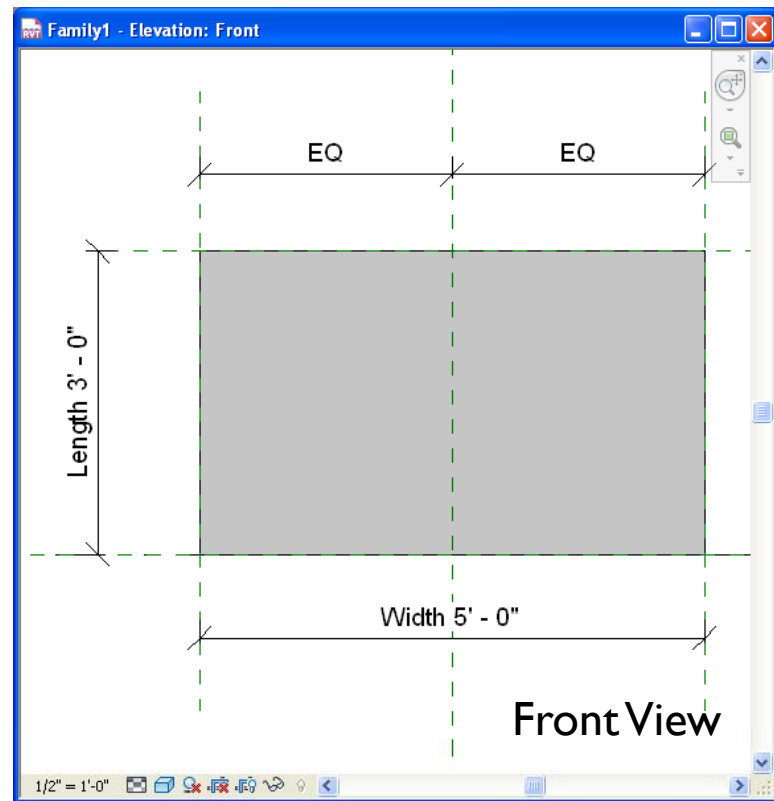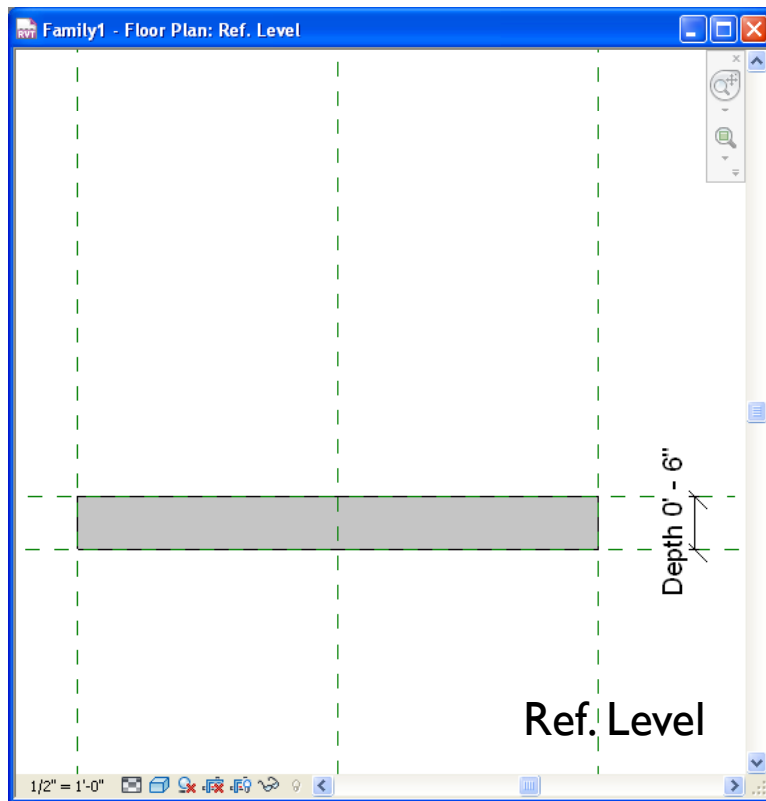# 48-749 Parametric Modeling
Curtain Wall System

Carnegie Mellon University
School of Architecture

Curtain Panel: Nested Box with Opening

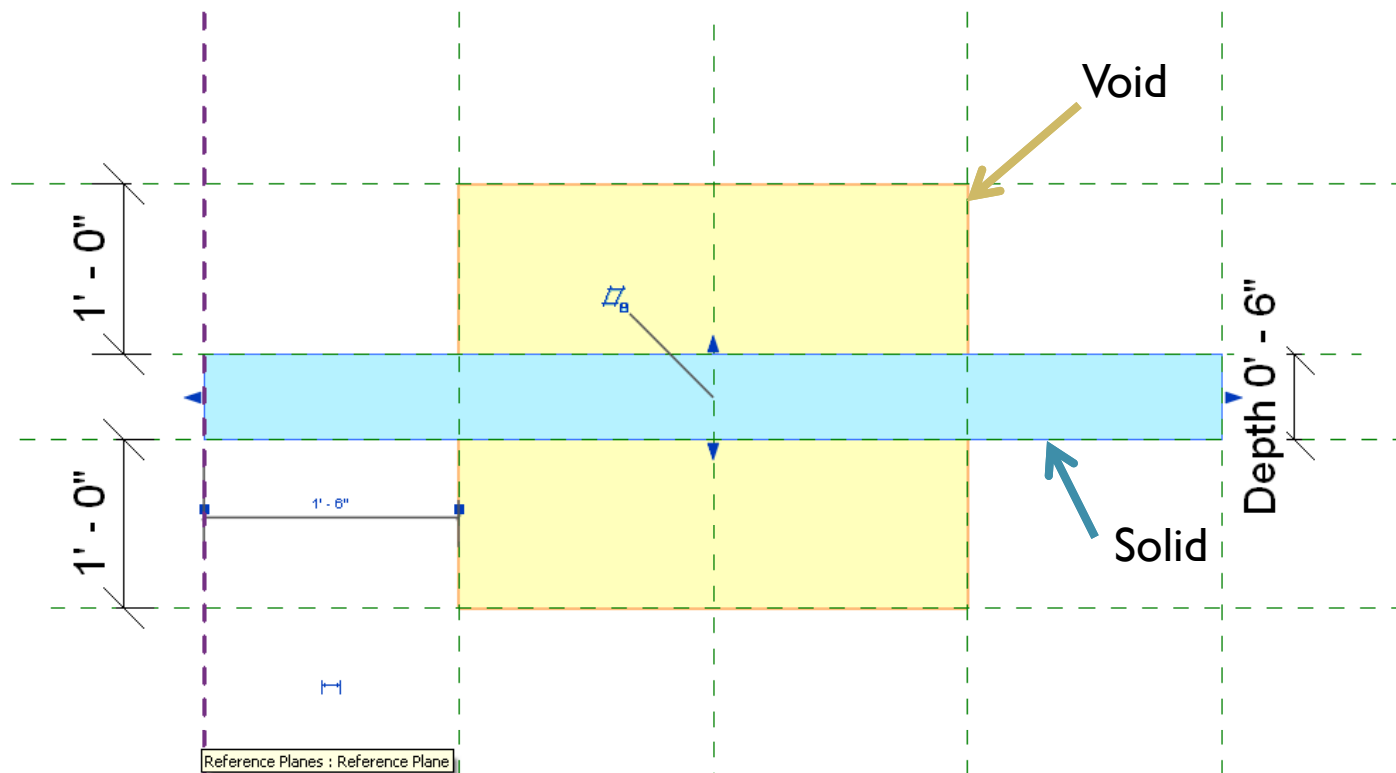Step 1: Start with a Generic model template
→Initiate a rectangular extrusion solid
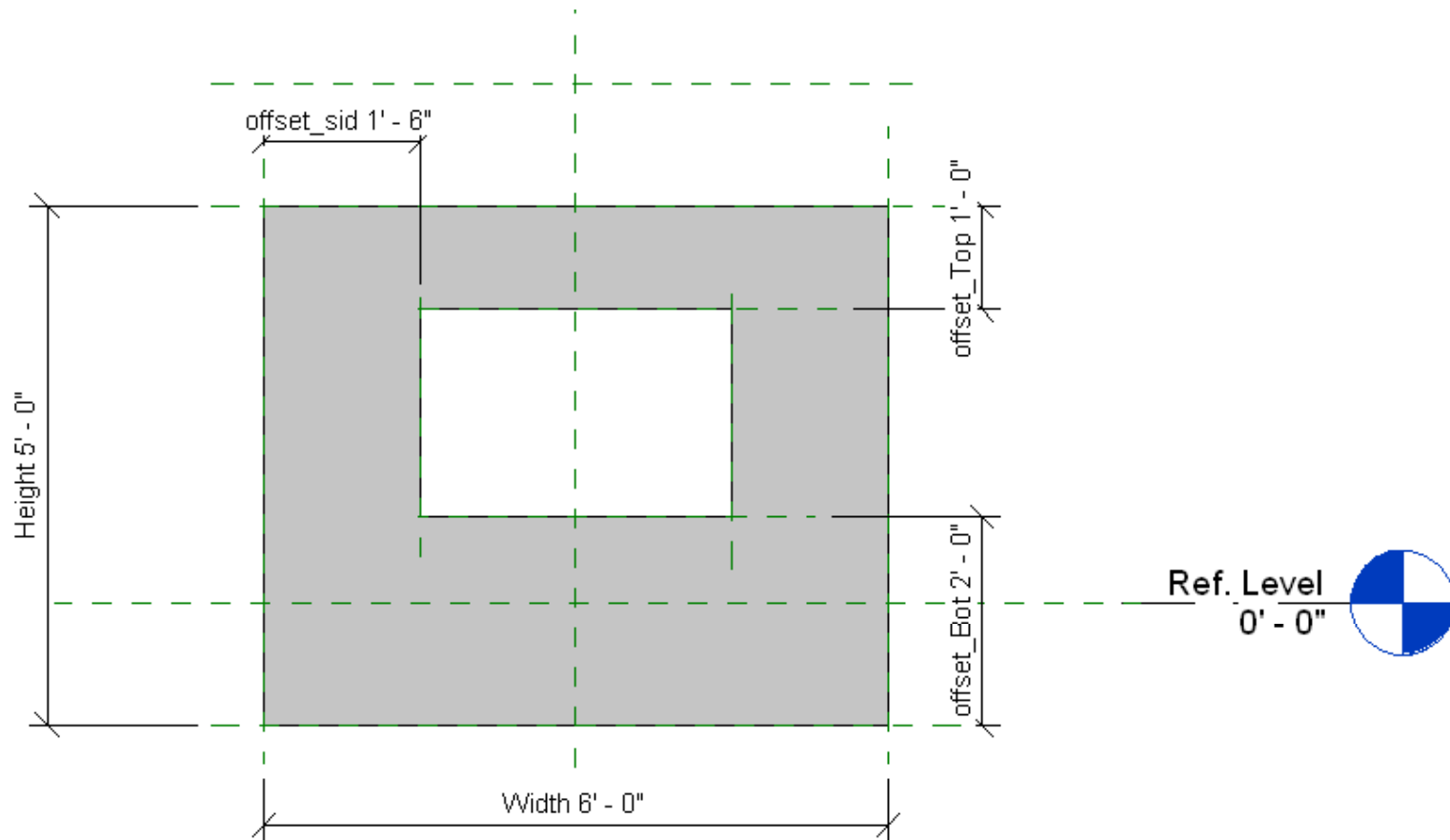→Set up the reference planes and align the edges of the solid to the reference planes

Ref. Level

Front View

Curtain Panel: Nested Box with Opening

Step 2: Create a void extrusion solid and make sure the void is always larger than the solid.

Curtain Panel: Nested Box with Opening
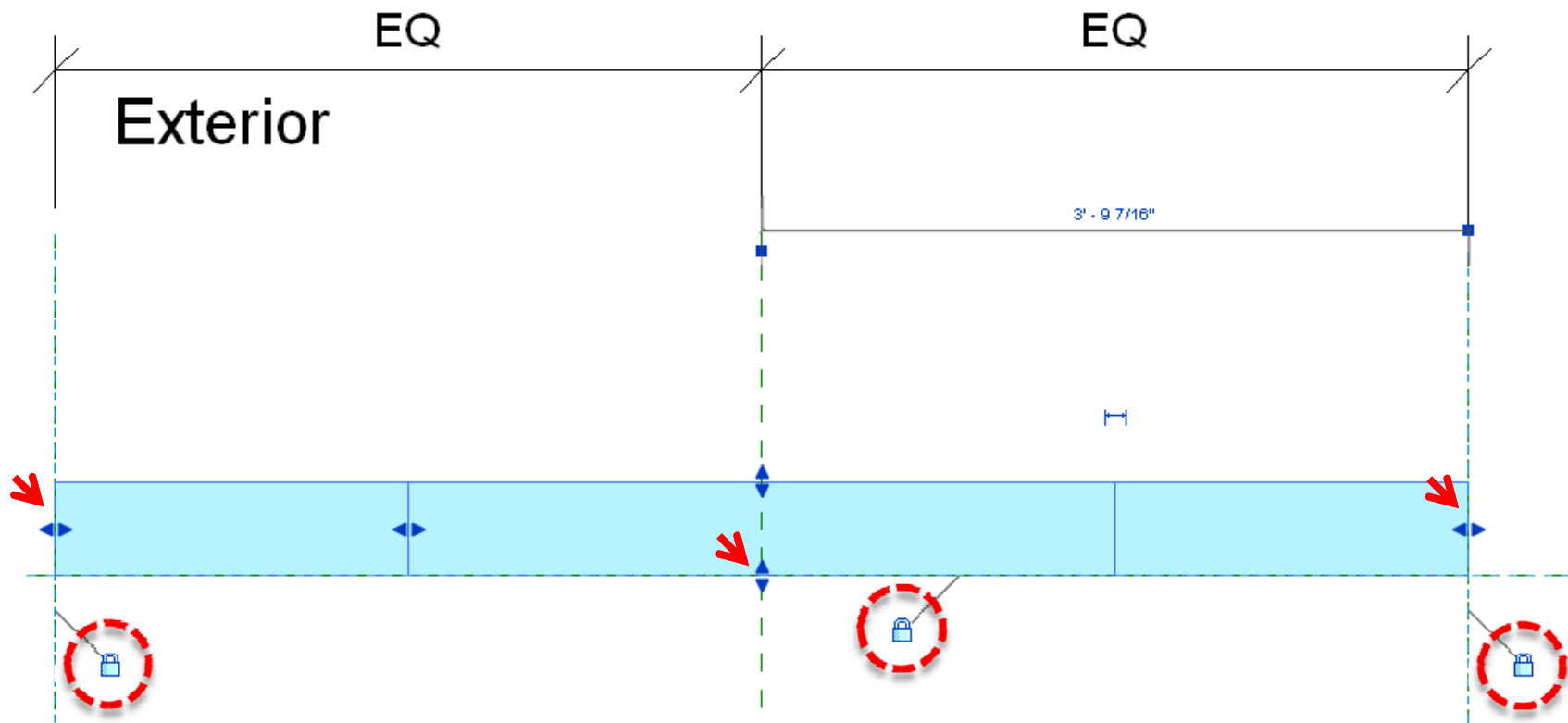
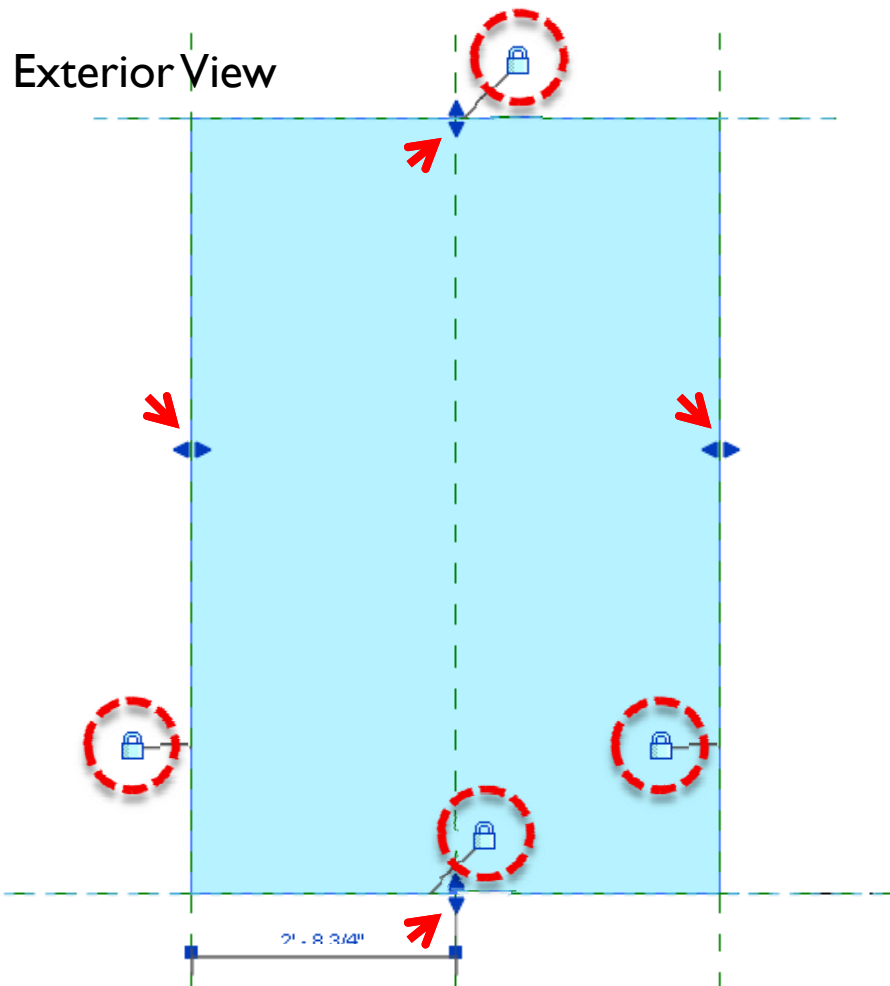**Result Curtain Panel.**

Curtain Panel: Nested Box with Opening

Step 3: Load the generic model into the Curtain Wall Panel template .
→ use the blue handles to constrain input geometry to the reference plan.

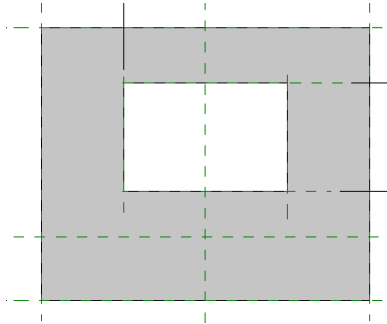# Curtain Panel: Nested Box with Opening
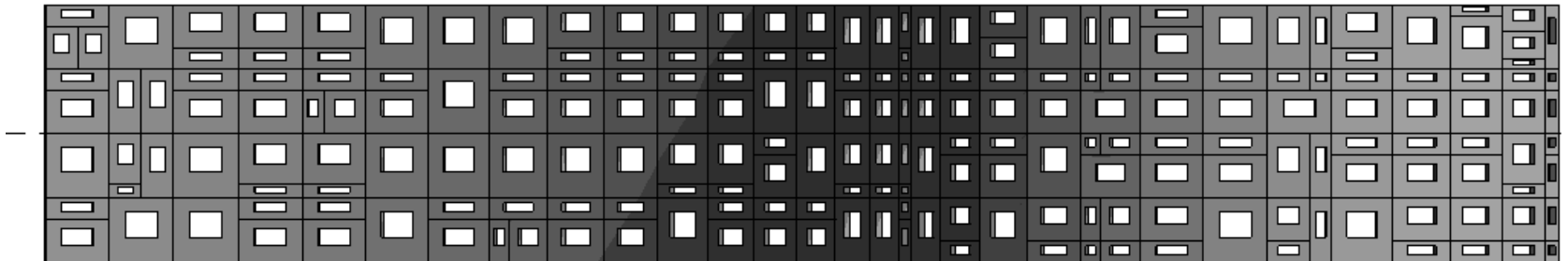
Exterior View

2' - 8 3/4"

Same for the Exterior view: properly constrain the edges to the left, right, top and bottom reference planes.
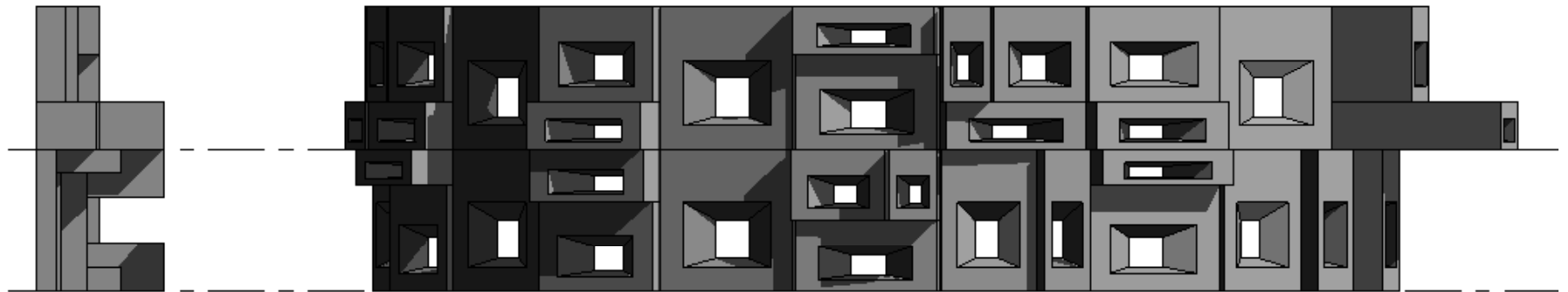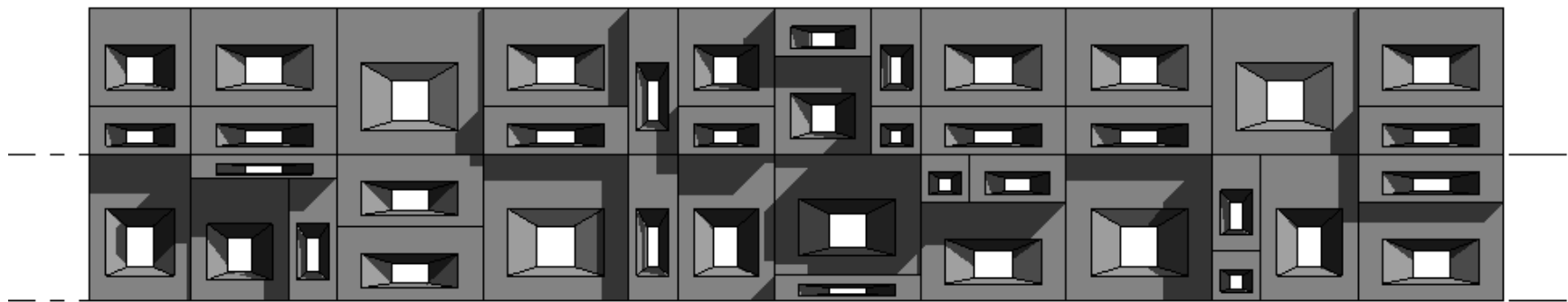
Curtain Panel: Nested Box with Opening

Result curtain wall panel.

Step 4: Load the curtain wall panel into the project. Below is the image generated with the panel specified above.
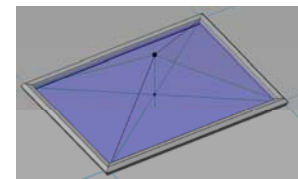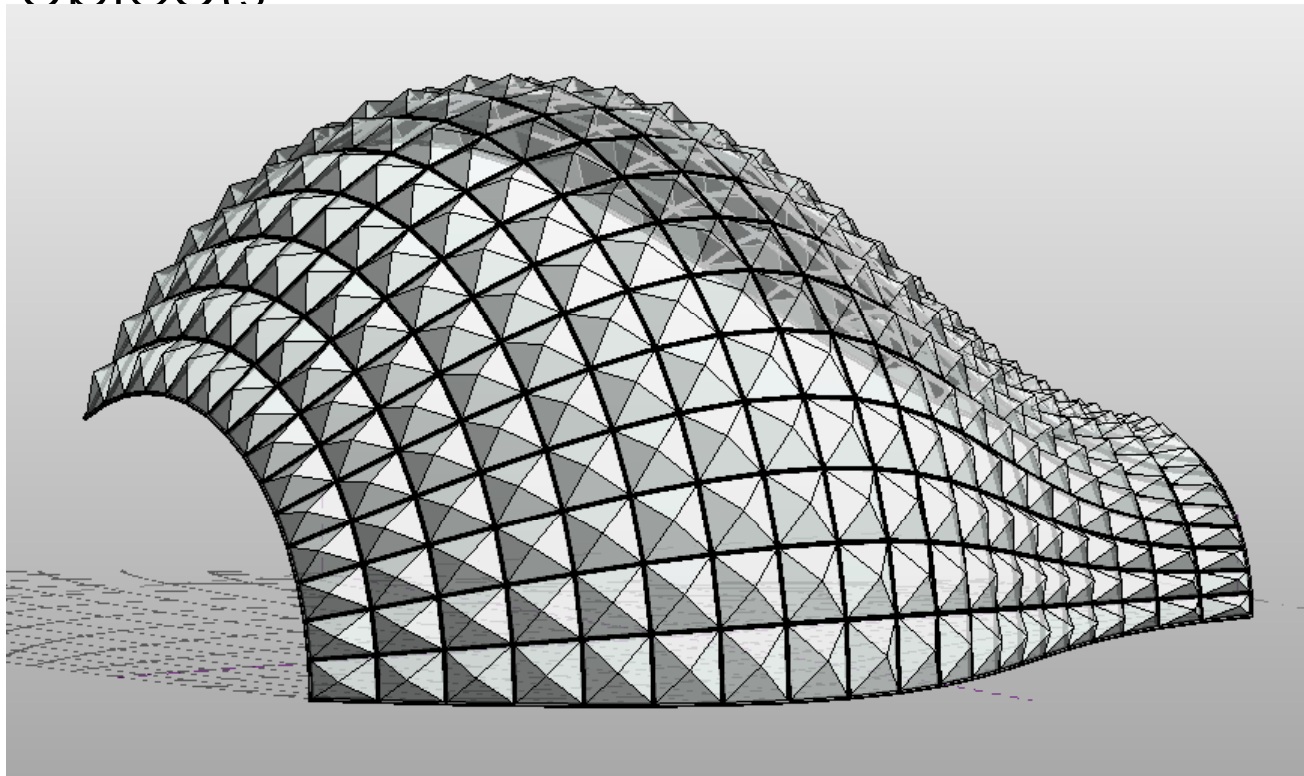
Curtain Panel: In-class exercise
Curtain Wall Panel with a **fixed** volume and a tapered opening

Pattern-Based Curtain Wall Panels

▸ When?

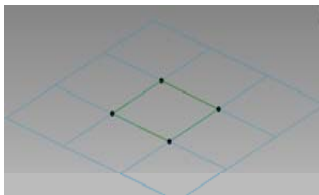➔ used when modeling conceptual mass objects

pyramid panel

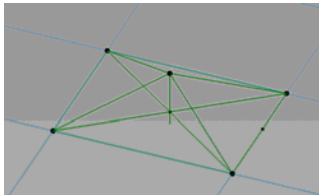A revolved surface patterned with rectangle-based pyramid panels.

Pattern-Based Curtain Wall Panels

Step 1: Start with a Curtain Panel Pattern
Based template

Step 2: Initiate reference lines with the pattern
selected.

Step 3: Design your panel.