Rhino and Grasshopper: Rule Based Modeling

final project | Light Diffusing Screens

Jung In, Chang

Schematic Design

Category | Dense Egg Crates

Large window with Direct Sunlight Everyday
Esp. Late Afternoon
12 Feet High Ceiling,
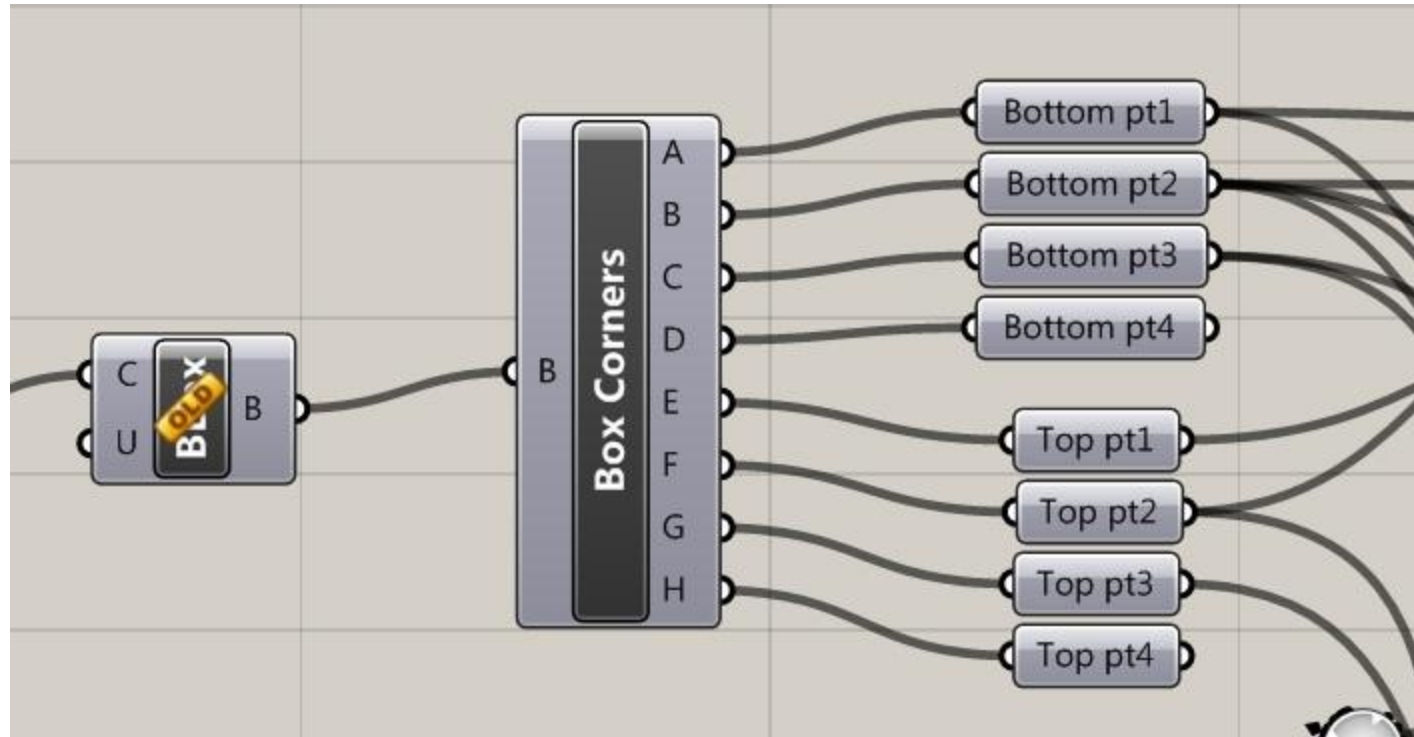Block only Lower Window
Human Scale
Supported by White Shelf
under the window
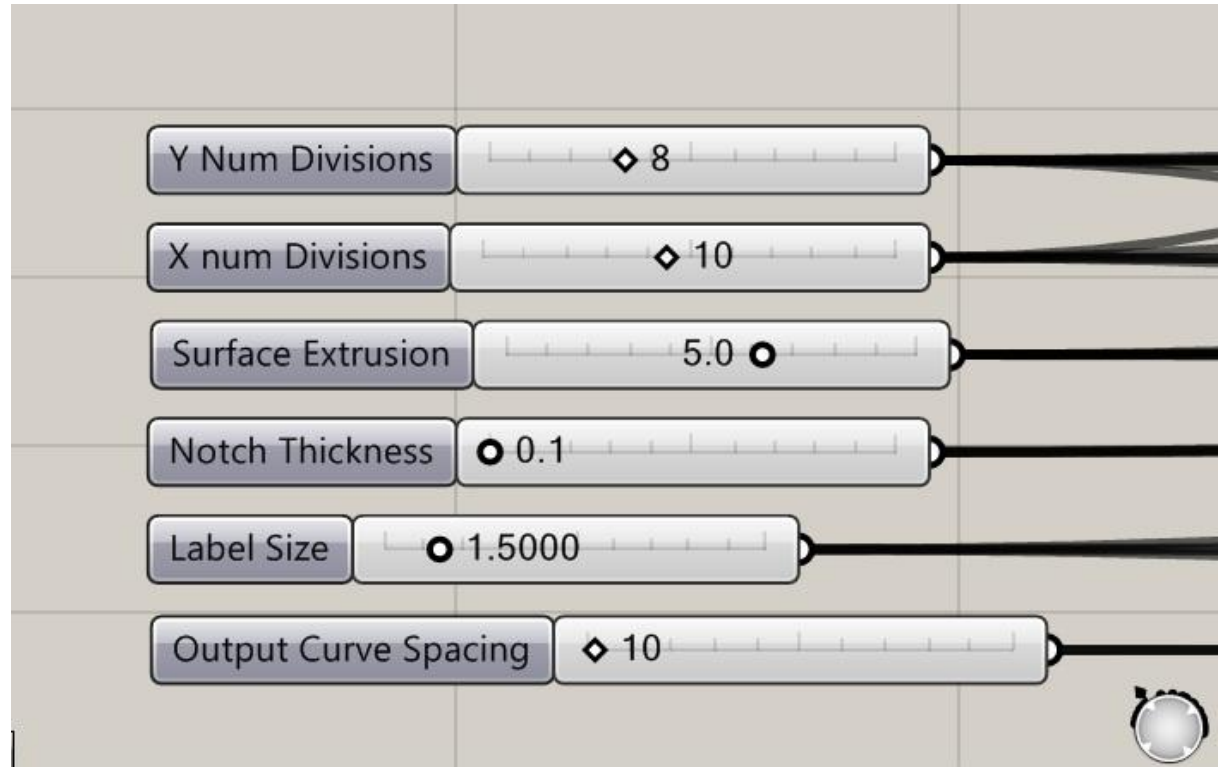
Design Drivers in GH Definitions

Category | Dense Egg Crates

Control Brep Box Corners
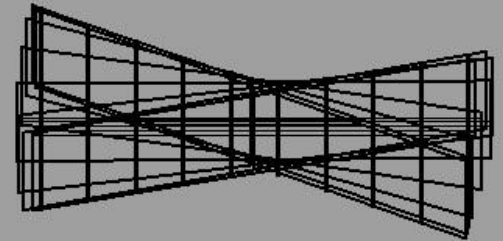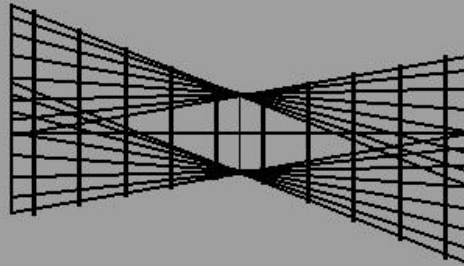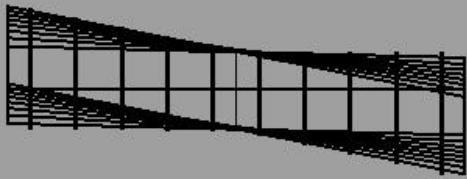
Design Drivers in GH Definitions

Category | Dense Egg Crates

Control Number of X, Y Strut Divisions
Surface Extrusion

Design Drivers in GH Definitions
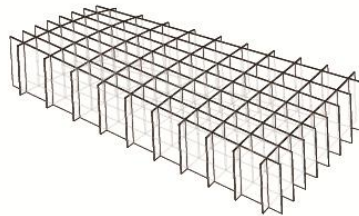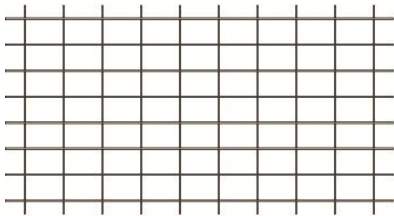
Category | Dense Egg Crates
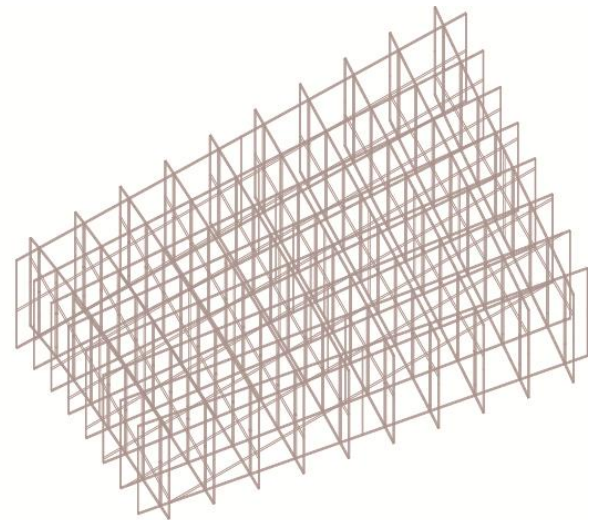

Control Rhinoceros Surface
Control points | Vertical, Horizontal
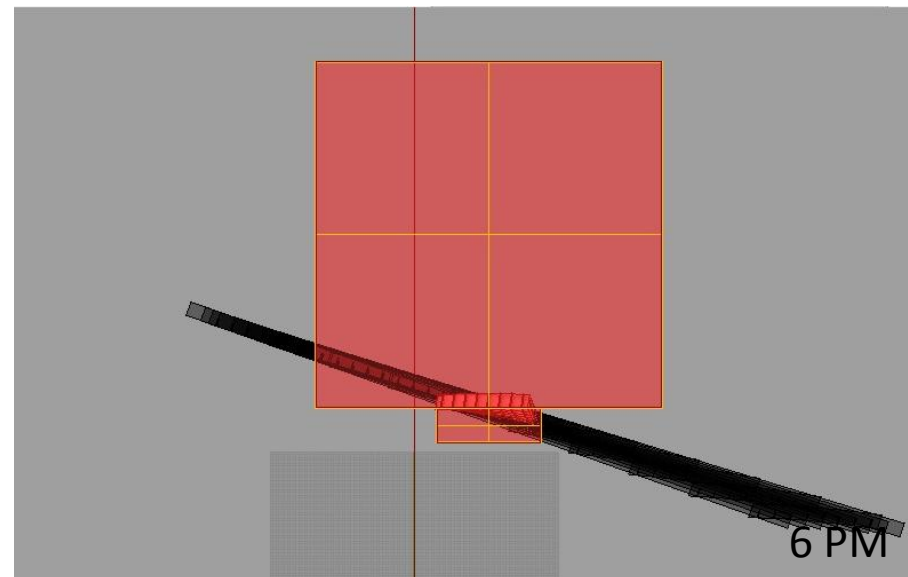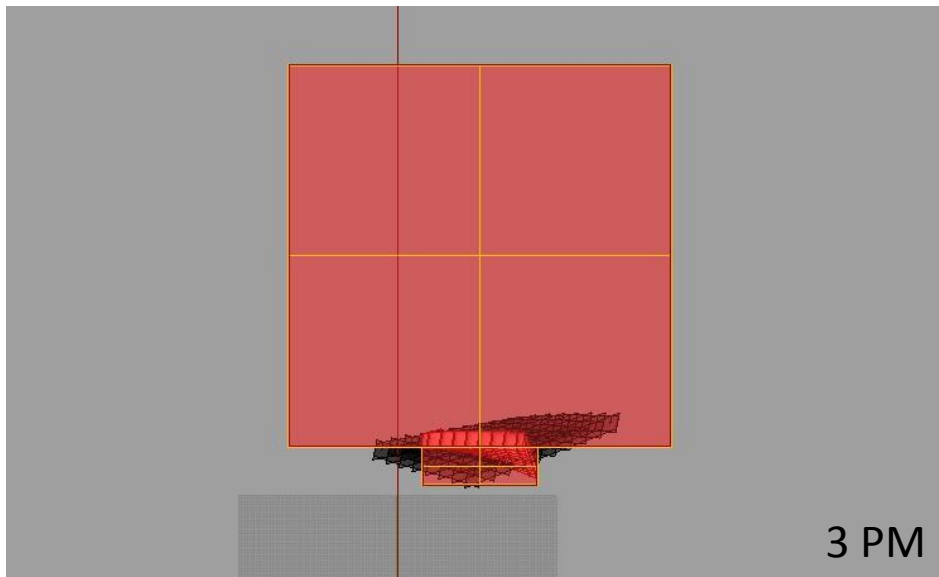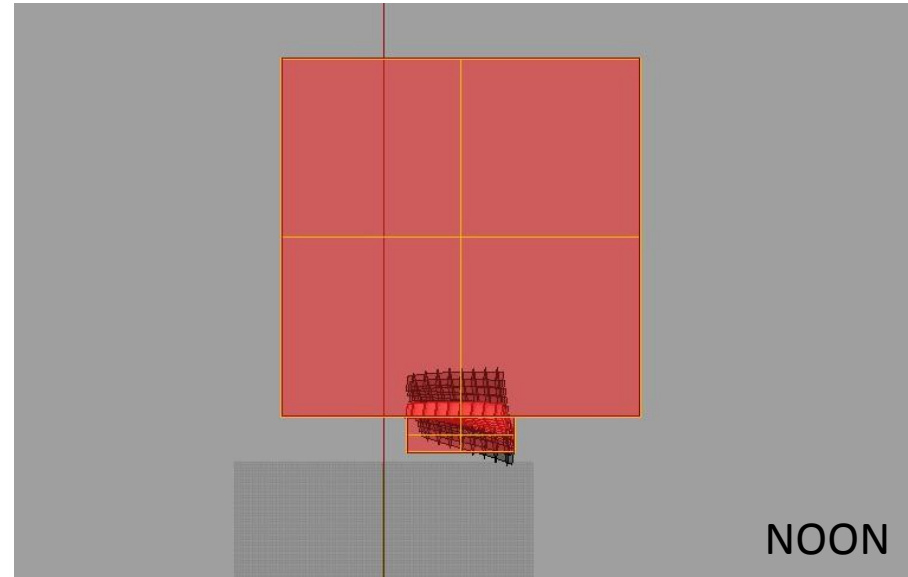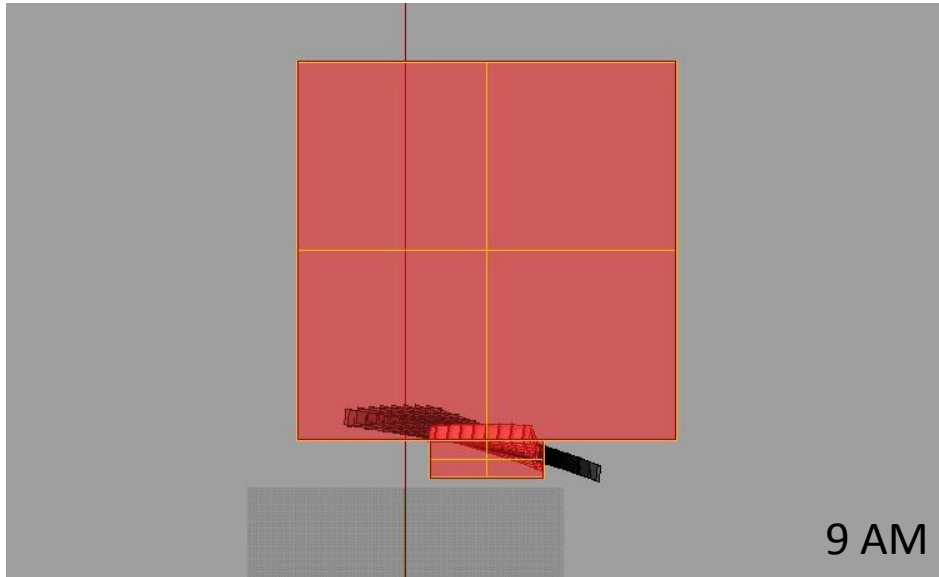Control lines | Straight, Curve

Line drawings

4 views of 2D Drawings

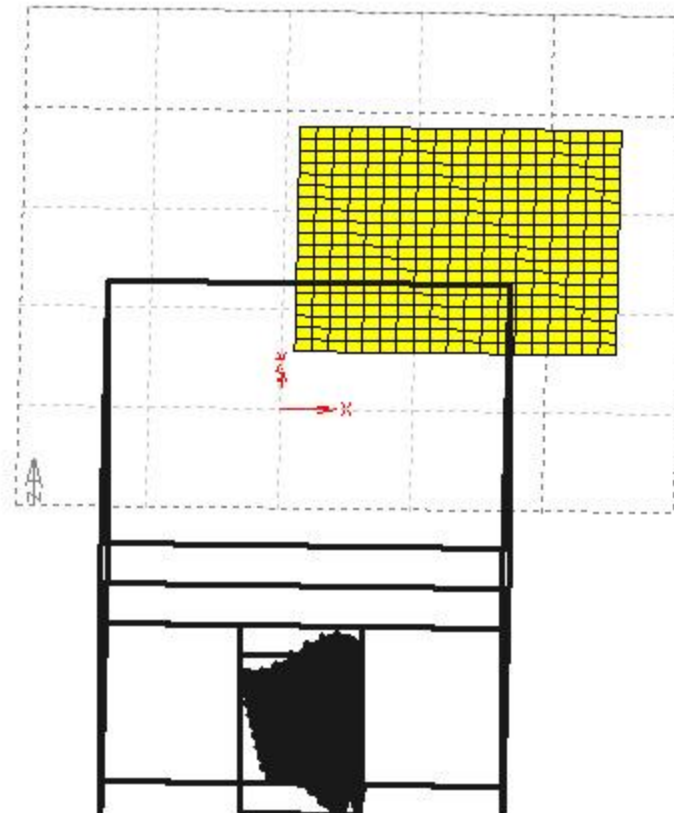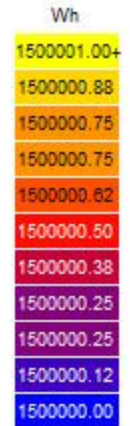Axonometric View

Shadow Studies

9 AM

NOON

3 PM

6 PM

Insolation Analysis
Total Radiation
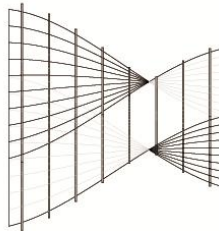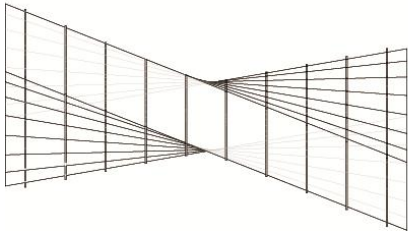Value Range: 1500000.00 - 1500001.00 Wh
© ECOTECT v5

Summer | June 21th

Wh

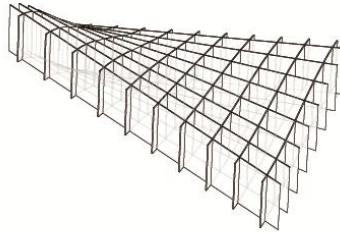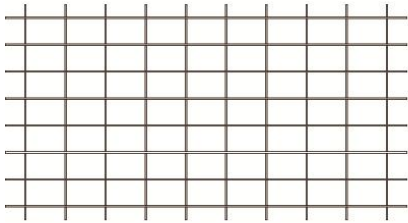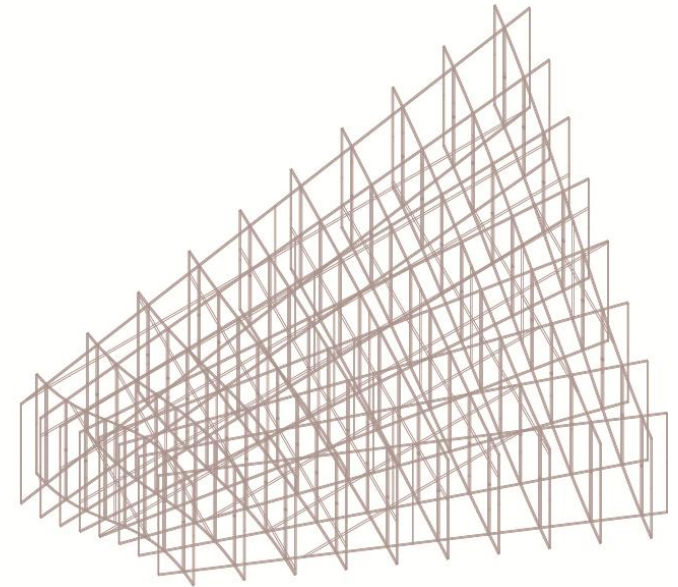| |
|---|
| 1500001.00+ |
| 1500000.88 |
| 1500000.75 |
| 1500000.75 |
| 1500000.62 |
| 1500000.50 |
| 1500000.38 |
| 1500000.25 |
| 1500000.25 |
| 1500000.12 |
| 1500000.00 |

Line drawings

Spring / Fall | September 21th

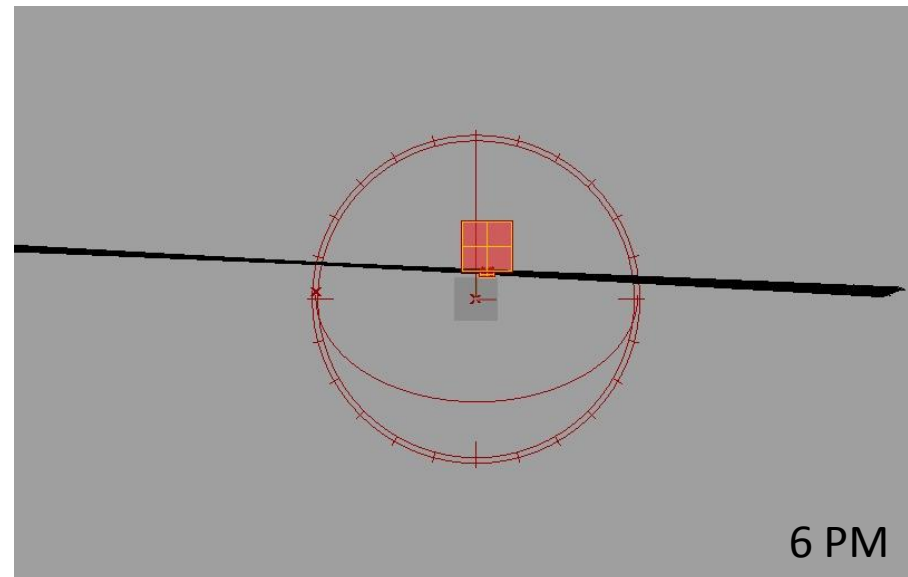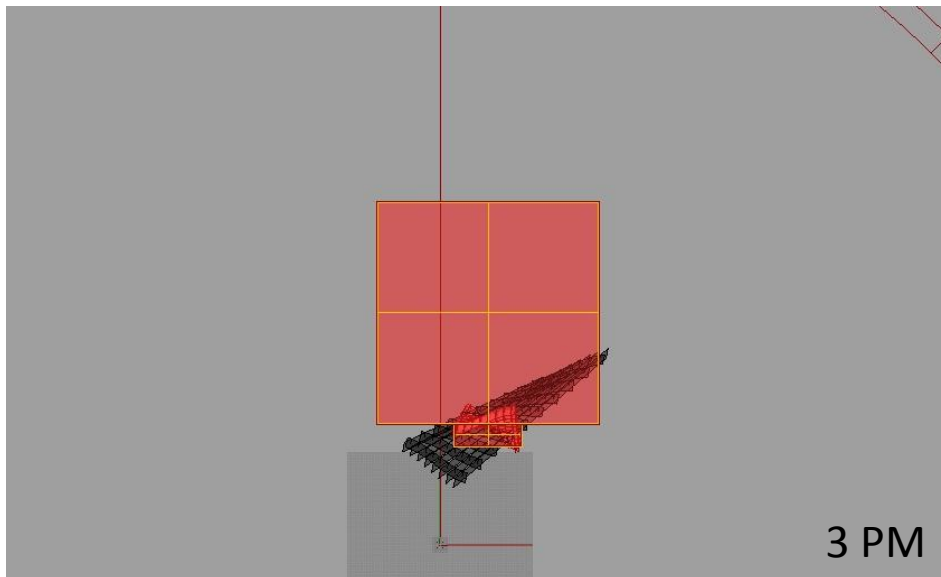Middle of the Year
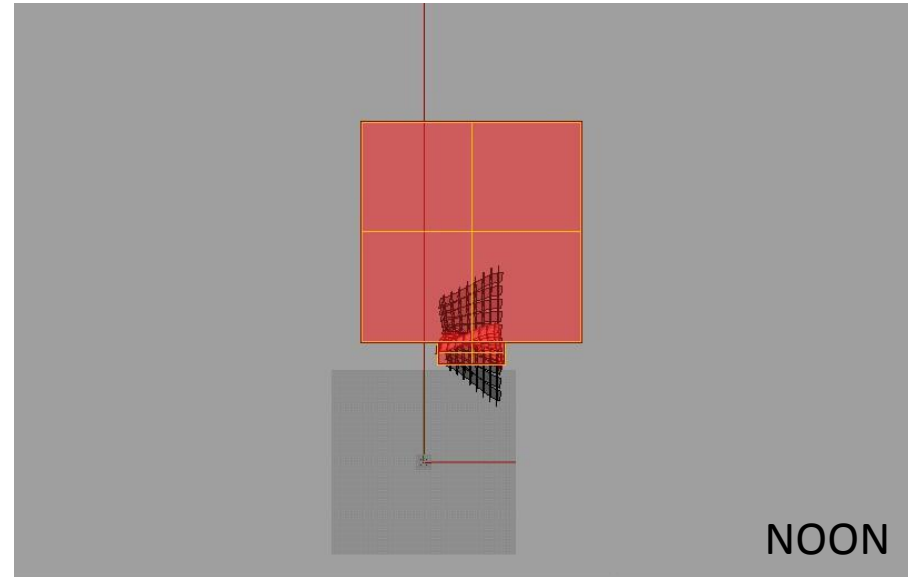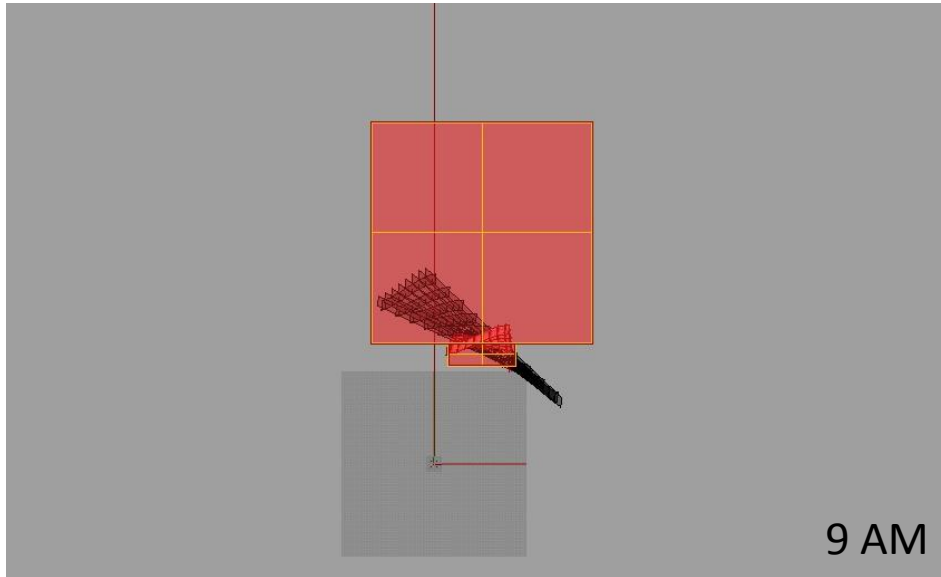Spread light evenly

W 30 x L 15 x H16.70

4 views of 2D Drawings

Axonometric View

Shadow Studies
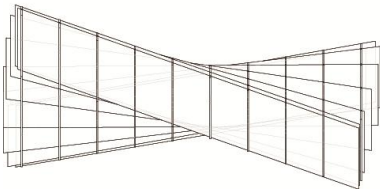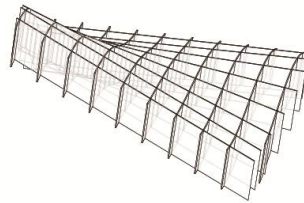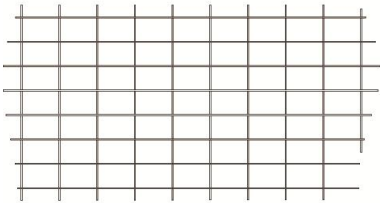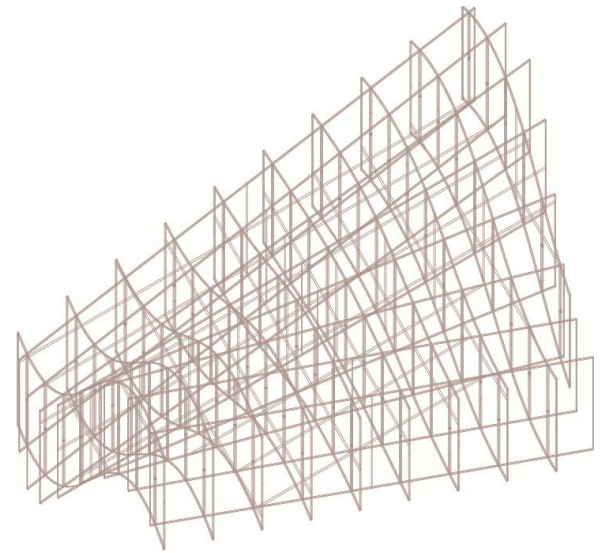
9 AM

NOON

3 PM

6 PM

Line drawings

Winter | December 21th

Shortest Sunlight of the Year
Absorbing Sunlight As Long As Possible

W 30 x L 16 x H15

4 views of 2D Drawings
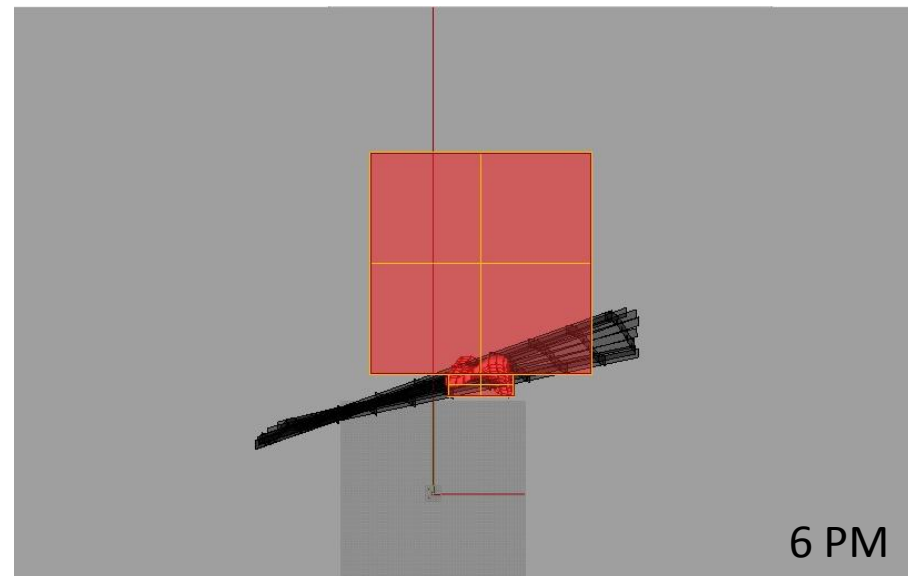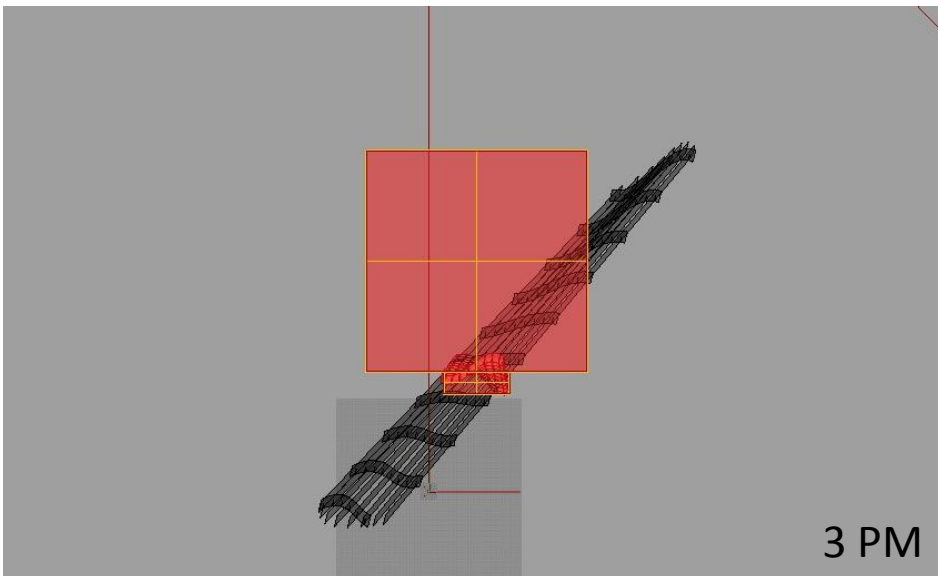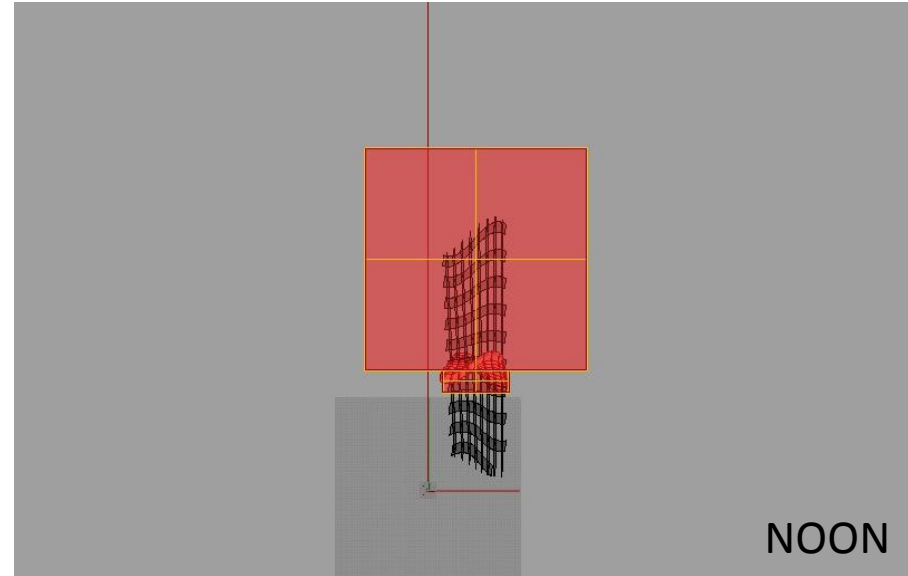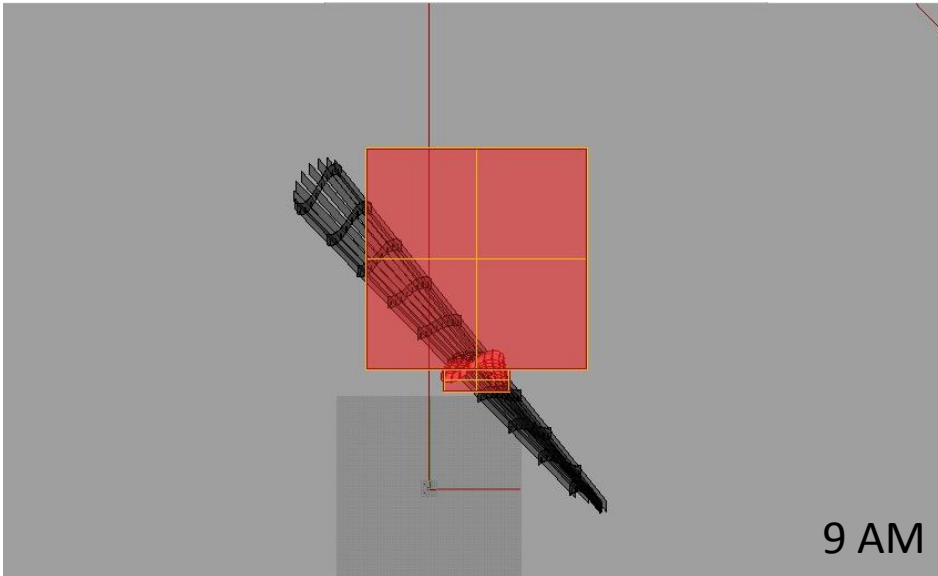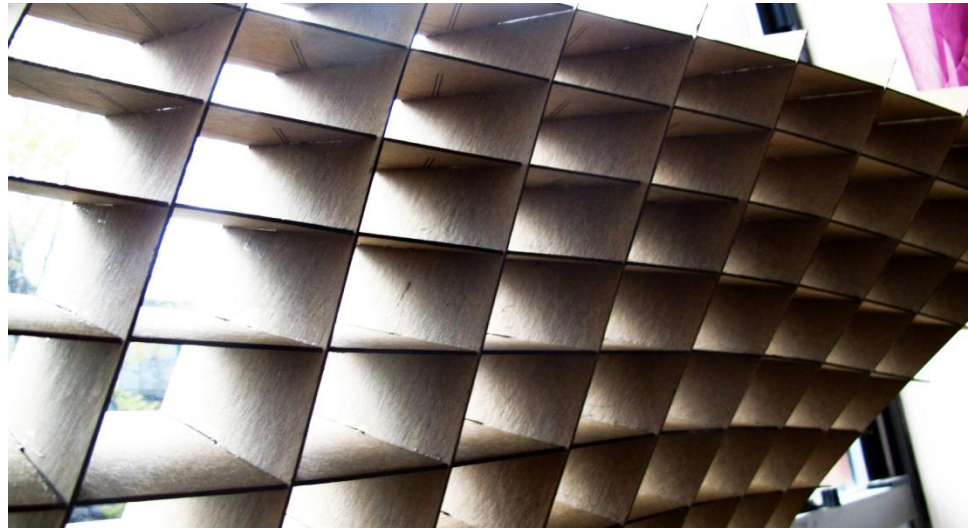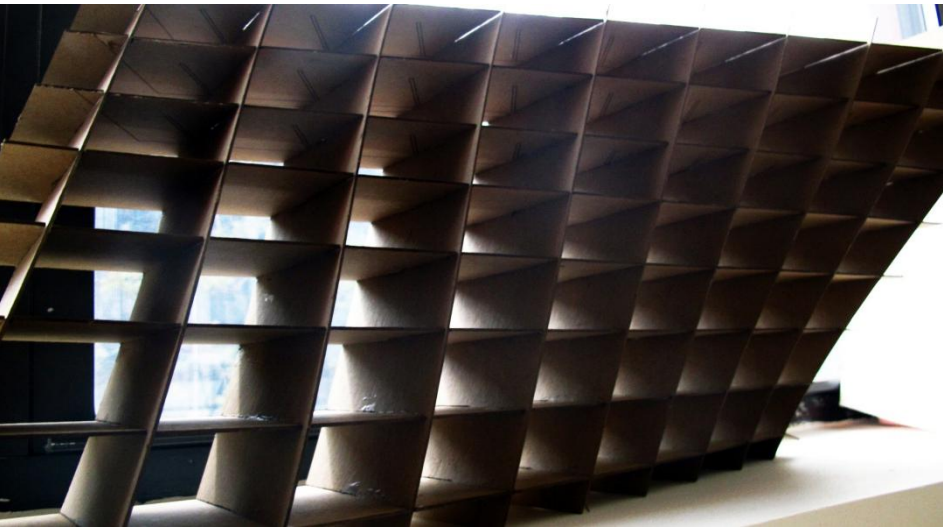

Axonometric View

9 AM

NOON

3 PM

6 PM

Lighting Studies

Lighting Studies

Lighting Studies