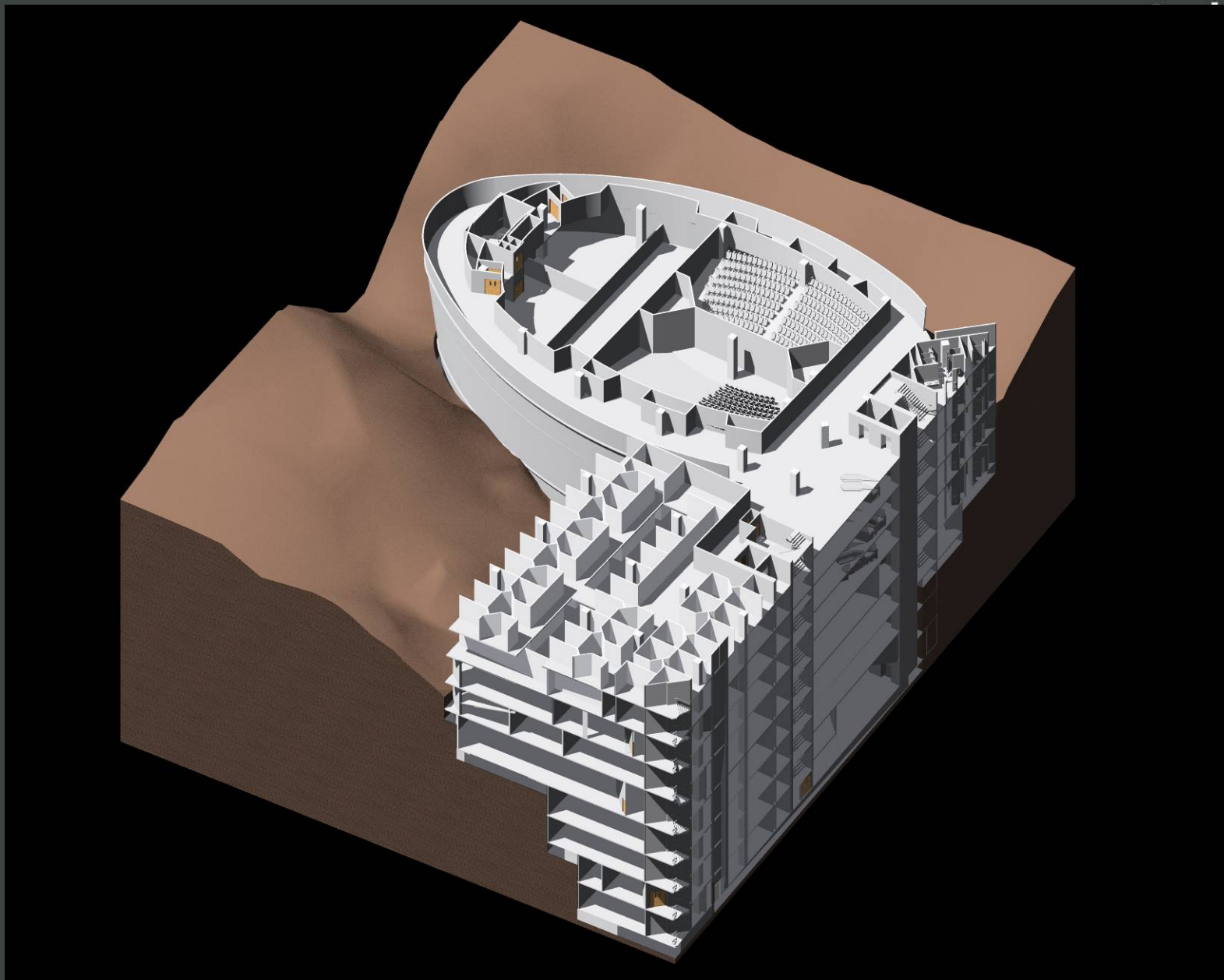


DIFFERENT DESIGN APPROACH

Aedas

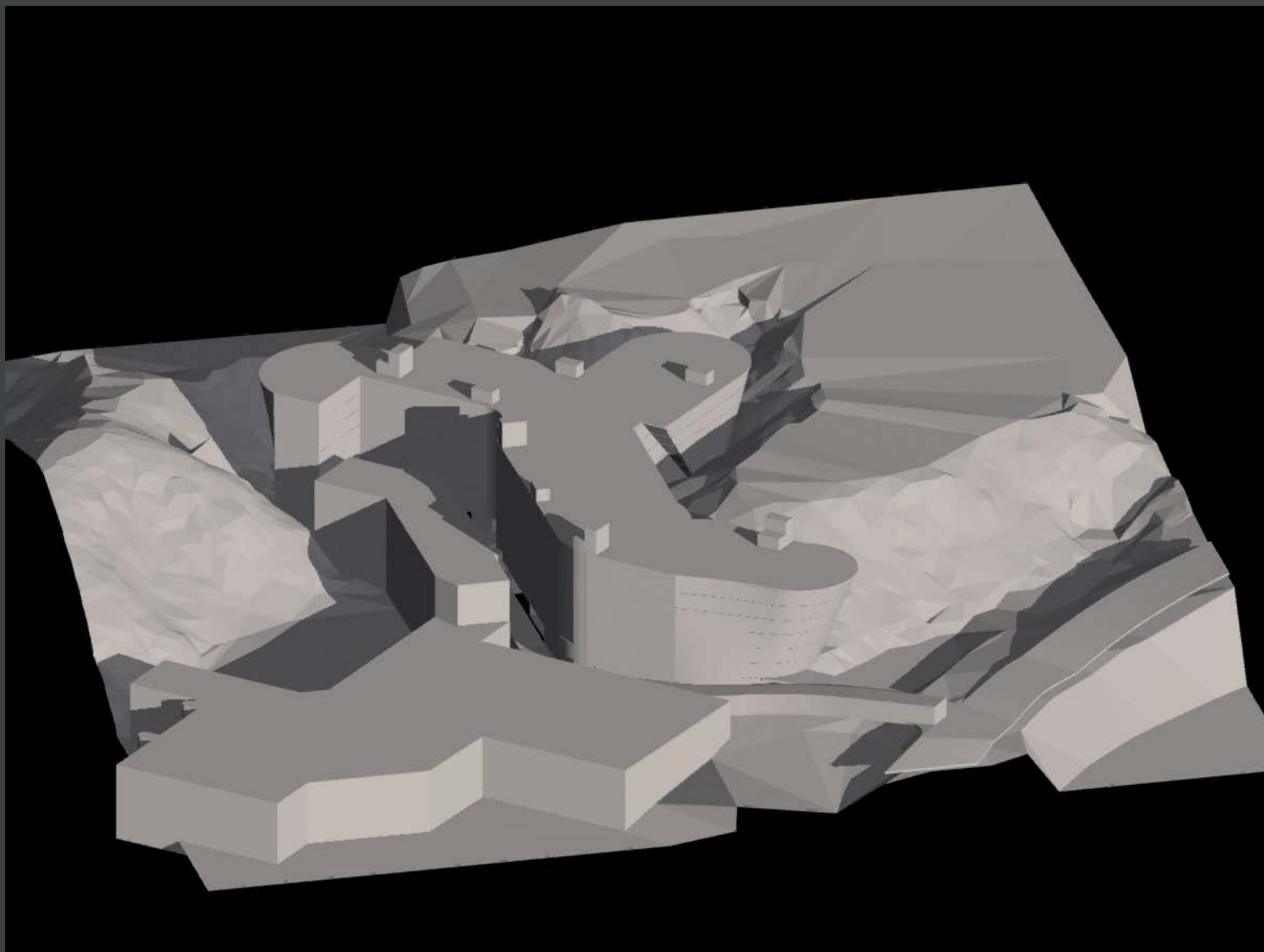


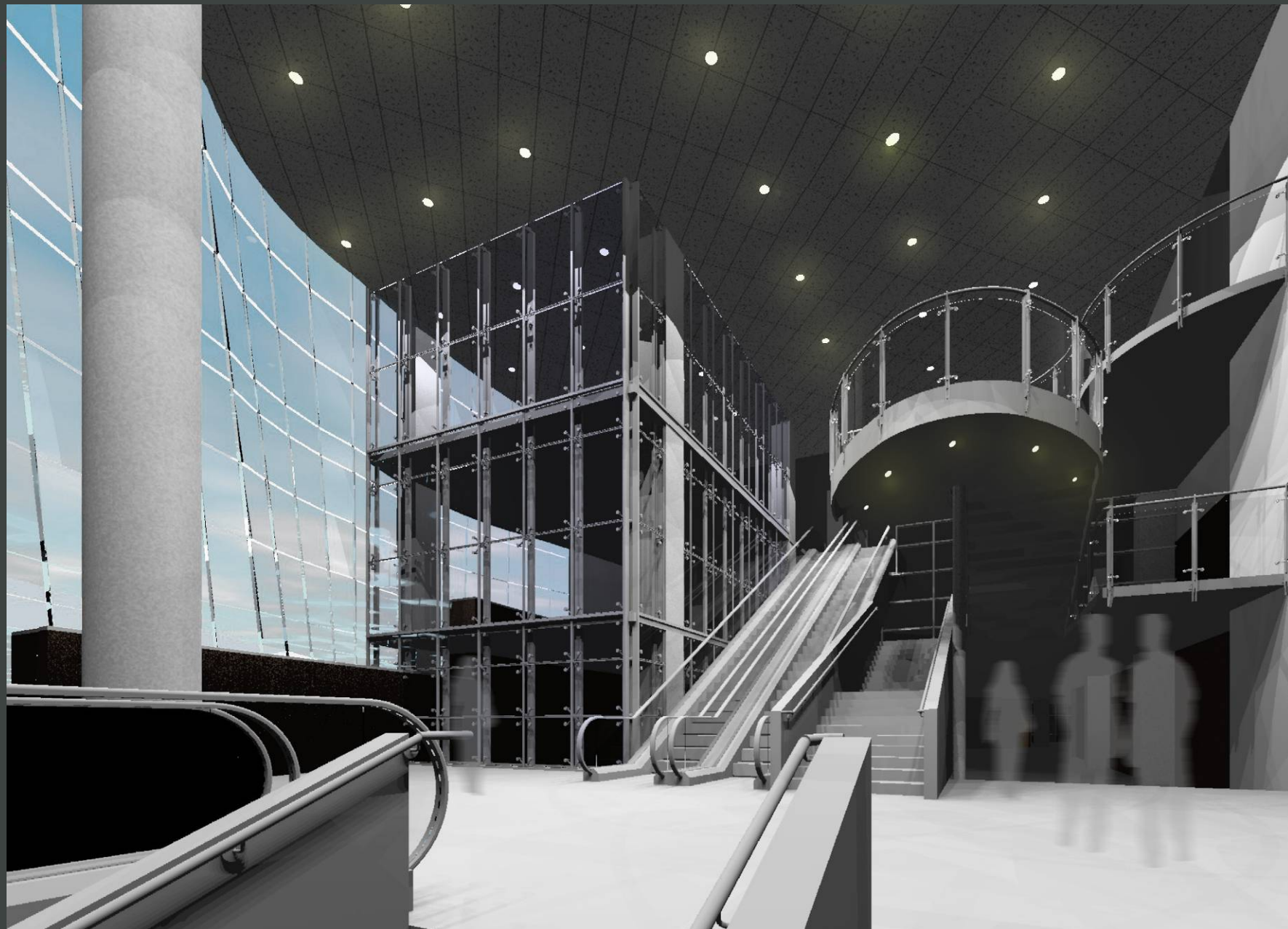
香港城市大學教學大樓項目



香港城市大學教學大樓項目

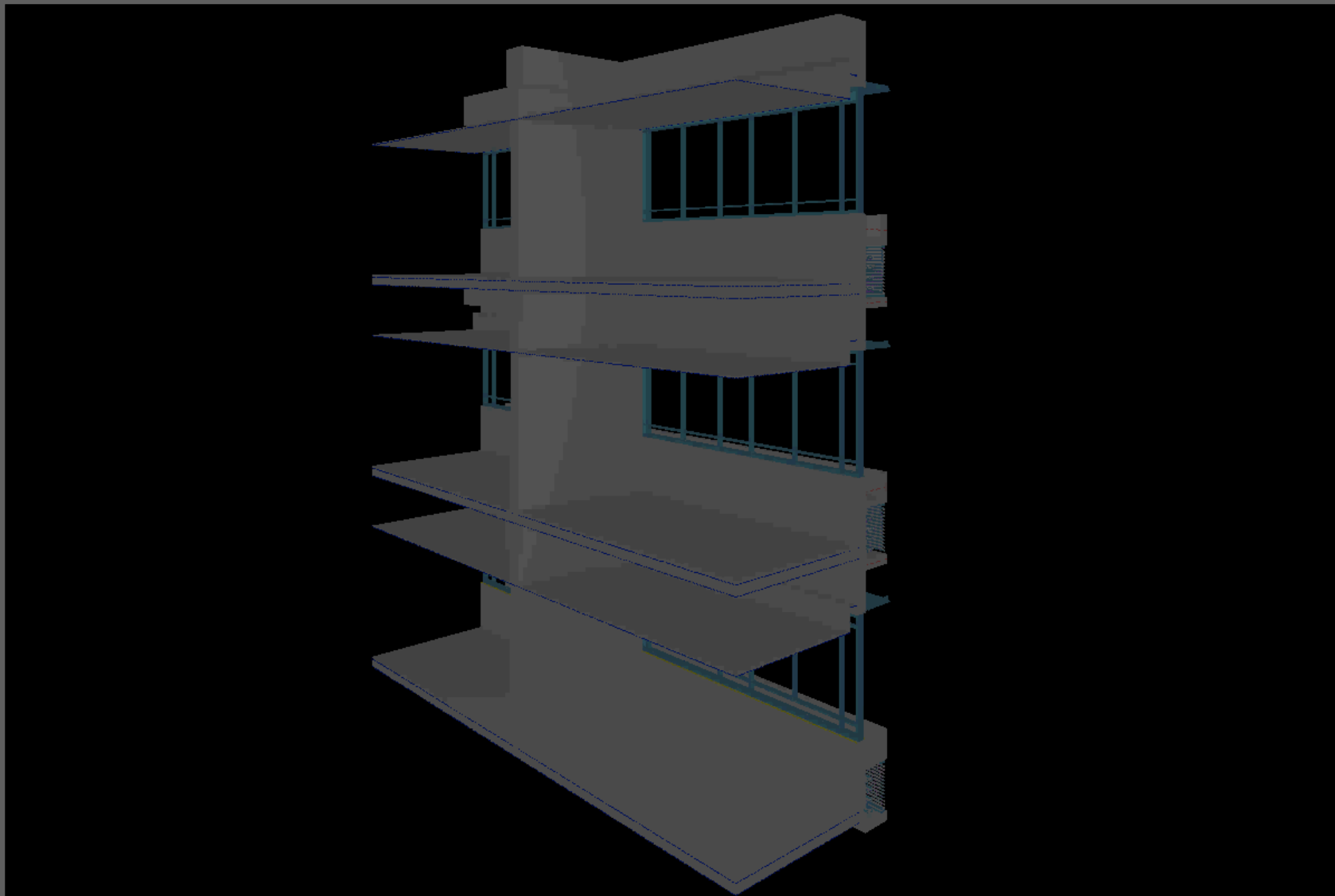
BUILDING IN SITE CONTEXT





香港城市大學教學大樓項目

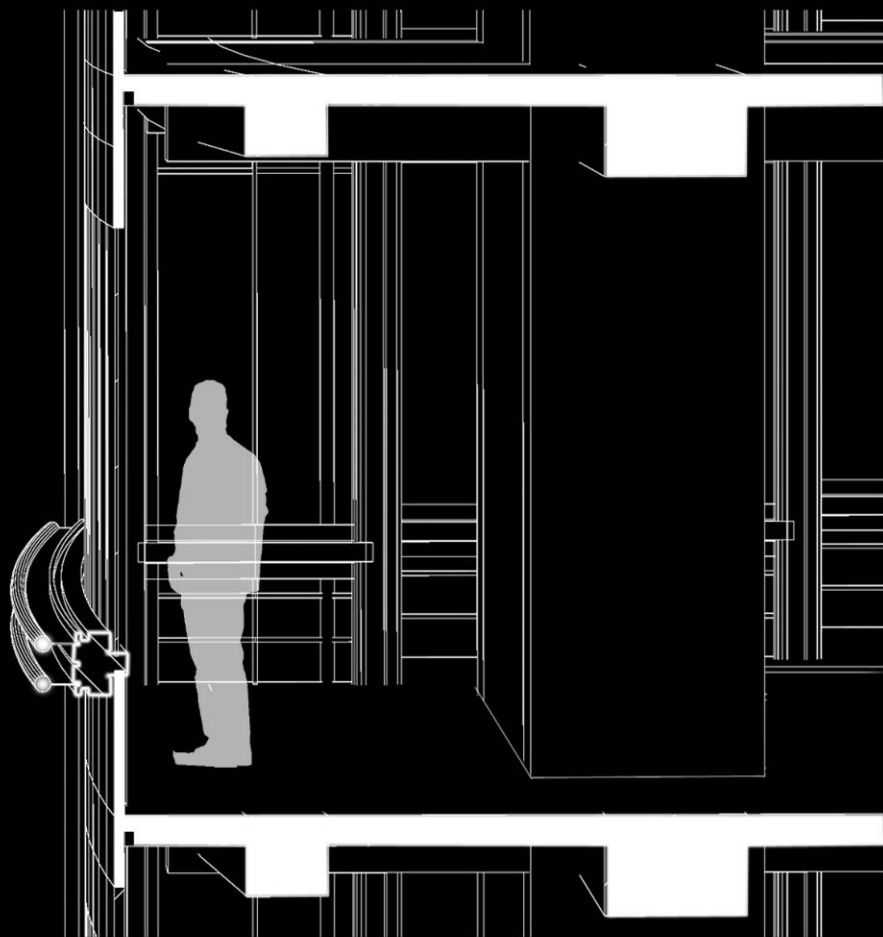
3D DESIGN



香港城市大學教學大樓項目

FAÇADE SOLAR STUDY

21/12/2006 7:00am – 6:00pm



廣州辦公室項目

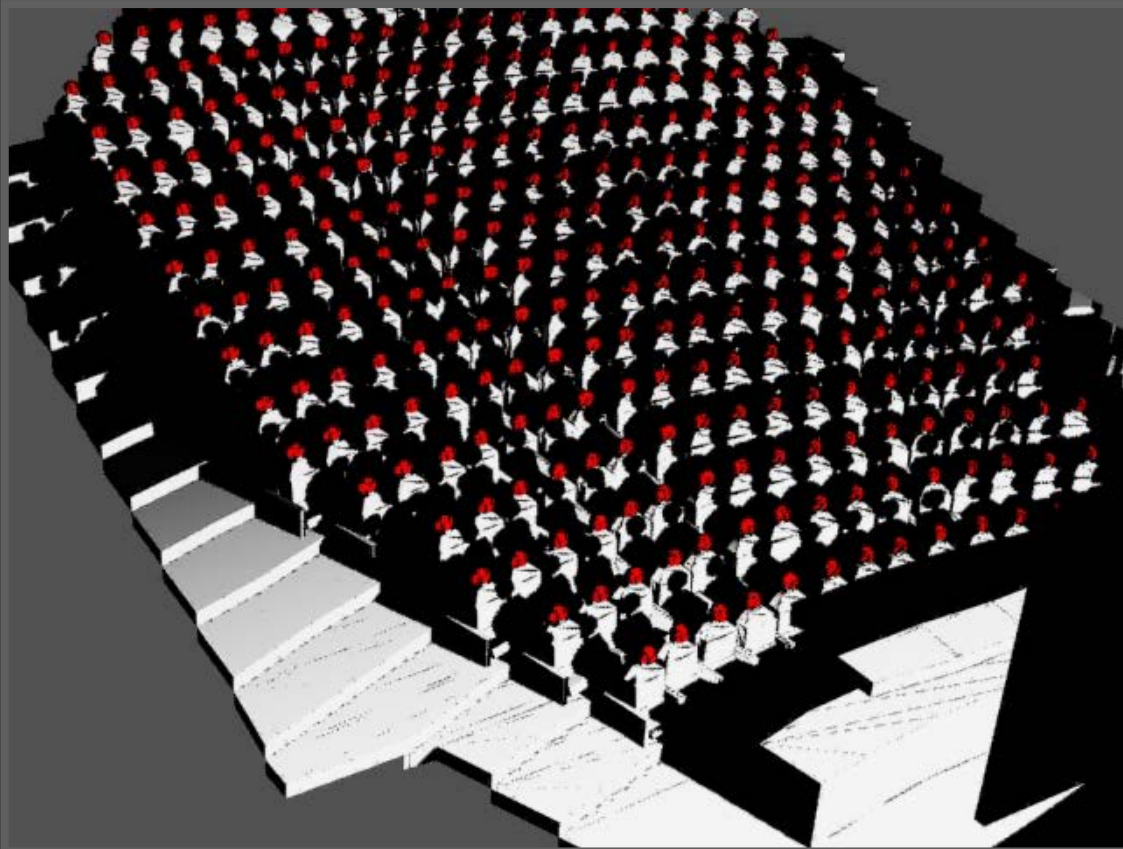
FAÇADE DESIGN and CO-ORDINATION



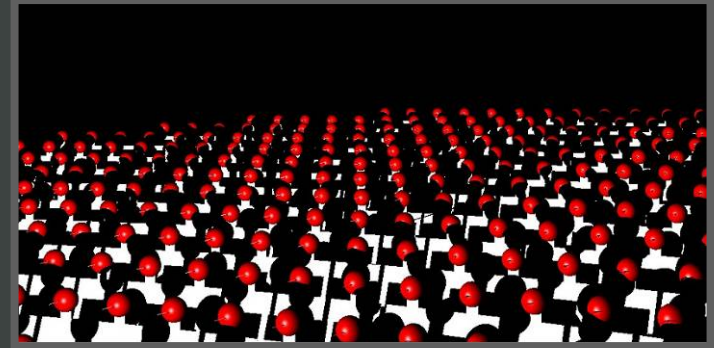
廣州辦公室項目



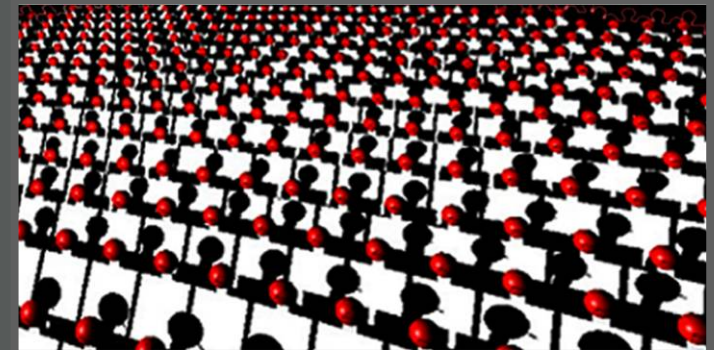
FAÇADE DESIGN and CO-ORDINATION



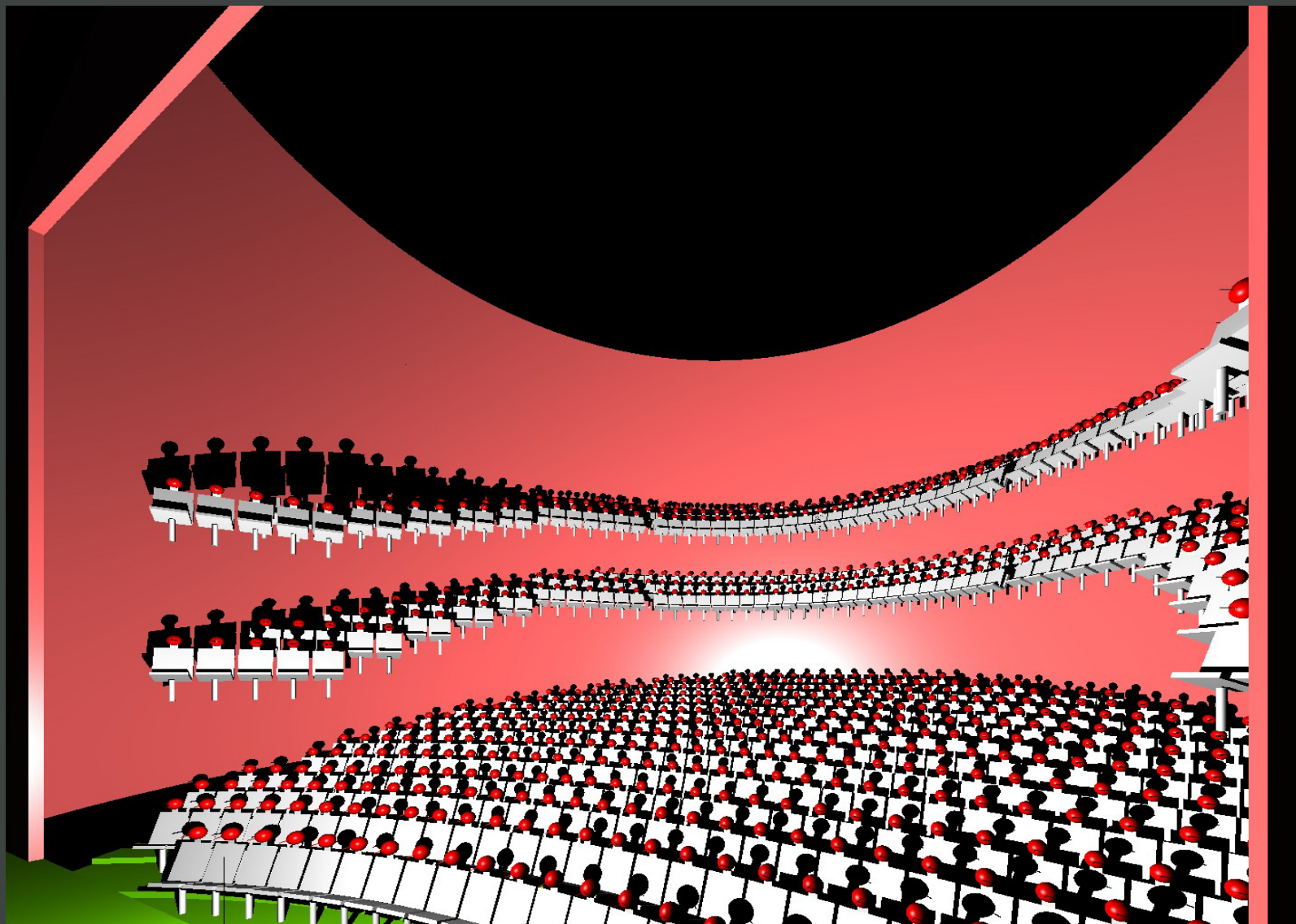
Radiating Light Method



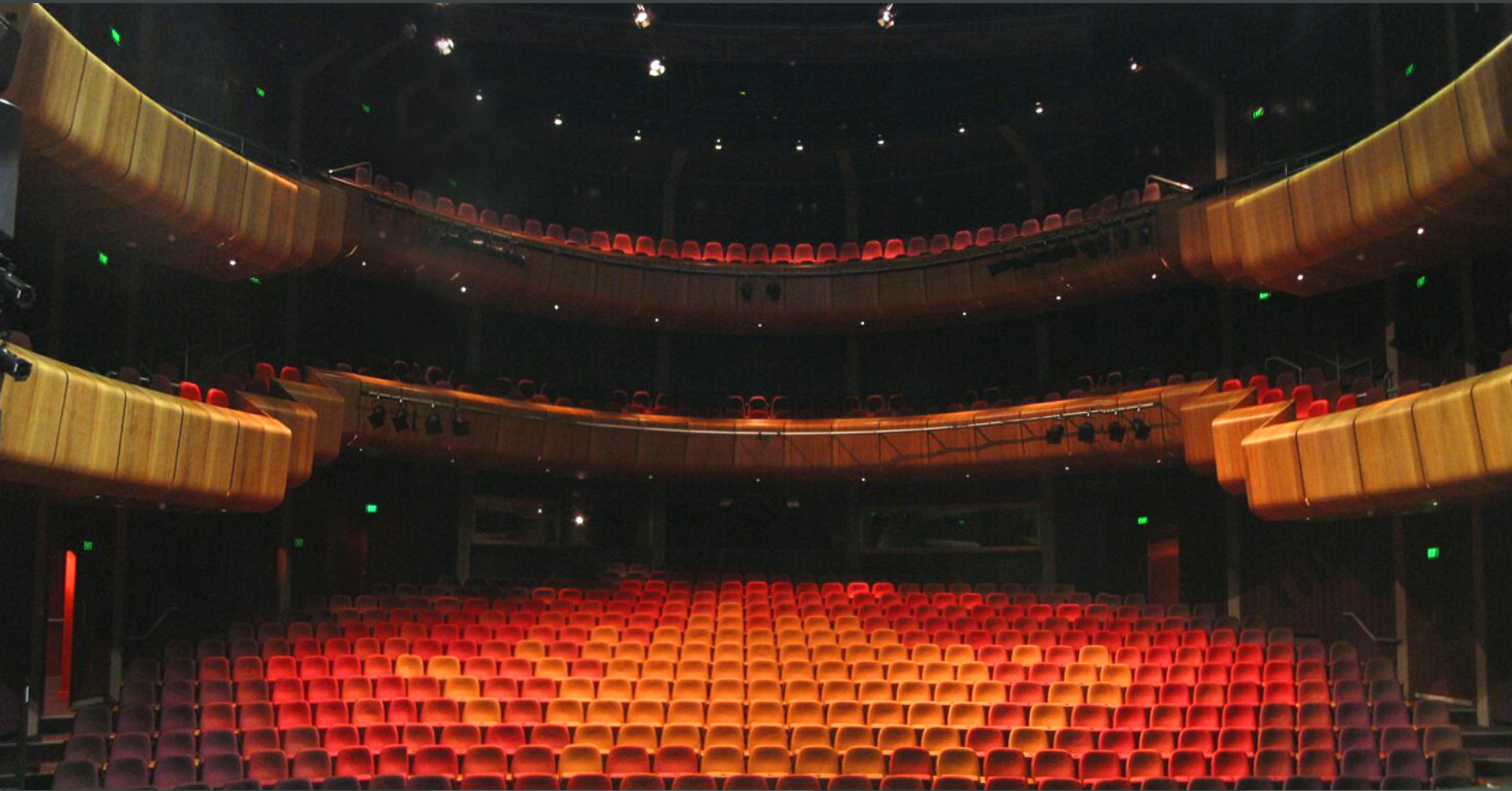
Unsatisfactory sightlines



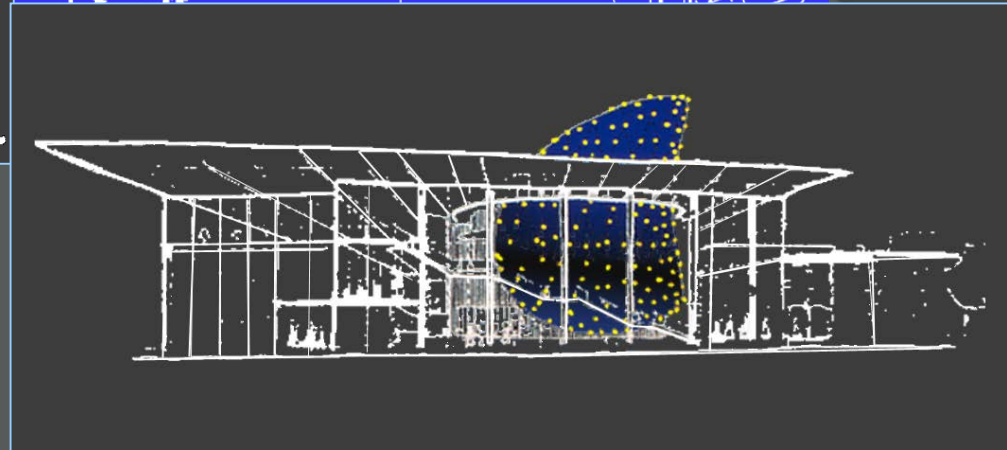
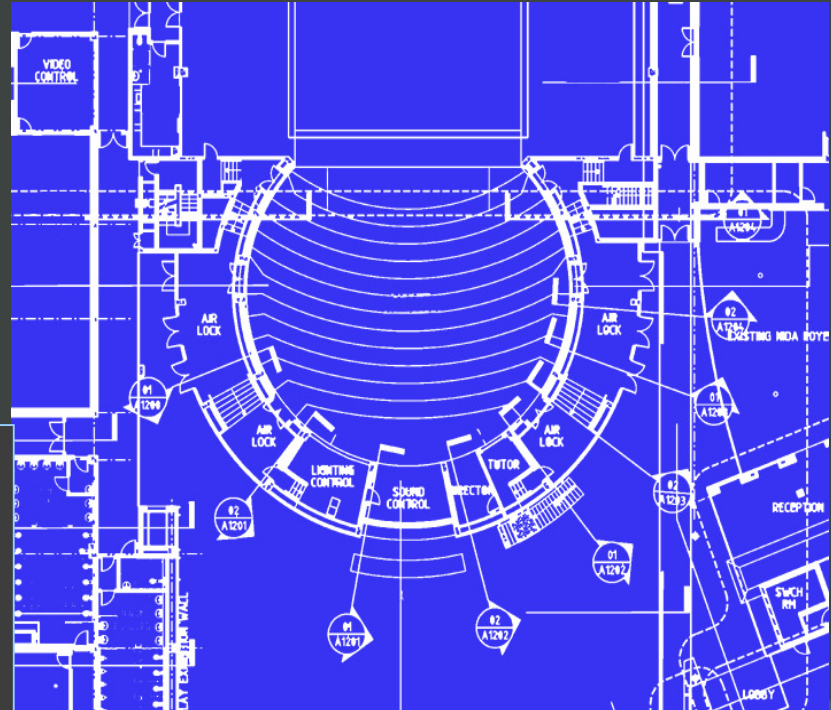
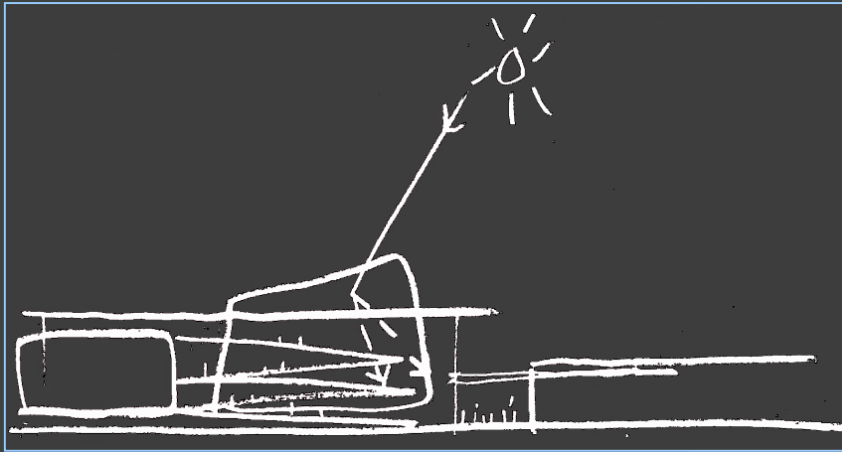
Satisfactory sightlines

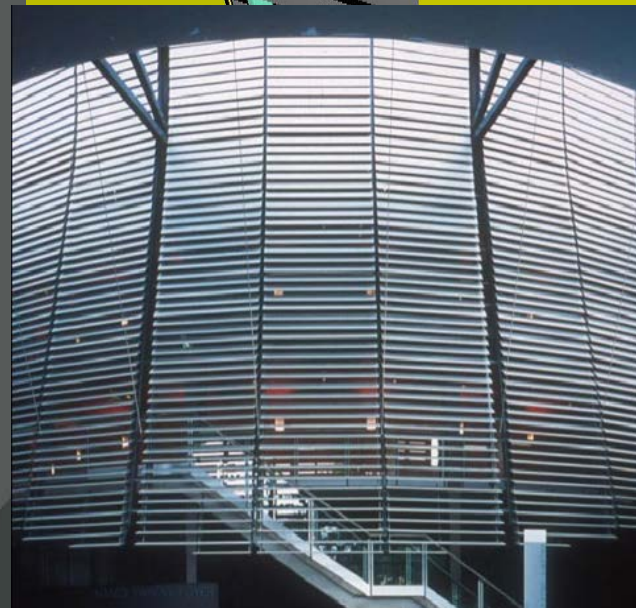
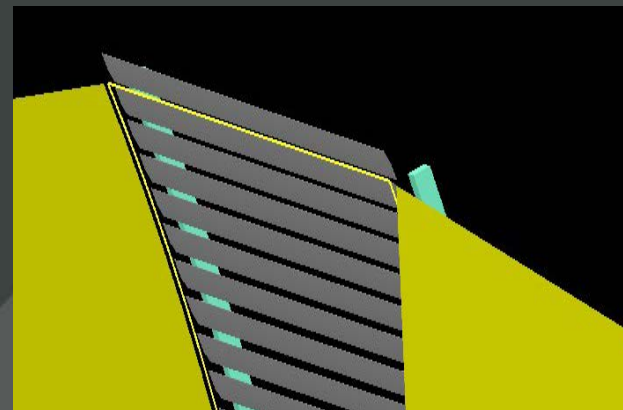
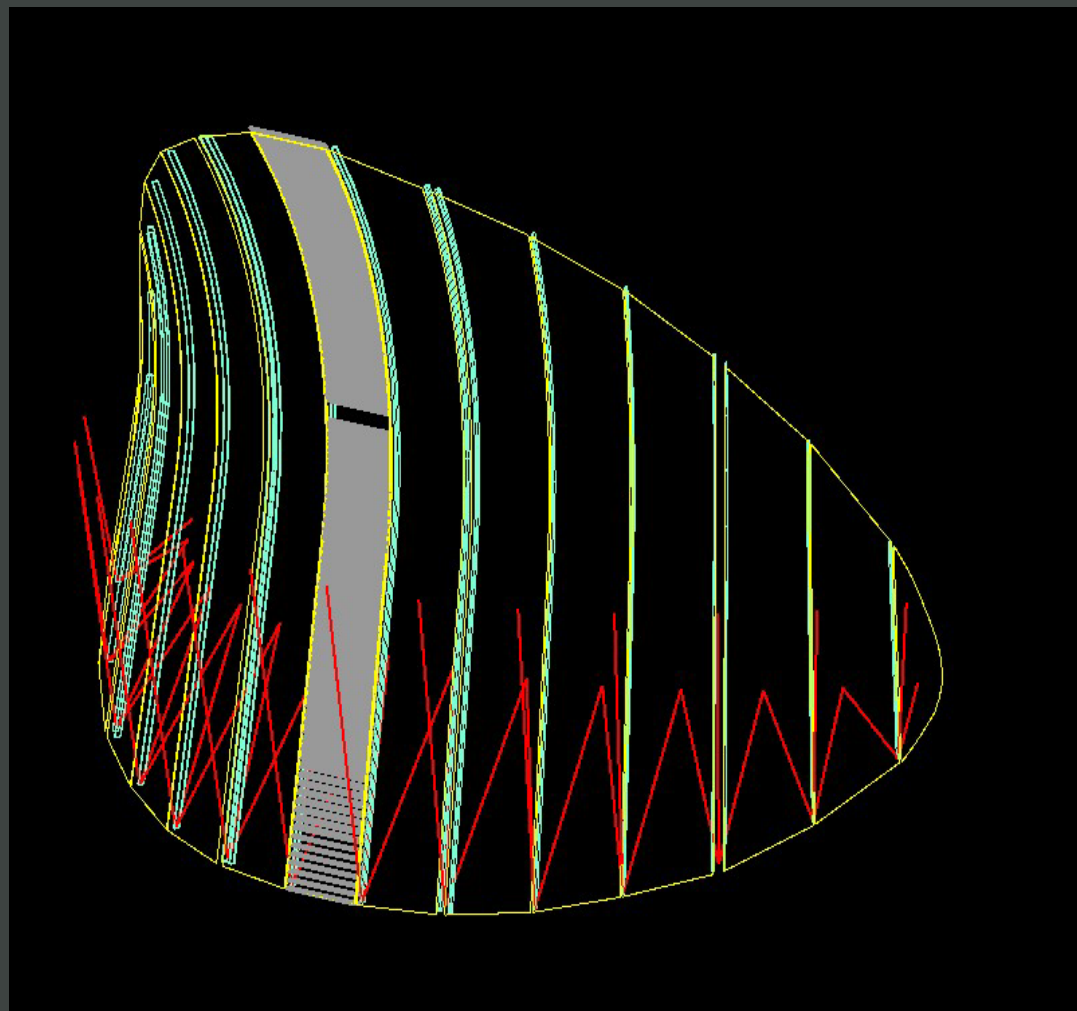


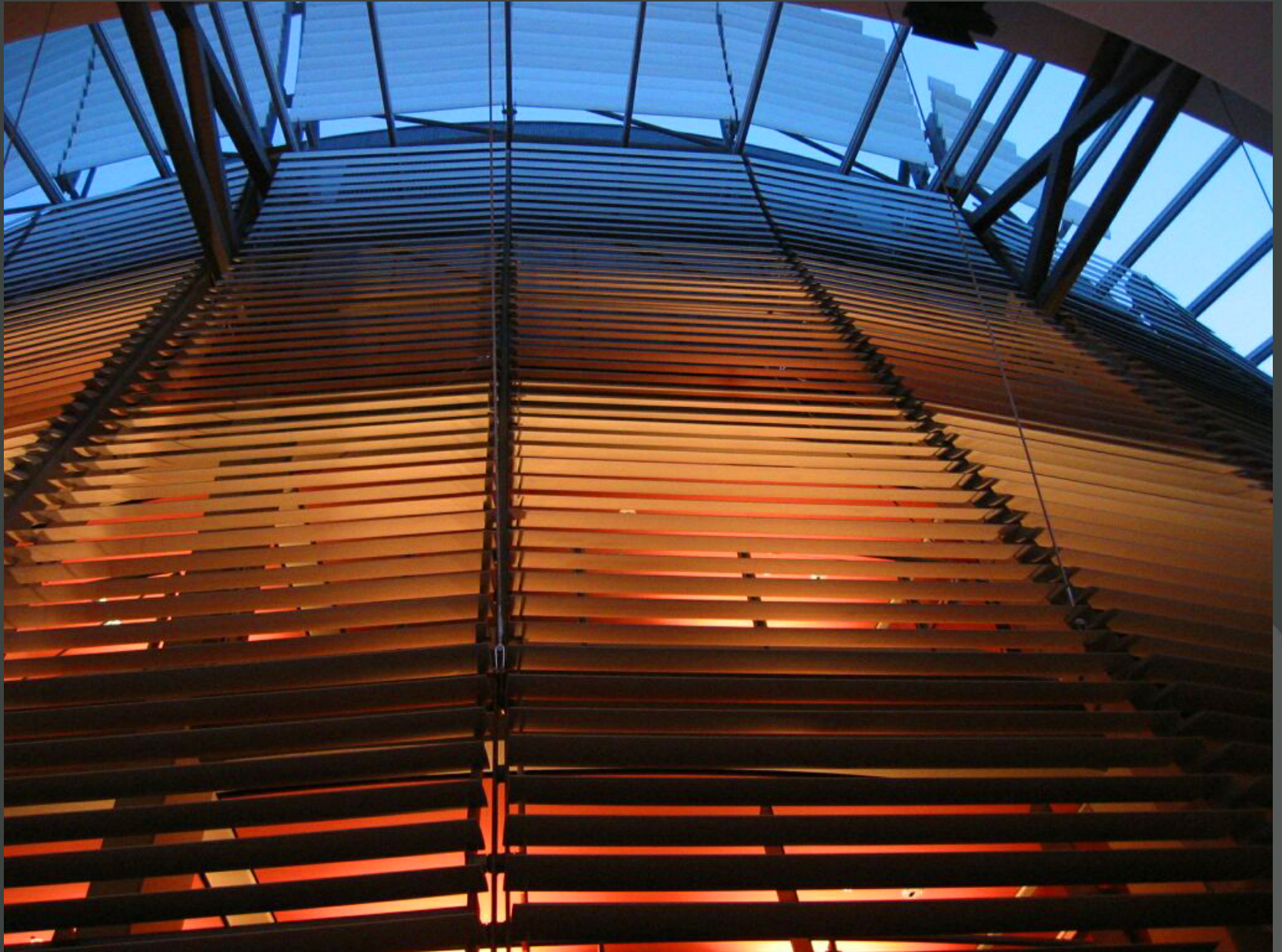
澳洲大學演藝學院項目

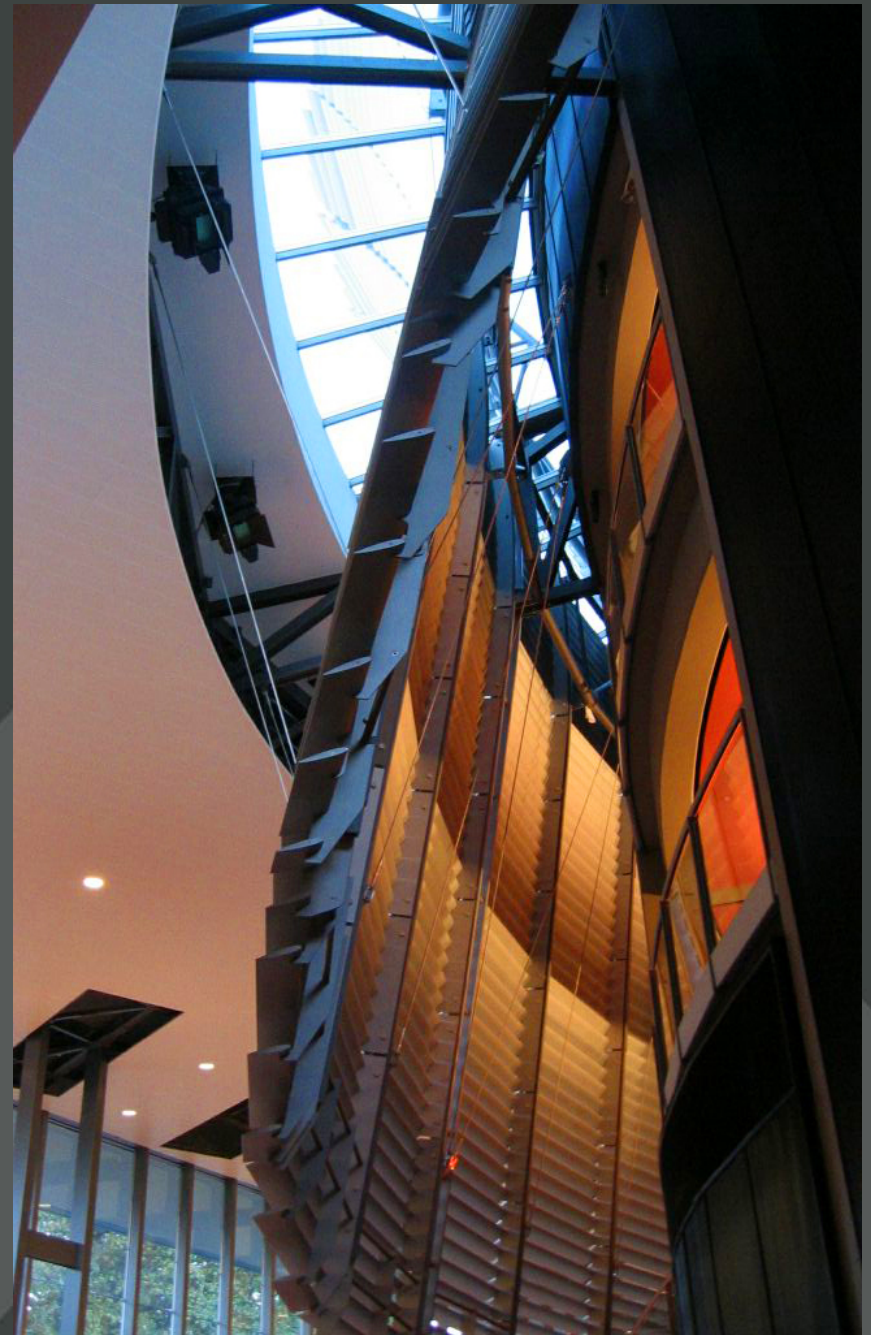
















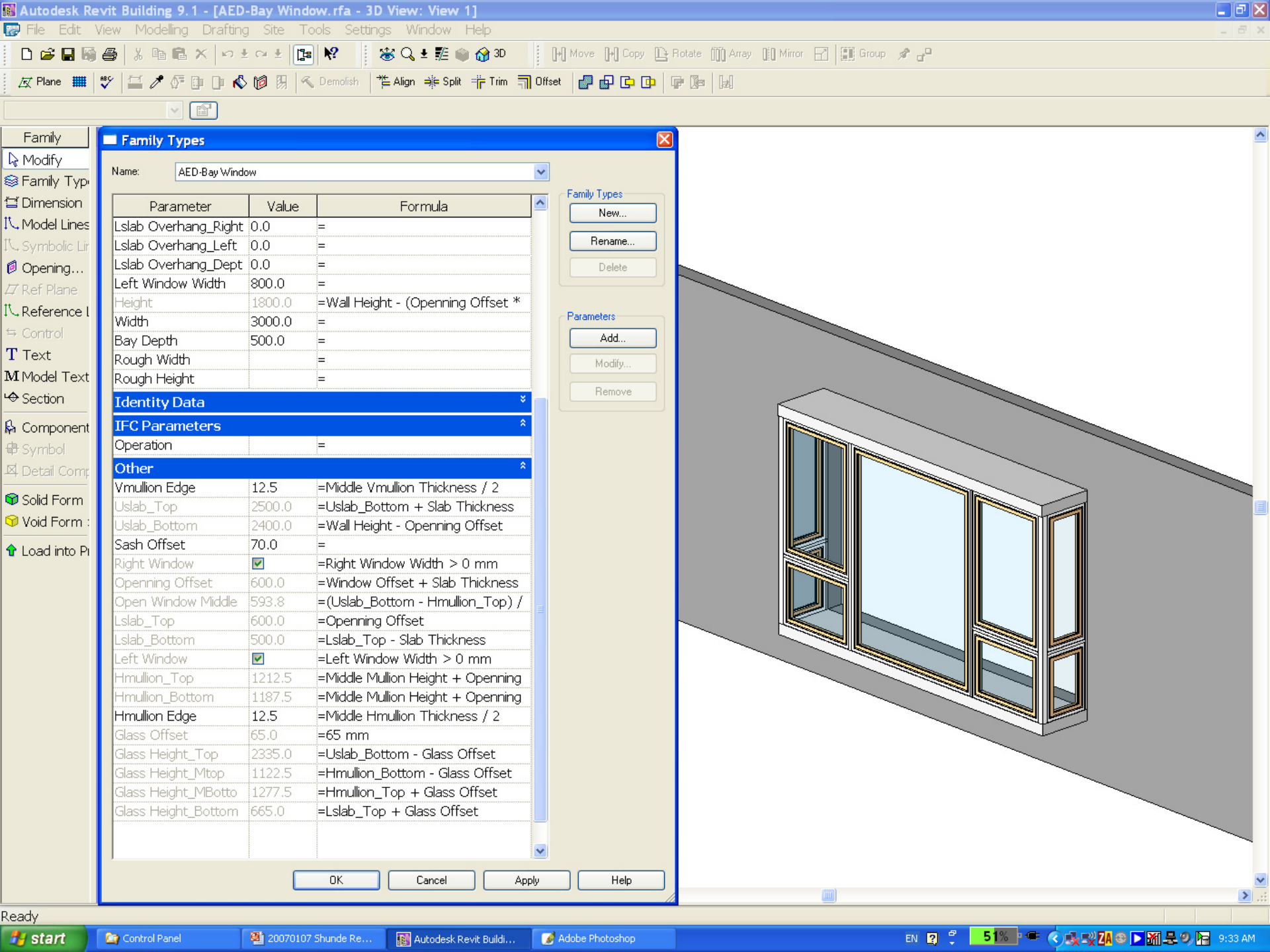


Efficiency 高效率

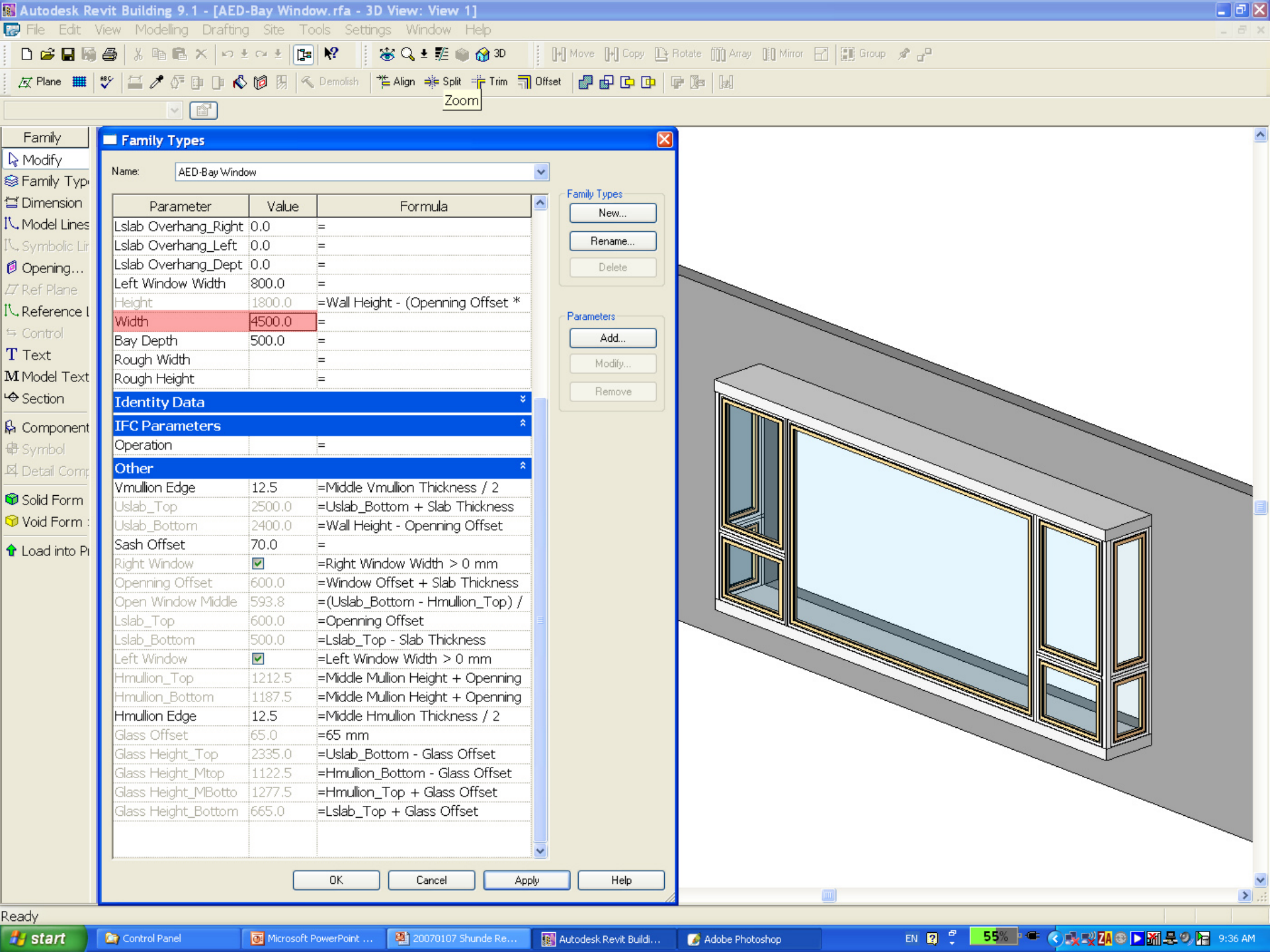




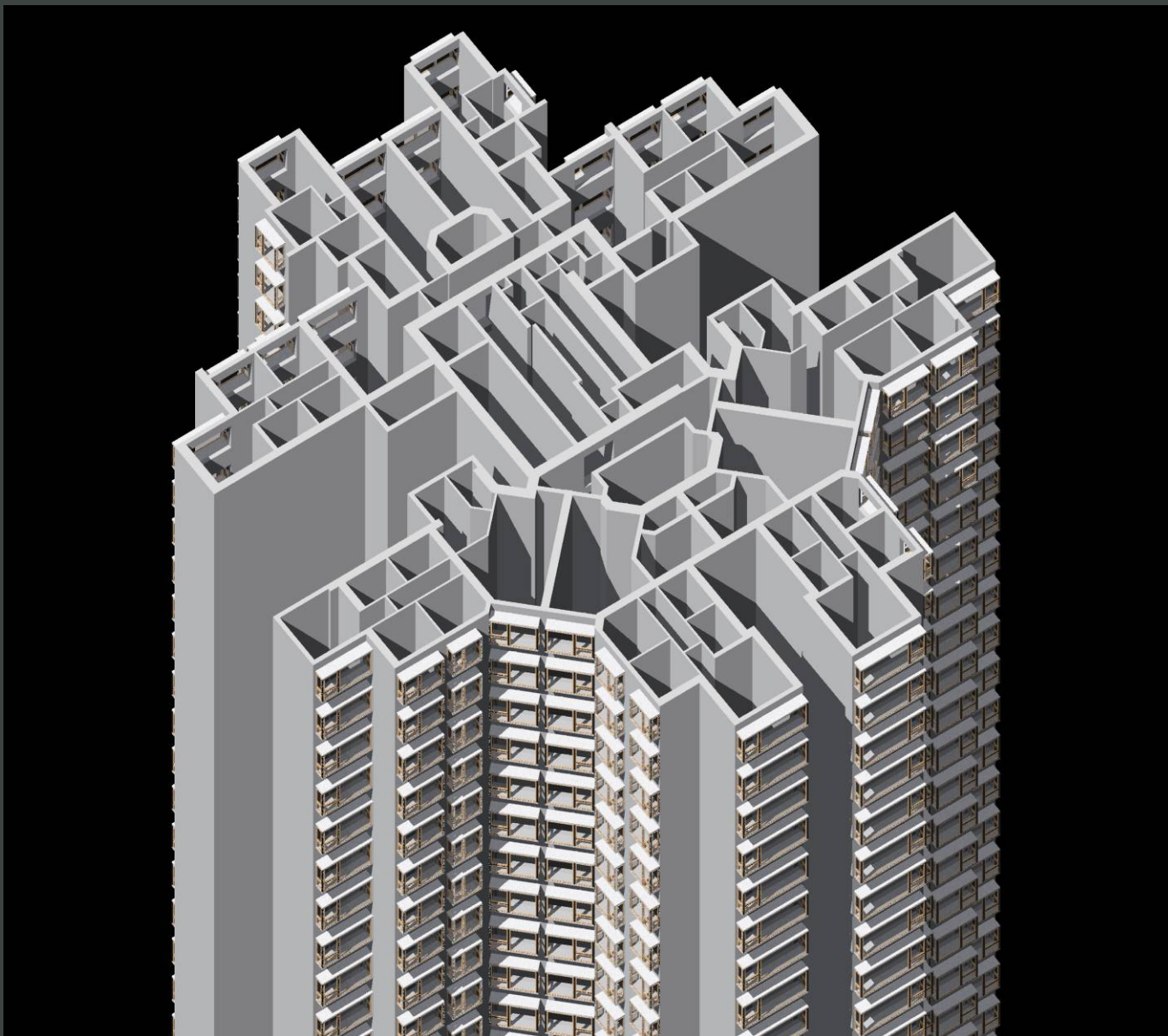
REPETITIONS vs VARIATIONS



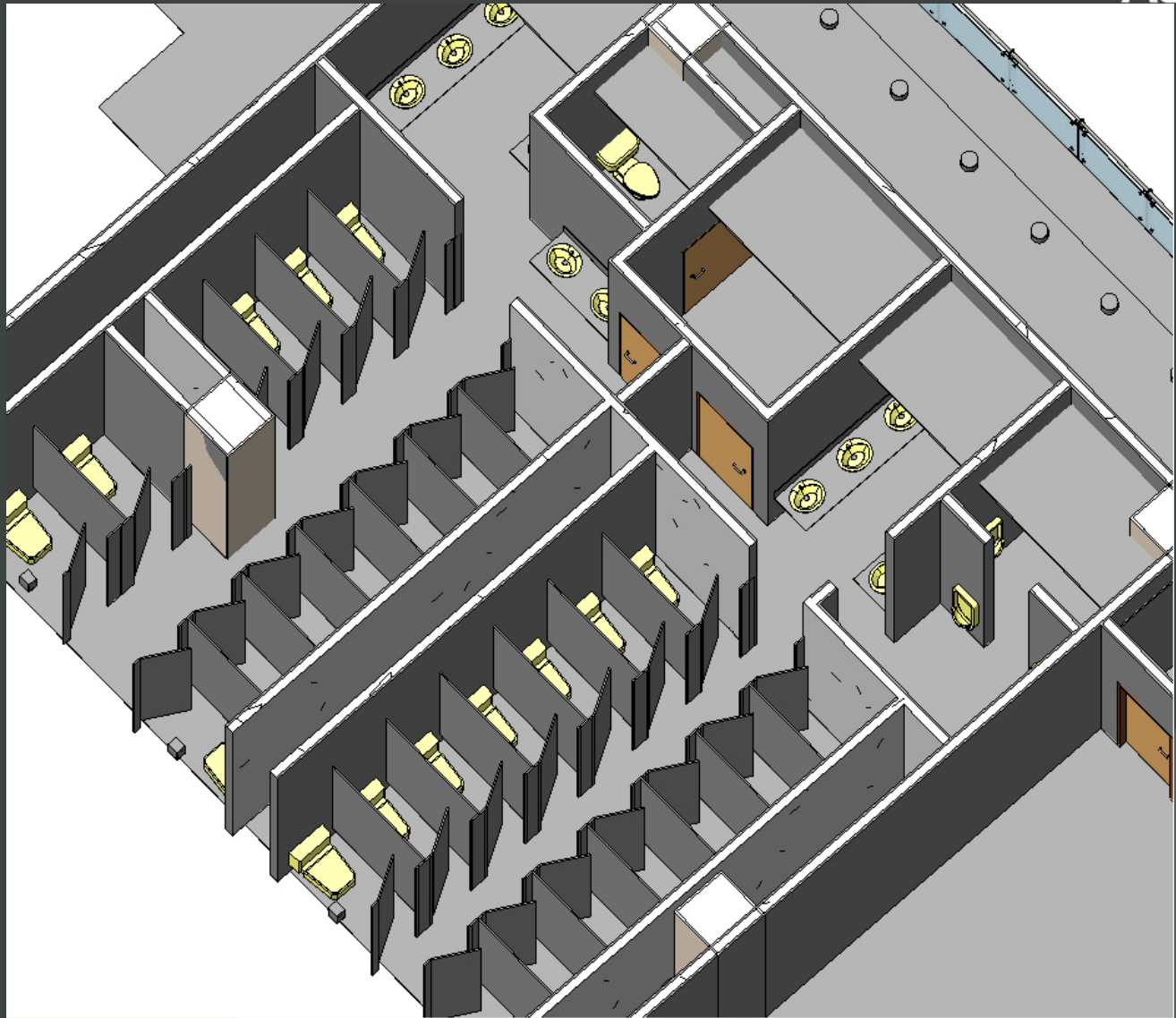
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Lslab Overhang_Left	0.0	=
Lslab Overhang_Dept	0.0	=
Left Window Width	800.0	=
Height	1800.0	=Wall Height - (Opening Offset *
Width	3000.0	=
Bay Depth	500.0	=
Rough Width		=
Rough Height		=
Identity Data		
IFC Parameters		
Operation		=
Other		
Vmullion Edge	12.5	=Middle Vmullion Thickness / 2
Uslab_Top	2500.0	=Uslab_Bottom + Slab Thickness
Uslab_Bottom	2400.0	=Wall Height - Opening Offset
Sash Offset	70.0	=
Right Window	☒	=Right Window Width > 0 mm
Opening Offset	600.0	=Window Offset + Slab Thickness
Open Window Middle	593.8	=(Uslab_Bottom - Hmullion_Top) /
Lslab_Top	600.0	=Opening Offset
Lslab_Bottom	500.0	=Lslab_Top - Slab Thickness
Left Window	☒	=Left Window Width > 0 mm
Hmullion_Top	1212.5	=Middle Mullion Height + Opening
Hmullion_Bottom	1187.5	=Middle Mullion Height + Opening
Hmullion_Edge	12.5	=Middle Hmullion Thickness / 2
Glass Offset	65.0	=65 mm
Glass Height_Top	2335.0	=Uslab_Bottom - Glass Offset
Glass Height_Mtop	1122.5	=Hmullion_Bottom - Glass Offset
Glass Height_MBotto	1277.5	=Hmullion_Top + Glass Offset
Glass Height_Bottom	665.0	=Lslab_Top + Glass Offset



Parameter	Value	Formula
Lslab Overhang_Right	0.0	=
Lslab Overhang_Left	0.0	=
Lslab Overhang_Dept	0.0	=
Left Window Width	800.0	=
Height	1800.0	=Wall Height - (Opening Offset *
Width	4500.0	=
Bay Depth	500.0	=
Rough Width		=
Rough Height		=
Identity Data		
IFC Parameters		
Operation		=
Other		
Vmullion Edge	12.5	=Middle Vmullion Thickness / 2
Uslab_Top	2500.0	=Uslab_Bottom + Slab Thickness
Uslab_Bottom	2400.0	=Wall Height - Opening Offset
Sash Offset	70.0	=
Right Window	☒	=Right Window Width > 0 mm
Opening Offset	600.0	=Window Offset + Slab Thickness
Open Window Middle	593.8	=(Uslab_Bottom - Hmullion_Top) /
Lslab_Top	600.0	=Opening Offset
Lslab_Bottom	500.0	=Lslab_Top - Slab Thickness
Left Window	☒	=Left Window Width > 0 mm
Hmullion_Top	1212.5	=Middle Mullion Height + Opening
Hmullion_Bottom	1187.5	=Middle Mullion Height + Opening
Hmullion Edge	12.5	=Middle Hmullion Thickness / 2
Glass Offset	65.0	=65 mm
Glass Height_Top	2335.0	=Uslab_Bottom - Glass Offset
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Glass Height_MBotto	1277.5	=Hmullion_Top + Glass Offset
Glass Height_Bottom	665.0	=Lslab_Top + Glass Offset



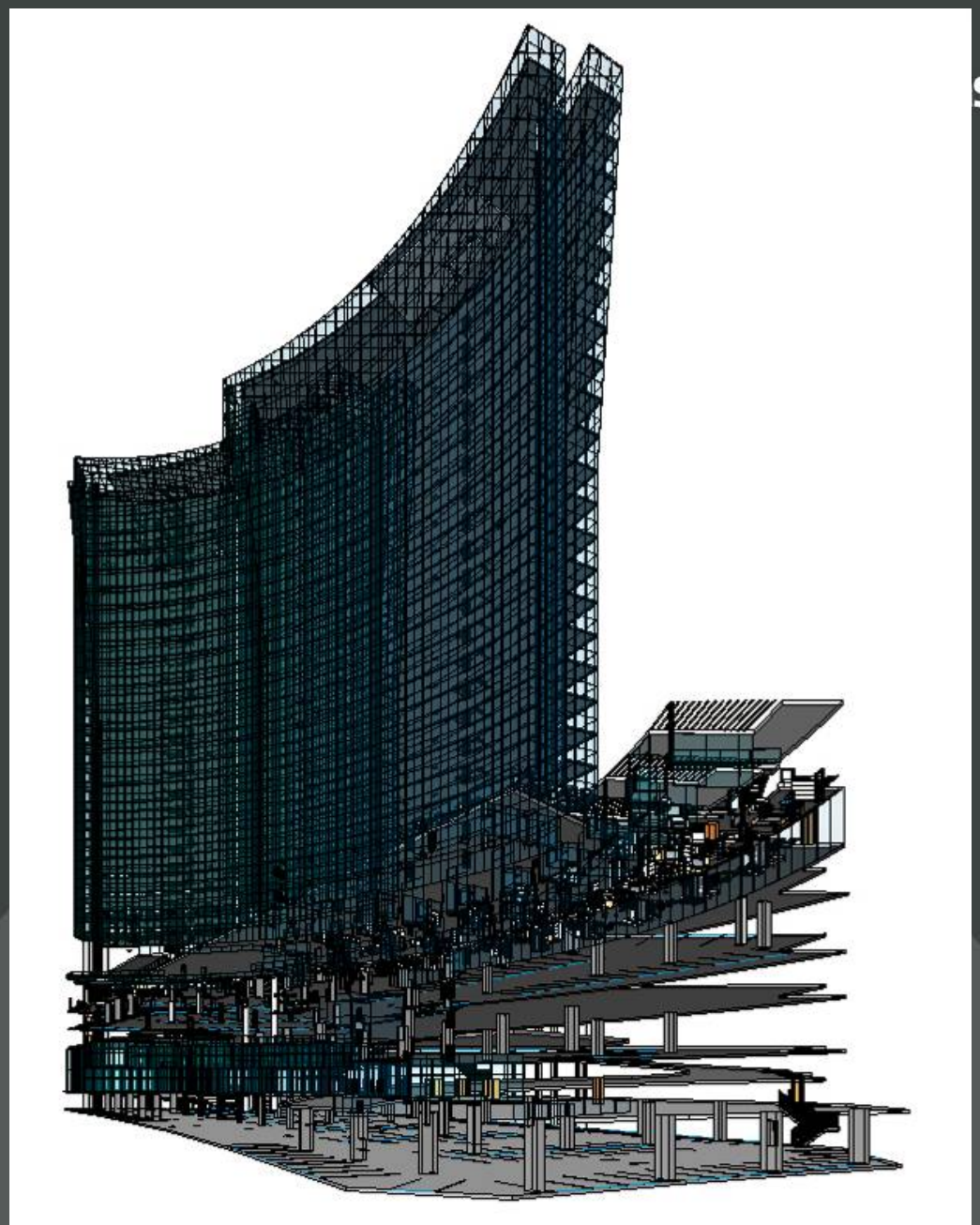
REPETITIONS vs VARIATIONS



CREATIVE TOOLS

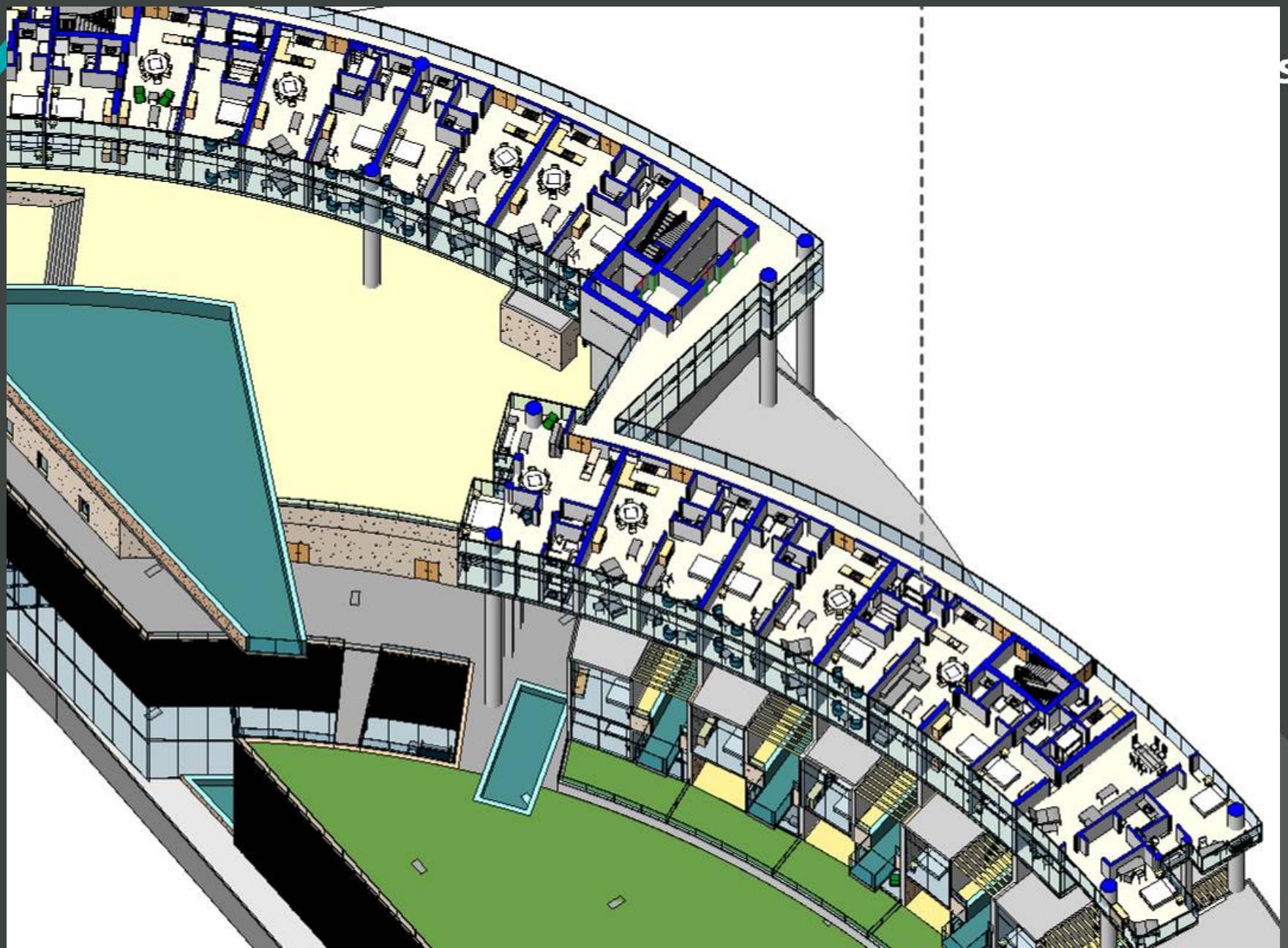


FAÇADE PANEL DESIGN



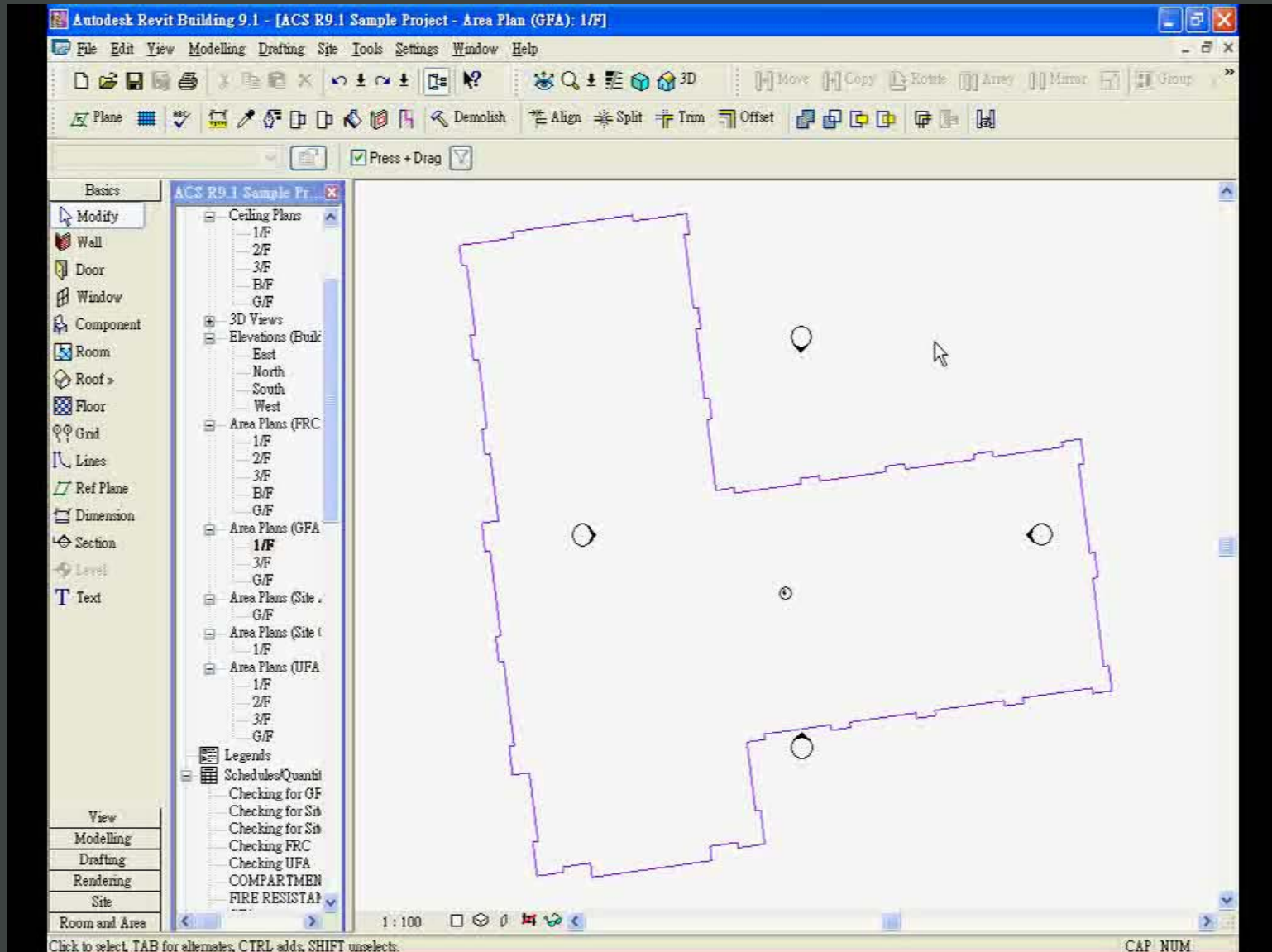
中東酒店項目

HORIZONTAL REPETITION / MODULARIZATION



中東酒店項目

MODULAR DESIGN



STATUTORY SUBMISSION – GFA CALCULATION



Autodesk Revit Building 9.1 - [ACS R9.1 Sample Project - Area Plan (Site Area): G/F]

File Edit View Modelling Drafting Site Tools Settings Window Help

Plane, Grid, Wall, Door, Window, Component, Room, Roof, Floor, Grid, Lines, Ref Plane, Dimension, Section, Level, Text

Basics

Modify, Wall, Door, Window, Component, Room, Roof, Floor, Grid, Lines, Ref Plane, Dimension, Section, Level, Text

View: Modelling, Drafting, Rendering, Site, Room and Area

ACS R9.1 Sample Pr

- Ceiling Plans
 - 1/F
 - 2/F
 - 3/F
 - B/F
 - G/F
- 3D Views
- Elevations (Bulk)
 - East
 - North
 - South
 - West
- Area Plans (FRC)
 - 1/F
 - 2/F
 - 3/F
 - B/F
 - G/F
- Area Plans (GFA)
 - 1/F
 - 3/F
 - G/F
- Area Plans (Site)
 - G/F**
- Area Plans (Site)
 - 1/F
- Area Plans (UFA)
 - 1/F
 - 2/F
 - 3/F
 - G/F
- Legends
- Schedules/Quantities
 - Checking for GF
 - Checking for Site
 - Checking for Site
 - Checking FRC
 - Checking UFA
 - COMPARTMENT
 - FIRE RESISTANCE

CLASS OF SITE: A

SITE AREA (SQ.M): 1990.642

BUILDING HEIGHT (M): 19

PERMITTED NON-DOMESTIC SC (%): 95

PERMITTED NON-DOMESTIC PR: 6.7

ACTUAL SITE COVERAGE (SQ.M): 788.919

ACTUAL SITE COVERAGE IN %: 39.631<95

ACTUAL NON-DOMESTIC GFA (SQ.M): 2237.736

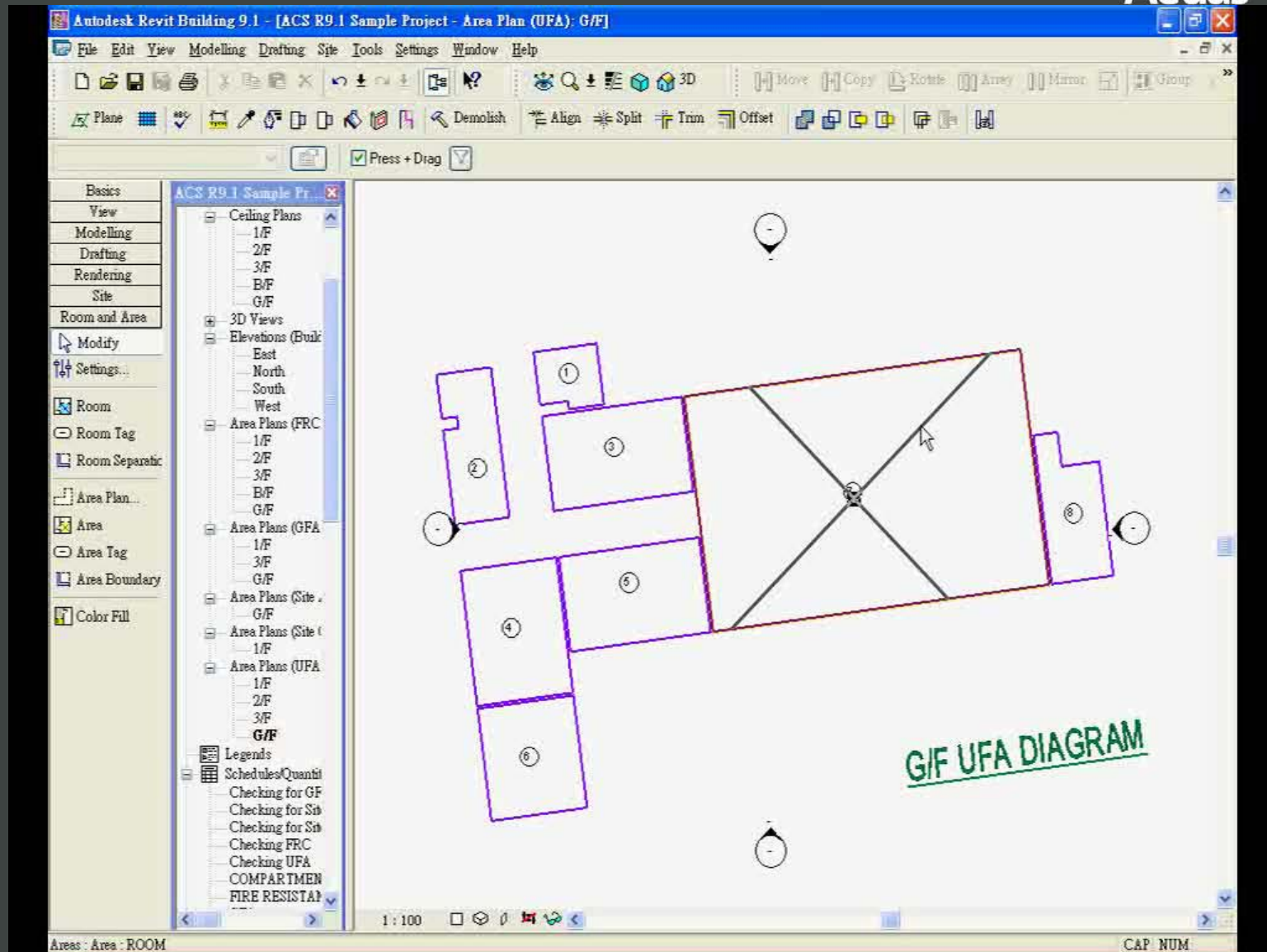
ACTUAL NON-DOMESTIC PR: 1.124<6.7

1 : 50

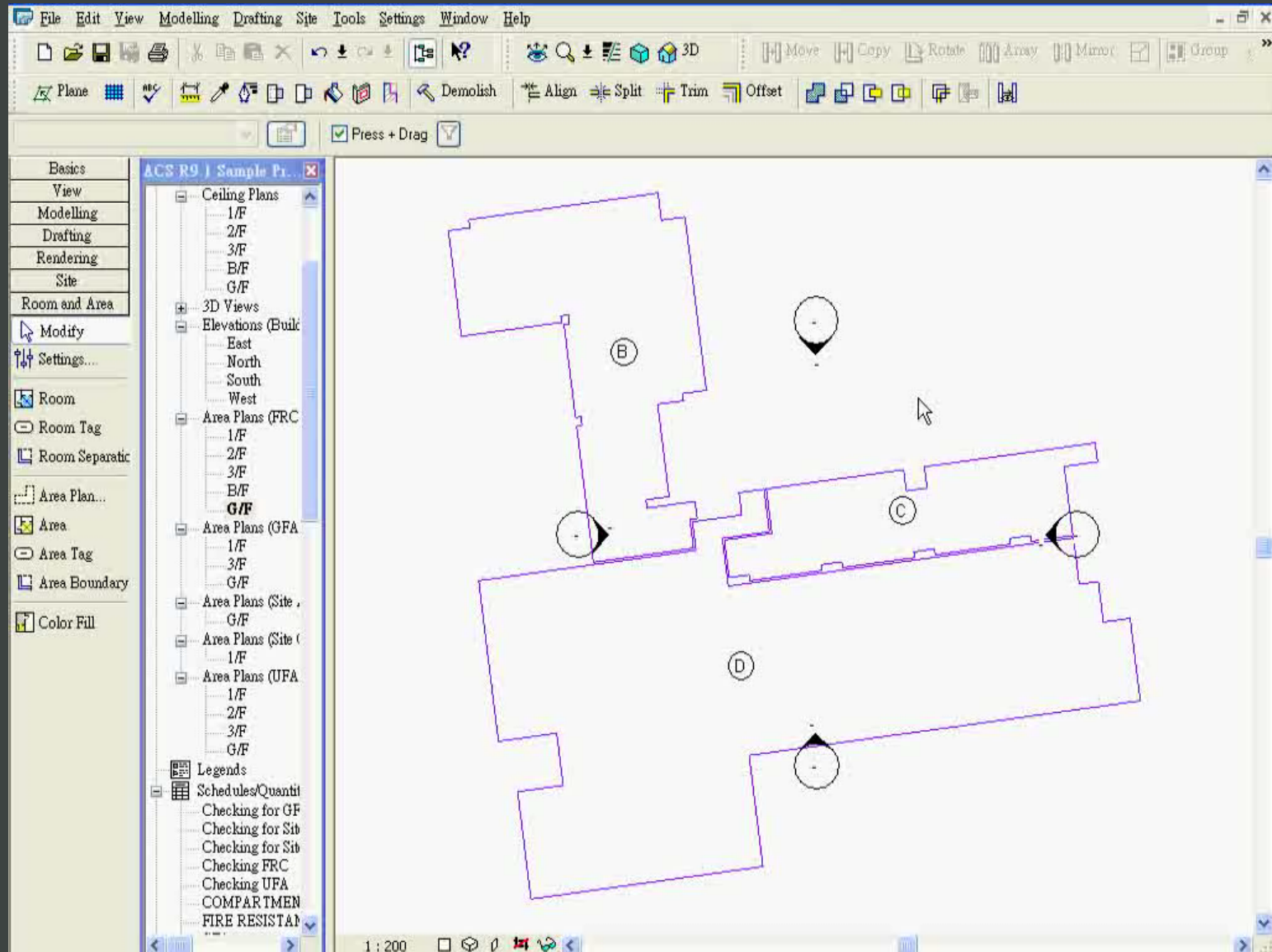
Click to select, TAB for alternates, CTRL adds, SHIFT unselects.

CAP NUM

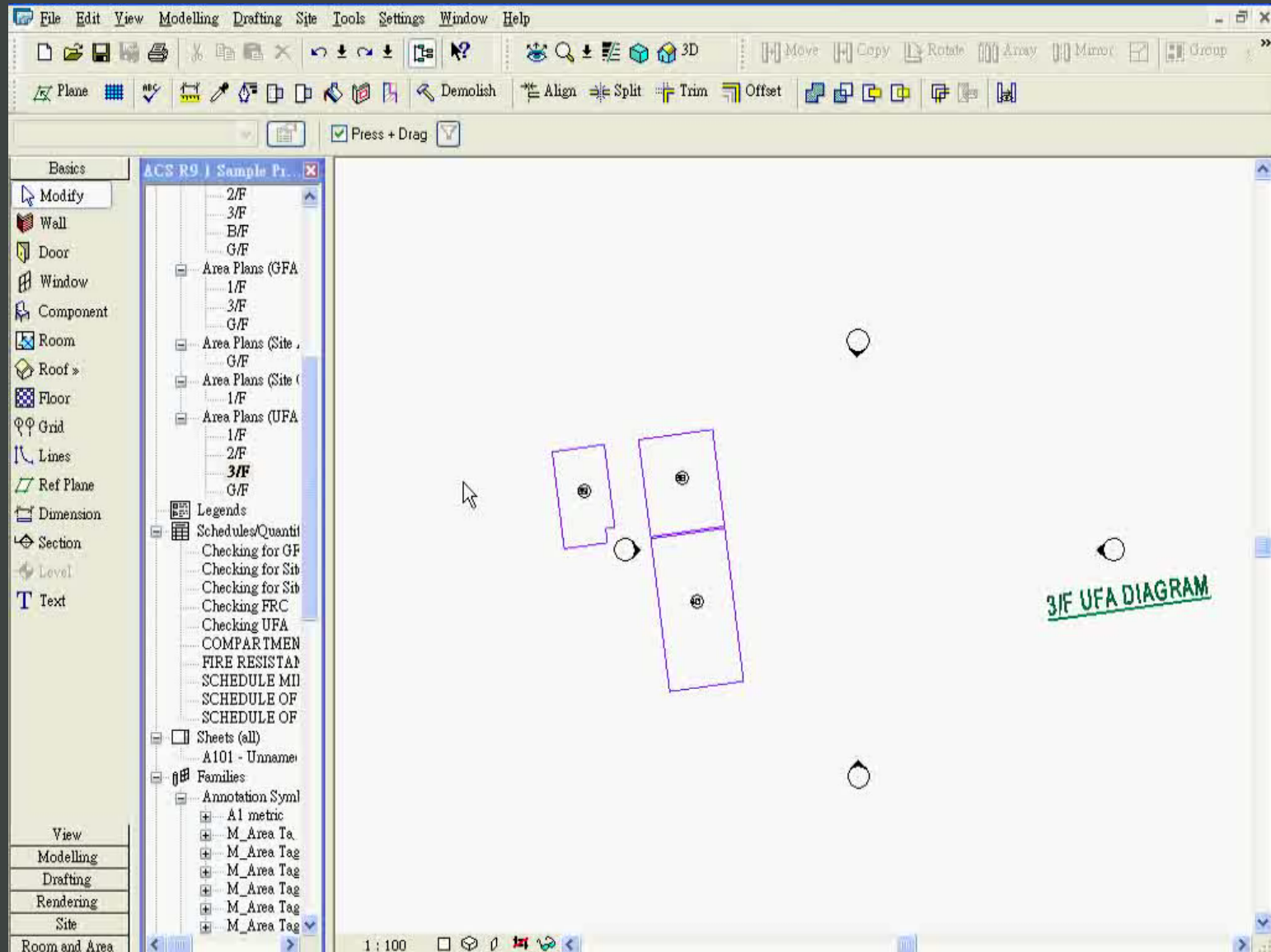
GFA CHANGES



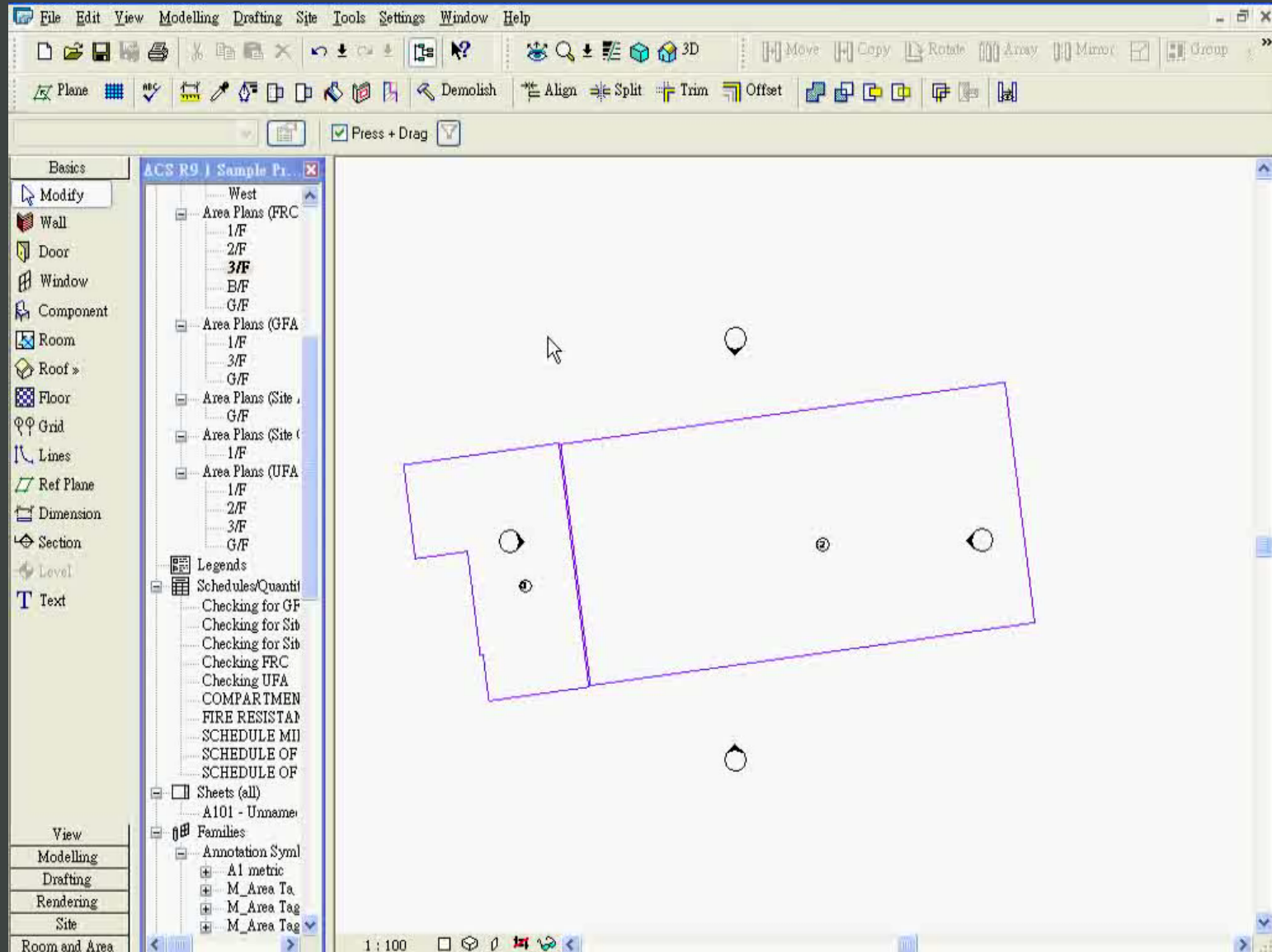
MEANS OF ESCAPE & SANITRAY FITMENT PROVISION



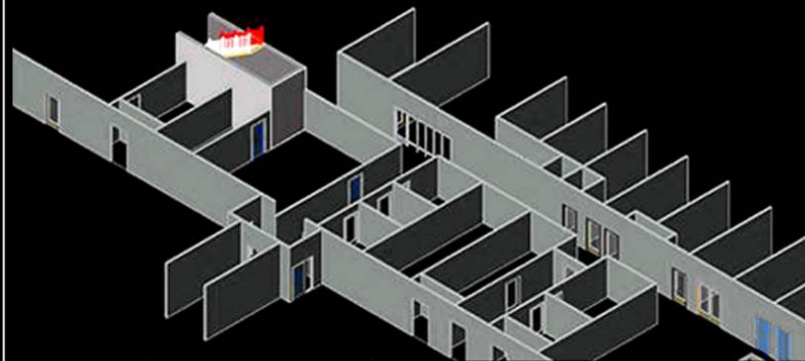
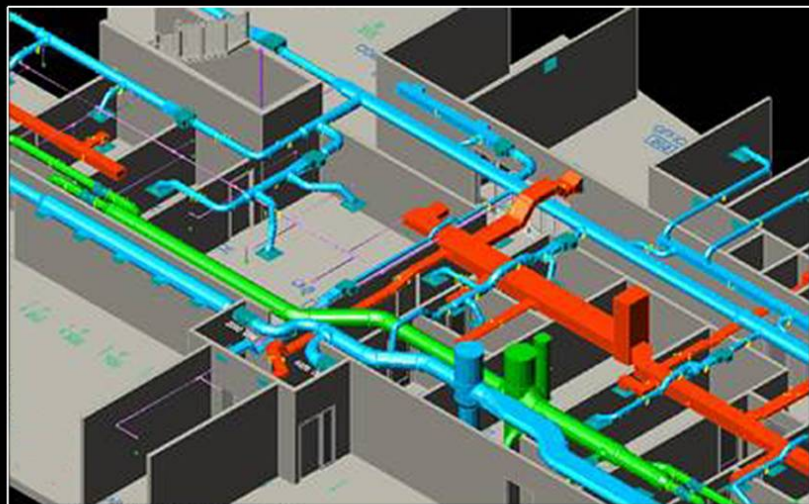
FIRE RESISTING CONSTRUCTION



MEANS OF ESCAPE & SANITARY FITMENT PROVISION

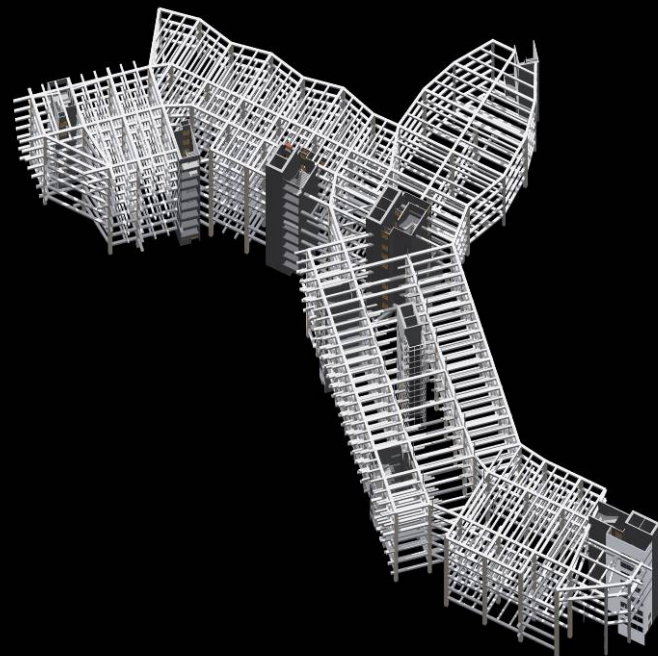
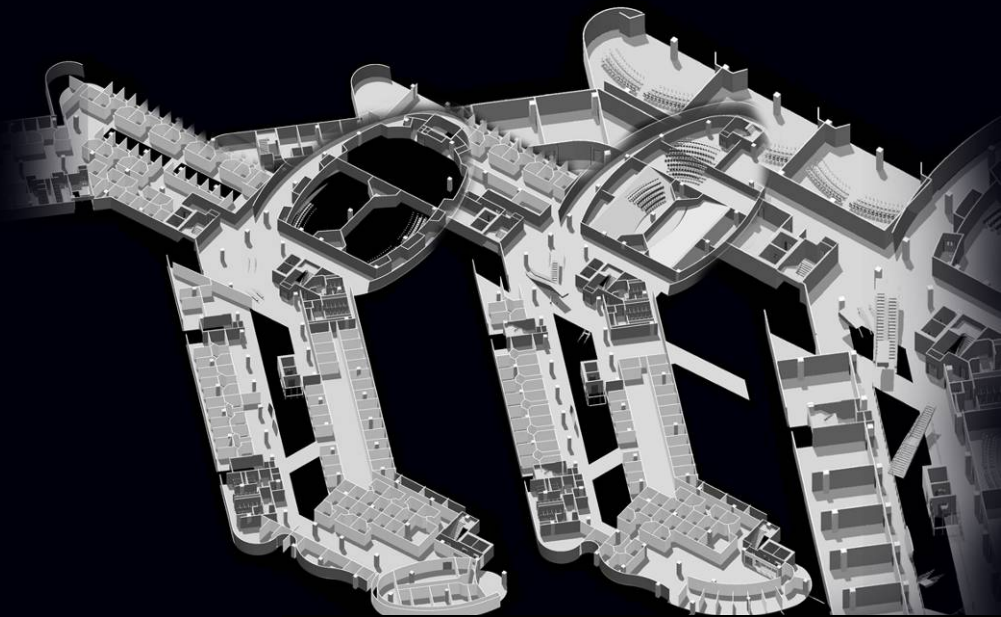


FIRE RESISTING CONSTRUCTION



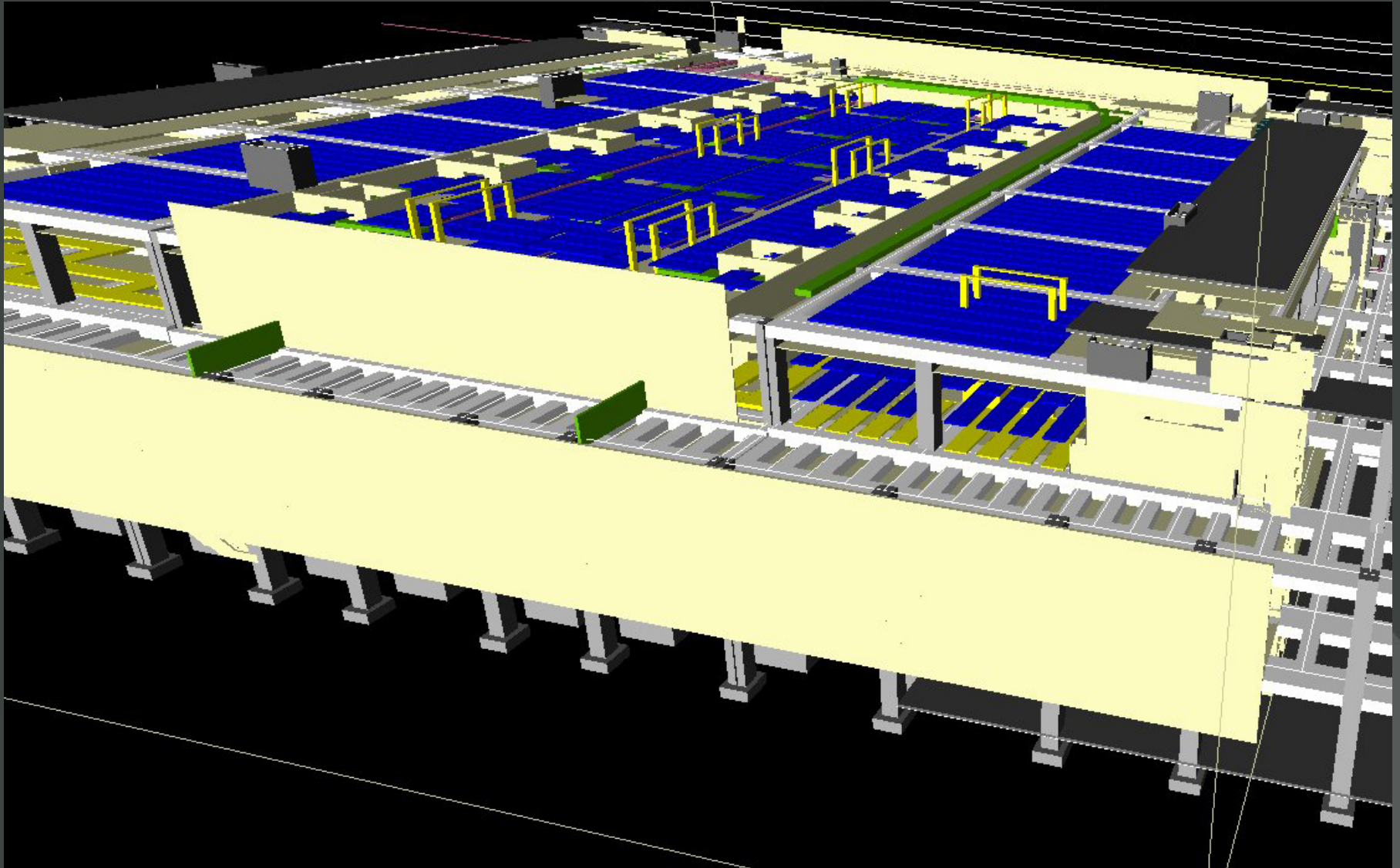
Clash Analysis
Full set of construction
Combined Services Drawings
produced

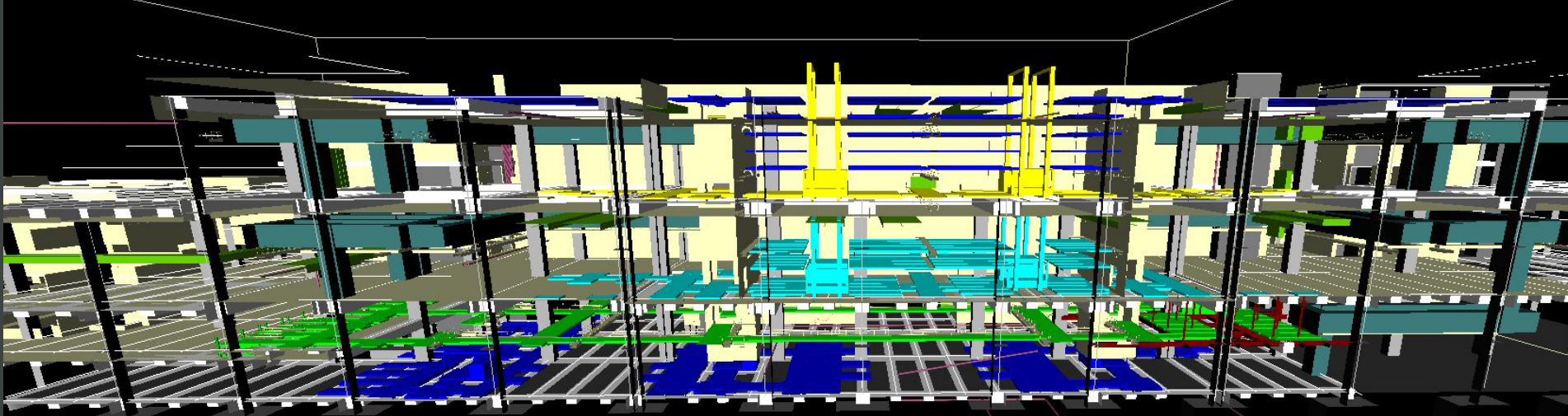
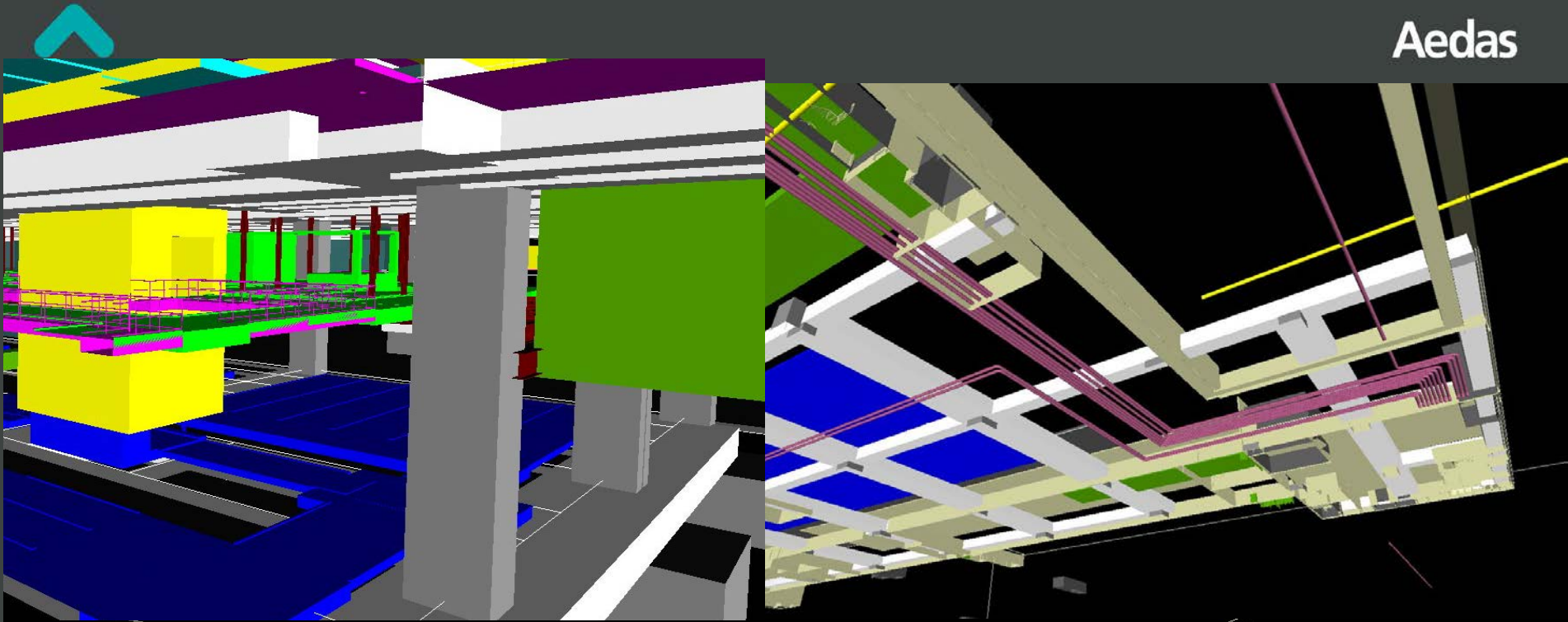
Close-up collaboration



香港城市大學教學大樓項目

DISCIPLINES COLLABORATION





物流大樓項目

DISCIPLINES COLLABORATION



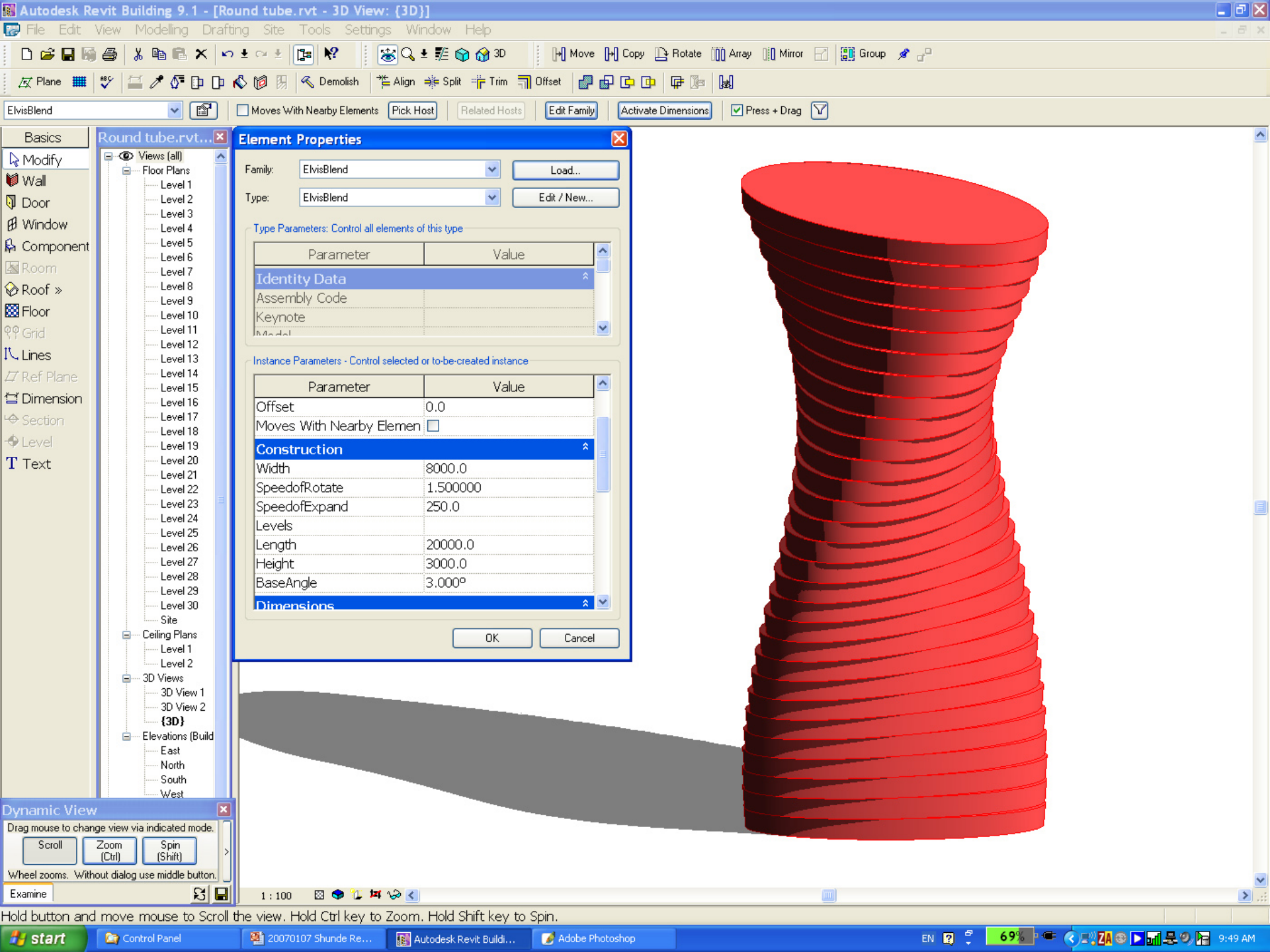
Wall Schedule							
Family	Family and Type	Length	Width	Count	Area	Volume	Aedas
Basic Wall: AED-Concrete - 50mm + Render One sides							
Basic Wall	Basic Wall: AED-Concrete - 50mm + Render One sides	200	50	1	0.548 m2	0.027 m3	
Basic Wall	Basic Wall: AED-Concrete - 50mm + Render One sides	200	50	1	0.548 m2	0.027 m3	
Basic Wall	Basic Wall: AED-Concrete - 50mm + Render One sides	200	50	1	0.548 m2	0.027 m3	
Basic Wall	Basic Wall: AED-Concrete - 50mm + Render One sides	200	50	1	0.548 m2	0.027 m3	
Basic Wall	Basic Wall: AED-Concrete - 50mm + Render One sides	200	50	1	0.548 m2	0.027 m3	
0.548 m2: 5		1000		5	2.738 m2	0.137 m3	
Basic Wall	Basic Wall: AED-Concrete - 50mm + Render One sides	200	50	1	0.578 m2	0.029 m3	
Basic Wall	Basic Wall: AED-Concrete - 50mm + Render One sides	200	50	1	0.578 m2	0.029 m3	
Basic Wall	Basic Wall: AED-Concrete - 50mm + Render One sides	200	50	1	0.578 m2	0.029 m3	
Basic Wall	Basic Wall: AED-Concrete - 50mm + Render One sides	200	50	1	0.578 m2	0.029 m3	
Basic Wall	Basic Wall: AED-Concrete - 50mm + Render One sides	200	50	1	0.578 m2	0.029 m3	
Basic Wall	Basic Wall: AED-Concrete - 50mm + Render One sides	200	50	1	0.578 m2	0.029 m3	
0.578 m2: 6		1200		6	3.465 m2	0.173 m3	
Basic Wall	Basic Wall: AED-Concrete - 50mm + Render One sides	200	50	1	0.608 m2	0.030 m3	
Basic Wall	Basic Wall: AED-Concrete - 50mm + Render One sides	200	50	1	0.608 m2	0.030 m3	
Basic Wall	Basic Wall: AED-Concrete - 50mm + Render One sides	200	50	1	0.608 m2	0.030 m3	
Basic Wall	Basic Wall: AED-Concrete - 50mm + Render One sides	200	50	1	0.608 m2	0.030 m3	
0.608 m2: 4		800		4	2.430 m2	0.122 m3	
Basic Wall	Basic Wall: AED-Concrete - 50mm + Render One sides	200	50	1	0.638 m2	0.032 m3	
Basic Wall	Basic Wall: AED-Concrete - 50mm + Render One sides	200	50	1	0.638 m2	0.032 m3	
Basic Wall	Basic Wall: AED-Concrete - 50mm + Render One sides	200	50	1	0.638 m2	0.032 m3	
0.638 m2: 3		600		3	1.913 m2	0.096 m3	
Basic Wall	Basic Wall: AED-Concrete - 50mm + Render One sides	250	50	1	0.730 m2	0.037 m3	
Basic Wall	Basic Wall: AED-Concrete - 50mm + Render One sides	250	50	1	0.730 m2	0.037 m3	
0.730 m2: 2		500		2	1.460 m2	0.073 m3	

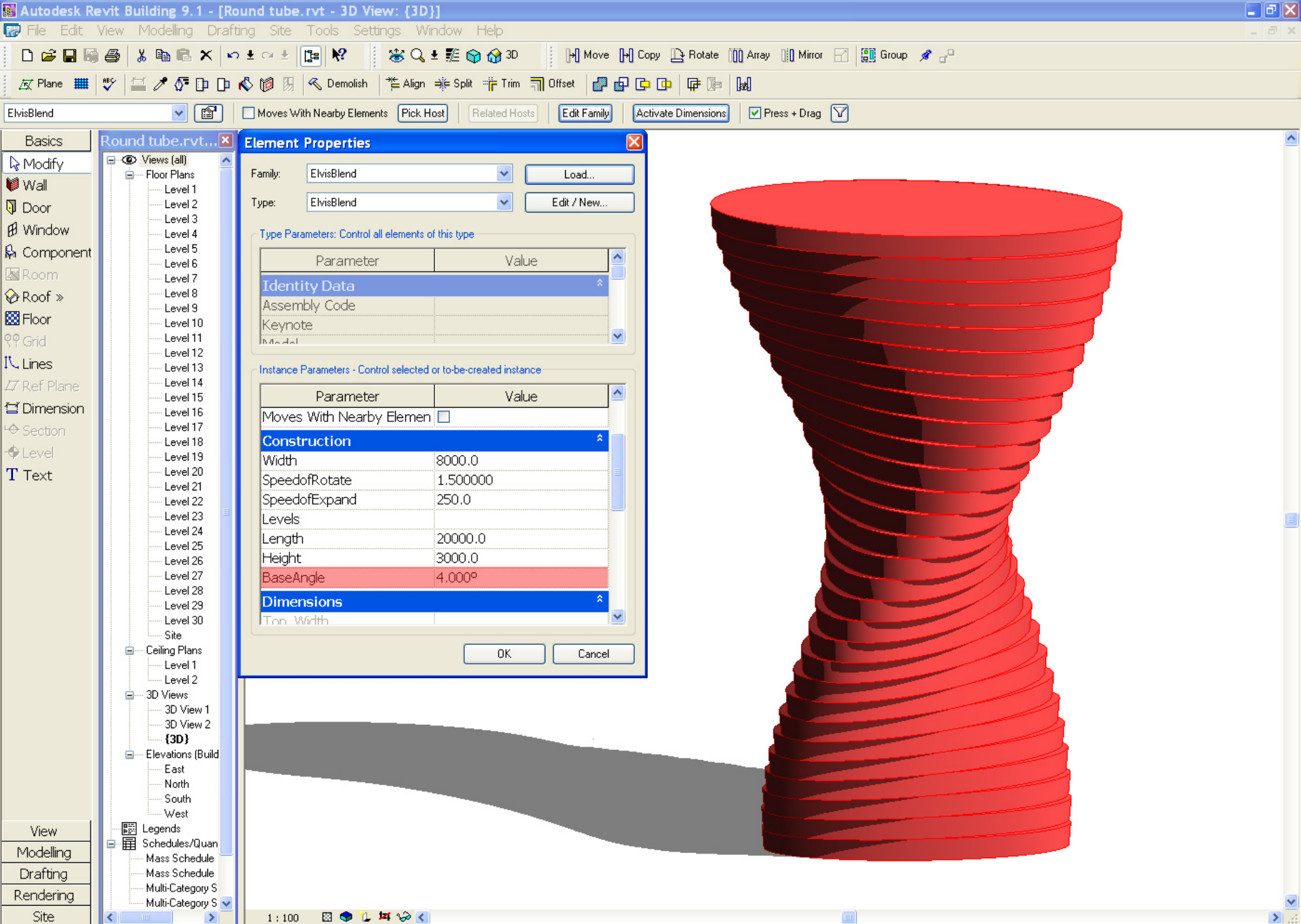
DISCIPLINES COLLABORATION



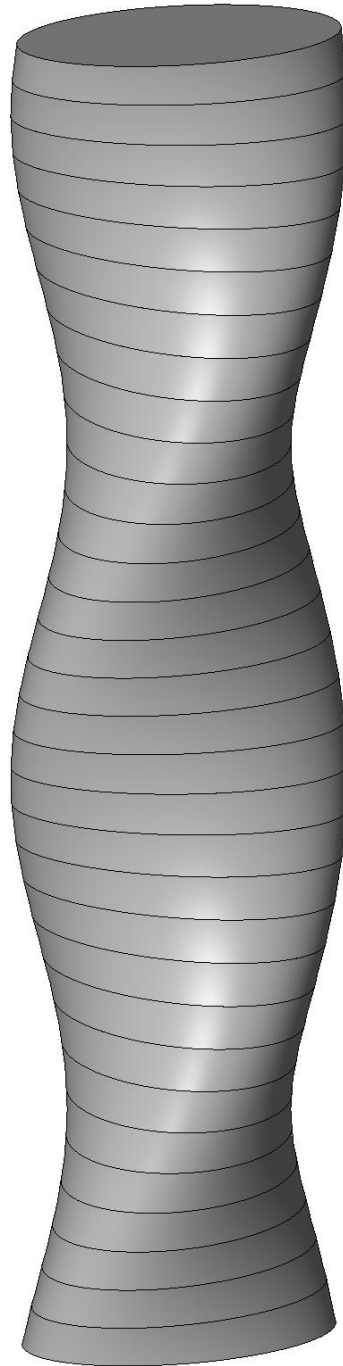
Creativity 創造性







Click to select, TAB for alternates, CTRL adds, SHIFT unselects.





absoluteworld BUILDING 2

AbsoluteWorld's two buildings, as envisioned by their creator, Yansong Ma. The buildings were designed to complement and enhance each other, each with its own unique personality, but created from the same architectural language.

Commenting on the design, Ma says: "They talk to each other and harmonize with each other. There is a synergy between them, an aura which transcends each of the individual buildings to create a totally unique and original urban space."

absoluteworld BUILDING 1



MON. - THURS.: 12 P.M. - 7 P.M.
SAT. & SUN.: 11 A.M. - 6 P.M.
FRI.: CLOSED

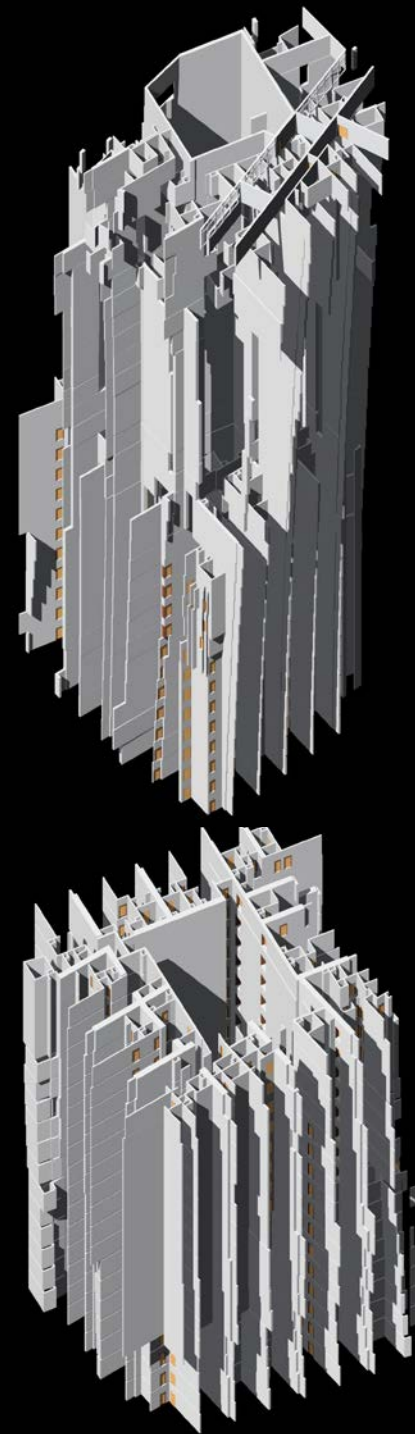




Program: Residential, Site Area: 3,746 sqm
Floor Area: 659,659 sqm | Building Height: 345 m

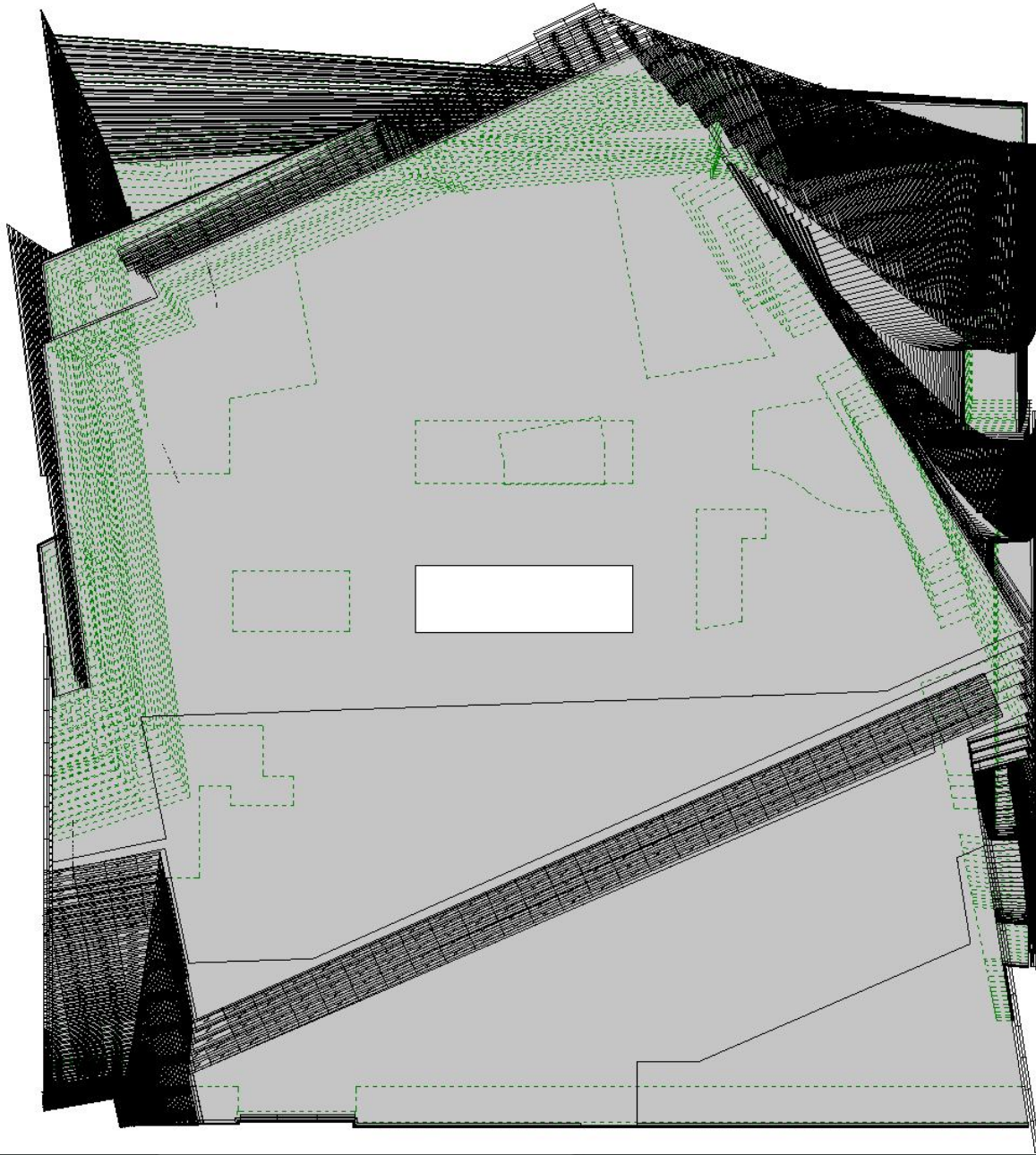


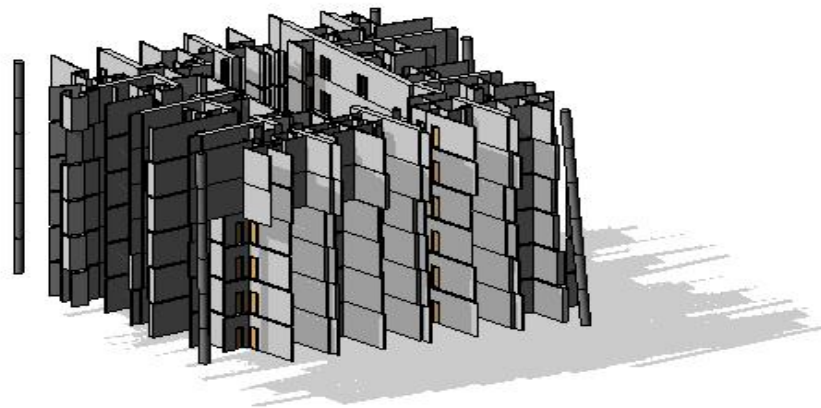
Dubai **Ocean Heights One**

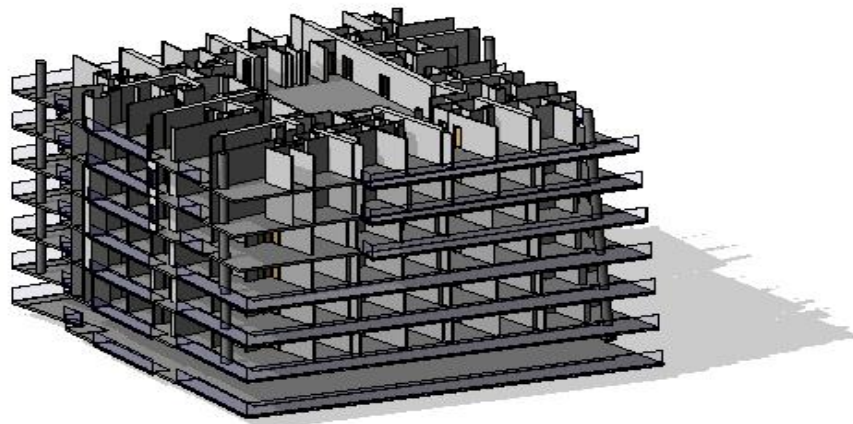


中東住宅項目

COMPLEX GEOMETRY





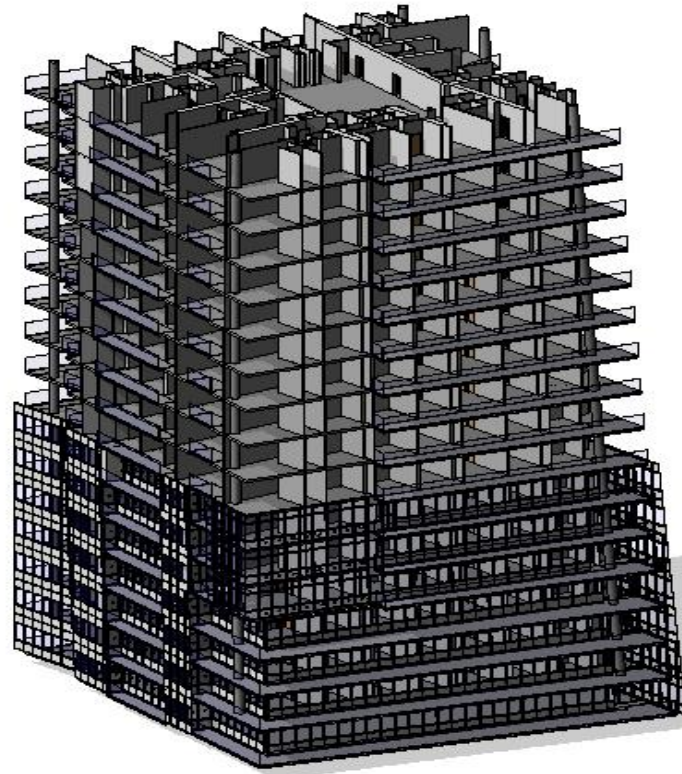


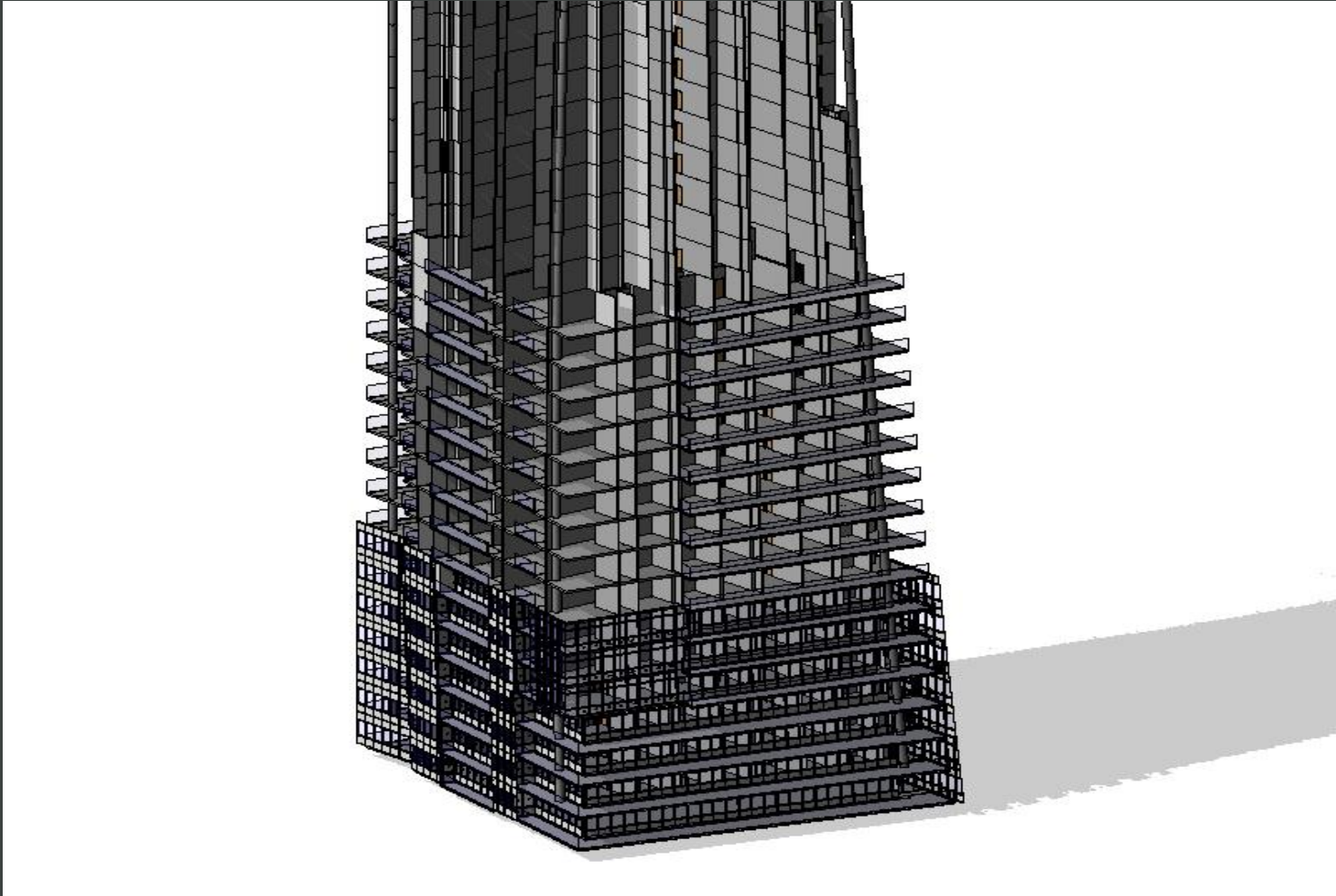








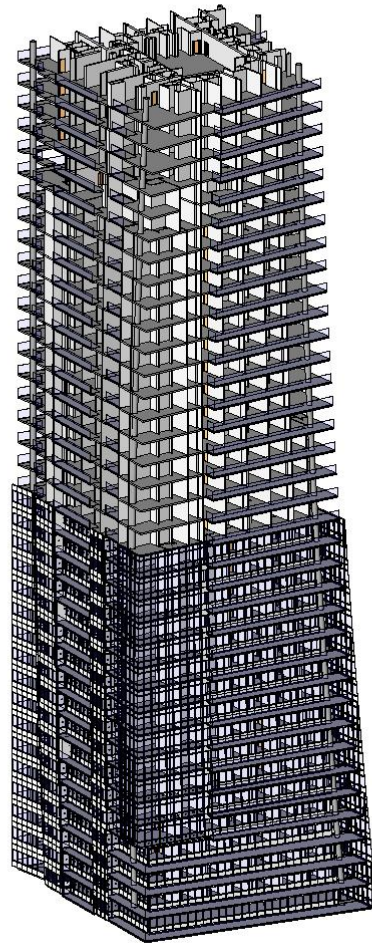


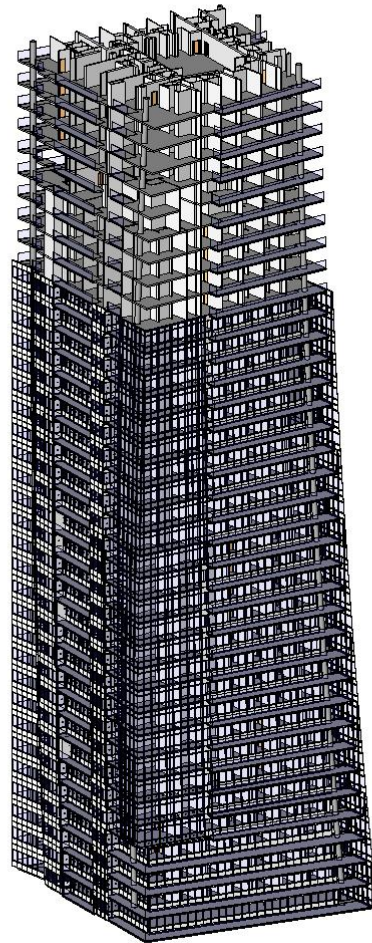


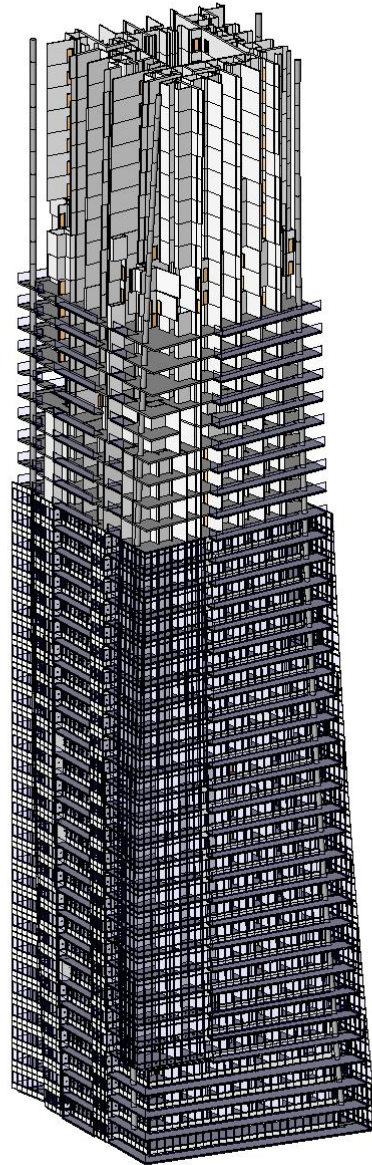


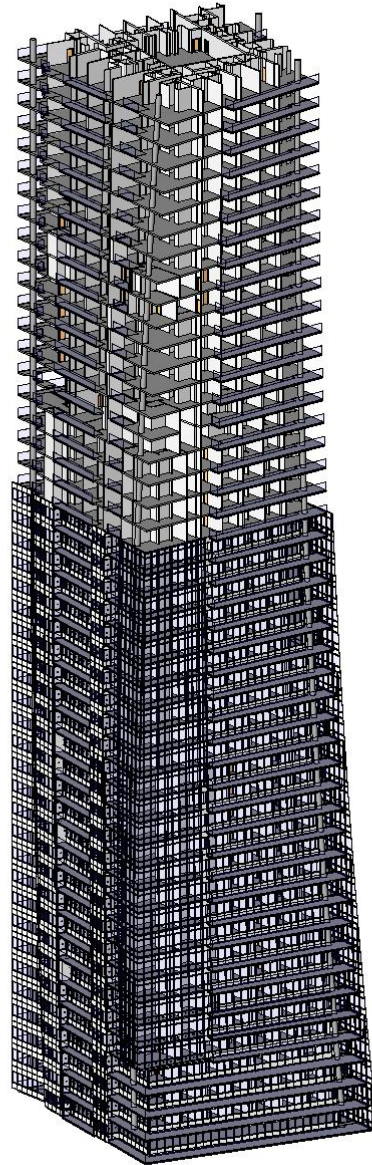


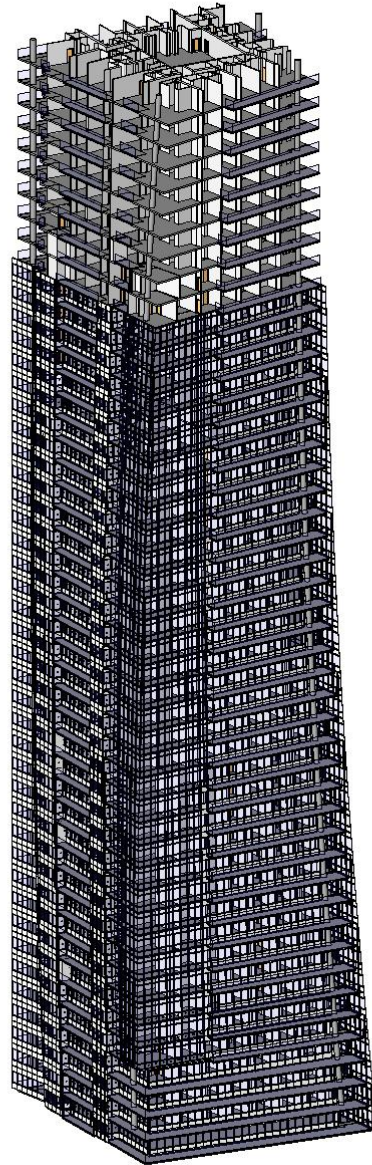


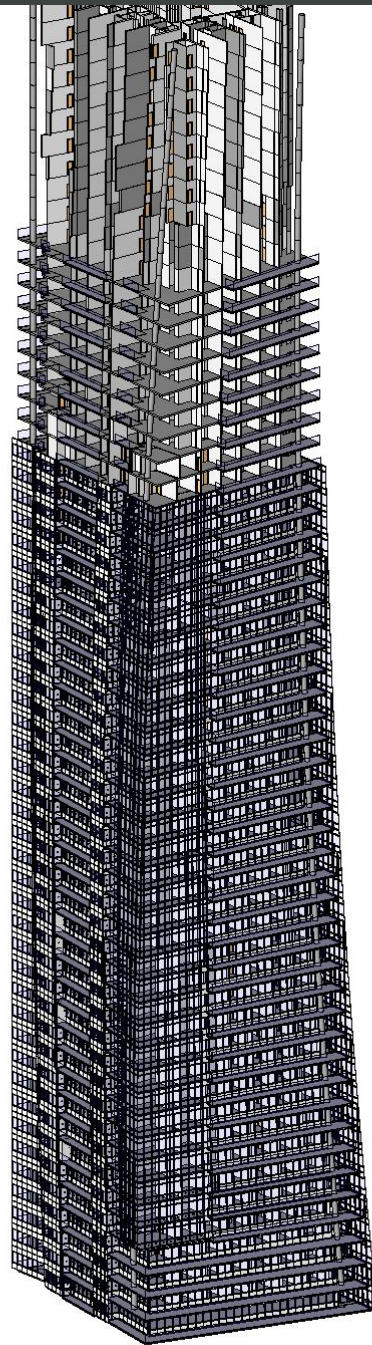


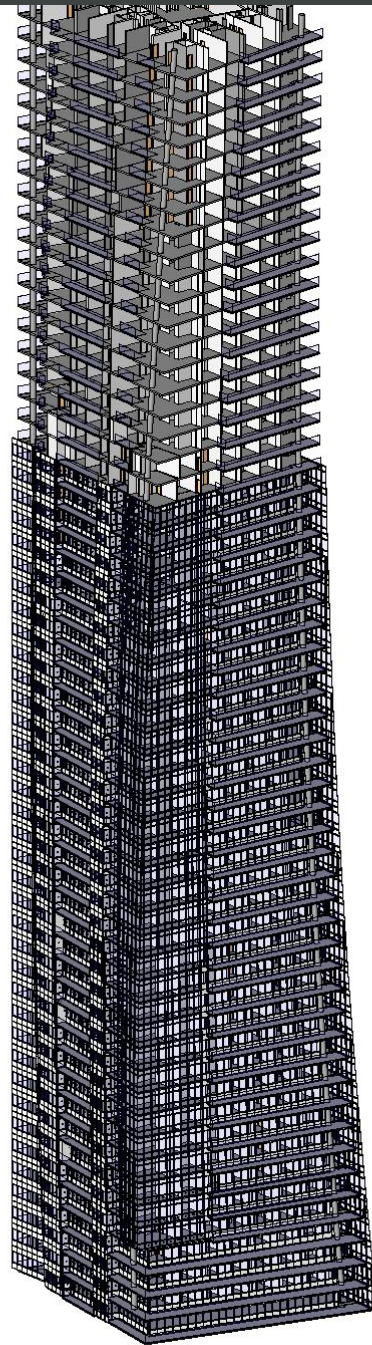


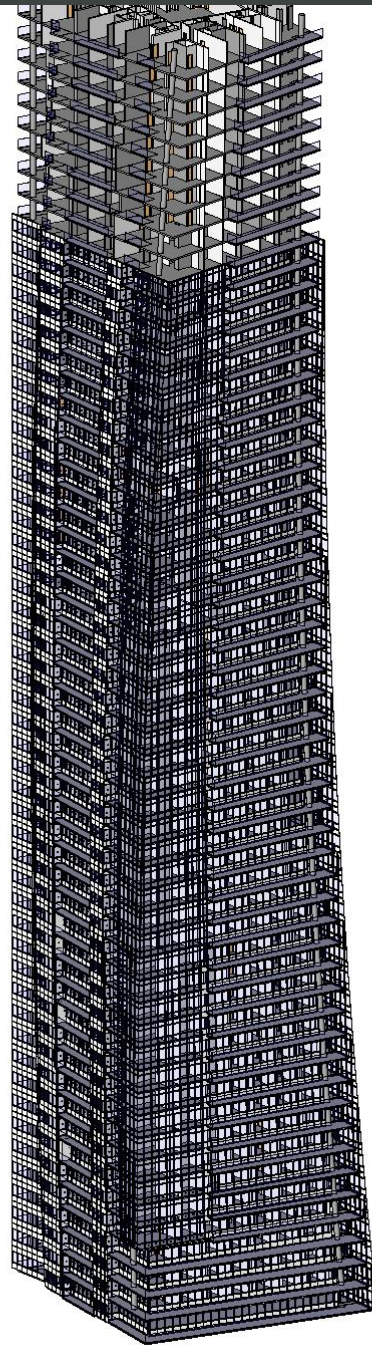
















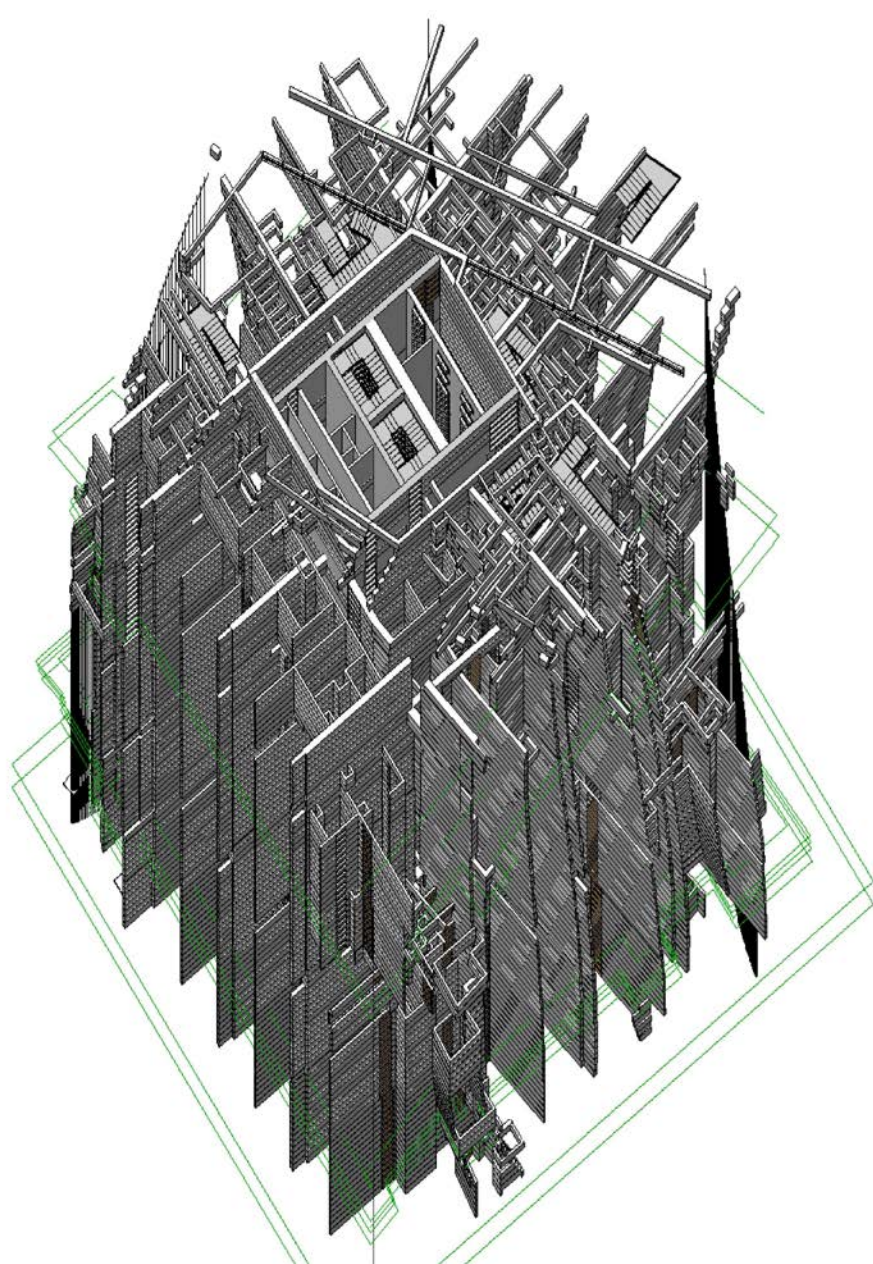
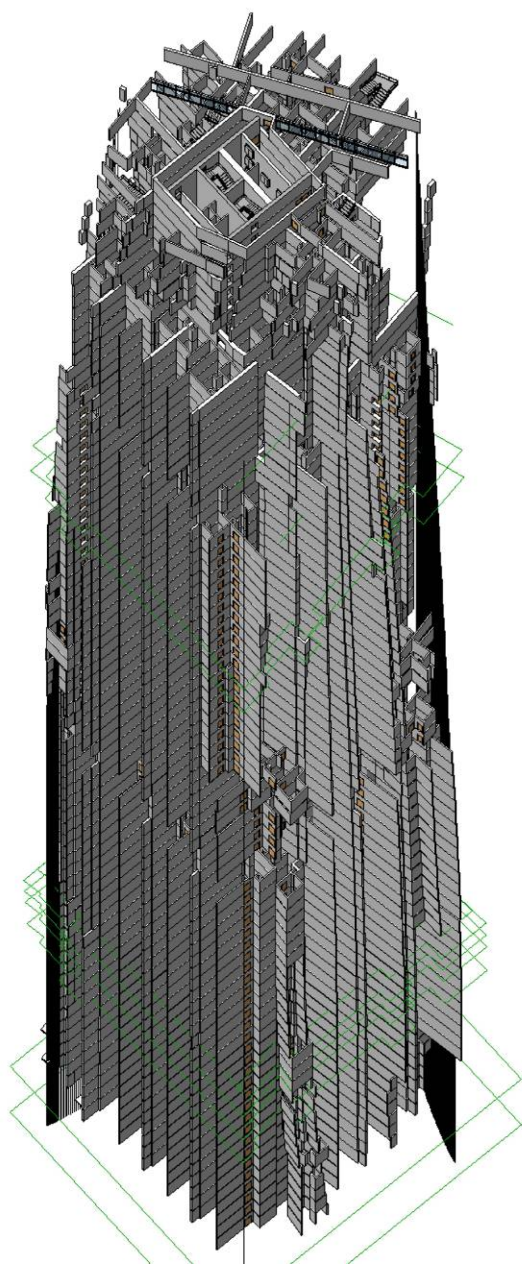


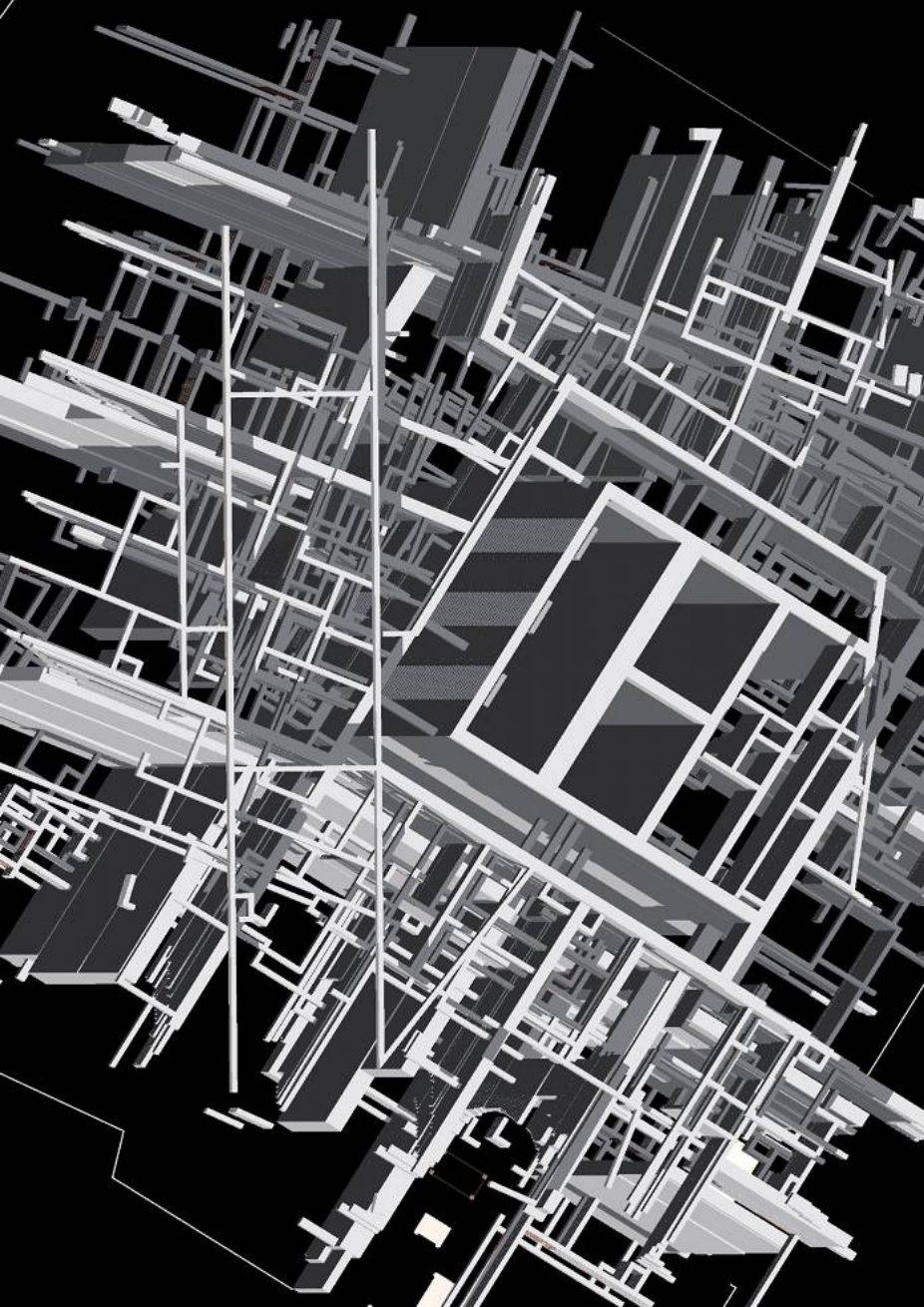




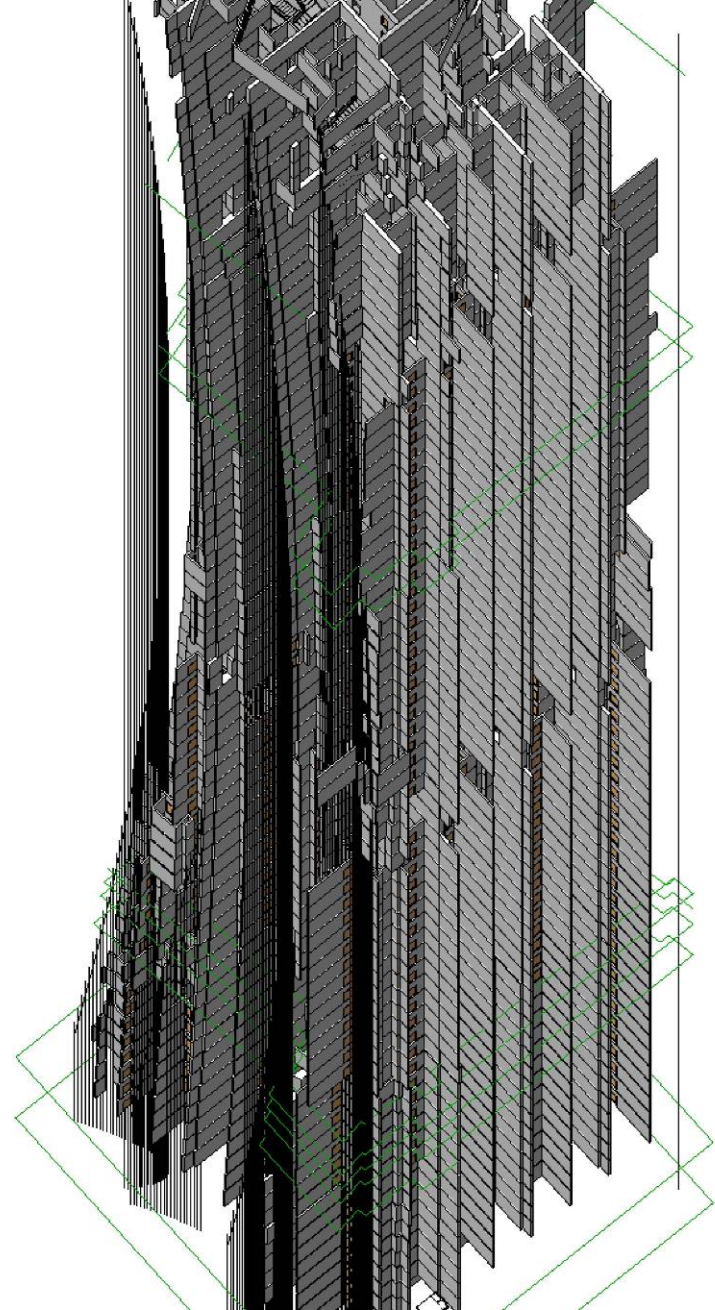




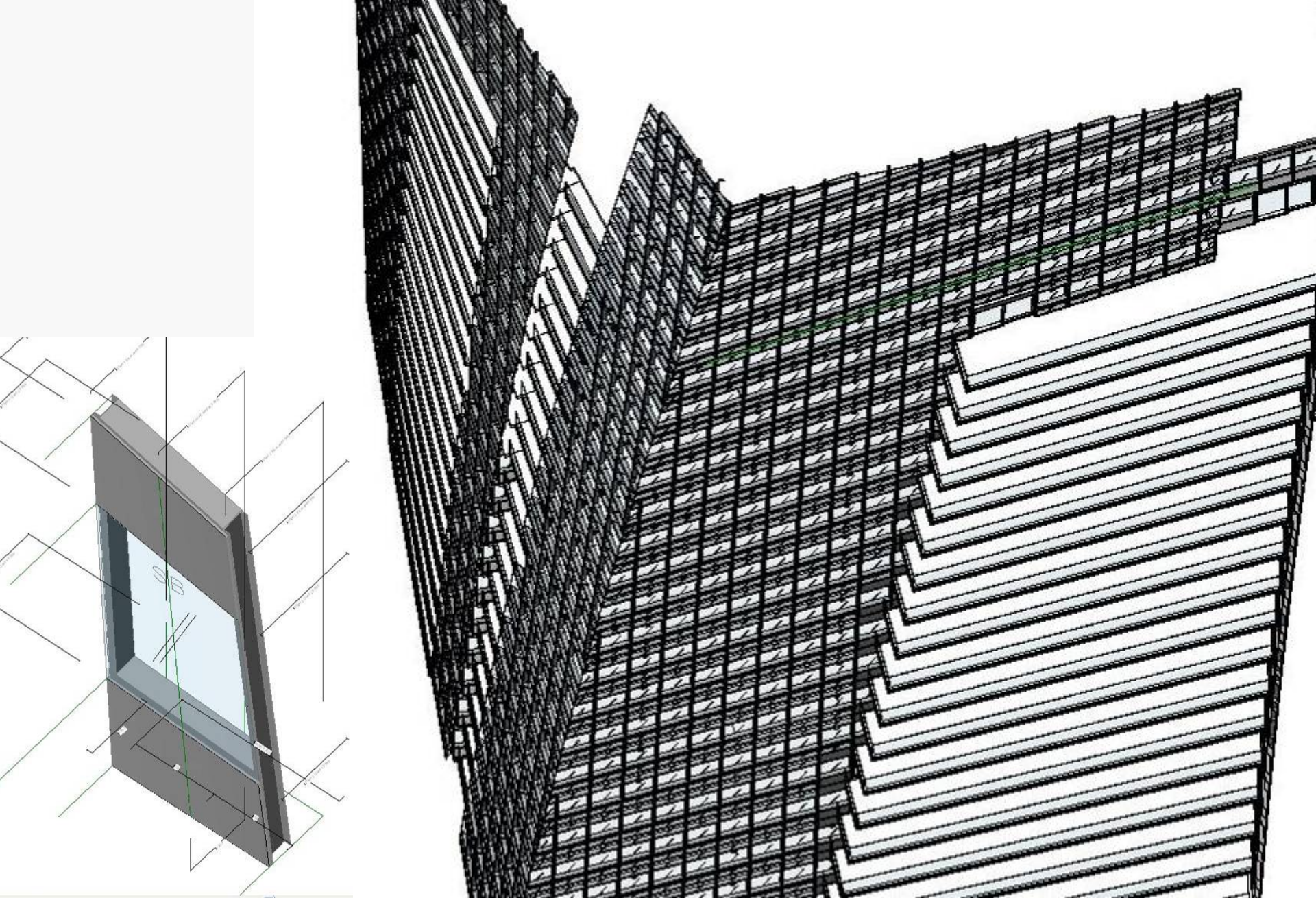




中東住宅項目



INTERNAL vs EXTERNAL



中東住宅項目

COMPLICATED CURTAIN WALL



Abu Dhabi Empire Tower

Empire Tower was challenged through a client request of not "pushing the limits" too far. The concern is that the residential project was located in the middle of a master plan filled with potential icons. The design standardizes the units to accommodate the client request but manipulates the section to develop a very dynamic solution, which holds its own amidst the visual clutter of its neighbors. This was deemed crucial to the financial viability of this project, which is dependent on pre-sales within a highly competitive market.

The design maximizes the tower's presence on the street, with vertical layers spreading out to the property lines. The building then bends back away from the street across from a large commercial tower, allowing for an enlarged view corridor between the central park of the community and the sea, one block away. The splayed vertical layers converge and rise up before bending forward together, as the 230-meter tower extends into the sky – maximizing its views between the park and the sea •



Initial Massing



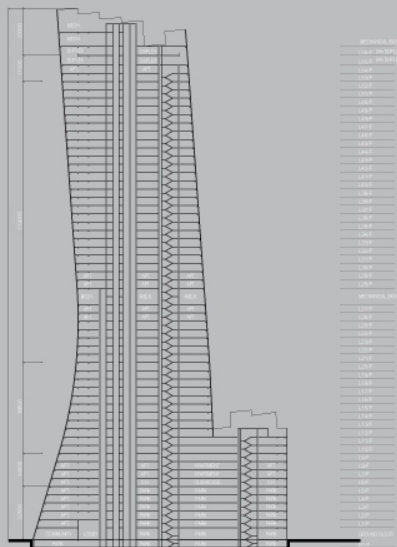
Mass Divisions



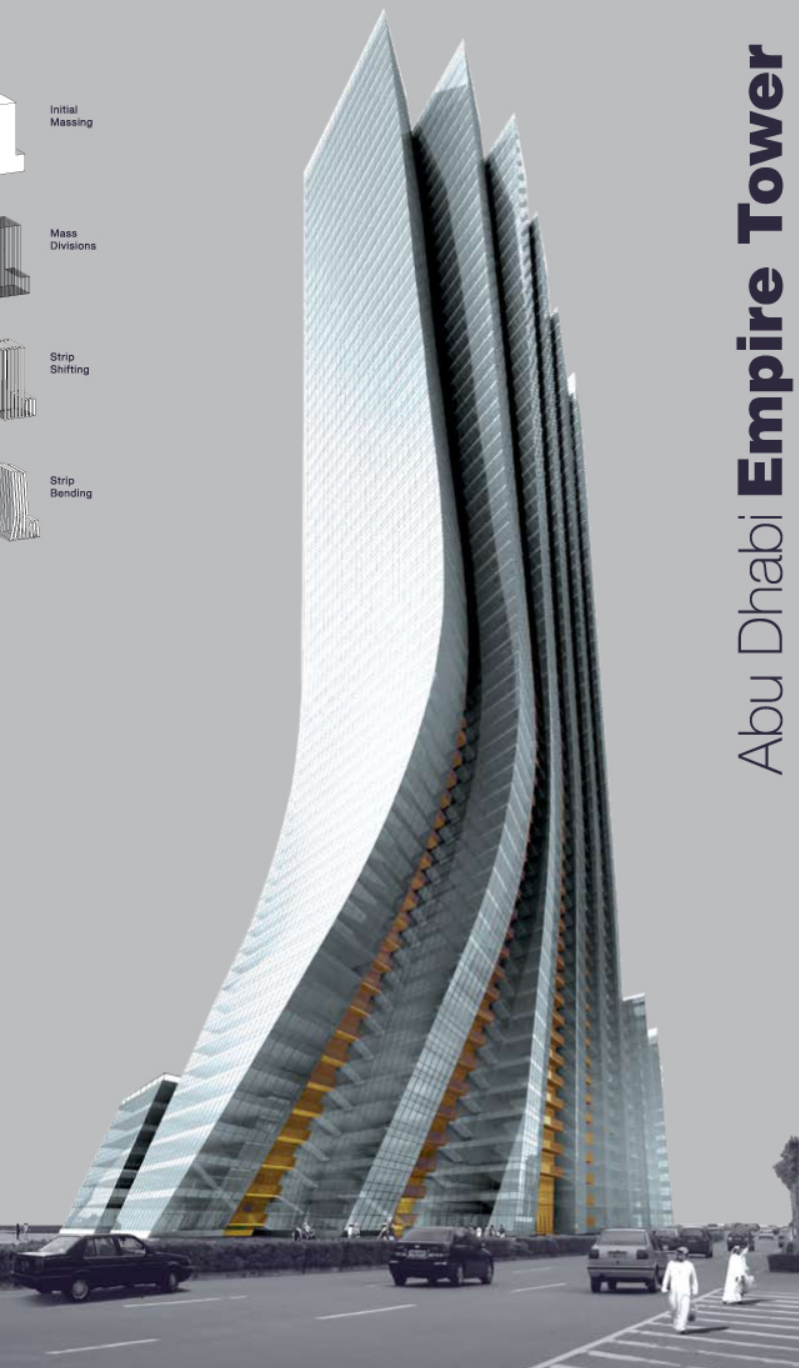
Strip Shifting



Strip Bending



Program: Residential, Site Area 7,007 sqm
Floor Area 90,206 sqm, Building Height 225 m



Abu Dhabi Empire Tower



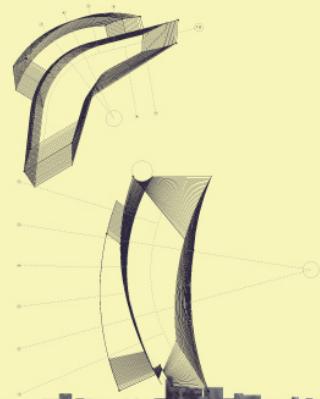
Abu Dhabi Dancing Towers

Located in the heart of Abu Dhabi, Dancing Towers was designed to appropriately fit its surrounding neighbors in scale.

The challenge was how to achieve this when the project was only 70,000 square meters and adjacent properties were relatively small, averaging 900 square-meter floor plates. Two slender towers as opposed to one singular tower was the first step, but the site itself was constrained, forcing a close proximity between the two buildings.

This site constraint is intensified in achieving a viable connective retail podium between the commercial and residential towers, drop-offs to the lobbies and access to supporting functions. The buildings were placed deliberately to maximize the uses down below.

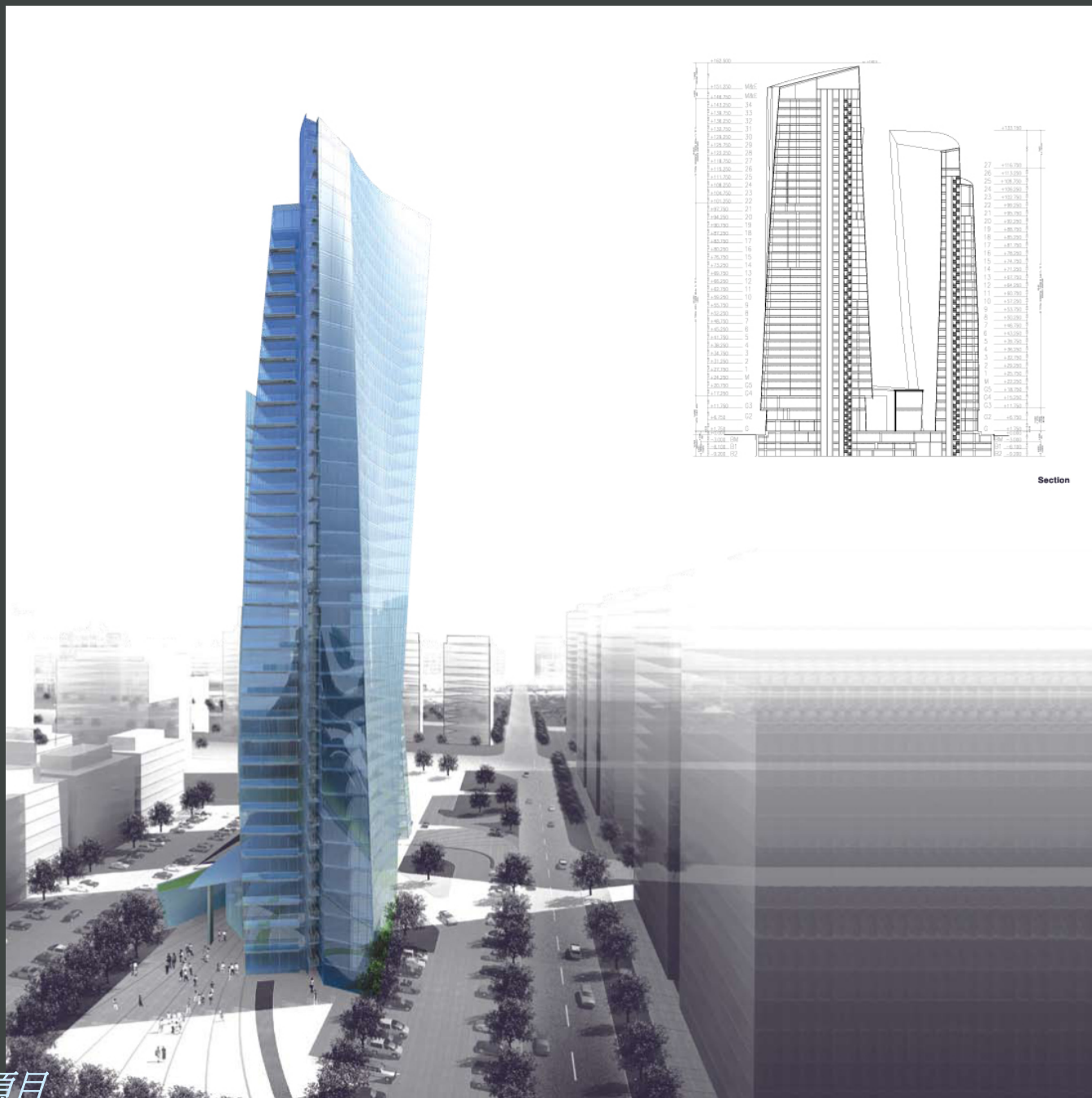
However, the two towers quickly lean, rotate, bend and warp to respond to each other, the adjacent sites and ultimately the view to the ocean at their horizon. These two figures fluidly respond to each other, dynamically engaged and flowing – and ultimately tied together in a passionate dance •



Program Mixed Use Site Area 4,160 sqm
Floor Area 44,235 sqm Building Height 160 m

Abu Dhabi Dancing Towers







Dubai Ocean Heights Two

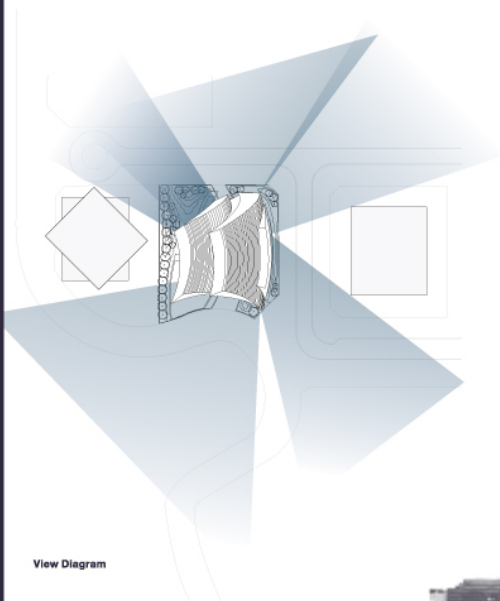
Ocean Heights Two is also located in Dubai Marina, UAE, along with its sister project, Ocean Heights One. At 460 meters in height and 105 floors, it will be the tallest tower in its vicinity. However, unlike its predecessor, the requirements for more modulated units up to the 60th floor, forced a different approach while intending to maintain the spirit of its sister.



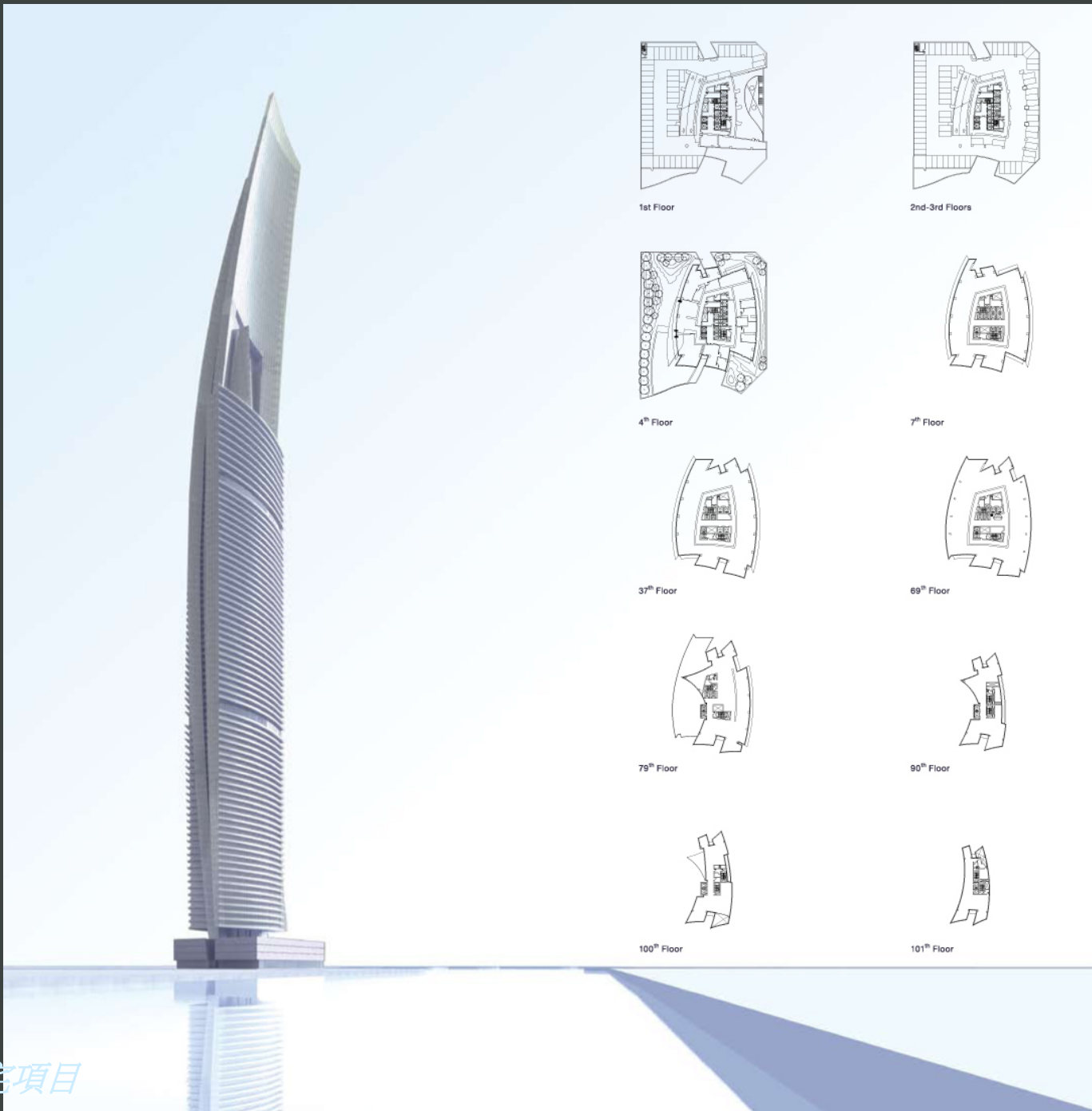
The first 60th floors of the tower are intended to be service apartments, which in order to be marketable, needed to have the majority of units standardized. The curved shape of the tower improves views past its densely located neighbors. The playfulness of this tower was concentrated into the two most visible faces, allowing units to bend up the tower in two blades. These blades were still modulated up to the 60th floor before the tight restrictions of unit area fluctuations become more relaxed. At this point, the modules drop off and the blades continue, tapering and bending into the sky ■

Program Residential Site Area 3,463sqm
Floor Area 197,979 sqm Building Height 460 m

View Diagram



Dubai Ocean Heights Two





建築及建造業 (AEC) 在改變嗎？





Thank You...