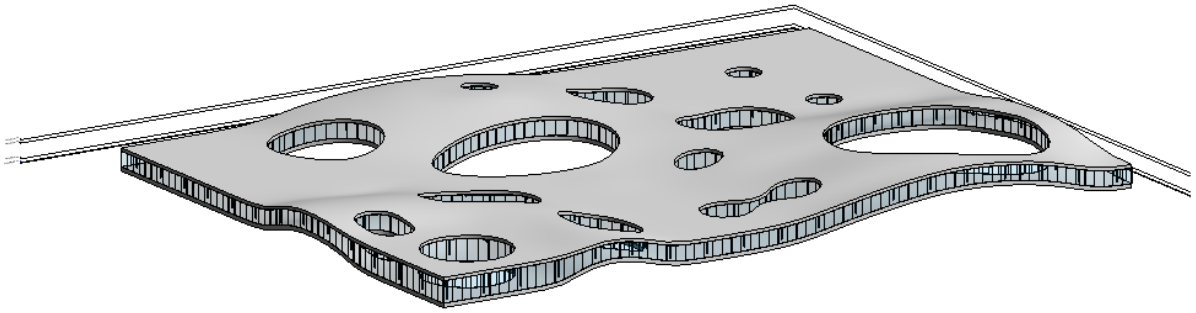
Assignment1_RolexCenter



Base files

- MOD_THO_RolexCenter_Base.rvt **It is a Revit 2021 file just in case, but you can open it in 2022 and upgrade it*
- RolexCenter_Base.3dm
- Plans, sections, elevations

Exercise

Use a dwg export from Rhino to create a mass in Revit. Pay attention to the elevation, and the level it is imported into.

Create the necessary levels. From an elevation or section you'll notice the main floor and roof levels. Create two levels in Revit for each of these: one for the top of slab (TOS) and one for the bottom of slab (BOS).

Create the necessary grids. Use numbers to name the vertical ones, and letters (A-Z) for the horizontal ones. You can use the grids from Rhino as a reference.

Model the slabs. Use the base roof type provided to create the roof types needed for each slab thickness.

Create the facades as Curtain Systems. Model one curtain system for each of the four exterior facades, and one curtain system for each of the interior voids. The panels must be 2.25m wide, and go from floor to roof (no vertical subdivisions).

Model the structural columns. Use the CHS type provided.

Use the placeholder sheets and titleblocks provided to prepare the following drawings:

- **001 - SITE PLAN**: A general site plan view, scale 1:250
- **002 - SECTIONS**: Representative sections. At least a longitudinal and a transverse one
- **003 - AXON:** An exploded axonometric of the whole building, showing the interior space
- **004 - SCHEDULES:** Include the schedules shown below:
    - Structural Columns: Schedule columns by their base elevation. Group those starting at the same elevation showing how many there are and the total length (*figure 1*).
    - Prepare a schedule for fabrication of the facade mullions. We need to know the type, and number of mullions of each length. Also show the subtotals, and include the units in the table (m) (*figure 2*). **Tip: you might want to look into "calculated fields"*

Output

Please submit the Revit model as ***BIMSC_S2_Assignment1_GroupNumber.rvt***, and pdfs of the drawings as ***BIMSC_S2_Assignment1_GroupNumber_DrawingNumber.pdf***.

Images

244.5x20CHS	0.75_Level00_TOS	-0.04	1	4.75
244.5x20CHS	0.75_Level00_TOS	-0.03	2	6.57
244.5x20CHS	0.75_Level00_TOS	-0.02	1	3.30
244.5x20CHS	0.75_Level00_TOS	-0.01	10	37.35
244.5x20CHS	0.75_Level00_TOS	0.00	44	146.64
244.5x20CHS	0.75_Level00_TOS	0.01	5	16.49
244.5x20CHS	0.75_Level00_TOS	0.02	5	16.49

Figure 1. Structural Column schedule.

30x30mm	4.73 m	1	4.73 m
30x30mm	4.74 m	3	14.22 m
30x30mm	4.75 m	32	152.00 m
30x30mm	4.76 m	5	23.80 m
30x30mm	4.77 m	9	42.93 m
30x30mm	4.78 m	1	4.78 m
30x30mm	4.80 m	2	9.59 m
30x30mm	4.81 m	1	4.81 m
1985			5231.74 m

Figure 2. Mullions schedule.