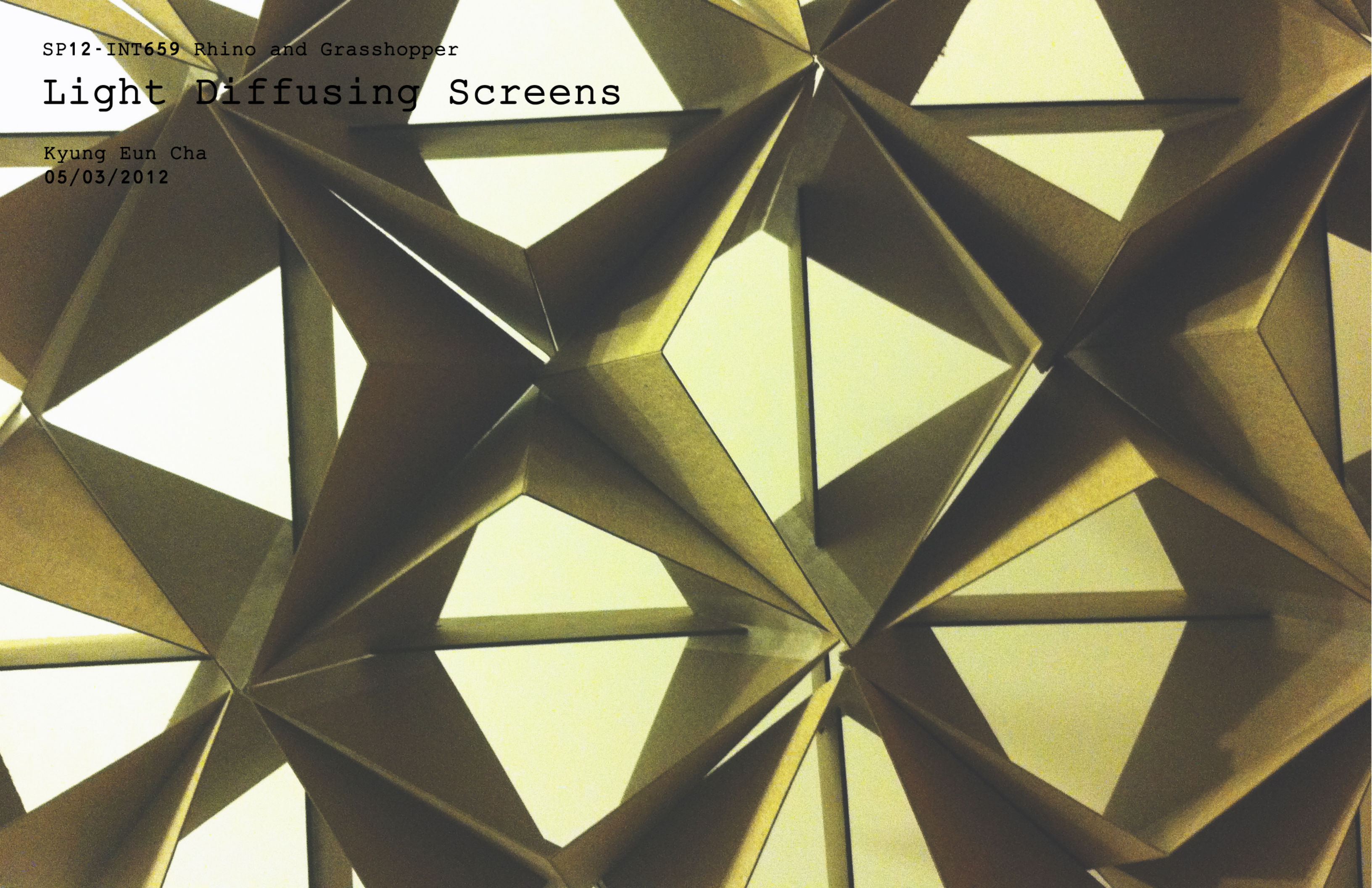


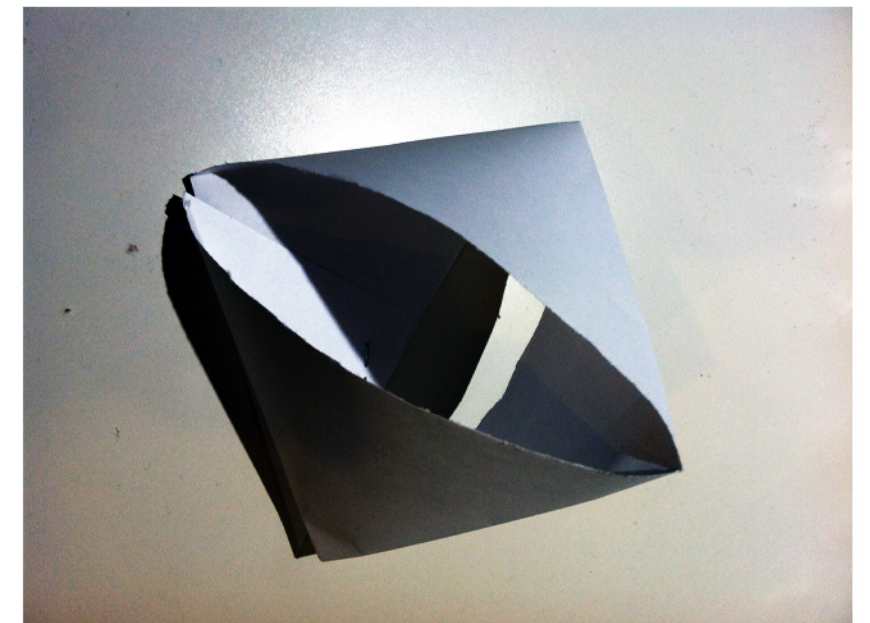
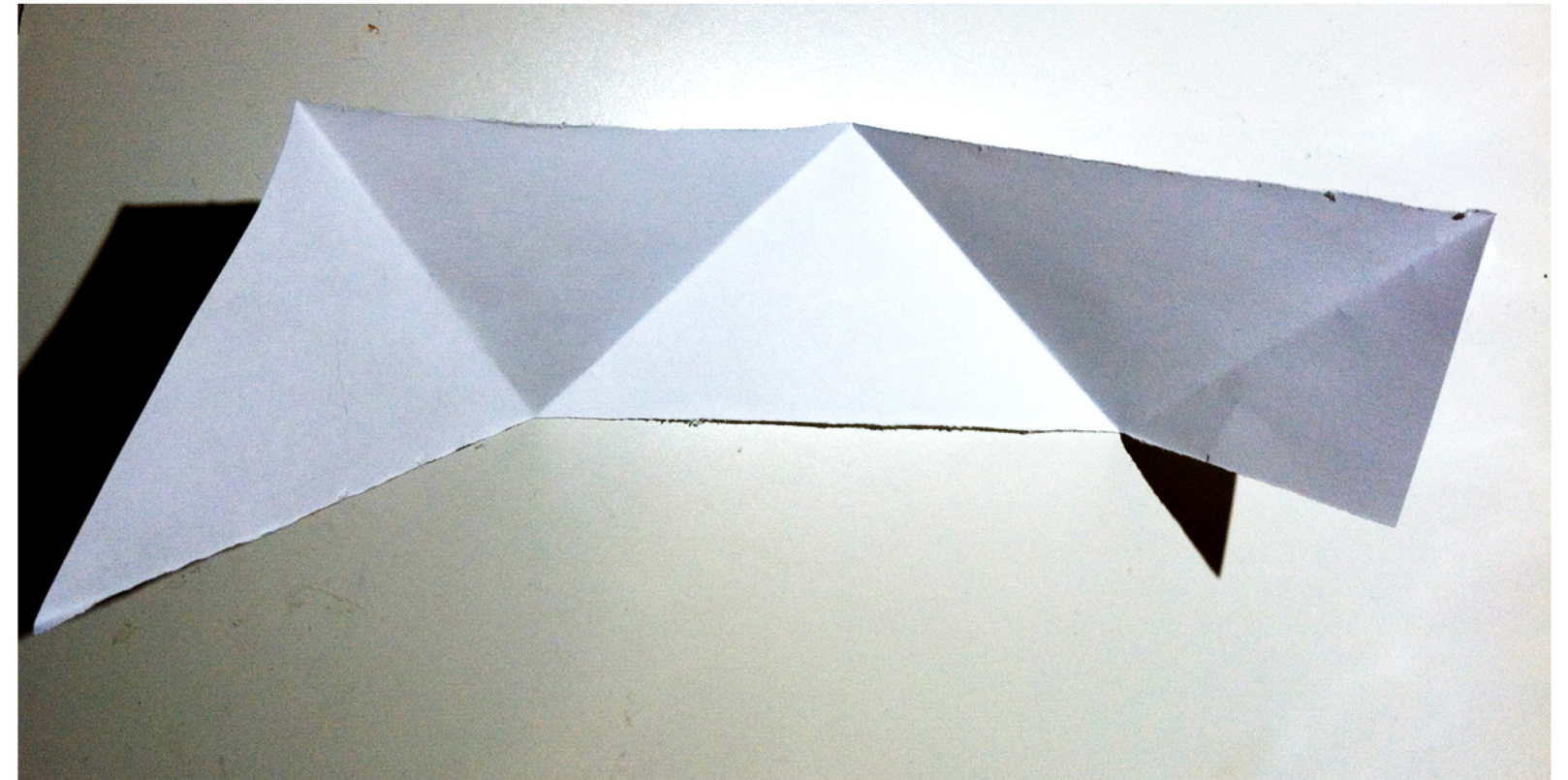
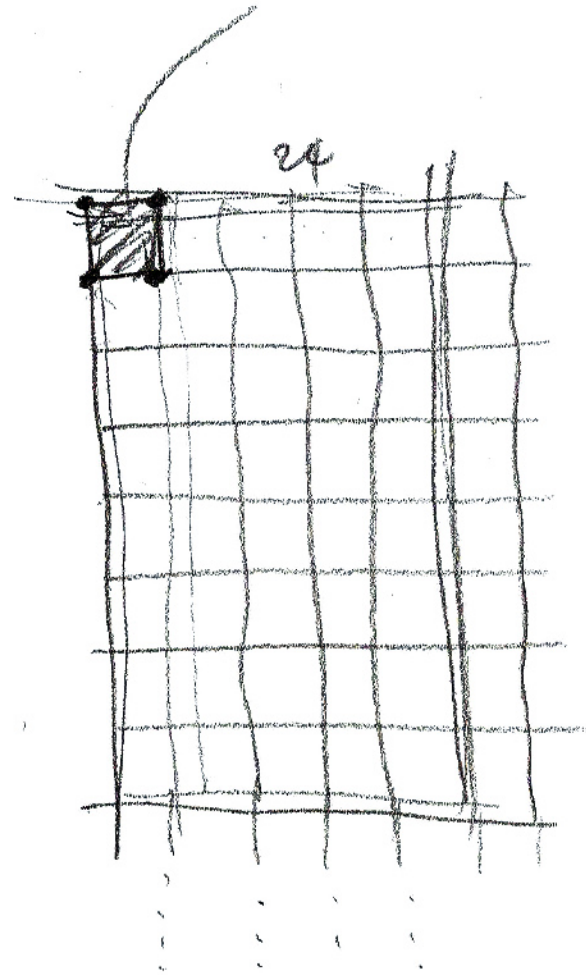
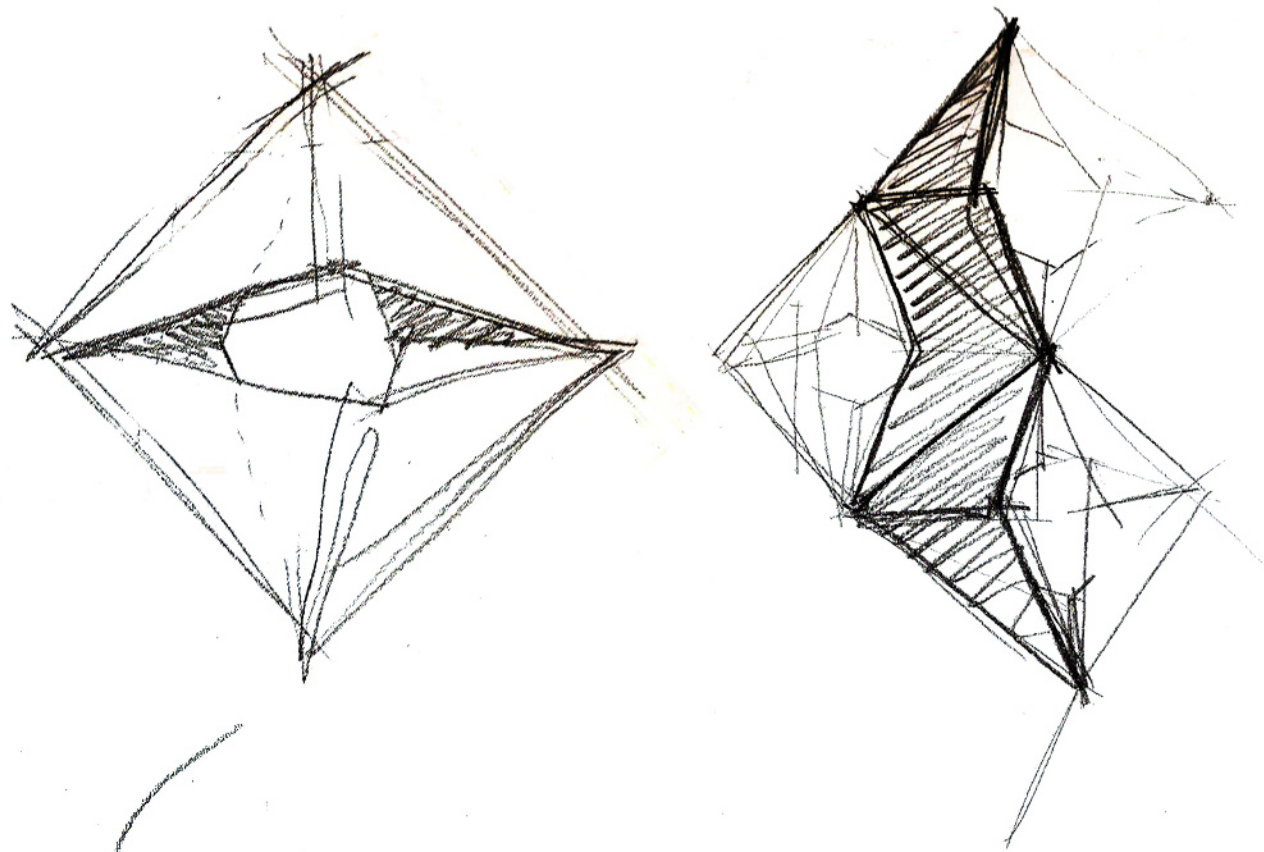


SP12-INT659 Rhino and Grasshopper

Light Diffusing Screens

Kyung Eun Cha

05/03/2012



Assembly System

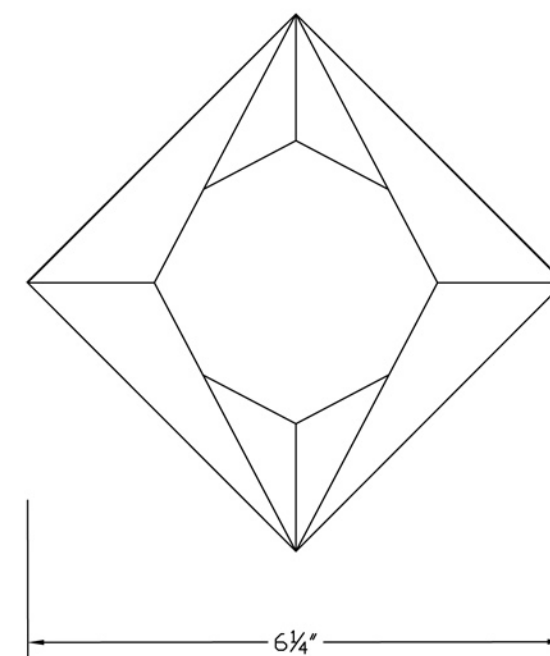
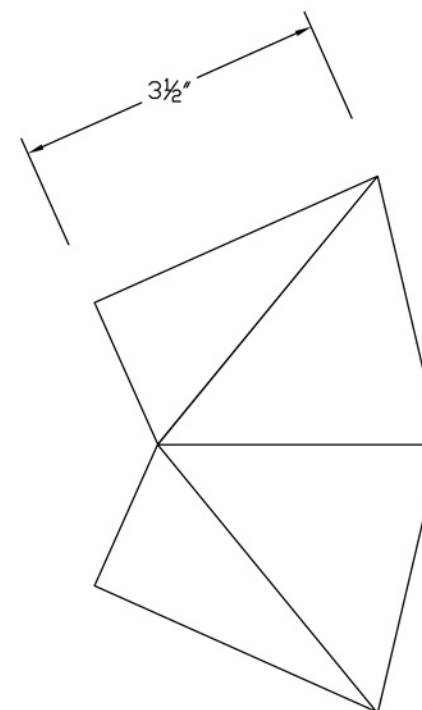
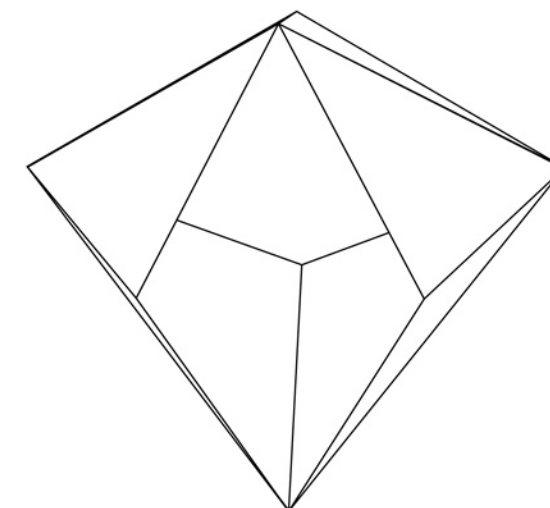
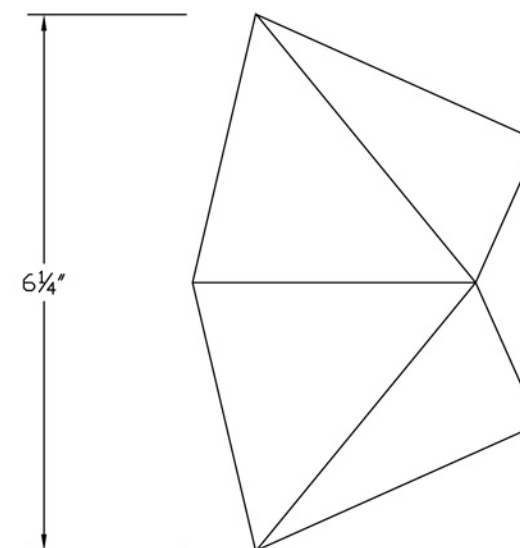
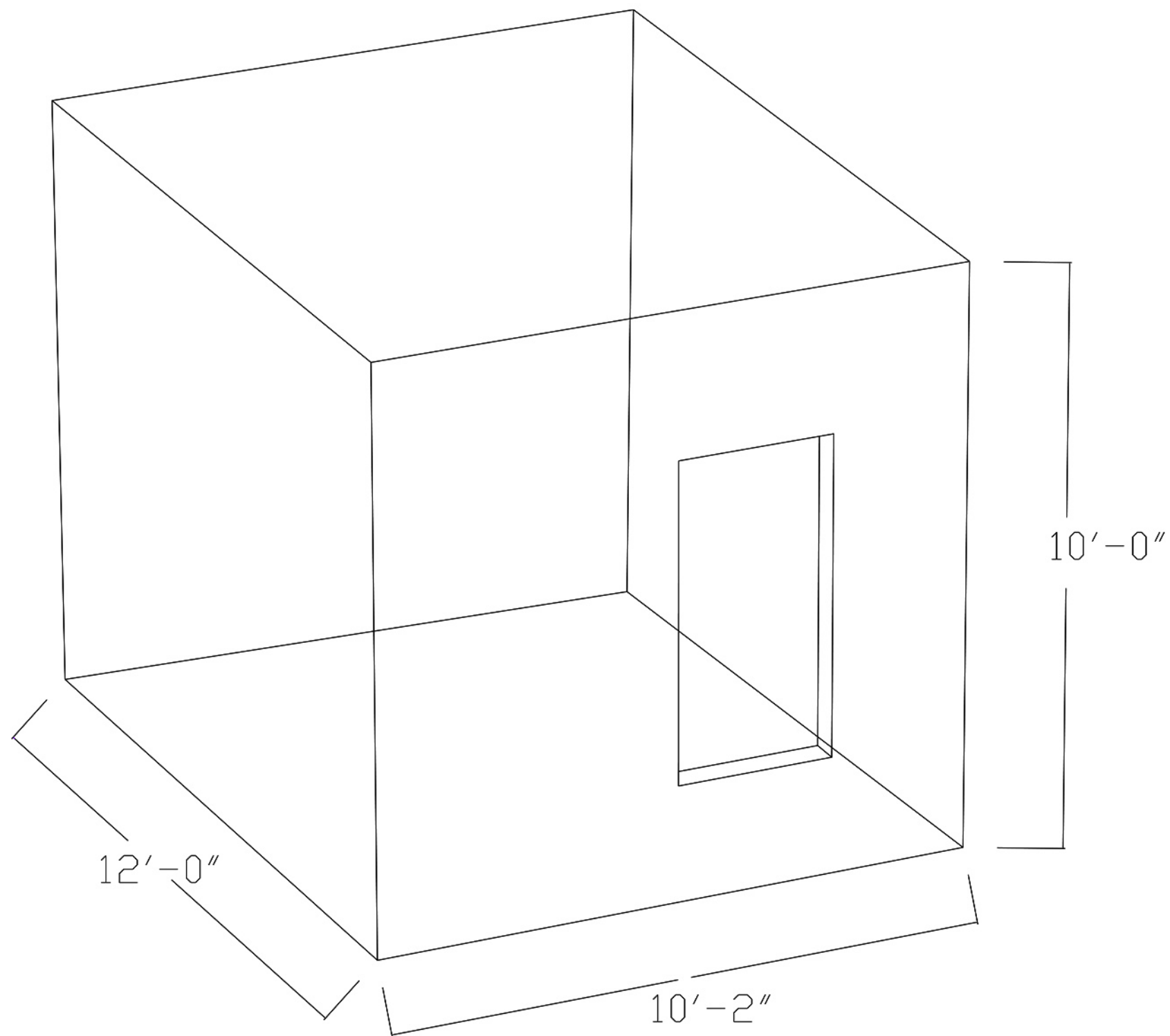
-Egg Crates With Modular Cells

Design Performance Criteria

-Light Diffusing

-Heat Blocking

-Aesthetic



Context Room

- 10' - 2" (W) x 12' - 0" (L) x 10' - 0" (H) Room

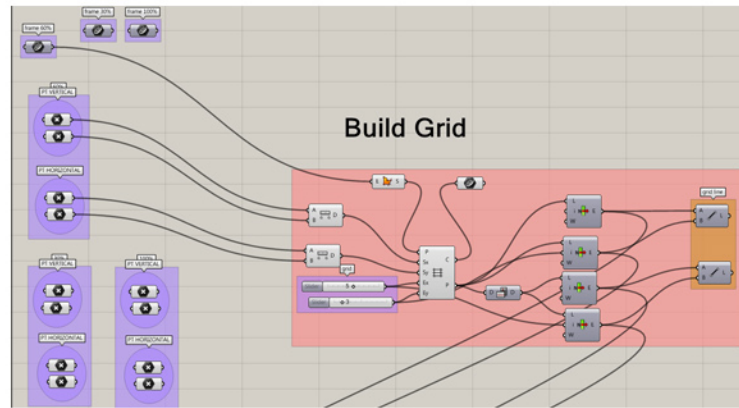
- 32" x 72" Window

Design Drivers

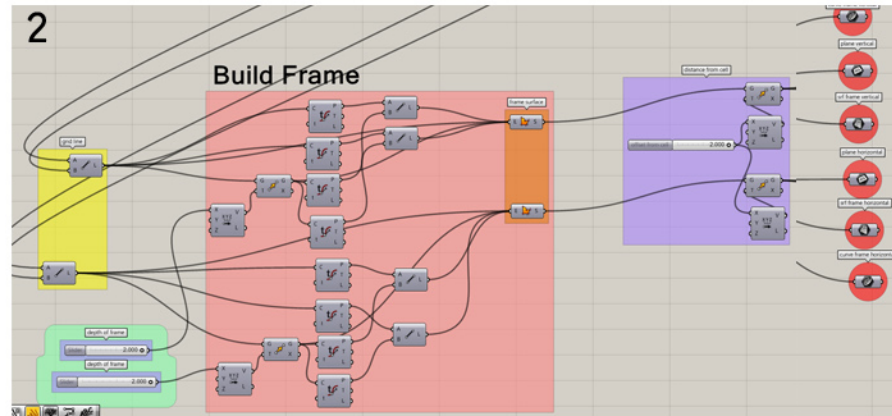
- Aperture of the cell

- Density of Frame Grid (Size of the cell)

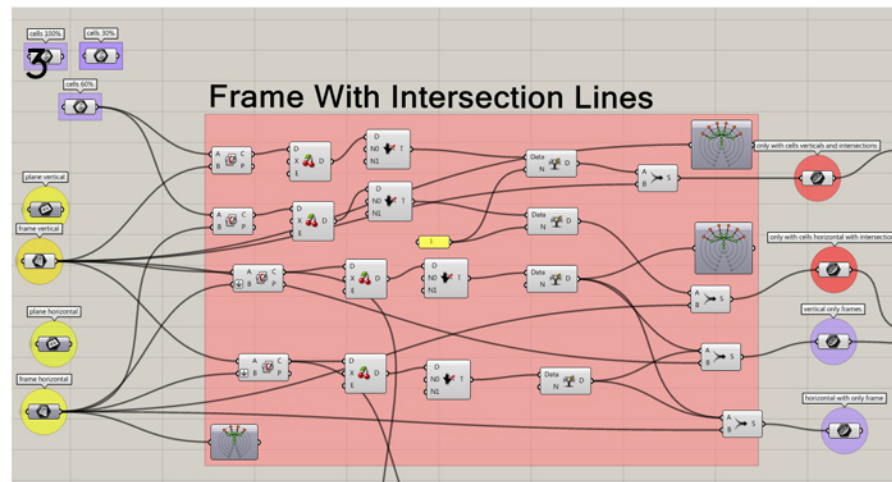
1



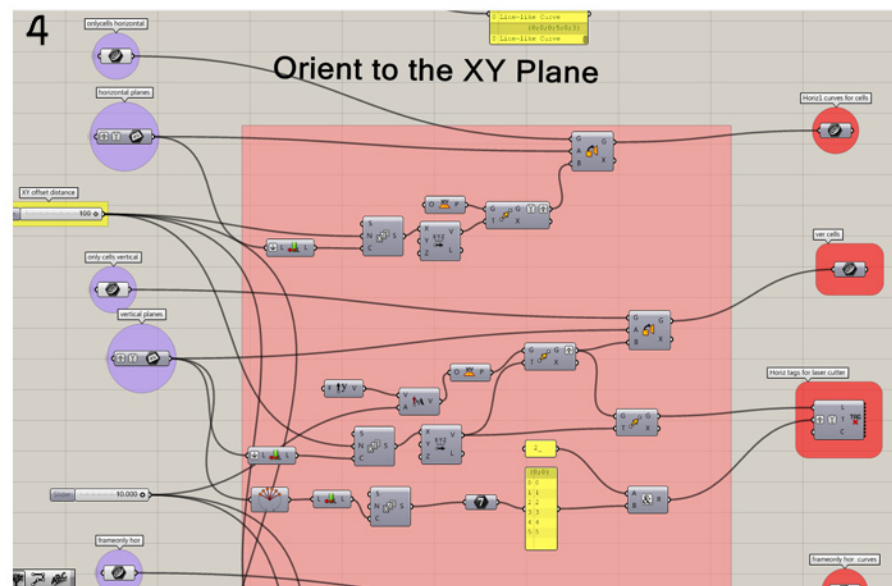
2



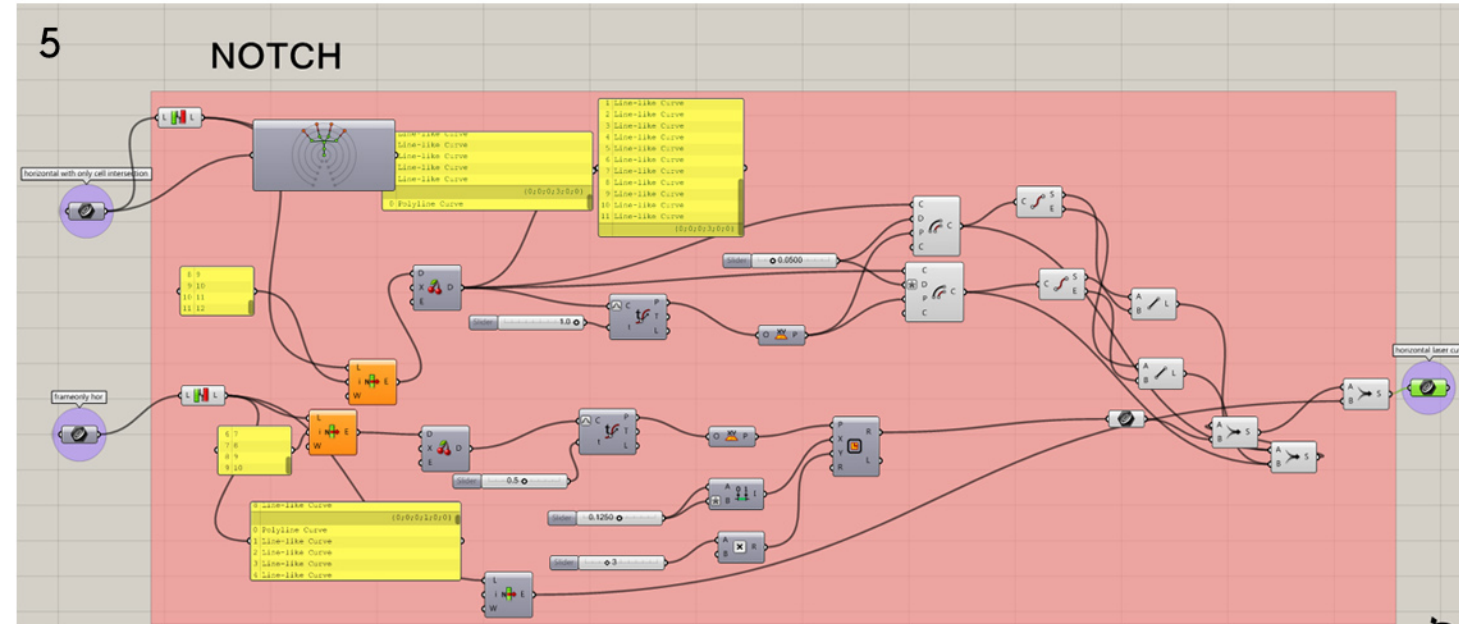
3



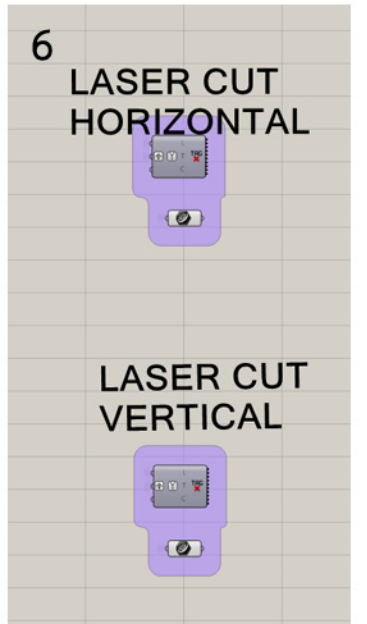
4



5



6

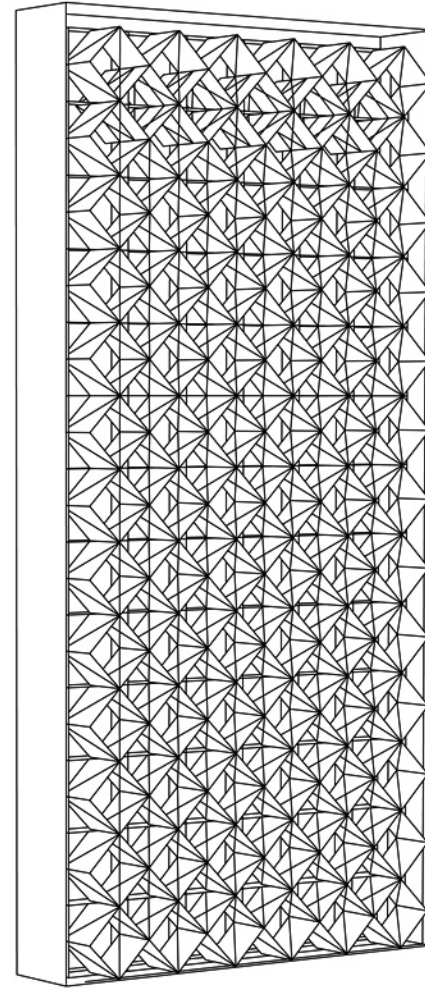


Process

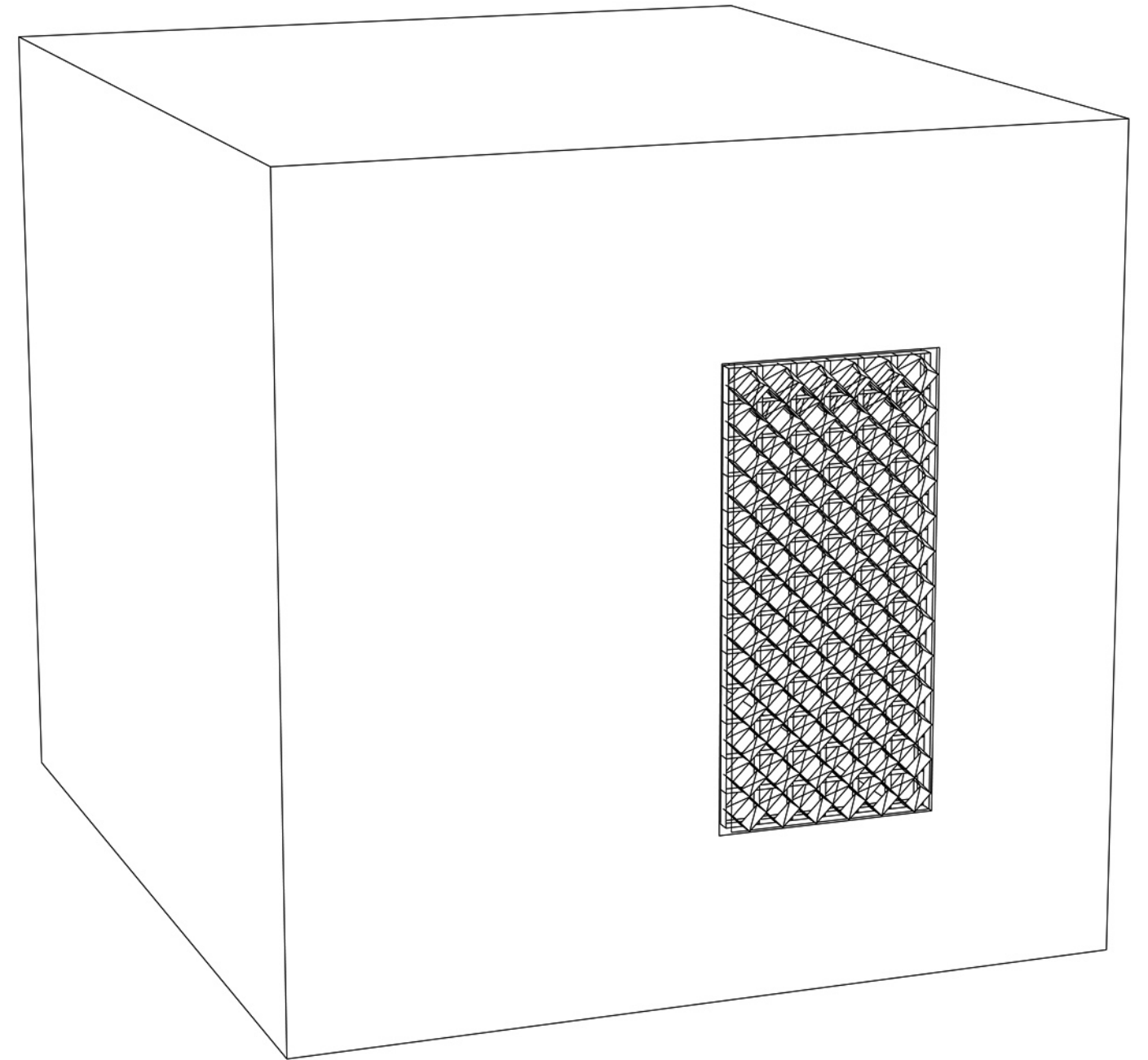
- Building Grid
- Building Frame
- Intersection Lines With Frames
- Orient Curves to the XY Plane
- Making Notch For Laser Cutting
(Cells-Frame, Vertical-Horizontal of Frame)



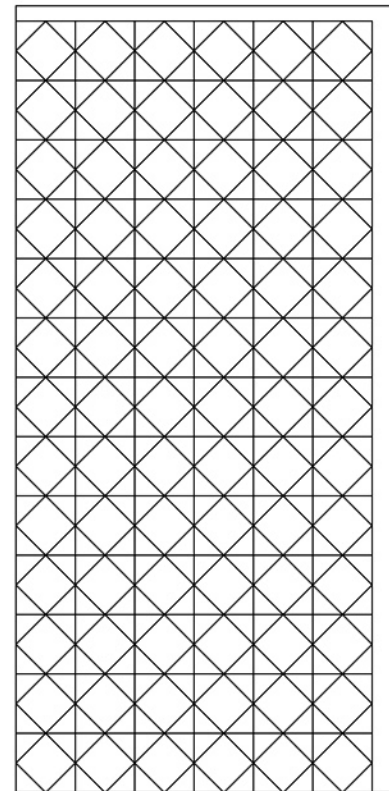
Top View



Perspective



Side View

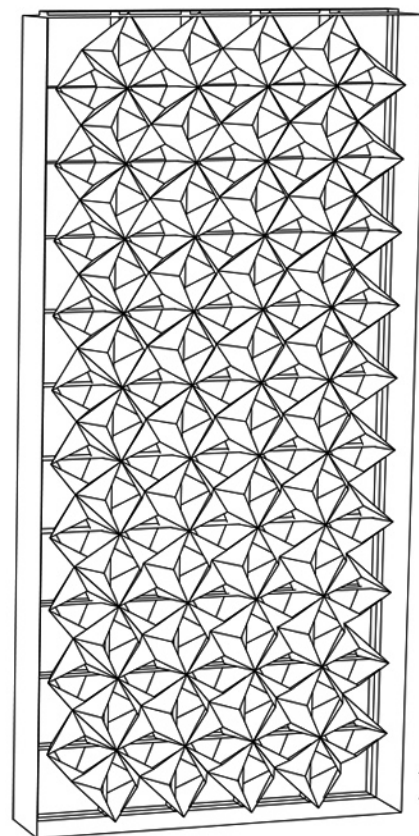


Front View

Line Drawings
100% Aperture Screen



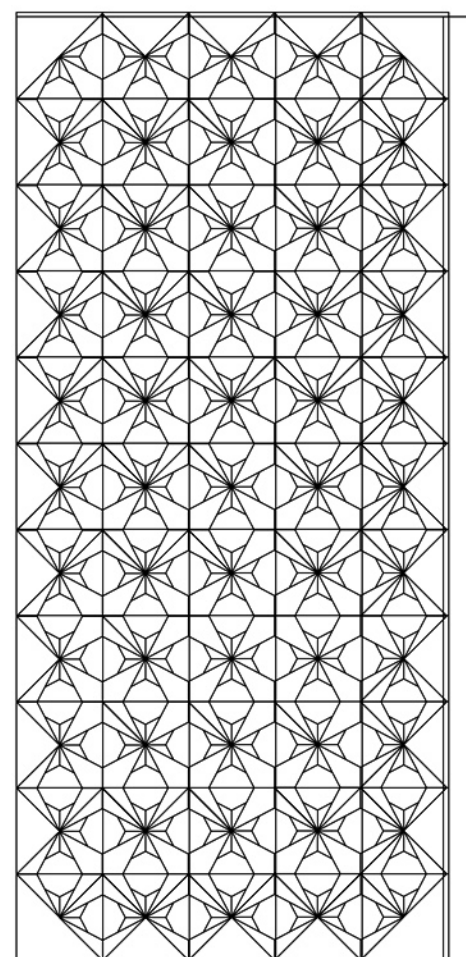
Top View



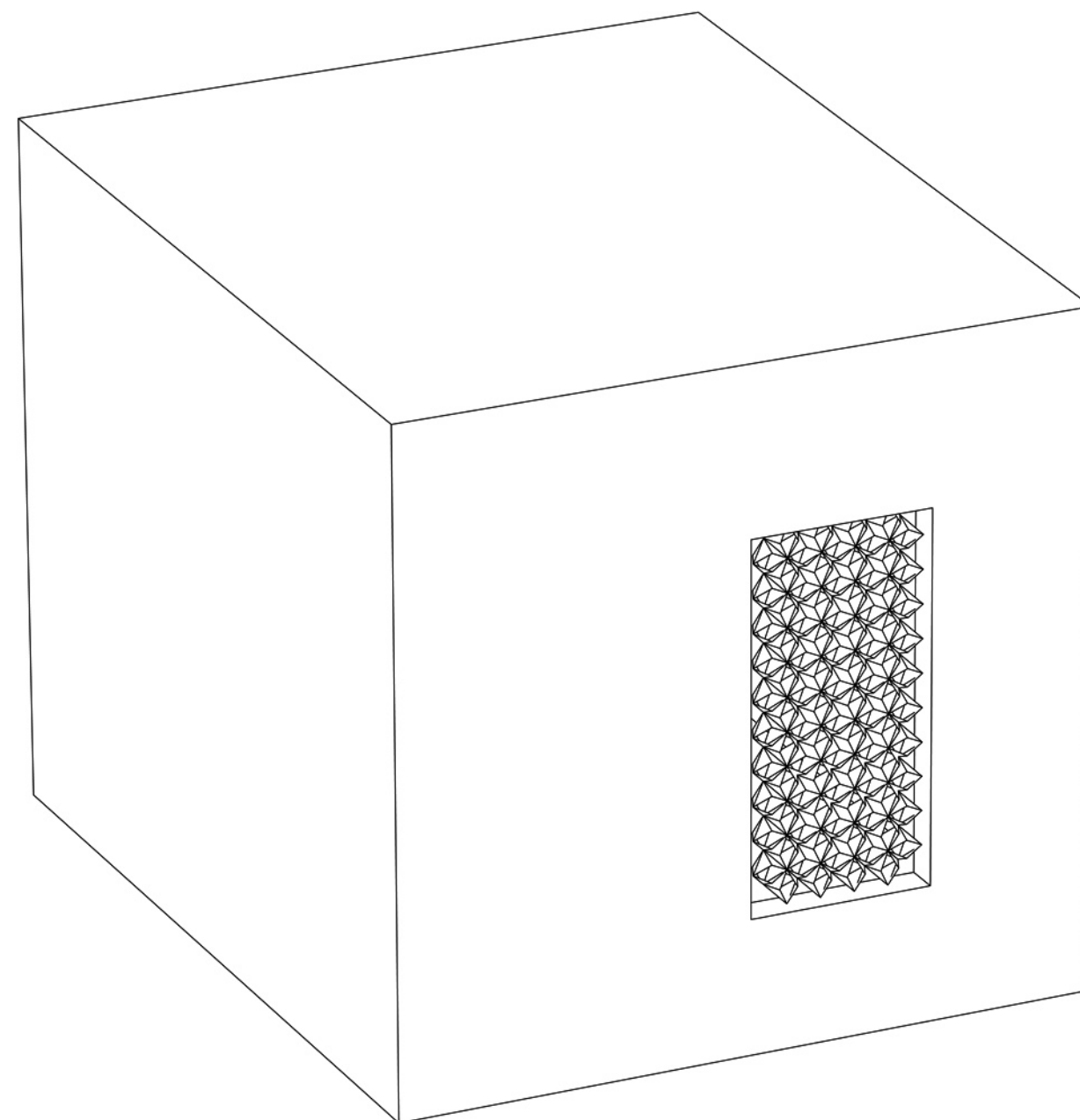
Perspective



Side View



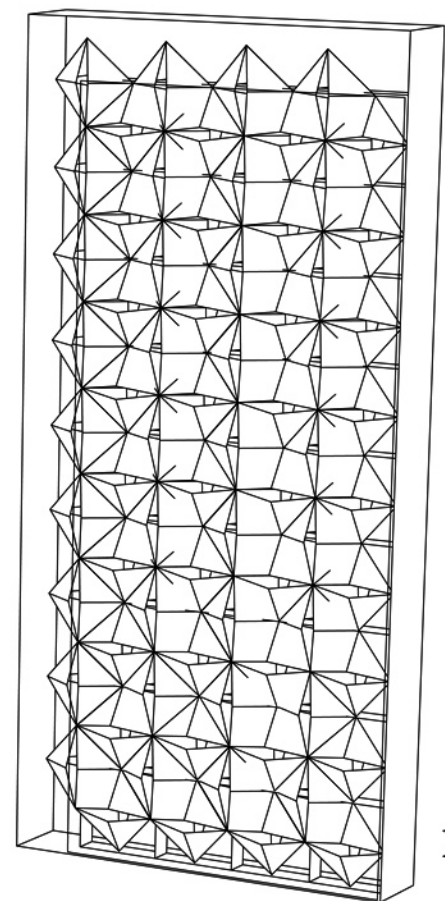
Front View



Line Drawings
60% Aperture Screen



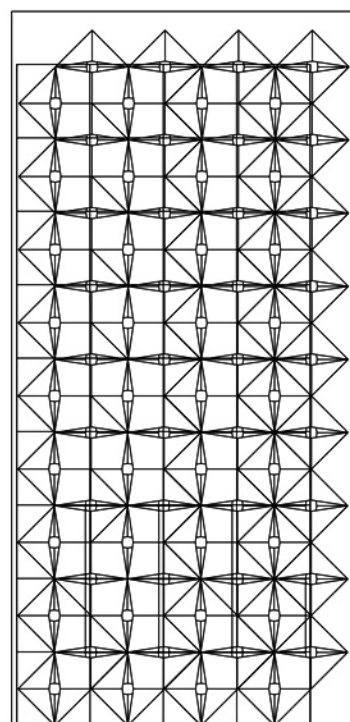
Top View



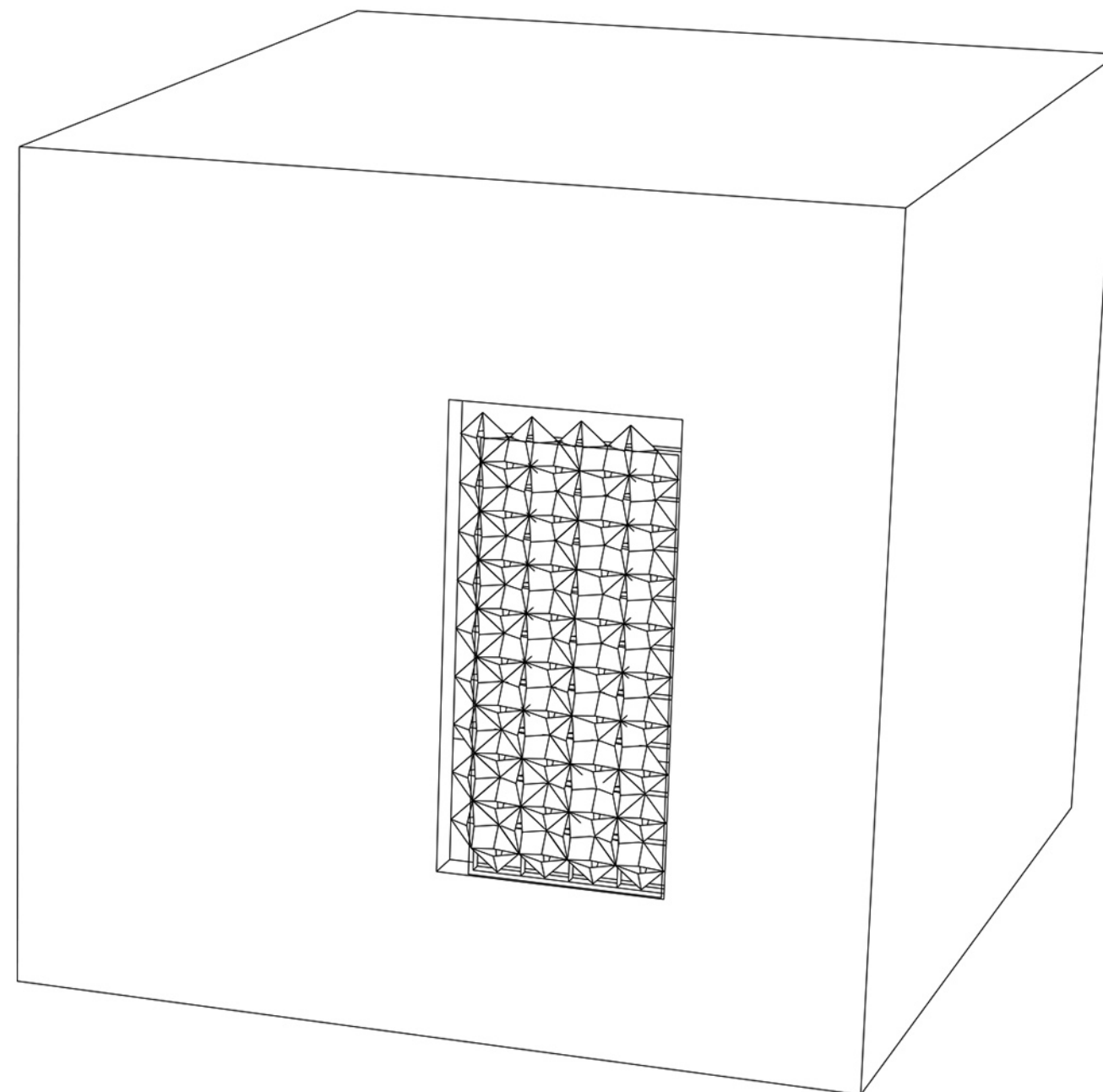
Perspective



Side View

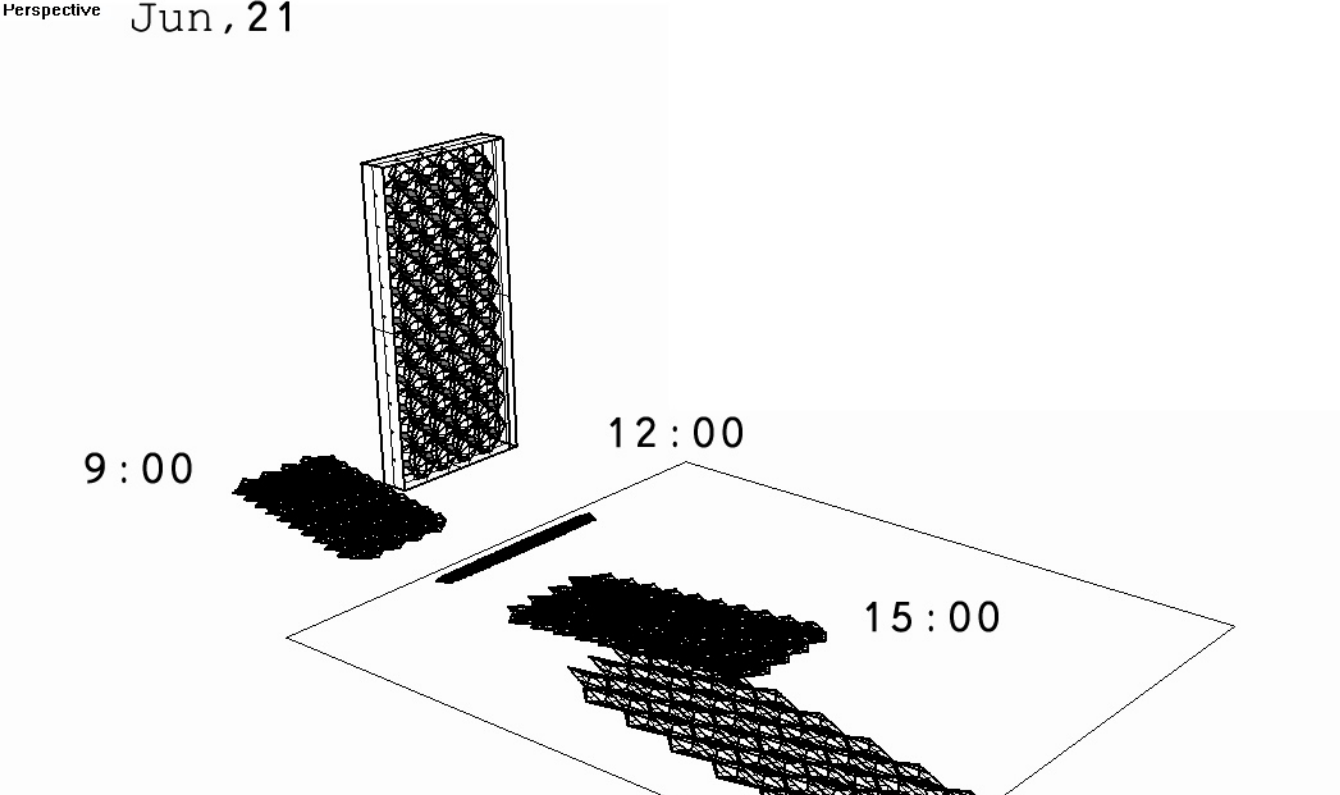


Front View

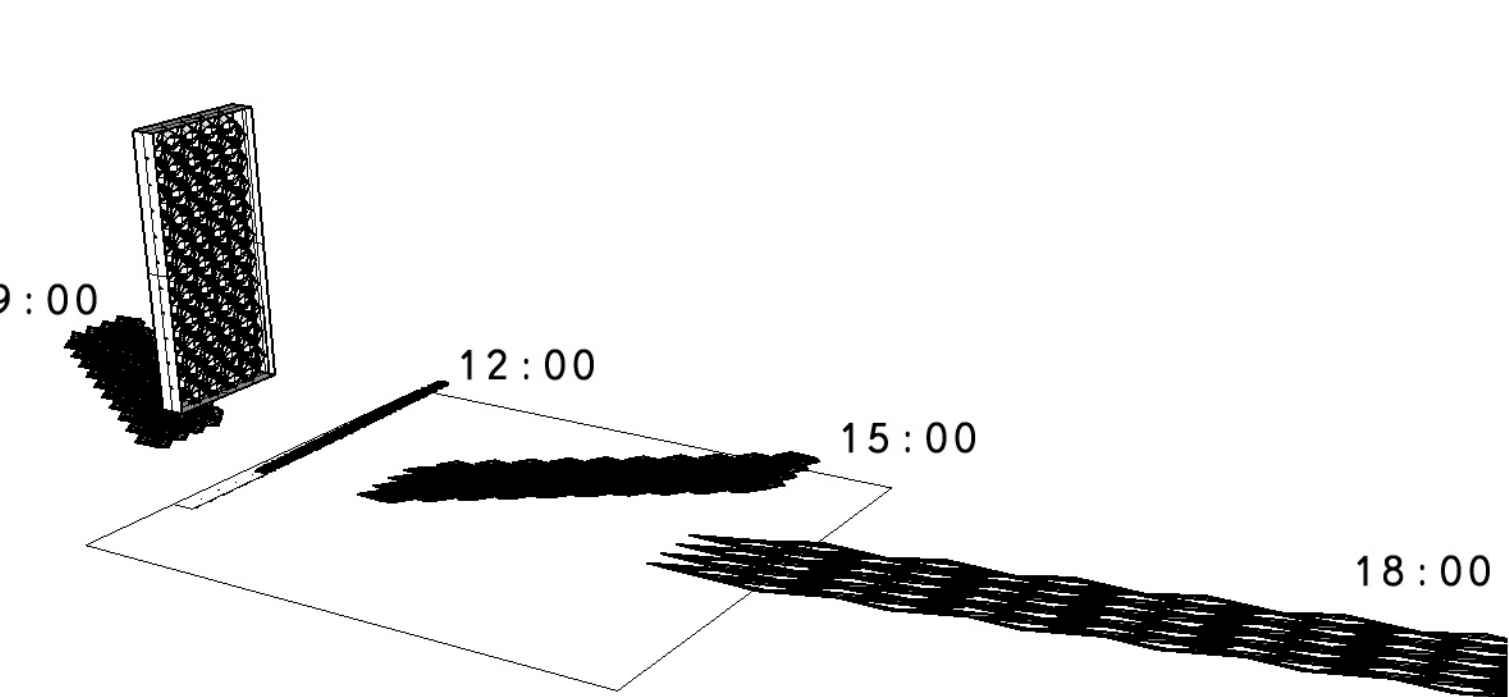


Line Drawings
30% Aperture Screen

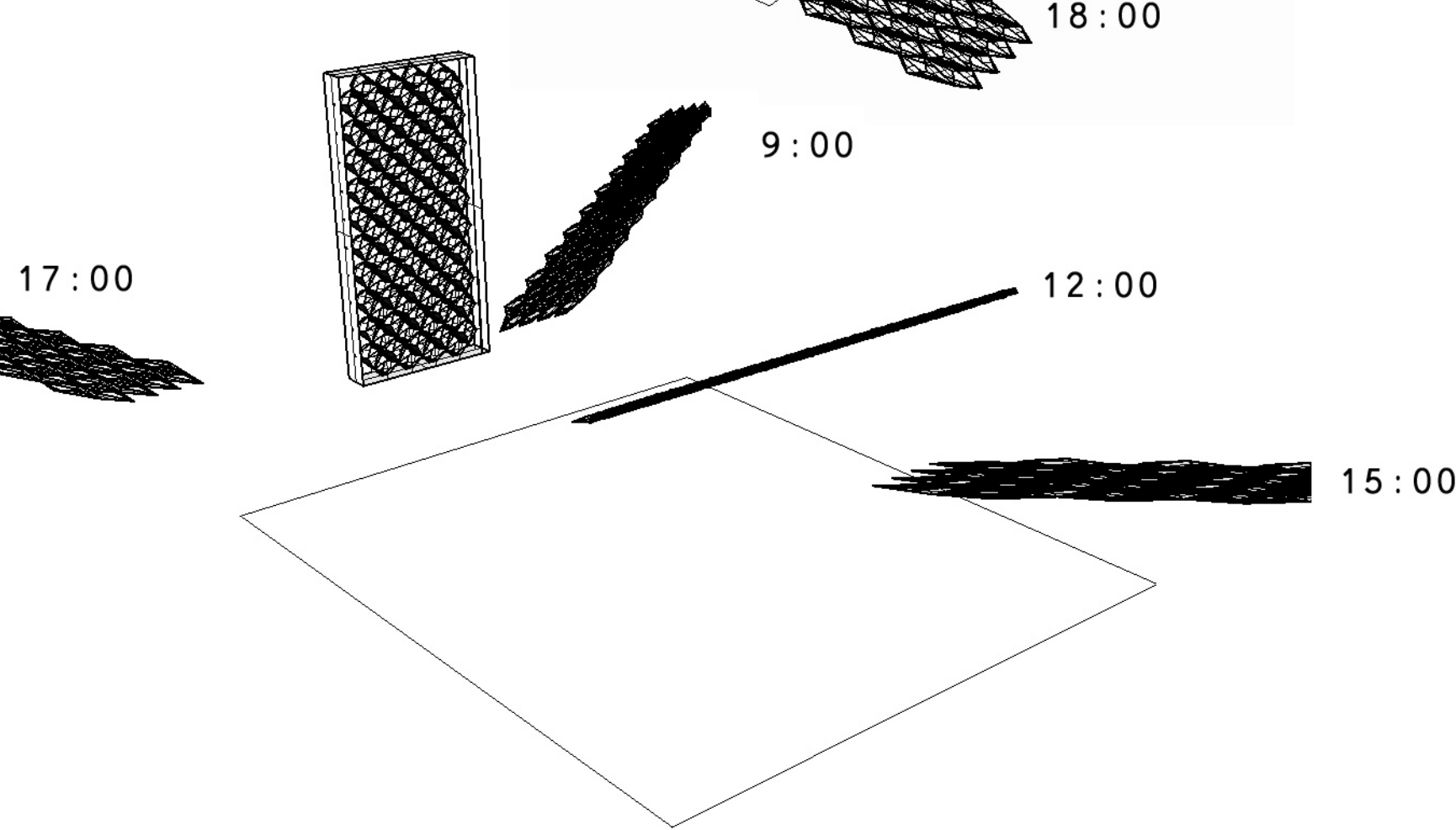
Perspective Jun, 21



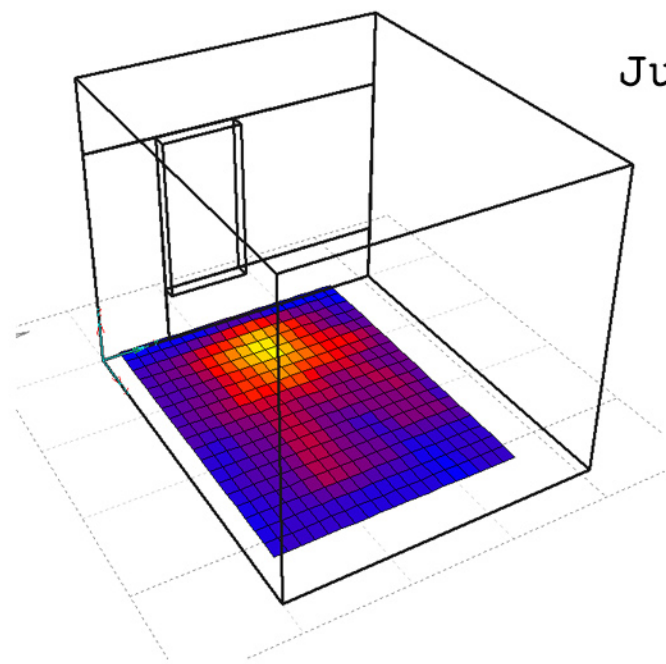
Perspective Mar, 21



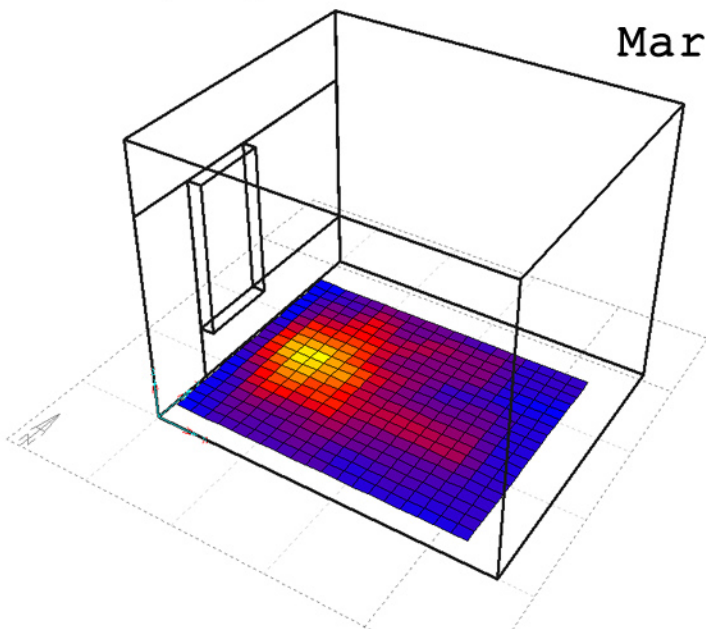
Perspective Dec, 21



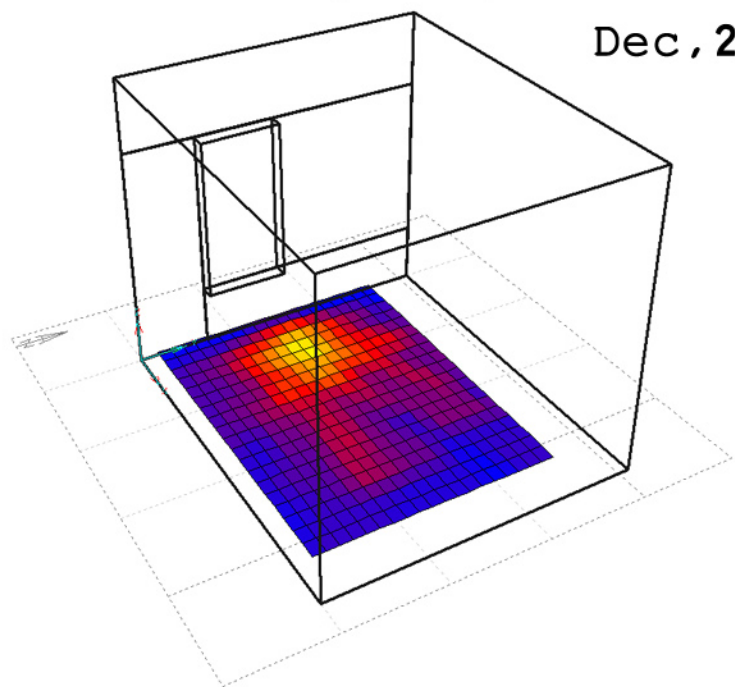
Jun, 21



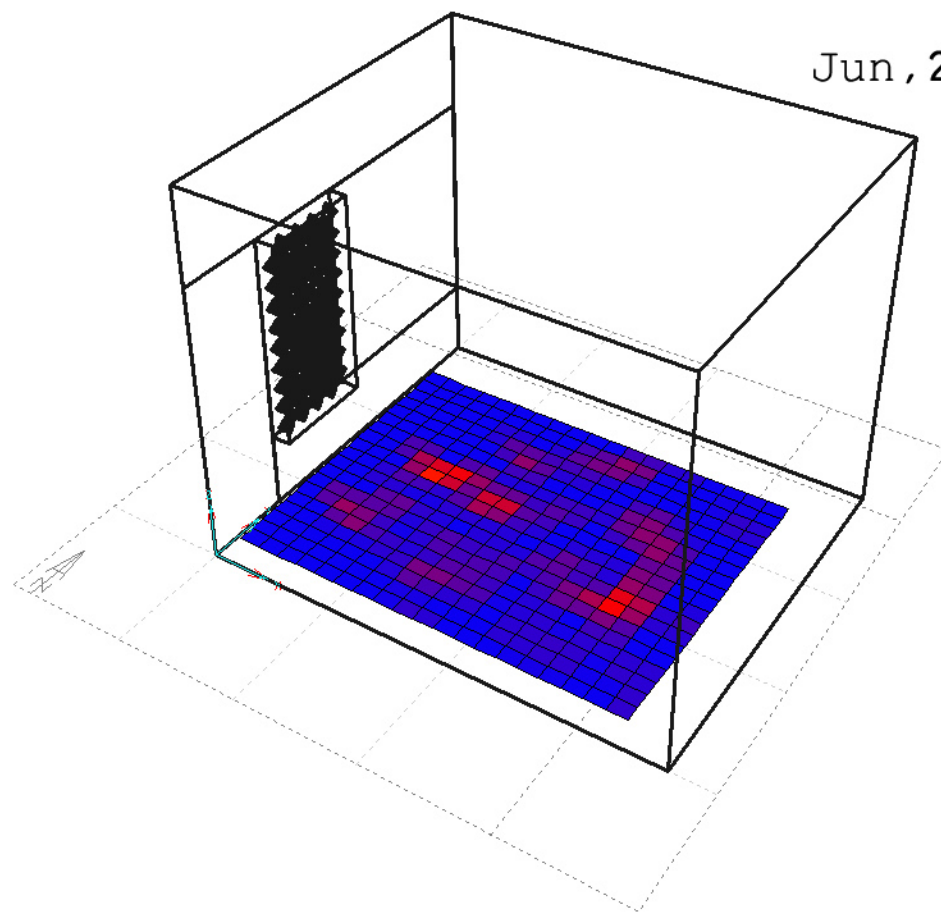
Mar, 21



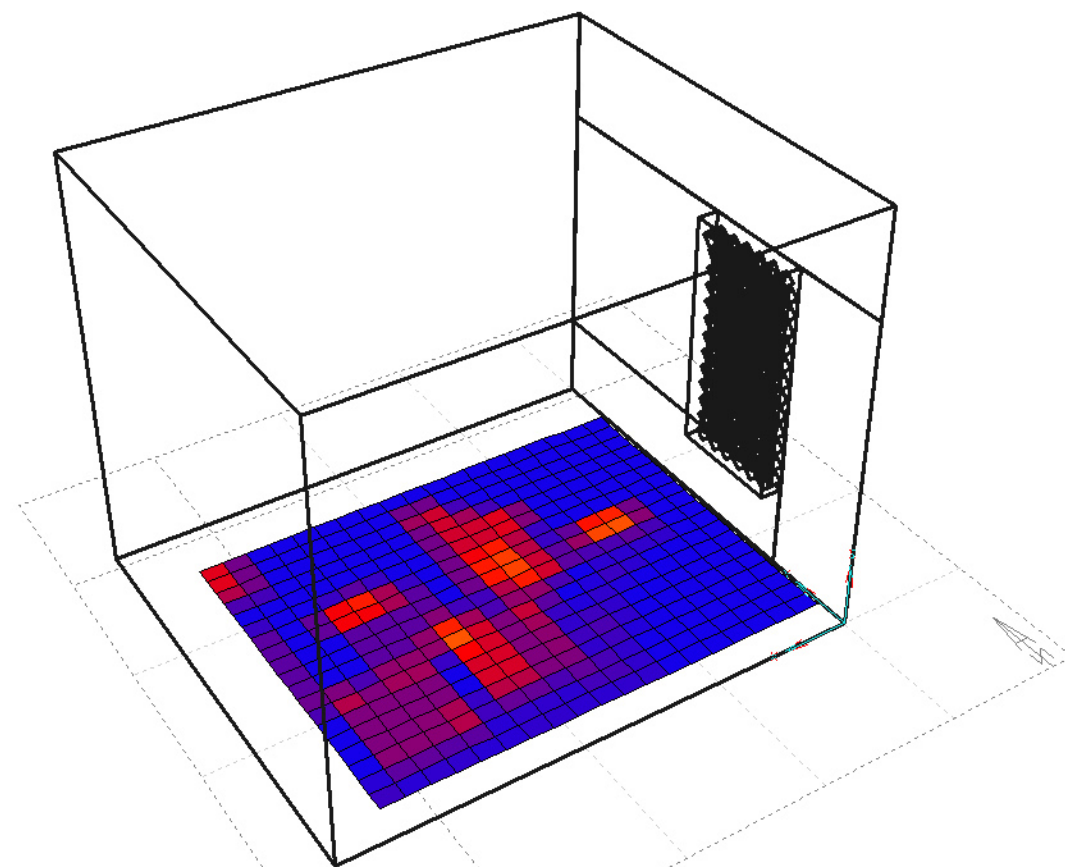
Dec, 21



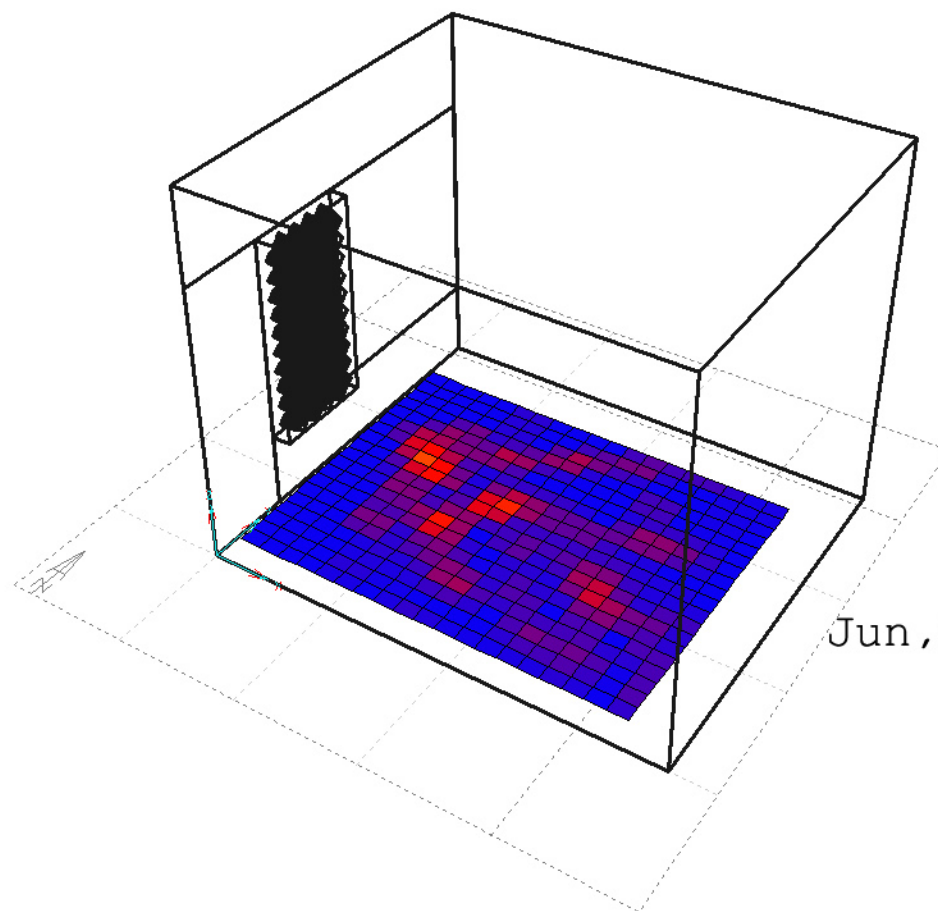
Jun, 21 30% Aperture Screen



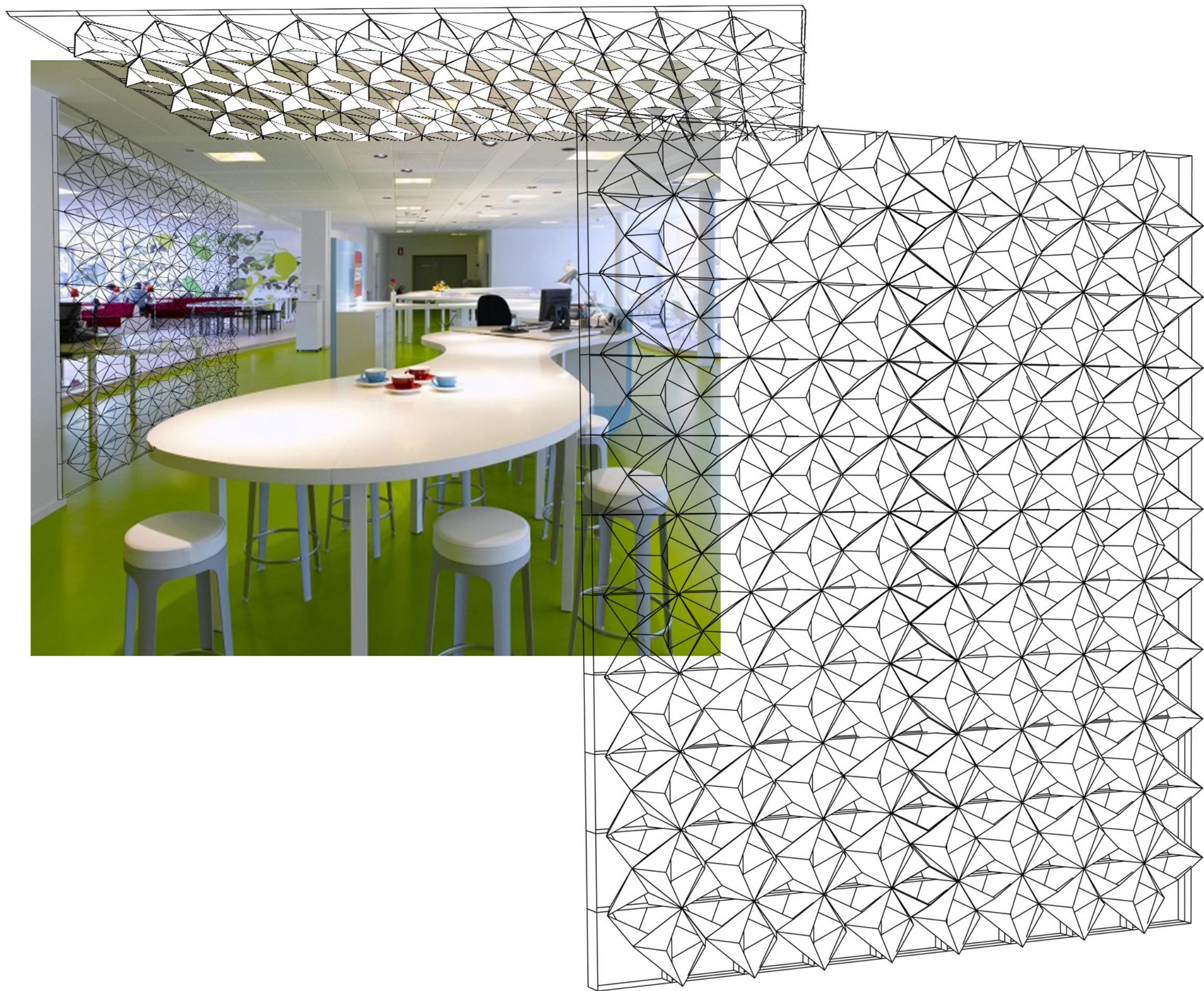
Jun, 21 100% Aperture Screen



Jun, 21 60% Aperture Screen



Interior Radiation Analysis



Performance
Partition
Ceiling