

BIM in Action

BIM is not just 3D

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26 Oct 2006



BIM is not just 3D

- History of my BIM Application
- Importance of INFORMATION in BIM
- 4 projects to illustrate the application of INFORMATION

History of my BIM Experience

- June 2005 – First time heard about BIM and its application
- July 2005 – First attempt in REVIT
- August 2005 – First project using REVIT
- August 2005 till now – 8 projects using REVIT
- Sharing in 6 seminars and presentations
- Scheduled presentation on 26 Oct
- Will attend Autodesk University 2006 to share REVIT Structure Experience

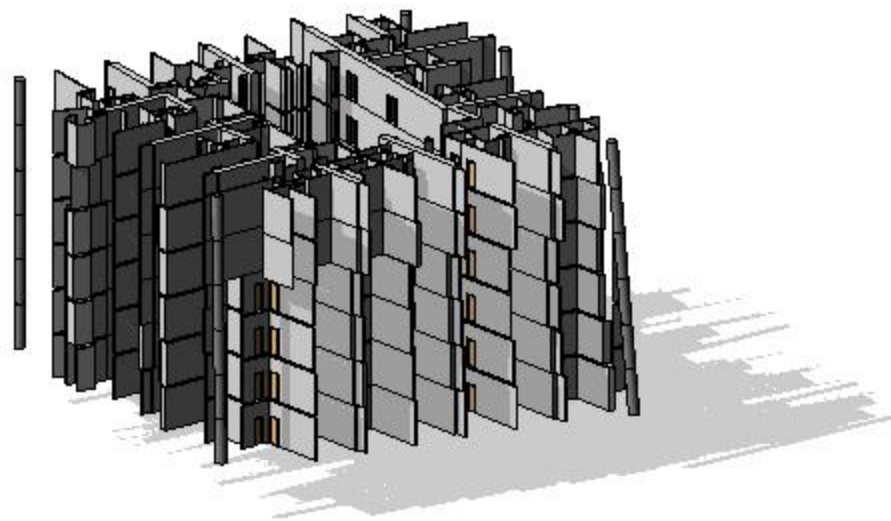
Importance of INFORMATION in BIM

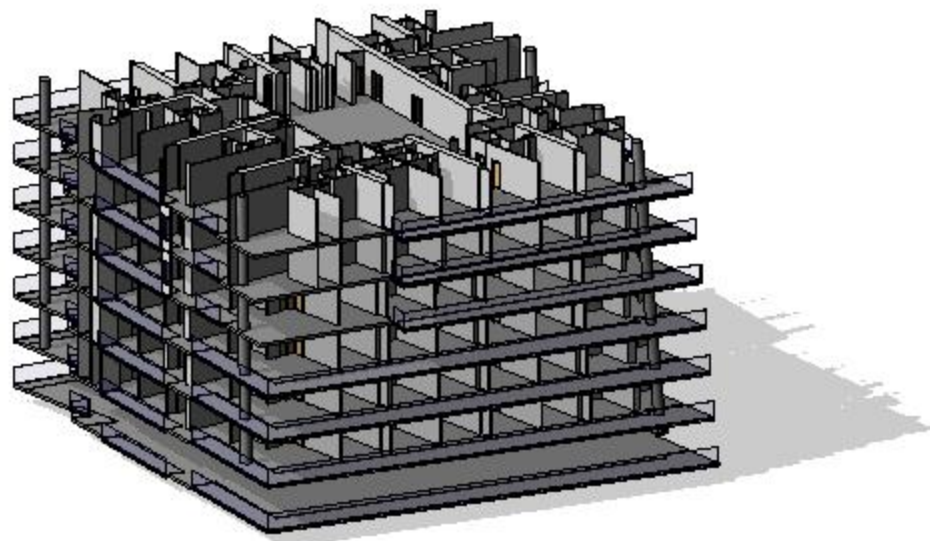
- 3D based visualisation application in building has been widely used for more than a decade
- BIM emphasis on Object Based Parametric Modelling
- Models consist of centralised Database
- Information is stored in the database and used in the whole life of the project
- Consistent and coordinated output
- More and better ways to communicate

Twisting Tower











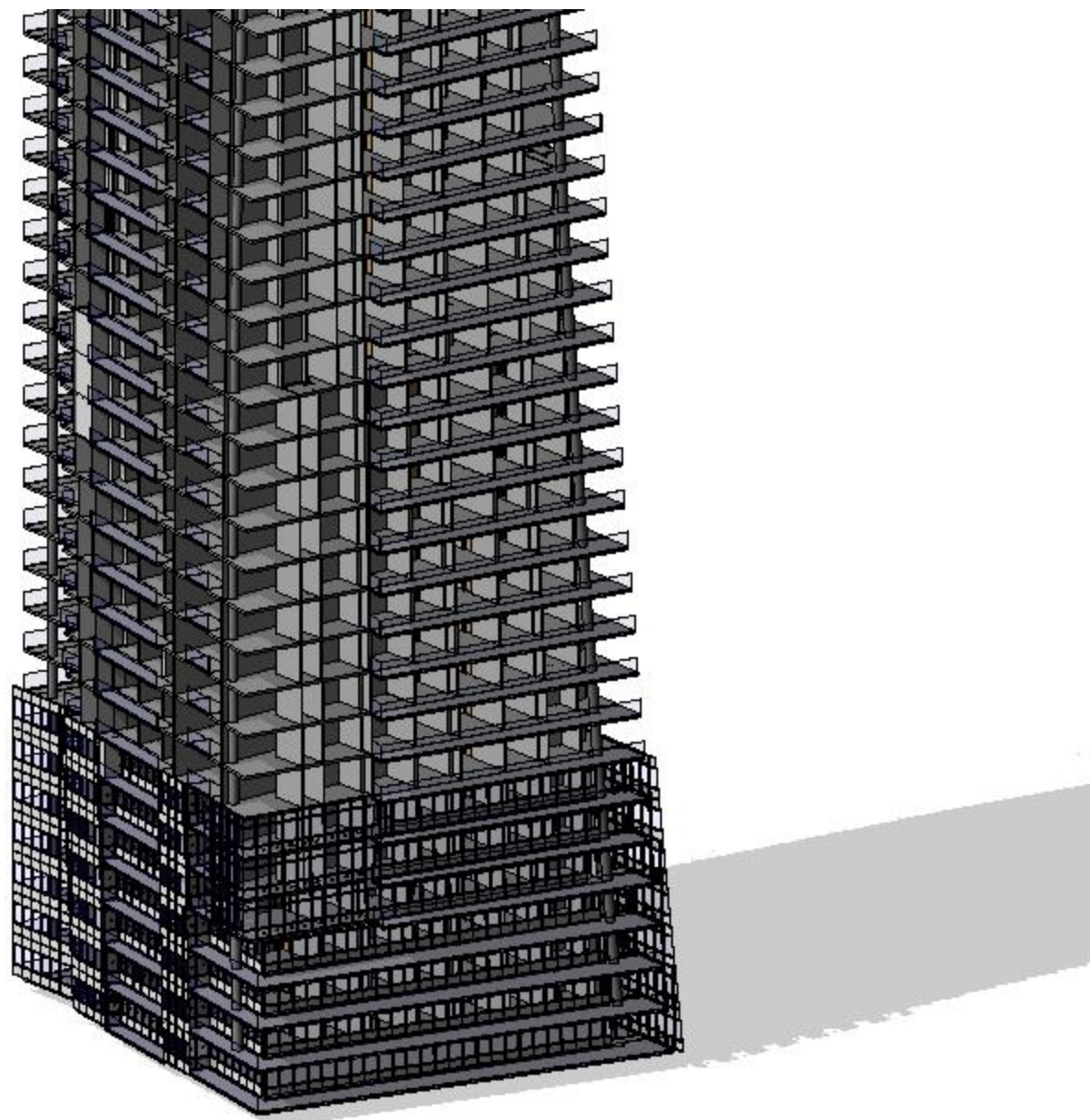


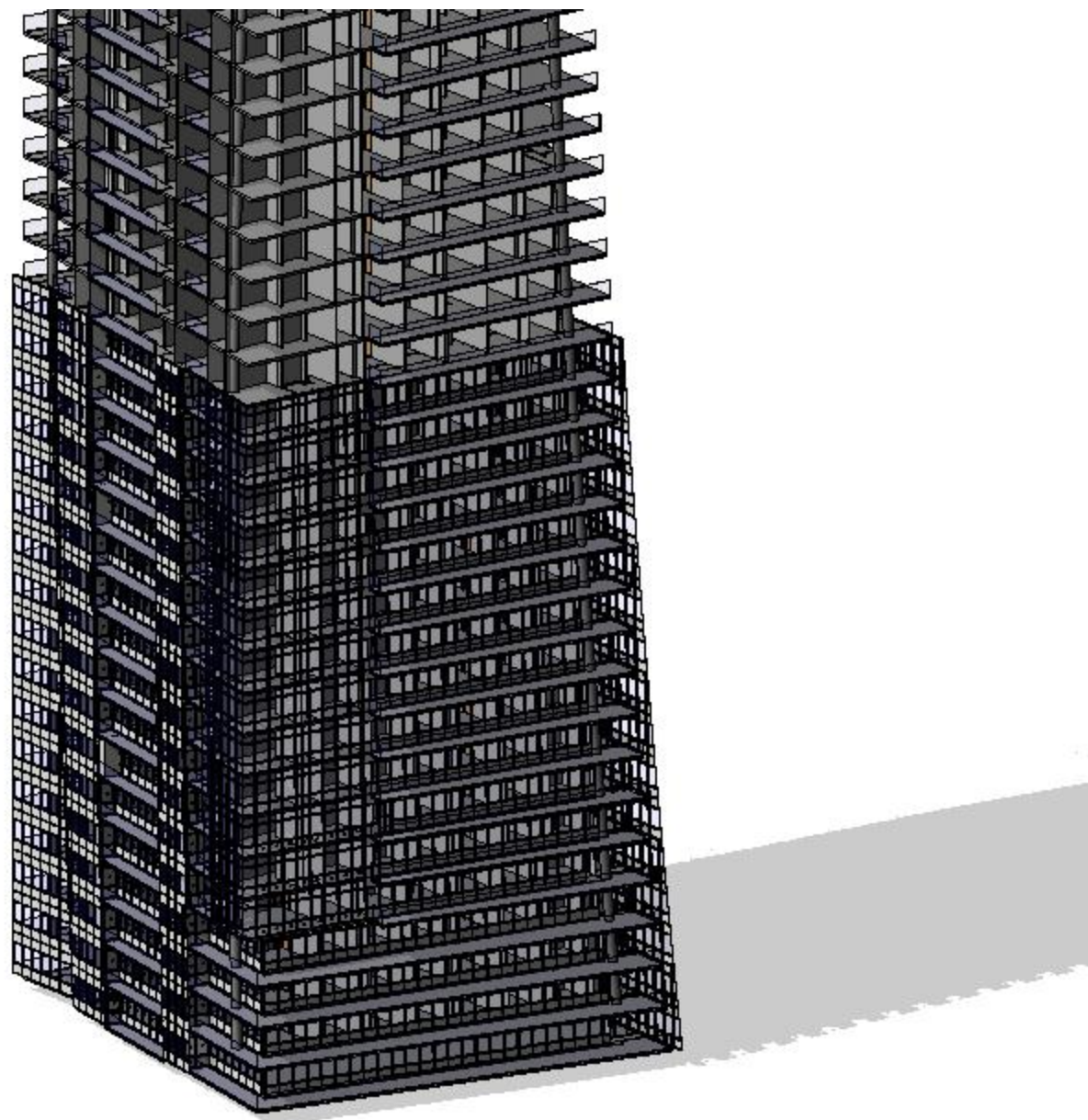




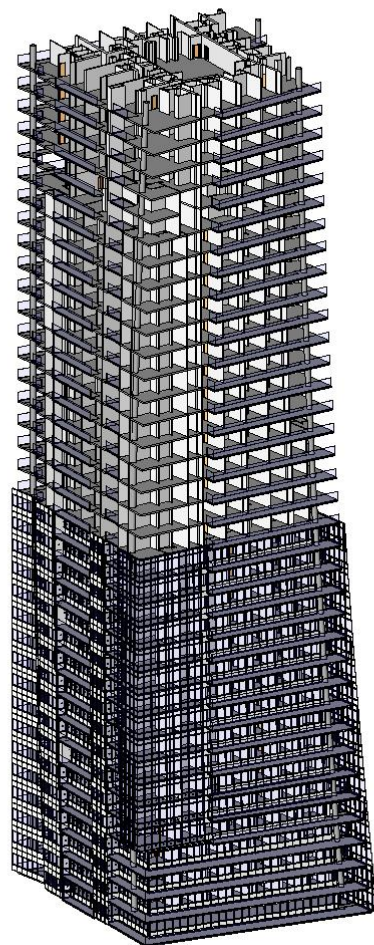


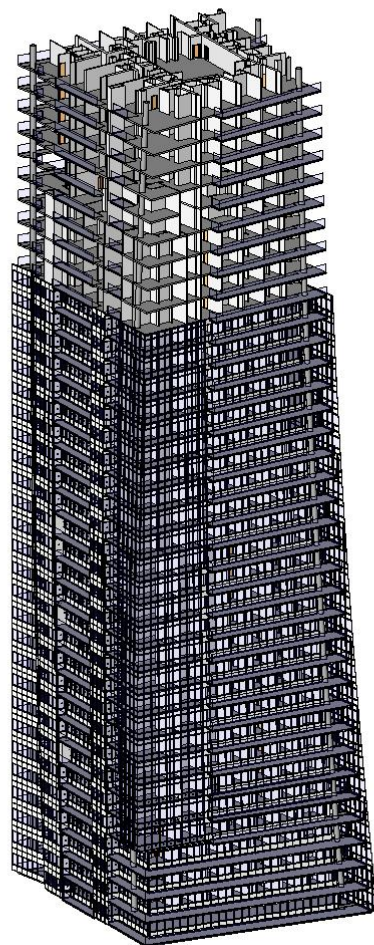


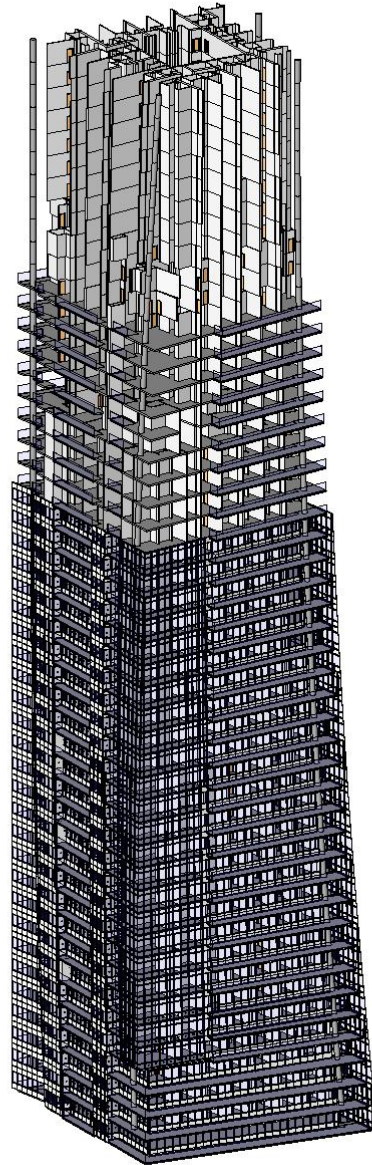


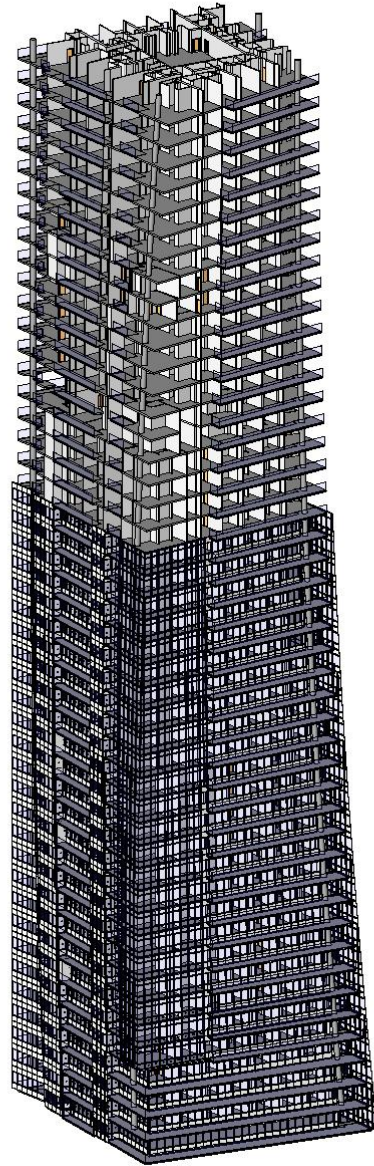


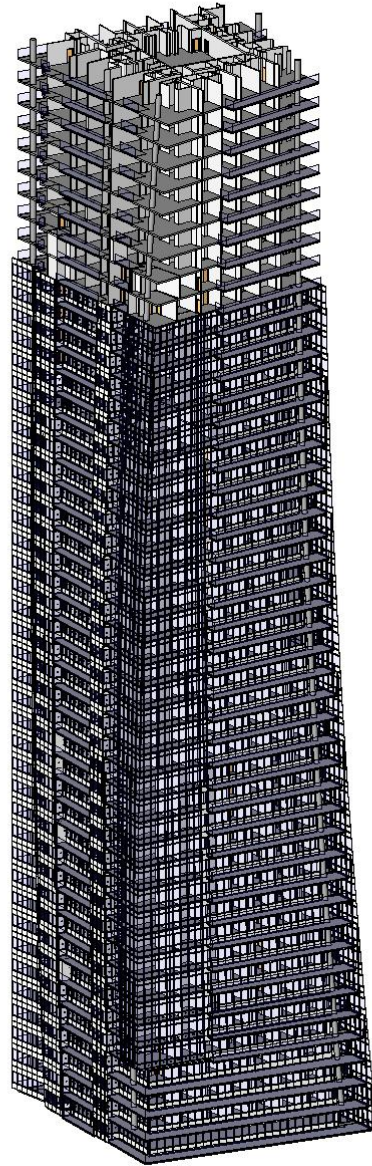


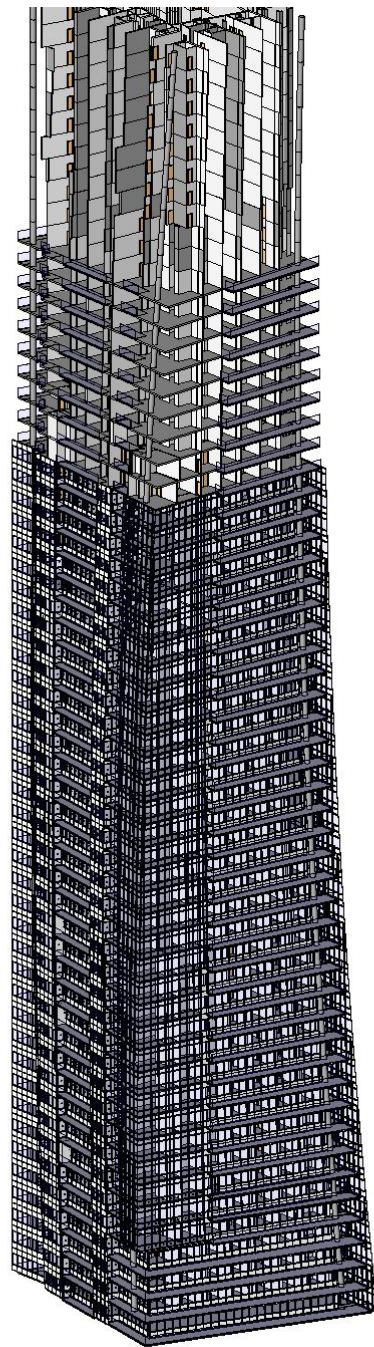


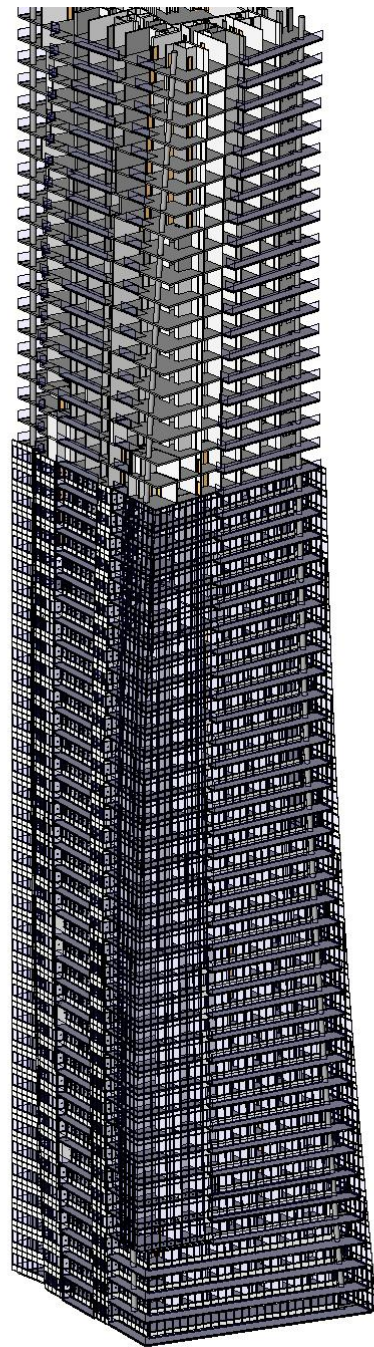


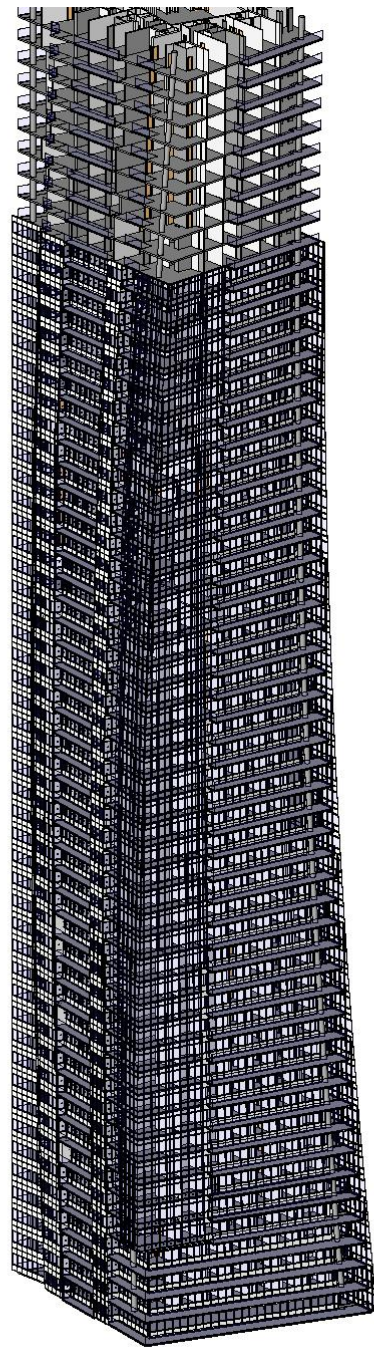
















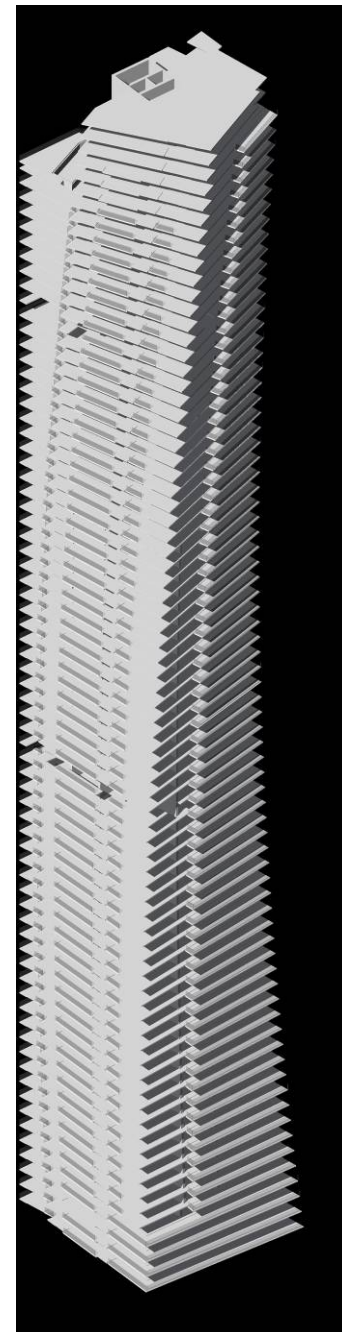
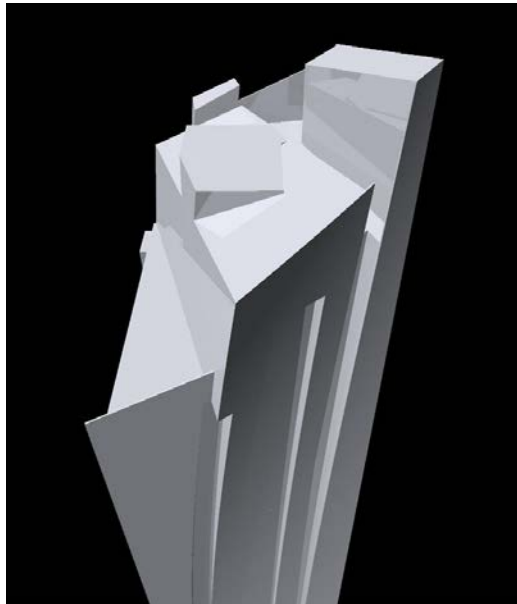
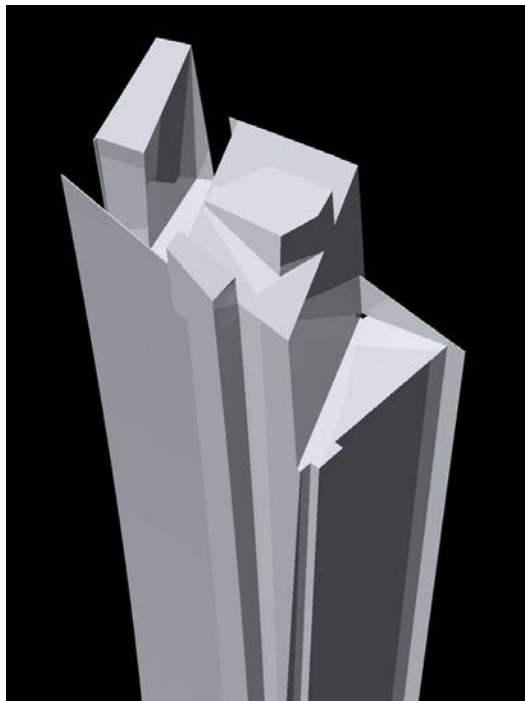


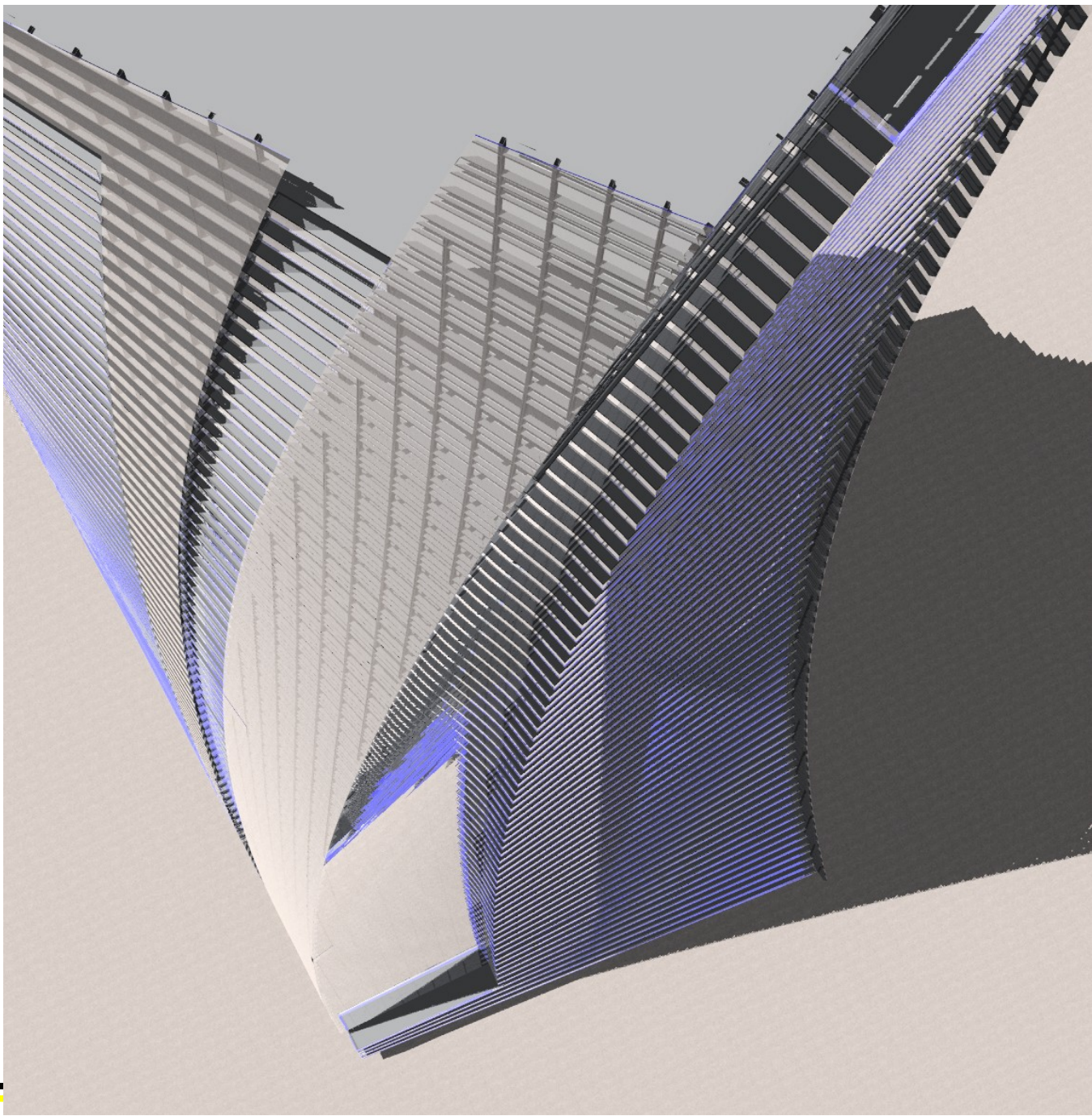




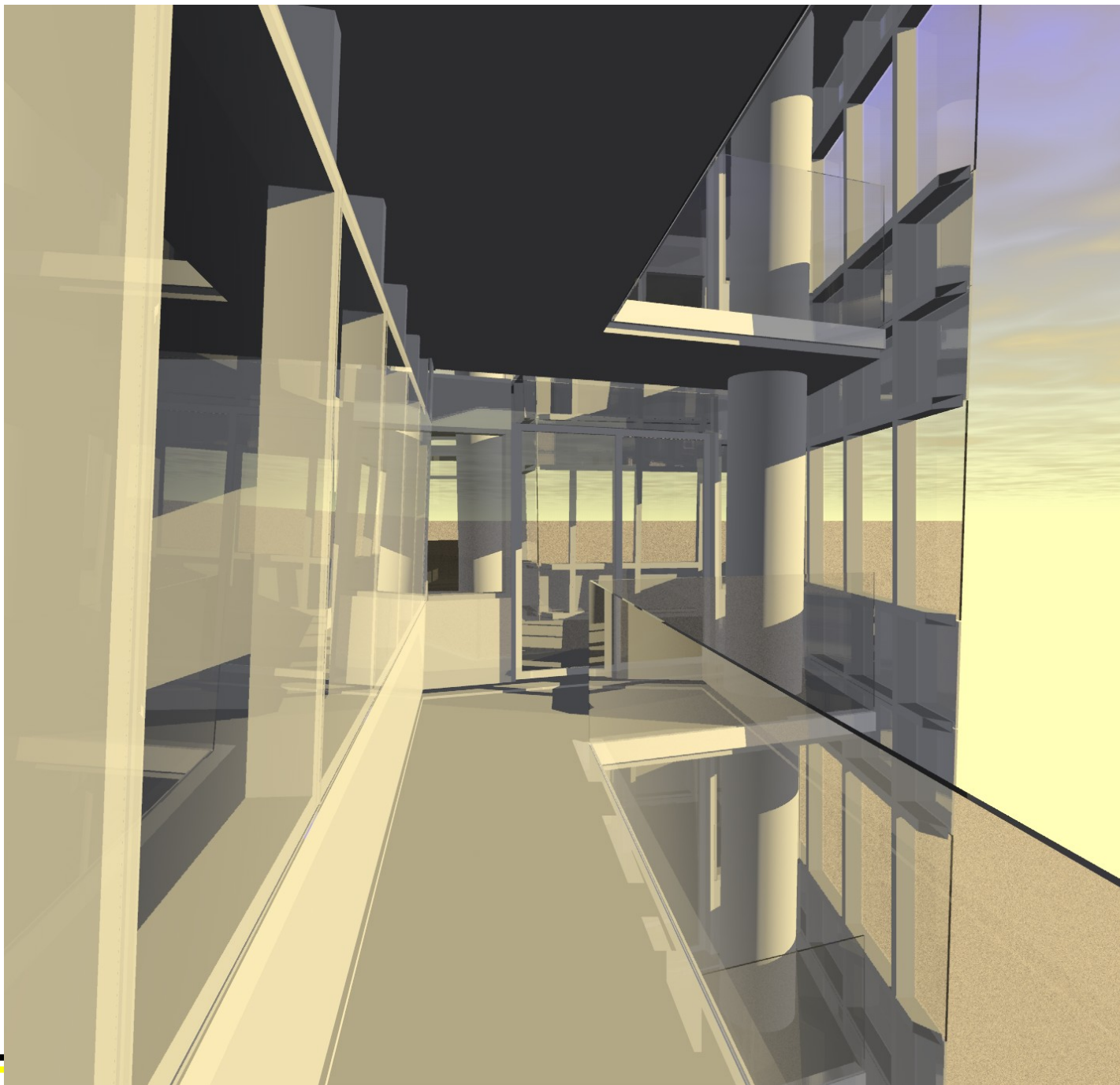












Autodesk Revit Structure 4 - [Ocean Heights 1 R4 Local 2.rvt - Schedule: Multi-Category Schedule]

File Edit View Modelling Drafting Site Tools Settings Window Help

Plane

Demolish

Align

Split

Trim

Offset

Move

Copy

Rotate

Array

Mirror

Group

[Not Editable] Level 31 to

Headers: Group Ungroup Rows: New Delete Show

Basics

Ocean Heights 1 R4 Local 2.rvt

Views (all)

Structural Plans

CAD REFERENCE

Level 1

Level 1 - An

Level 2

Level 2 - An

Level 4

Level 10

Level 20

Level 30

Level 40

Level 50

Level 60

Level 65

Level 70

Level 75

3D Views

3D View 1

3D View 2

3D View 3

3D View 4

3D View 5

3D View 6

Copy of 3D View 1

View 1 - An

(3D)

Elevations (Building)

East

North

South

West

Sections (Building)

Section 1

Section 2

Section 3

Legends

Schedules/Quantities

Multi-Category Schedule

Multi-Category Schedule

Sheets (all)

Families

Annotation Symbols

Ceilings

Curtain Panels

Curtain Systems

Curtain Wall Multi

Detail Items

Doors

Floors

Furniture

View

Architectural

Drafting

Rendering

Site

Massing

Modelling

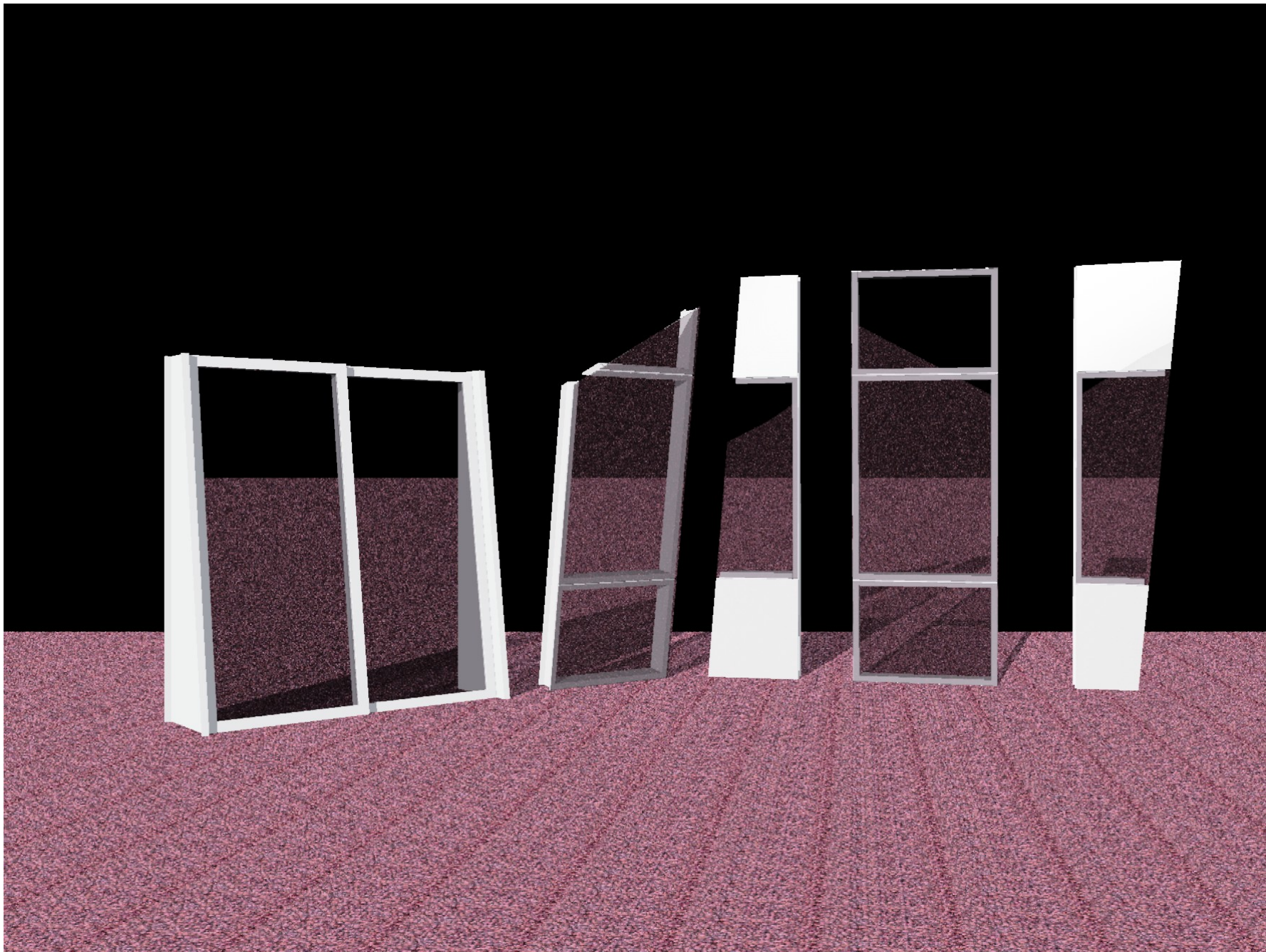
Construction

Multi-Category Schedule

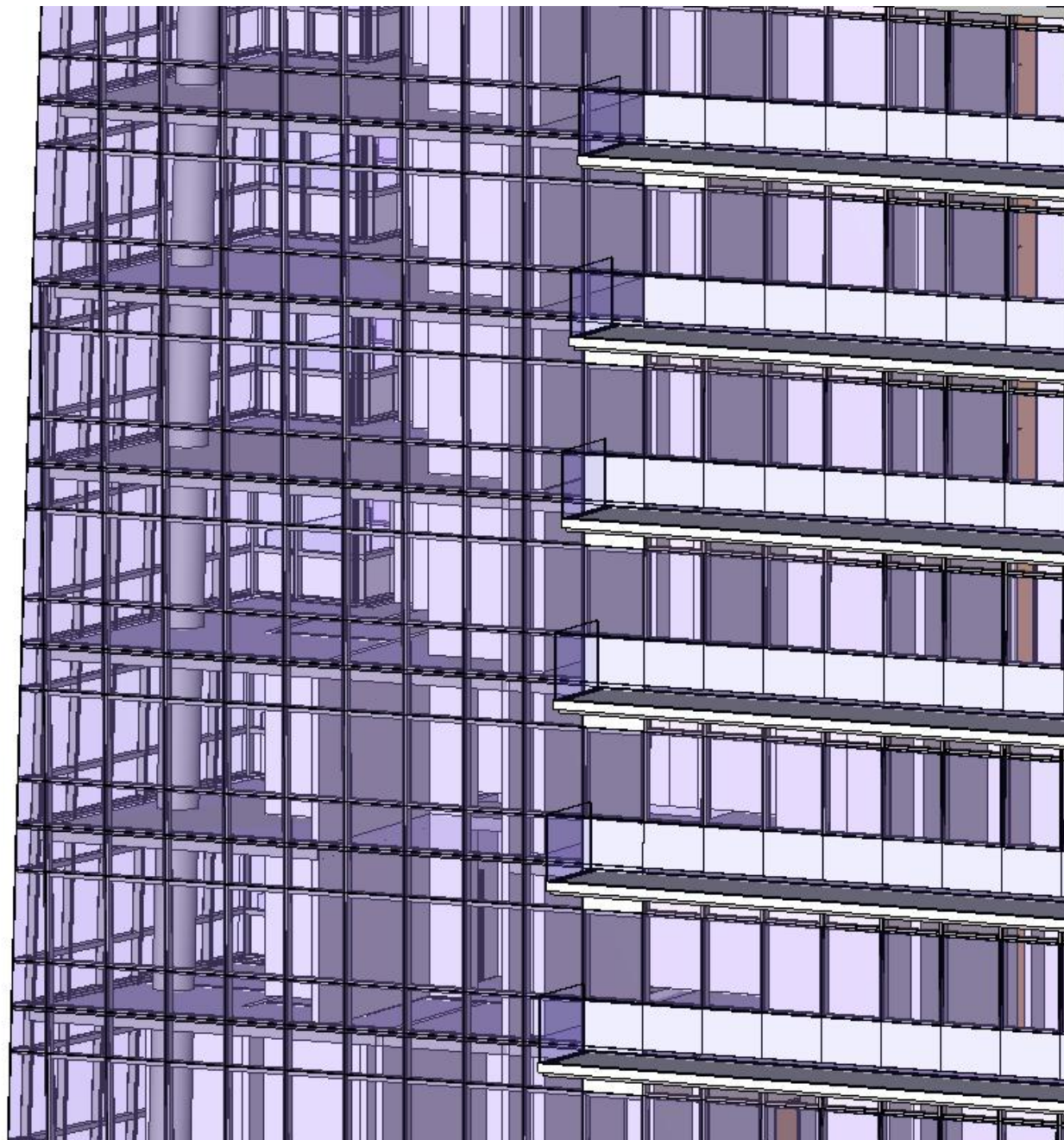
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Curtain Wall Panel 2	L08F01N03	Level 8	1255.67			-52.71	-63.53
Curtain Wall Panel 2	L08F01N04	Level 8	1255.67			-63.53	-74.34
Curtain Wall Panel 2	L08F01N05	Level 8	1255.67			-74.34	-85.16
Curtain Wall Panel 2	L08F01N06	Level 8	1255.67			-85.16	-95.97
Curtain Wall Panel 2	L08F01N07	Level 8	1255.67			-95.97	-106.79
Curtain Wall Panel 2	L08F01N08	Level 8	1255.67			-106.79	-117.60
Curtain Wall Panel 2	L08F01N09	Level 8	1255.67			-117.60	-117.60
Curtain Wall Panel 2	L08F03N09	Level 8	1224.13			5.31	5.66
Curtain Wall Panel 2	L08F03N10	Level 8	1224.13			5.66	6.01
Curtain Wall Panel 2	L08F03N11	Level 8	1224.13			6.01	6.36
Curtain Wall Panel 2	L09F01N01	Level 9	1255.72			-29.00	-39.77
Curtain Wall Panel 2	L09F01N02	Level 9	1255.72			-39.77	-50.54
Curtain Wall Panel 2	L09F01N03	Level 9	1255.72			-50.54	-61.31
Curtain Wall Panel 2	L09F01N04	Level 9	1255.72			-61.31	-72.07
Curtain Wall Panel 2	L09F01N05	Level 9	1255.72			-72.07	-82.84
Curtain Wall Panel 2	L09F01N06	Level 9	1255.72			-82.84	-93.61
Curtain Wall Panel 2	L09F01N07	Level 9	1255.72			-93.61	-104.38
Curtain Wall Panel 2	L09F01N08	Level 9	1255.72			-104.38	-115.15
Curtain Wall Panel 2	L09F03N09	Level 9	1224.13			0.64	0.74
Curtain Wall Panel 2	L09F03N10	Level 9	1224.13			0.74	0.84
Curtain Wall Panel 2	L09F03N11	Level 9	1224.13			0.84	0.94
Curtain Wall Panel 2	L10F01N01	Level 10	1255.77			-26.77	-37.49
Curtain Wall Panel 2	L10F01N02	Level 10	1255.77			-37.49	-48.21
Curtain Wall Panel 2	L10F01N03	Level 10	1255.77			-48.21	-58.93
Curtain Wall Panel 2	L10F01N04	Level 10	1255.77			-58.93	-69.64
Curtain Wall Panel 2	L10F01N05	Level 10	1255.77			-69.64	-80.36
Curtain Wall Panel 2	L10F01N06	Level 10	1255.77			-80.36	-91.08
Curtain Wall Panel 2	L10F01N07	Level 10	1255.77			-91.08	-101.80
Curtain Wall Panel 2	L10F01N08	Level 10	1255.77			-101.80	-112.52
Curtain Wall Panel 2	L10F03N09	Level 10	1224.13			-4.06	-4.21
Curtain Wall Panel 2	L10F03N10	Level 10	1224.13			-4.21	-4.35
Curtain Wall Panel 2	L10F03N11	Level 10	1224.13			-4.35	-4.50
Curtain Wall Panel 2	L81B1RN01	Level 81	1224.10			0.00	0.00
Curtain Wall Panel 2	L82B1RN01	Level 82	1224.10			0.00	0.00
Curtain Wall Panel 2	L83B1RN01	Level 83	1224.10			0.00	0.00
Curtain Wall Panel 2	L84B1RN01	Level 84	1224.10			0.00	0.00
Curtain Wall Panel 2: 38							
Curtain Wall Panel 3	L04F03N01	Level 4	1224.13			-1.53	-0.38
Curtain Wall Panel 3	L04F03N02	Level 4	1224.13			-0.38	0.76
Curtain Wall Panel 3	L04F03N03	Level 4	1224.13			0.76	1.91
Curtain Wall Panel 3	L04F03N05	Level 4	1224.13			12.20	13.34
Curtain Wall Panel 3	L04F03N06	Level 4	1224.13			12.20	13.34
Curtain Wall Panel 3	L04F04N01	Level 4	1200.00			-137.36	-137.36
Curtain Wall Panel 3	L04F04N02	Level 4	1200.00			-137.36	-137.38
Curtain Wall Panel 3	L04F04N03	Level 4	1200.00			-137.38	-137.40
Curtain Wall Panel 3	L04F04N04	Level 4	1200.00			-137.40	-137.42
Curtain Wall Panel 3	L04F04N05	Level 4	1200.00			-137.42	-137.45
Curtain Wall Panel 3	L04F04N06	Level 4	1200.00			-137.45	-137.47
Curtain Wall Panel 3	L04F04N07	Level 4	1200.00			-137.47	-137.49

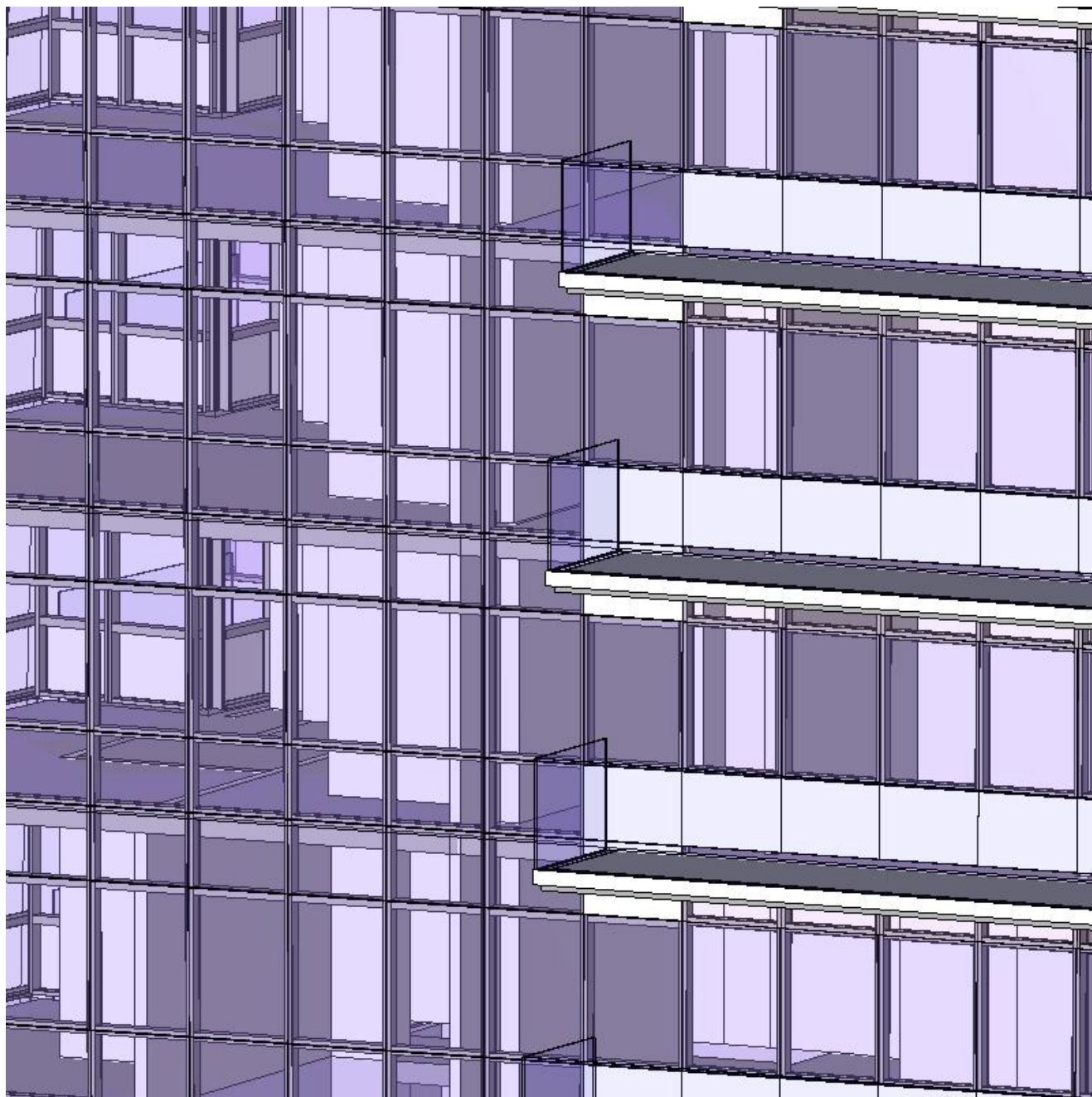
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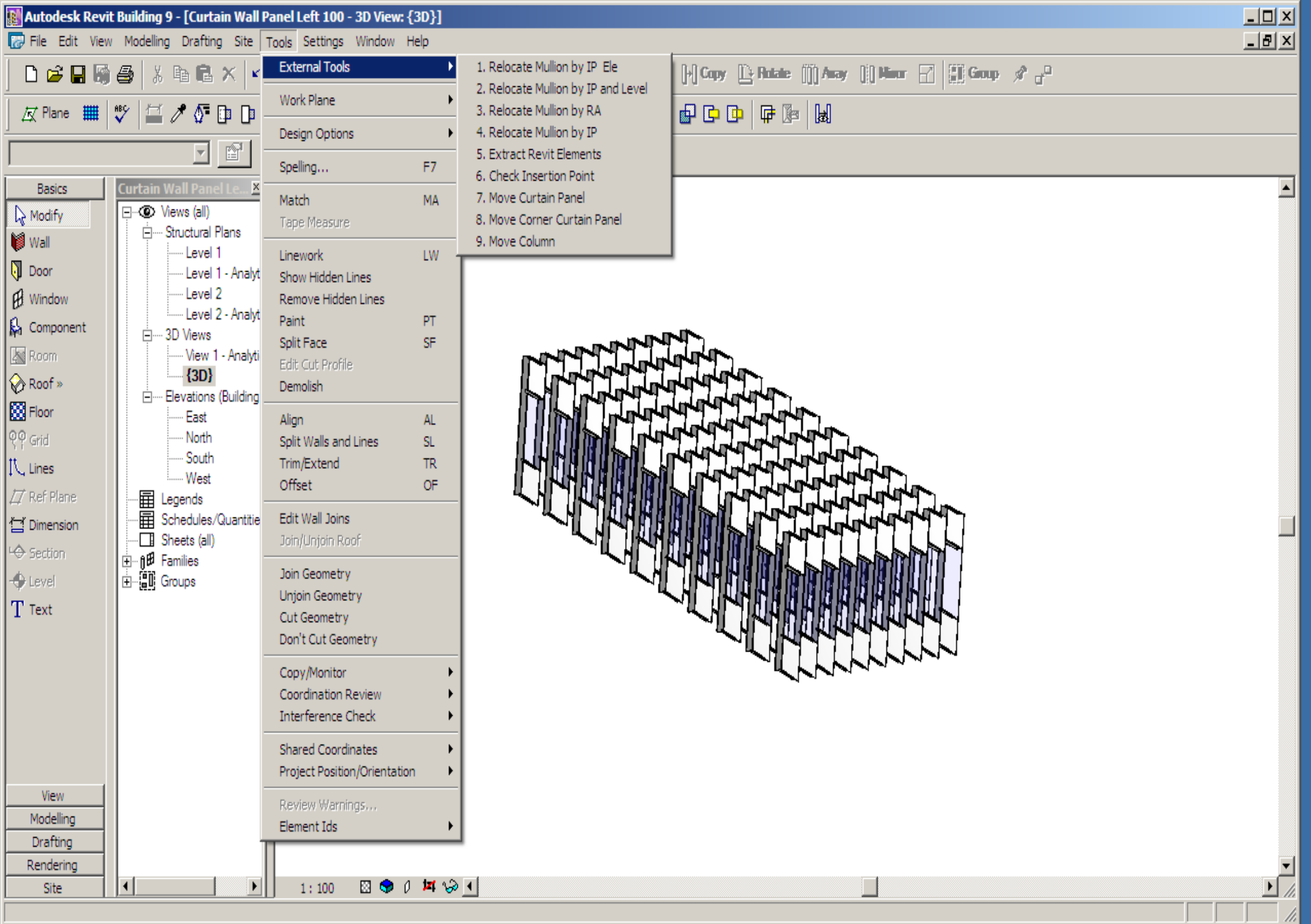
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Dimension	Level 30	Sliding Door	L71B05D15	Level 71	2550.00		0.00
Section	Level 40	Sliding Door	L72B01D02	Level 72	2400.00		0.00
Level	Level 50	Sliding Door	L72B02D02	Level 72	2500.00		0.00
Framing Elevati	Level 60	Sliding Door	L72B04D01	Level 72	1800.00		0.00
Text	Level 65	Sliding Door	L72B05D03	Level 72	2550.00		0.00
	Level 70	Sliding Door	L72B05D05	Level 72	2550.00		0.00
	Level 75	Sliding Door	L72B05D08	Level 72	2550.00		0.00
	3D Views	Sliding Door	L72B05D10	Level 72	2550.00		0.00
	3D View 1	Sliding Door	L72B05D12	Level 72	2550.00		0.00
	3D View 2	Sliding Door	L72B05D15	Level 72	2550.00		0.00
	3D View 3	Sliding Door	L73B01D02	Level 73	2400.00		0.00
	3D View 4	Sliding Door	L73B02D02	Level 73	2500.00		0.00
	3D View 5	Sliding Door	L73B04D01	Level 73	1700.00		0.00
	3D View 6	Sliding Door	L73B05D03	Level 73	2550.00		0.00
	Copy of 3D V	Sliding Door	L73B05D05	Level 73	2550.00		0.00
	View 1 - Ana	Sliding Door	L73B05D08	Level 73	2550.00		0.00
	{3D}	Sliding Door	L73B05D10	Level 73	2550.00		0.00
	Elevations (Build	Sliding Door	L73B05D12	Level 73	2550.00		0.00
	East	Sliding Door	L73B05D15	Level 73	2550.00		0.00
	North	Sliding Door	L74B01D02	Level 74	2400.00		0.00
	South	Sliding Door	L74B02D02	Level 74	2500.00		0.00
	West	Sliding Door	L74B04D01	Level 74	1600.00		0.00
	Sections (Building	Sliding Door	L74B05D03	Level 74	2550.00		0.00
	Section 1	Sliding Door	L74B05D05	Level 74	2550.00		0.00
	Section 2	Sliding Door	L74B05D08	Level 74	2550.00		0.00
	Section 3	Sliding Door	L74B05D10	Level 74	2550.00		0.00
	Legends	Sliding Door	L74B05D12	Level 74	2550.00		0.00
	Schedules/Quan	Sliding Door	L74B05D15	Level 74	2550.00		0.00
	Multi-Category S	Sliding Door	L75B01D02	Level 75	2400.00		0.00
	Multi-Category S	Sliding Door	L75B02D02	Level 75	2500.00		0.00
	Sheets (all)	Sliding Door	L76B01D02	Level 76	2400.00		0.00
	Families	Sliding Door	L76B02D02	Level 76	2500.00		0.00
	Annotation Symb	Sliding Door	L77B01D02	Level 77	2400.00		0.00
	Ceilings	Sliding Door	L77B02D01	Level 77	2426.17		0.00
	Curtain Panels	Sliding Door	L78B01D02	Level 78	2400.00		0.00
	Curtain Systems	Sliding Door	L78B02D01	Level 78	2203.01		0.00
	Curtain Wall Mul	Sliding Door	L79B01D02	Level 79	2400.00		0.00
	Detail Items	Sliding Door	L79B02D01	Level 79	1974.15		0.00
	Doors	Sliding Door: 649					
	Floors	Sliding Door to Replace CW Pan	L10F01N10	Level 10	1255.77		-123.24
	Furniture	Sliding Door to Replace CW Panel: 1					
		Grand total: 9740					

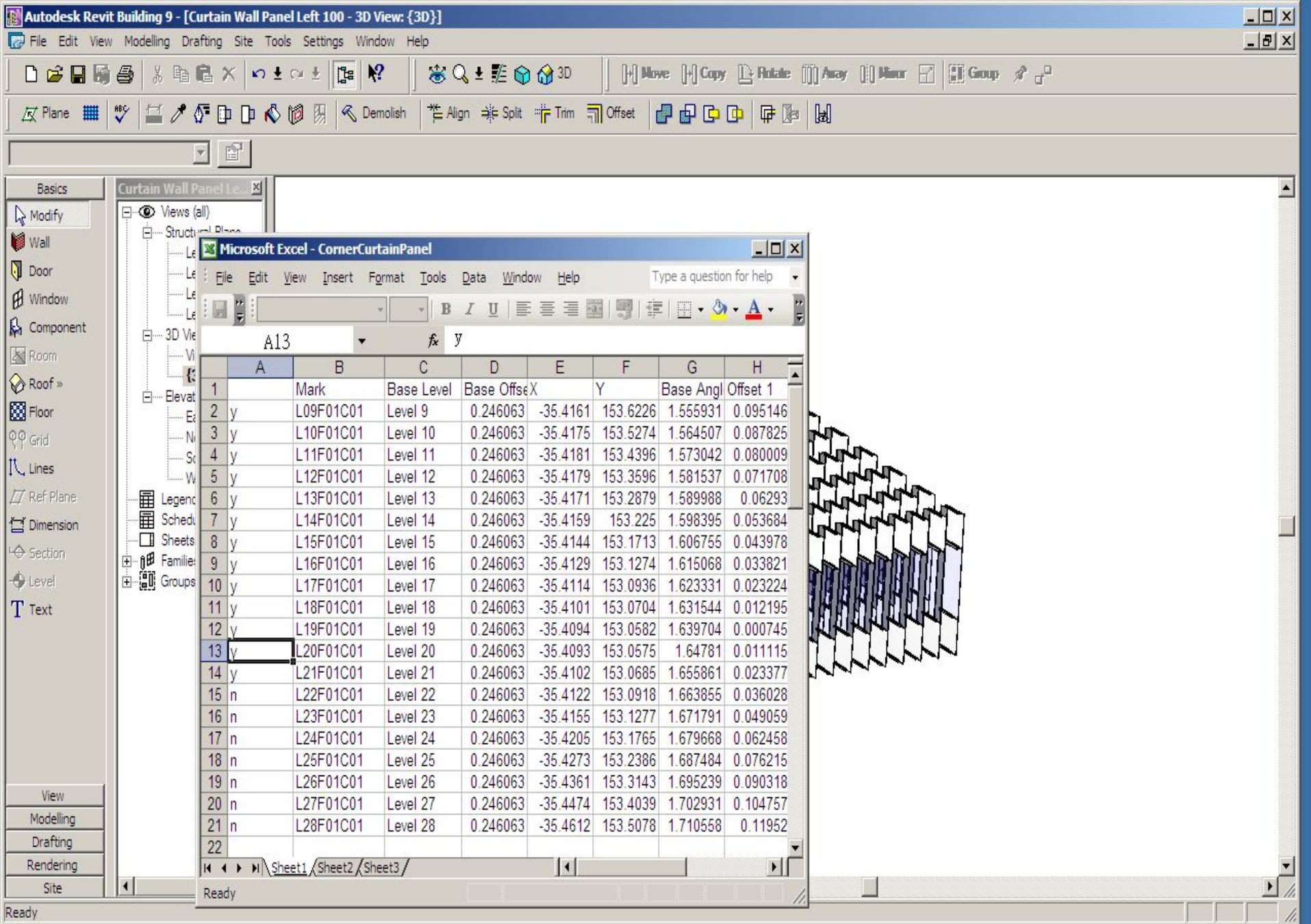


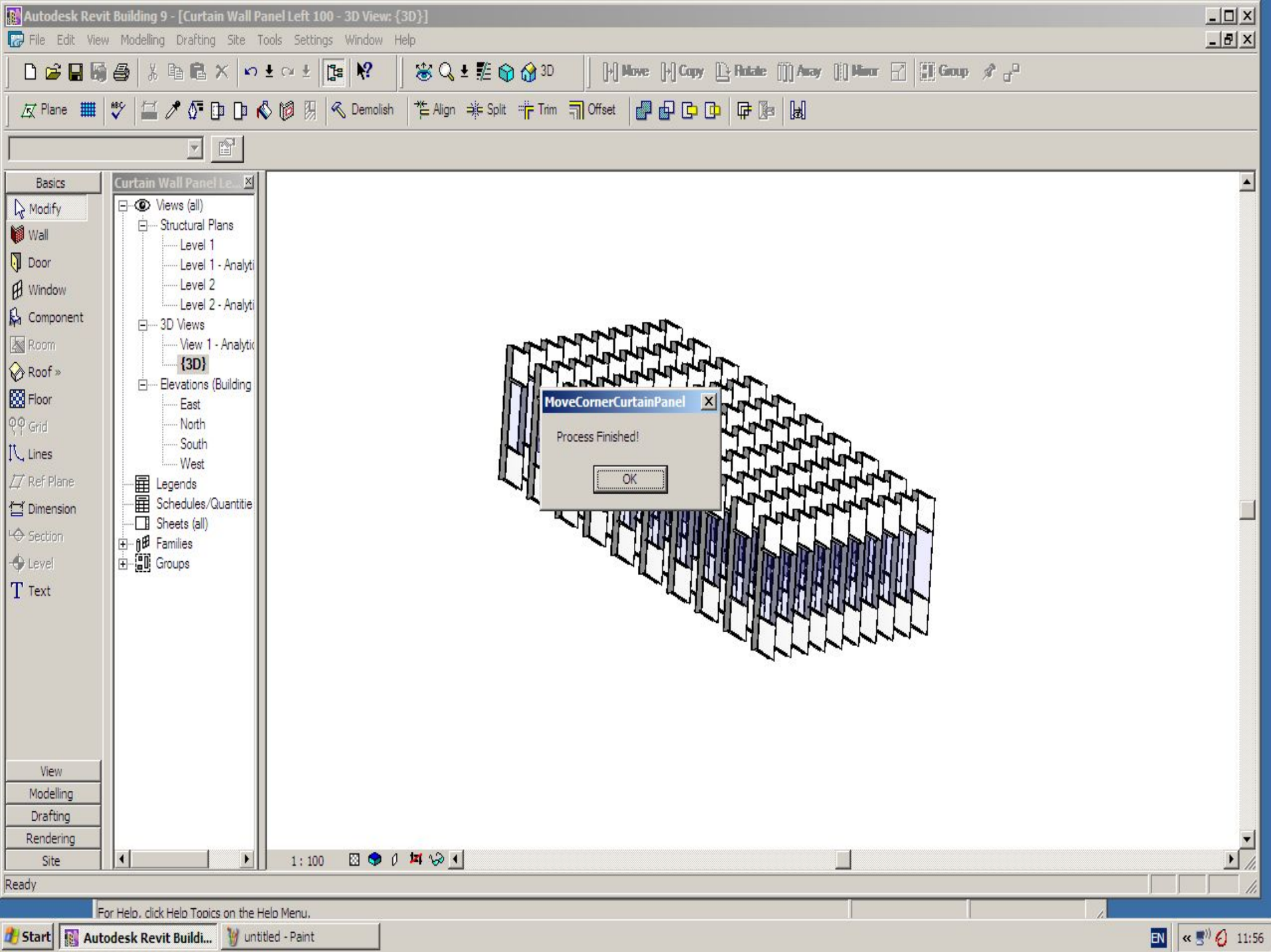


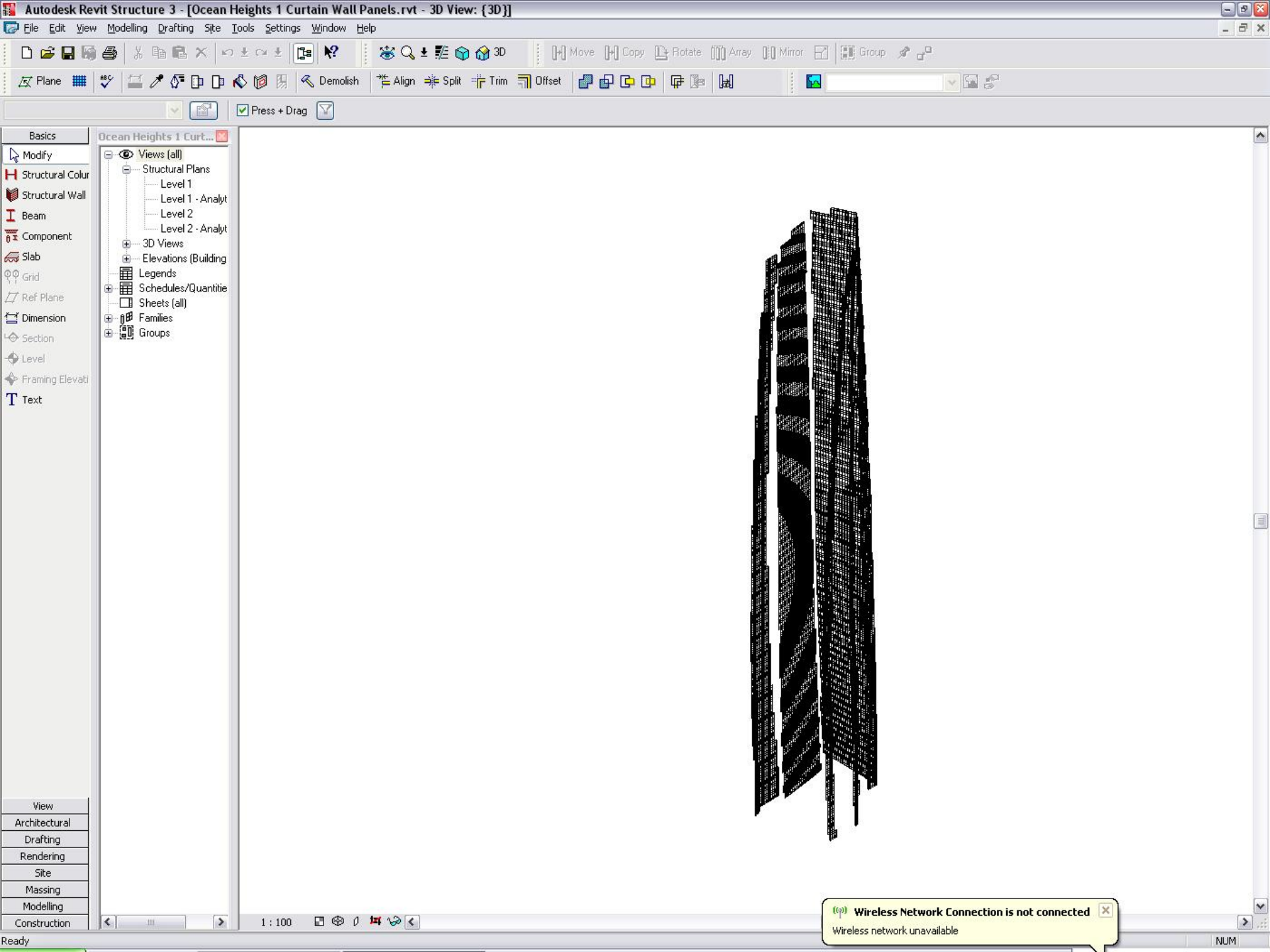






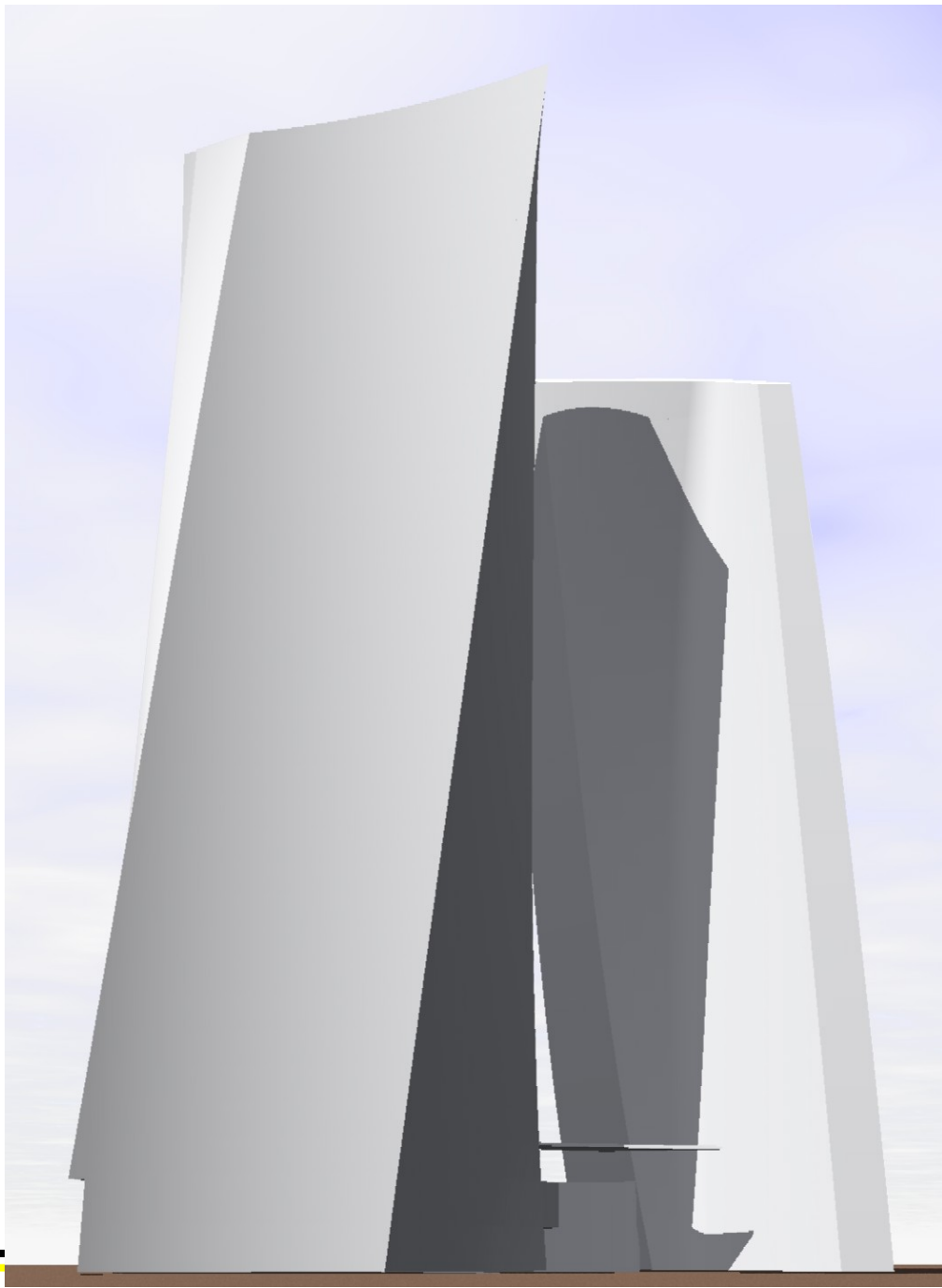


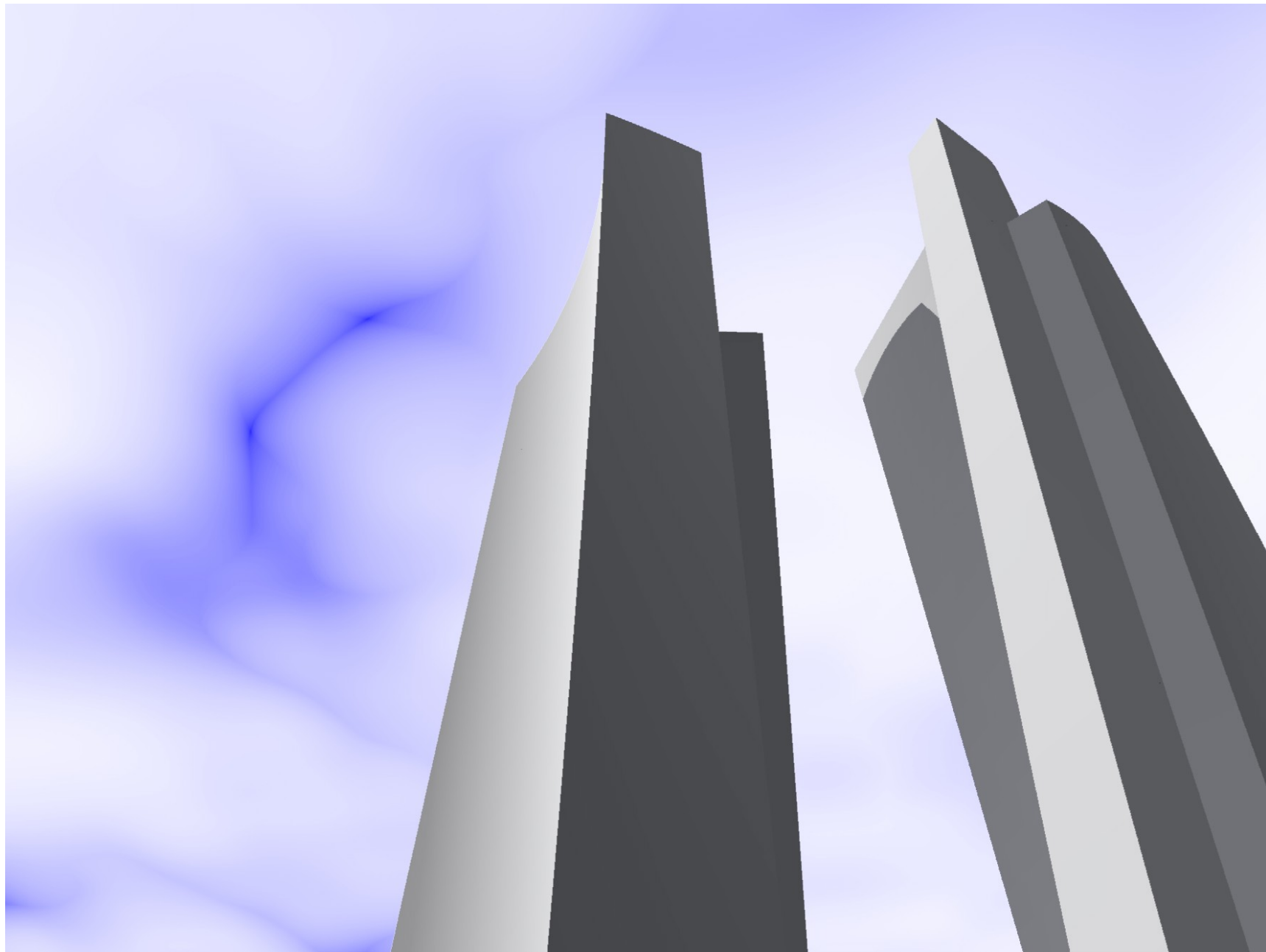


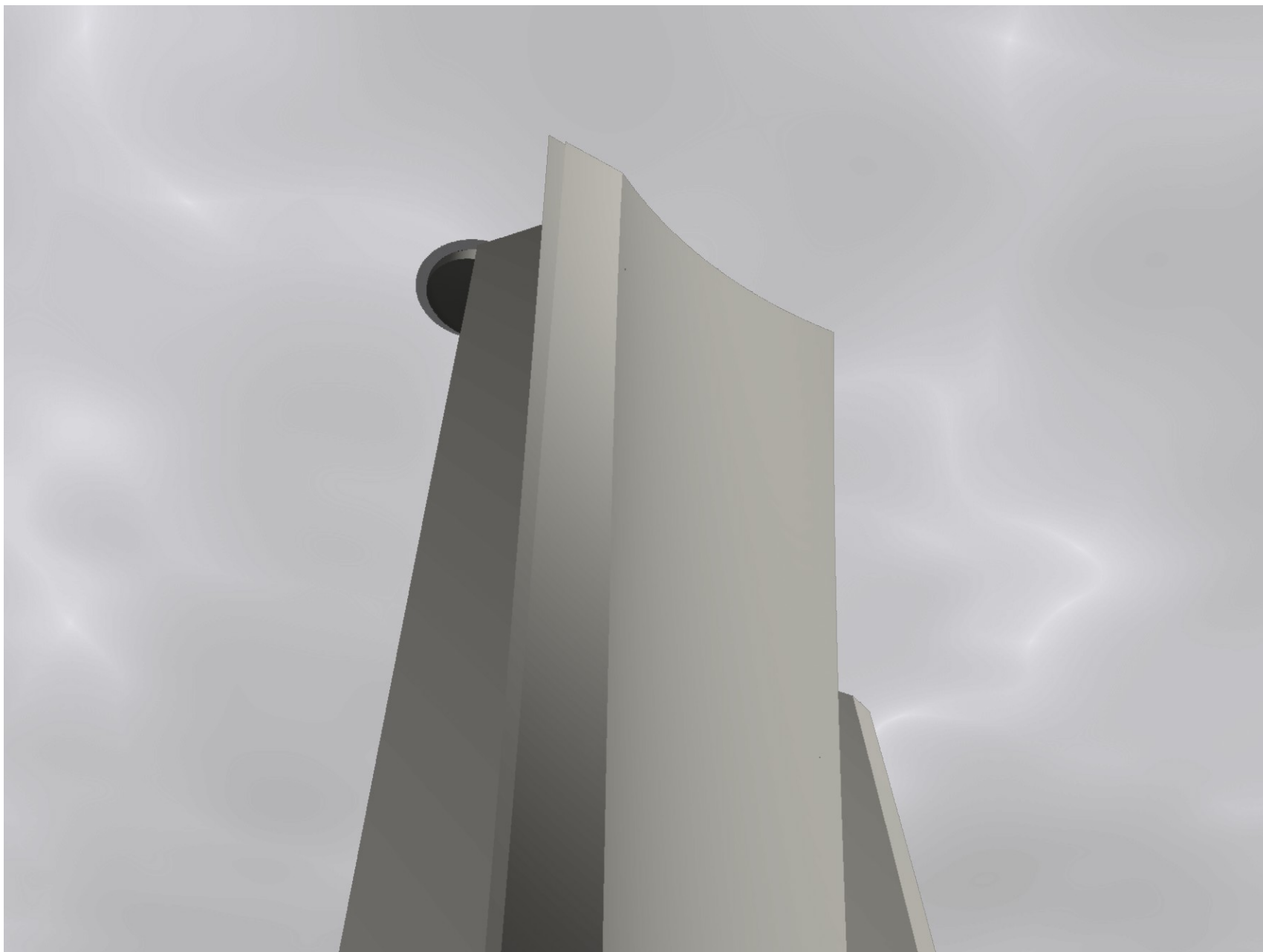


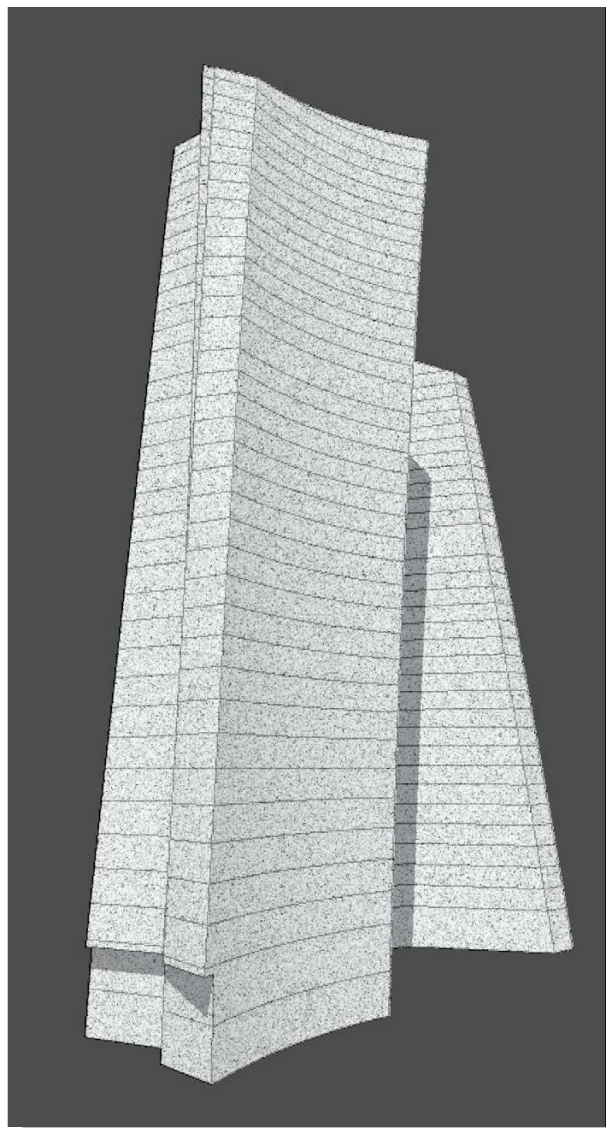
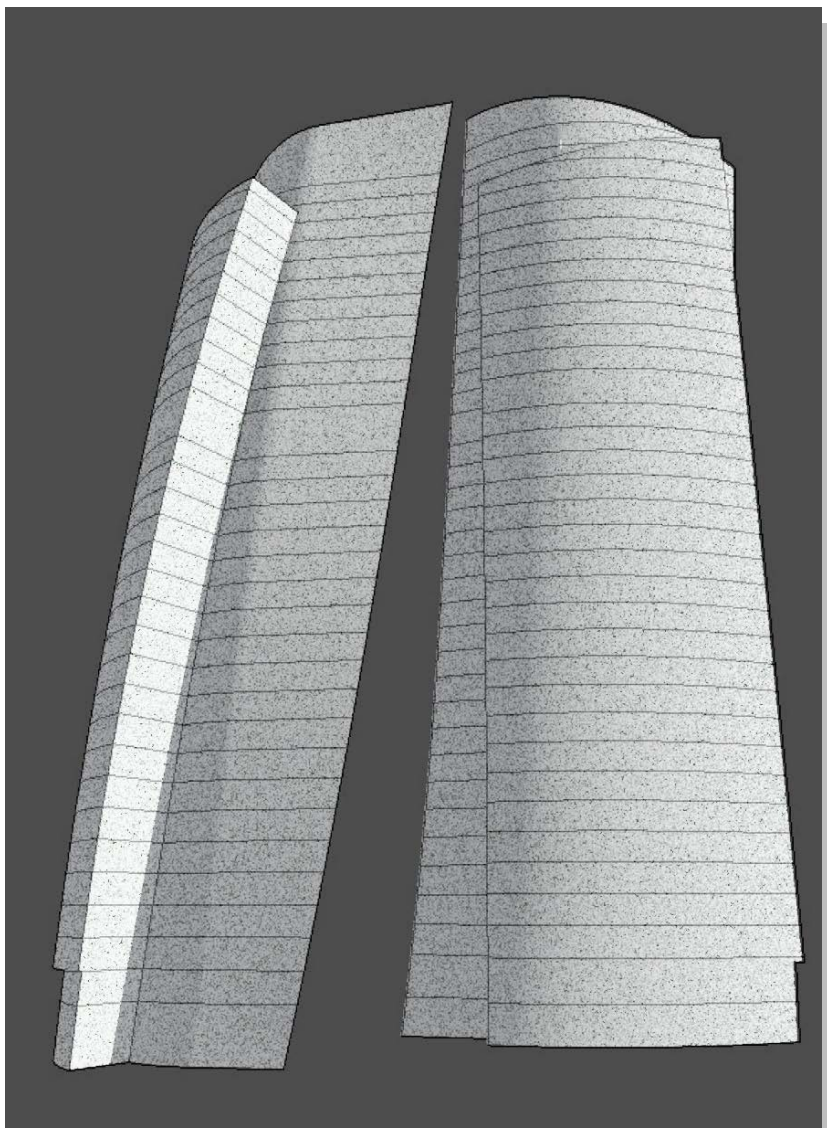
Free Form

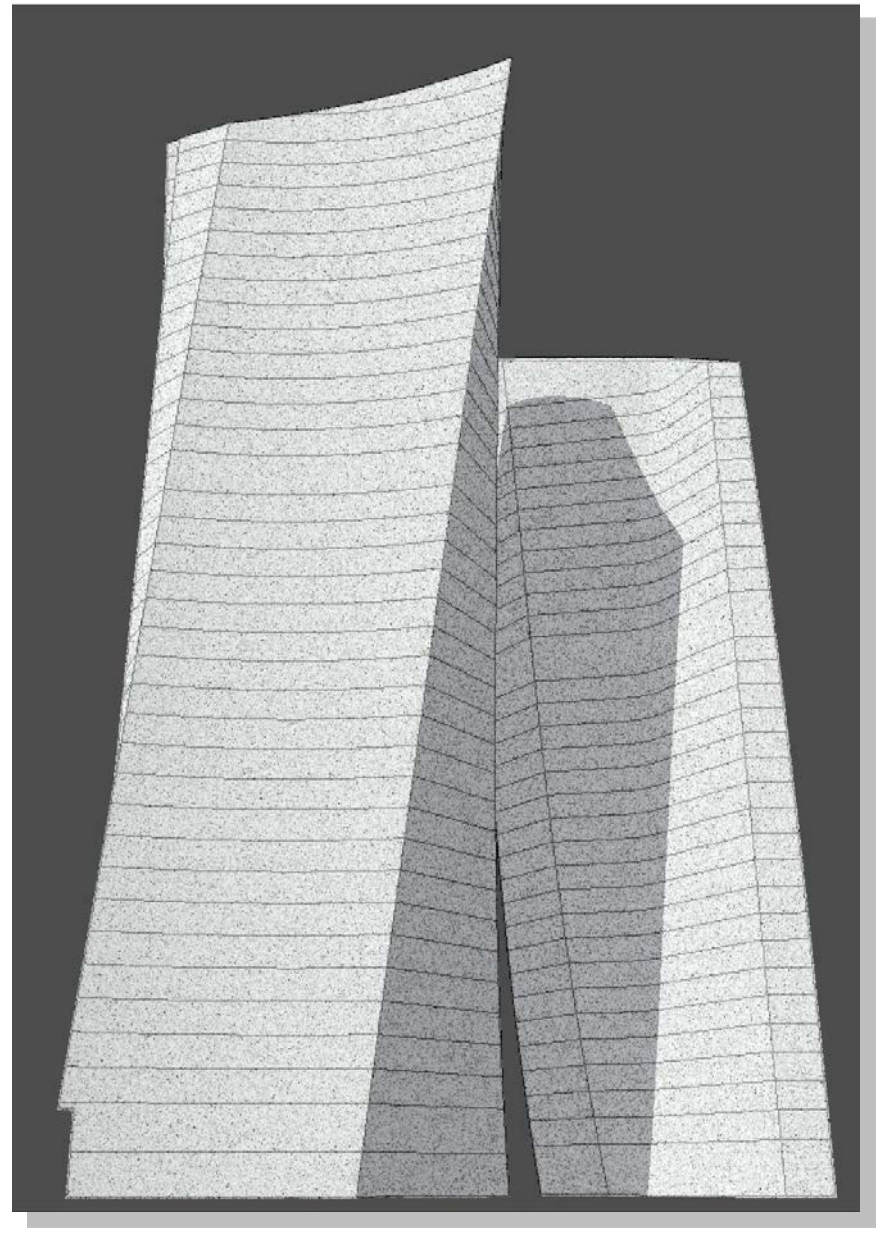
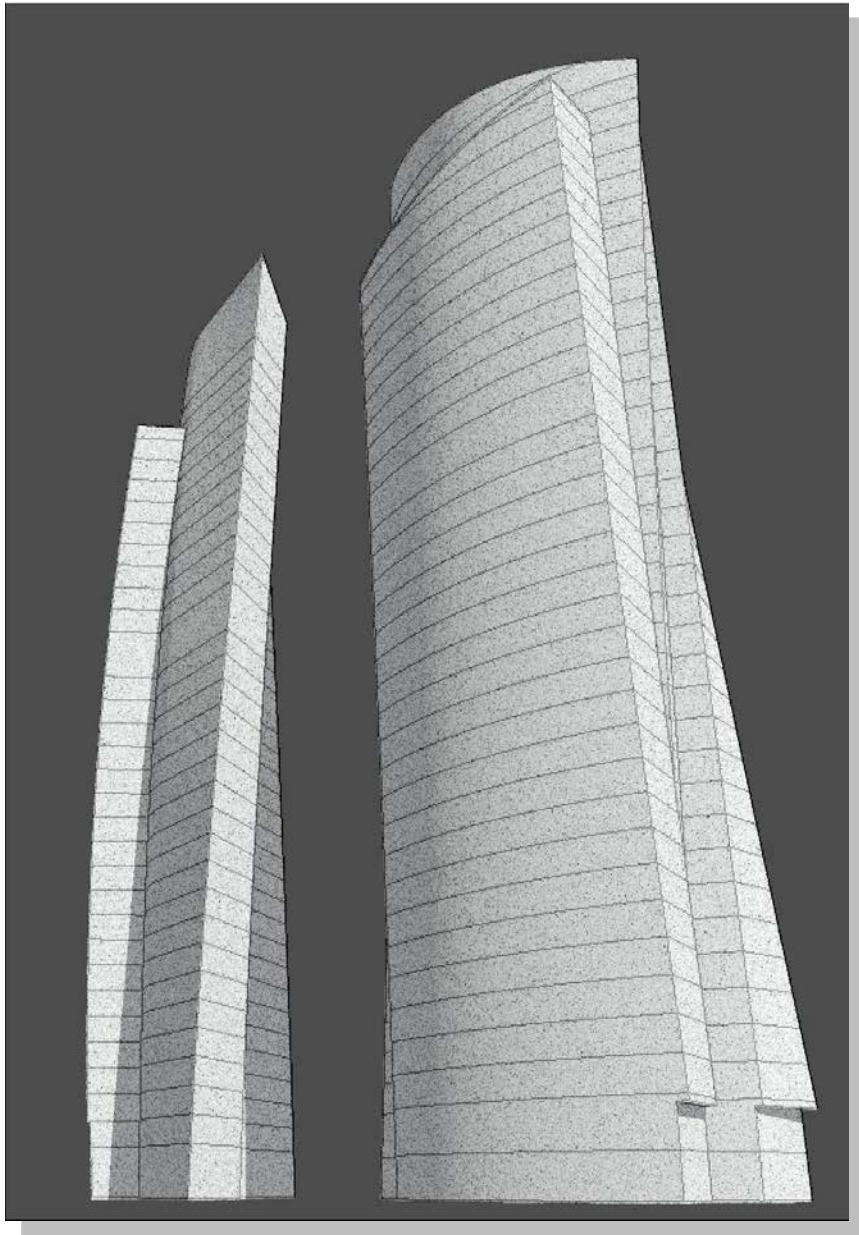


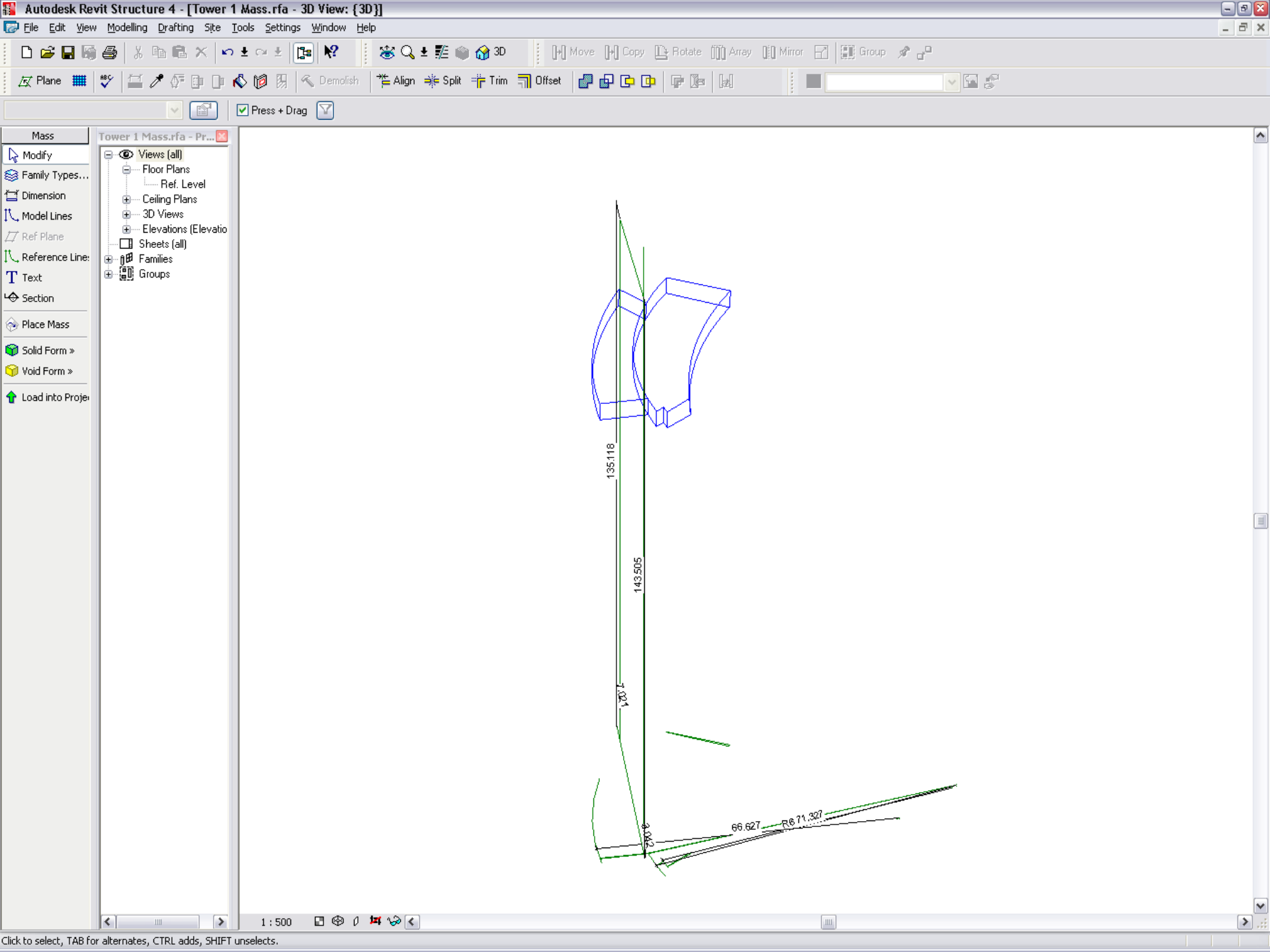














Desktop



My Documents



My Computer



My Network Places



Metric Library



Imperial Library



Metric Detail Library



Imperial Detail Libr...



Training Files



Metric Library(1)



Imperial Library(1)



Metric Detail Libr...



Imperial Detail Libr...



Training Files(1)

Look in: REVIT

Name	Size	Type	Date Modified
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Tower 1 Mass Roof.rfa	212 KB	Autodesk Revit Family	12/9/2006 1:09
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Tower 2 Mass OLD.rfa	276 KB	Autodesk Revit Family	24/7/2006 8:21
Tower 2 Mass Wireframe.000...	272 KB	Autodesk Revit Family	9/9/2006 15:58
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Tower 2 Mass.0020.rfa	464 KB	Autodesk Revit Family	10/8/2006 11:03
Tower 2 Mass.0021.rfa	236 KB	Autodesk Revit Family	10/8/2006 15:52
Tower 2 Mass.0022.rfa	480 KB	Autodesk Revit Family	10/8/2006 23:37
Tower 2 Mass.rfa	268 KB	Autodesk Revit Family	11/8/2006 1:51

File name: Tower 1 Mass.rfa

Files of type: Family Files (*.rfa)

Type	Height 1	Height 2	R4	R6	RA10	RA2	RB10	RB2	XA109	XA110	XA21
	(all)	(all)	(all)	(all)	(all)	(all)	(all)	(all)	(all)	(all)	(all)
T1LG3	10750.0	14750.0	68170.0	71327.0	62791.9	71599.6	62417.5	71396.5	15897.4	7846.6	29943.0
T1L01	14750.0	18750.0	68170.0	71327.0	62417.5	71396.5	62033.6	71197.8	15810.9	7995.0	29666.2
T1L02	18750.0	22750.0	68170.0	71327.0	62033.6	71197.8	61640.8	71003.4	15725.7	8134.4	29390.7
T1L03	22750.0	26750.0	68170.0	71327.0	61640.8	71003.4	61239.8	70813.4	15641.8	8265.5	29116.8
T1L04	26750.0	30750.0	68170.0	71327.0	61239.8	70813.4	60831.3	70627.8	15559.4	8389.3	28845.0
T1L05	30750.0	34750.0	68170.0	71327.0	60831.3	70627.8	60416.0	70446.5	15478.3	8506.7	28575.6

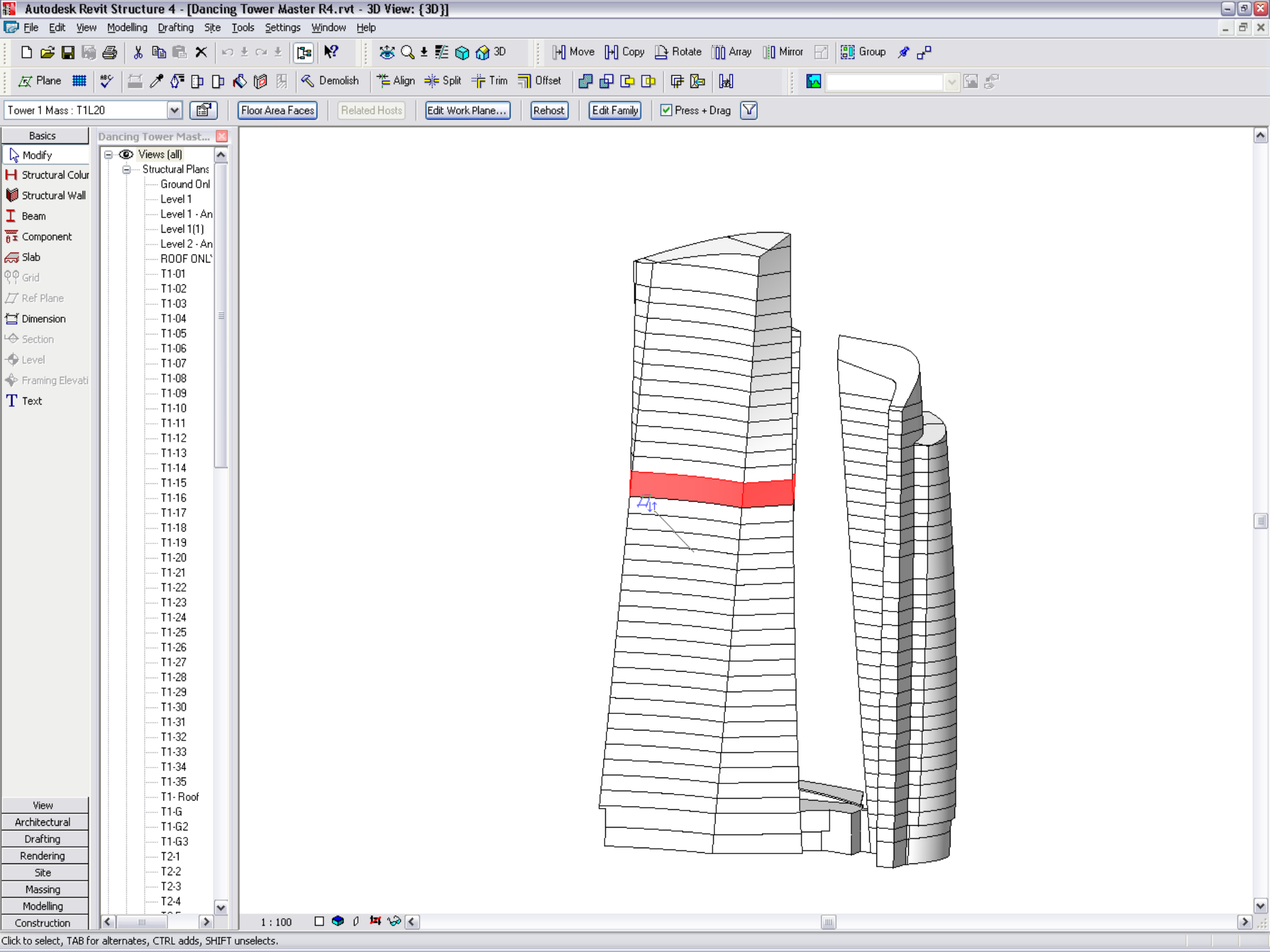
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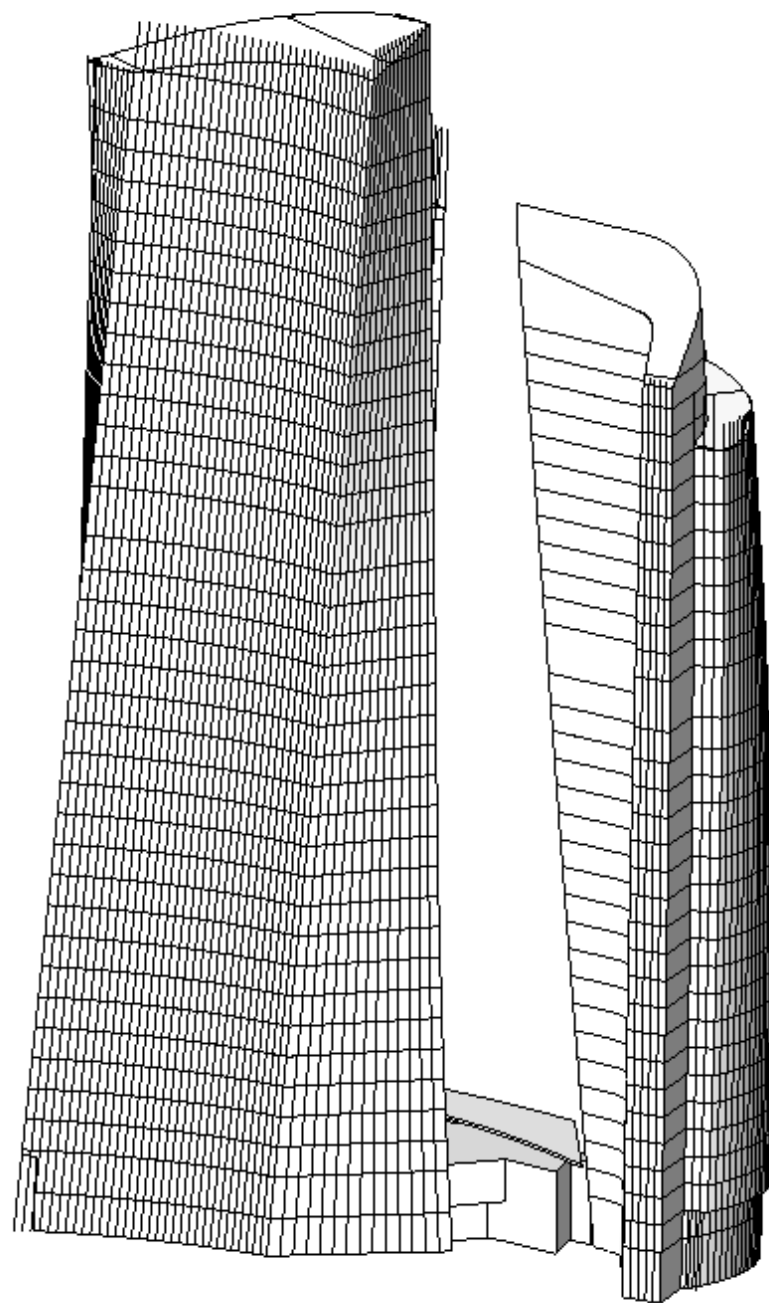
Preview



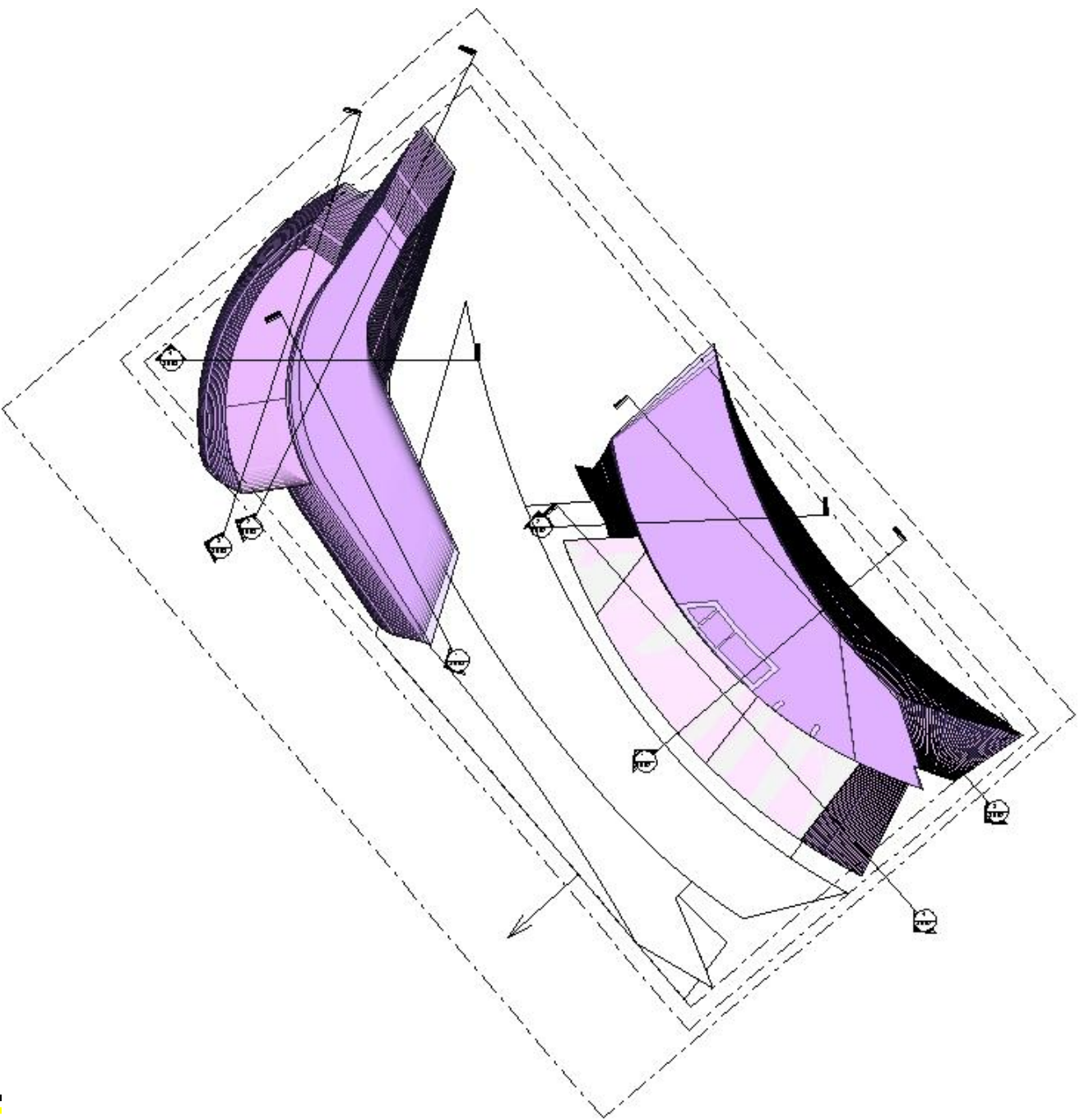
Open

Cancel











Plans - Structural Plan - T1-01.jpg



Plans - Structural Plan - T1-02.jpg



Plans - Structural Plan - T1-03.jpg



Plans - Structural Plan - T1-04.jpg



Plans - Structural Plan - T1-05.jpg



Plans - Structural Plan - T1-06.jpg



Plans - Structural Plan - T1-07.jpg



Plans - Structural Plan - T1-08.jpg



Plans - Structural Plan - T1-09.jpg



Plans - Structural Plan - T1-10.jpg



Plans - Structural Plan - T1-11.jpg



Plans - Structural Plan - T1-12.jpg



Plans - Structural Plan - T1-13.jpg



Plans - Structural Plan - T1-14.jpg



Plans - Structural Plan - T1-15.jpg



Plans - Structural Plan - T1-16.jpg



Plans - Structural Plan - T1-17.jpg



Plans - Structural Plan - T1-18.jpg



Plans - Structural Plan - T1-19.jpg



Plans - Structural Plan - T1-20.jpg



Plans - Structural Plan - T1-21.jpg



Plans - Structural Plan - T1-22.jpg



Plans - Structural Plan - T1-23.jpg



Plans - Structural Plan - T1-24.jpg



Plans - Structural Plan - T1-25.jpg



Plans - Structural Plan - T1-26.jpg



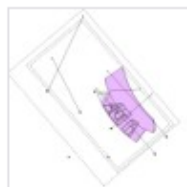
Plans - Structural Plan - T1-27.jpg



Plans - Structural Plan - T1-28.jpg



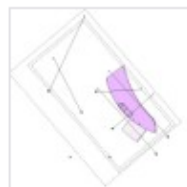
Plans - Structural Plan - T1-29.jpg



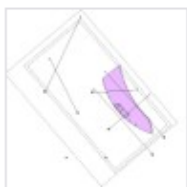
Plans - Structural Plan - T1-30.jpg



Plans - Structural Plan - T1-31.jpg



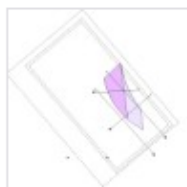
Plans - Structural Plan - T1-32.jpg



Plans - Structural Plan - T1-33.jpg



Plans - Structural Plan - T1-34.jpg



Plans - Structural Plan - T1-35.jpg



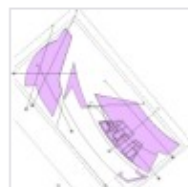
Plans - Structural Plan - T1-Roof.jpg



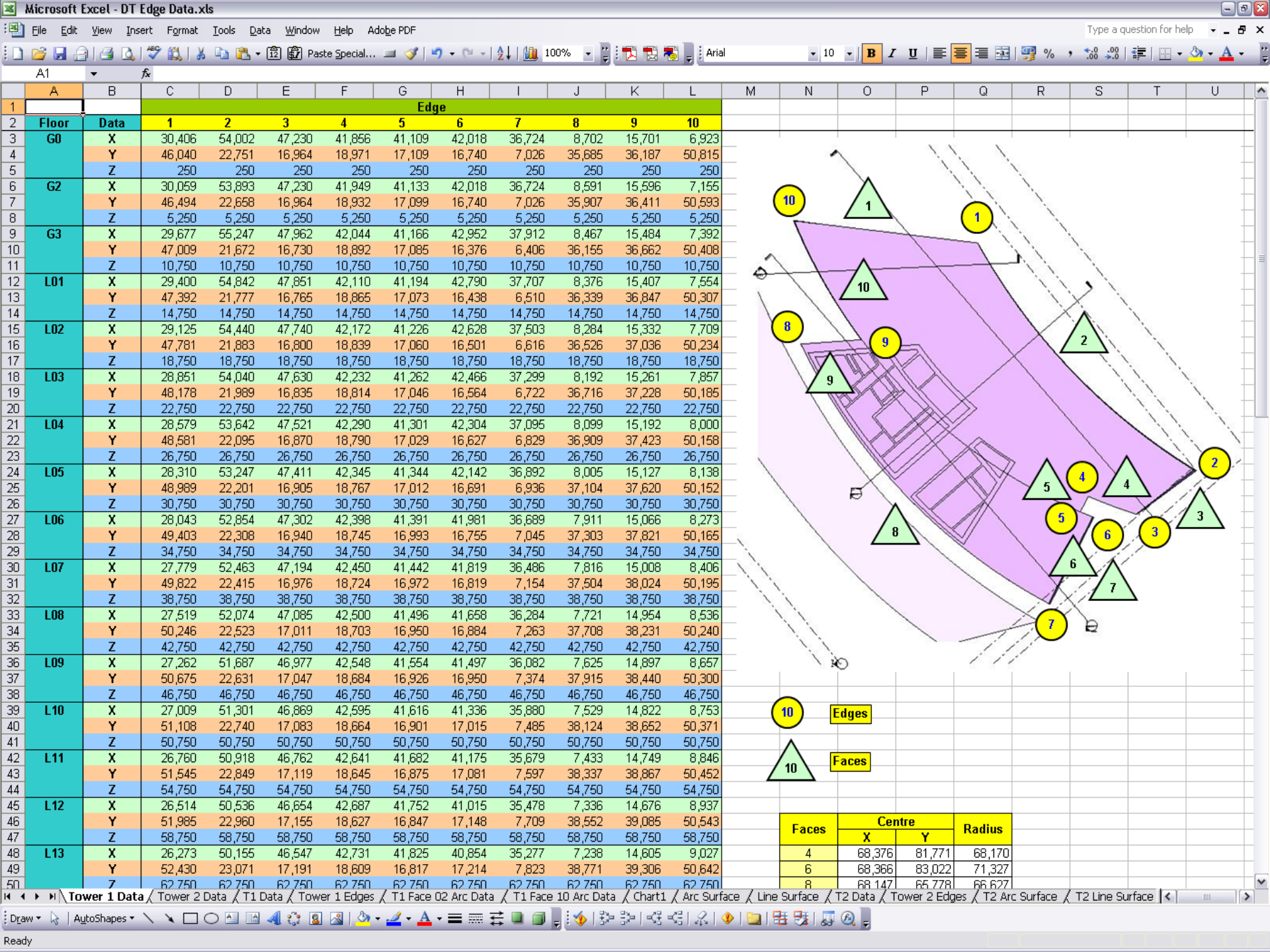
Plans - Structural Plan - T1-G2.jpg

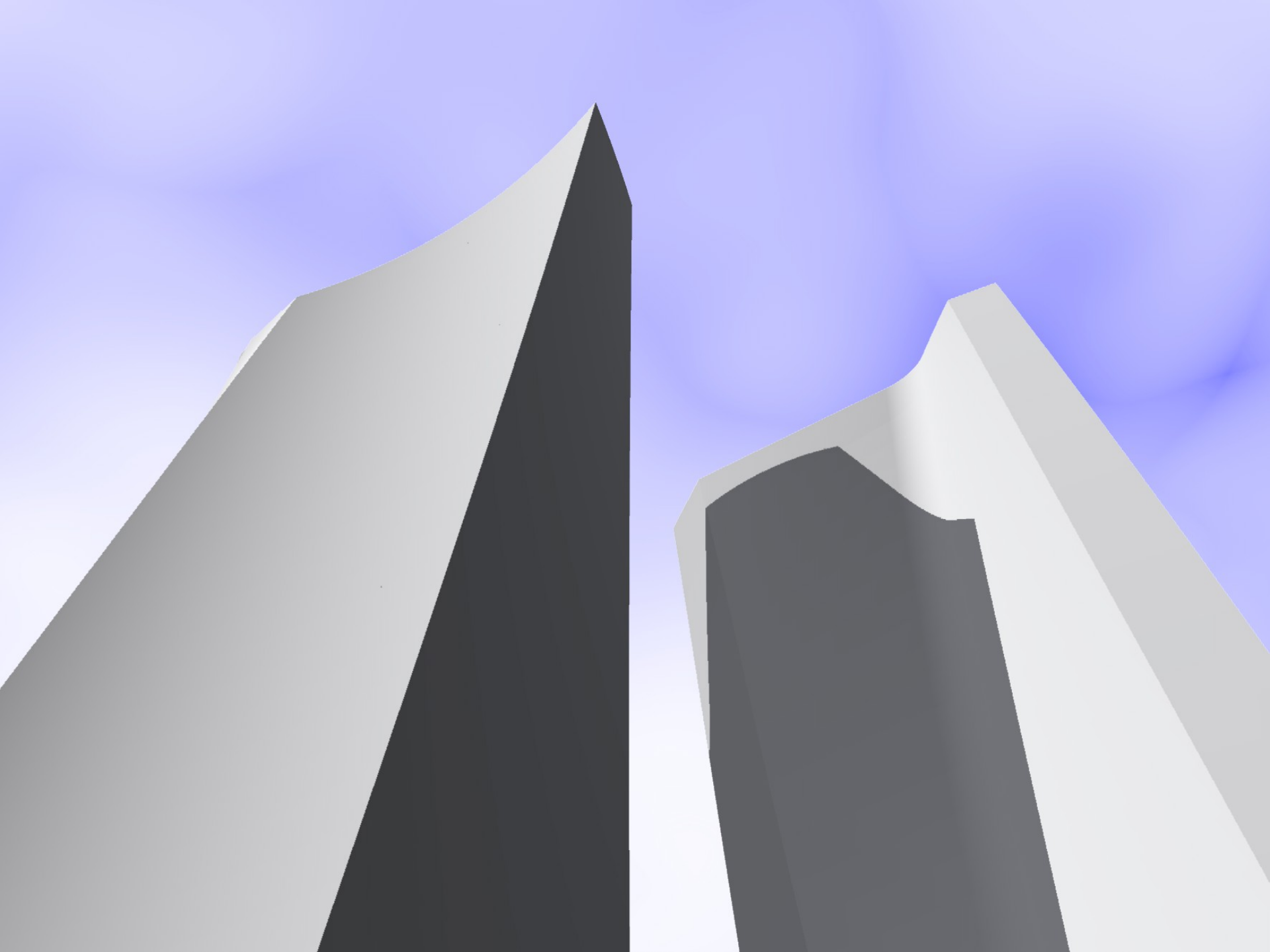


Plans - Structural Plan - T1-G3.jpg



Plans - Structural Plan - T1-G.jpg





The End! Thanks!

