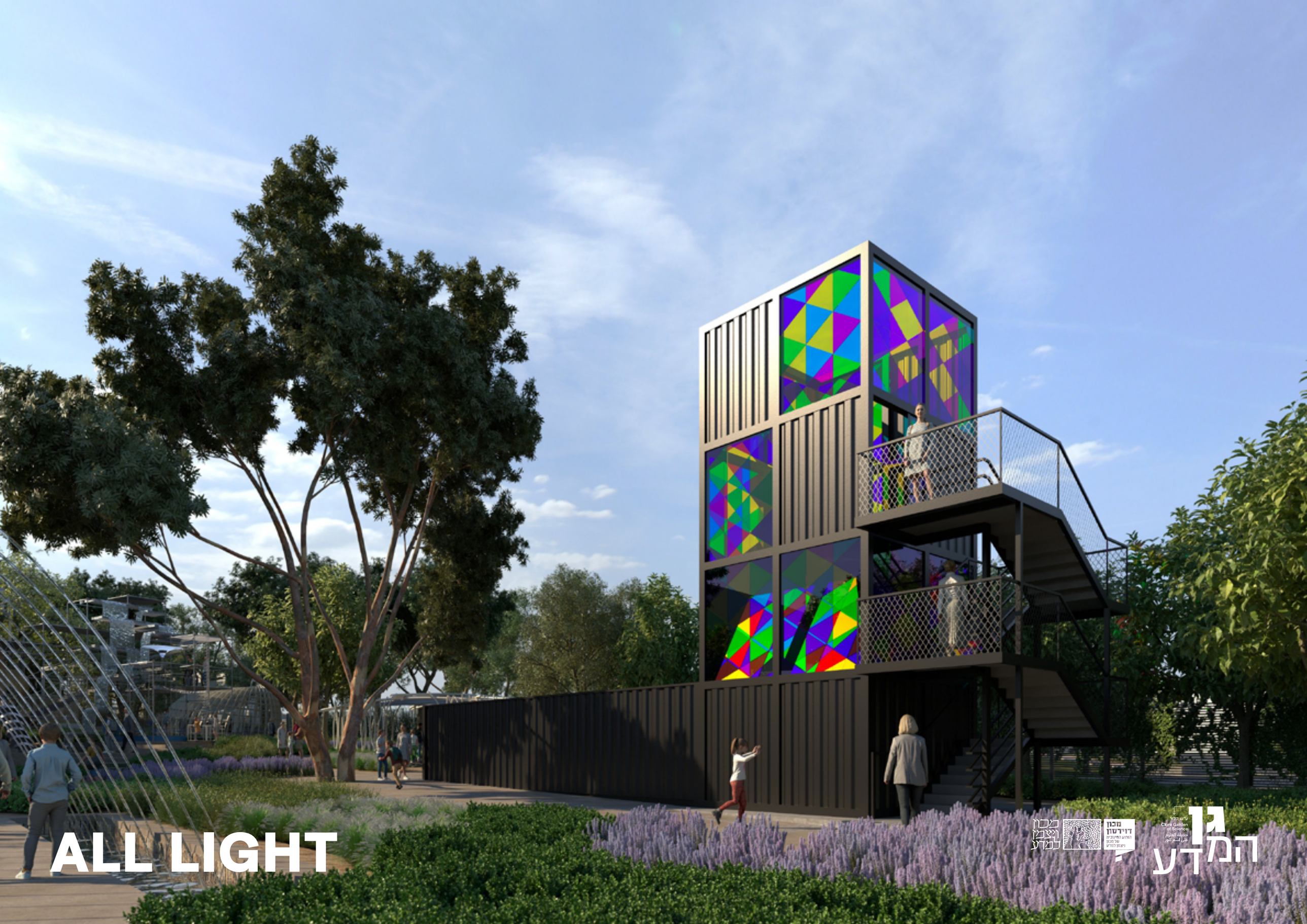

ALL LIGHT
מכון דוידסון
גן המדע
Clore Garden of Science

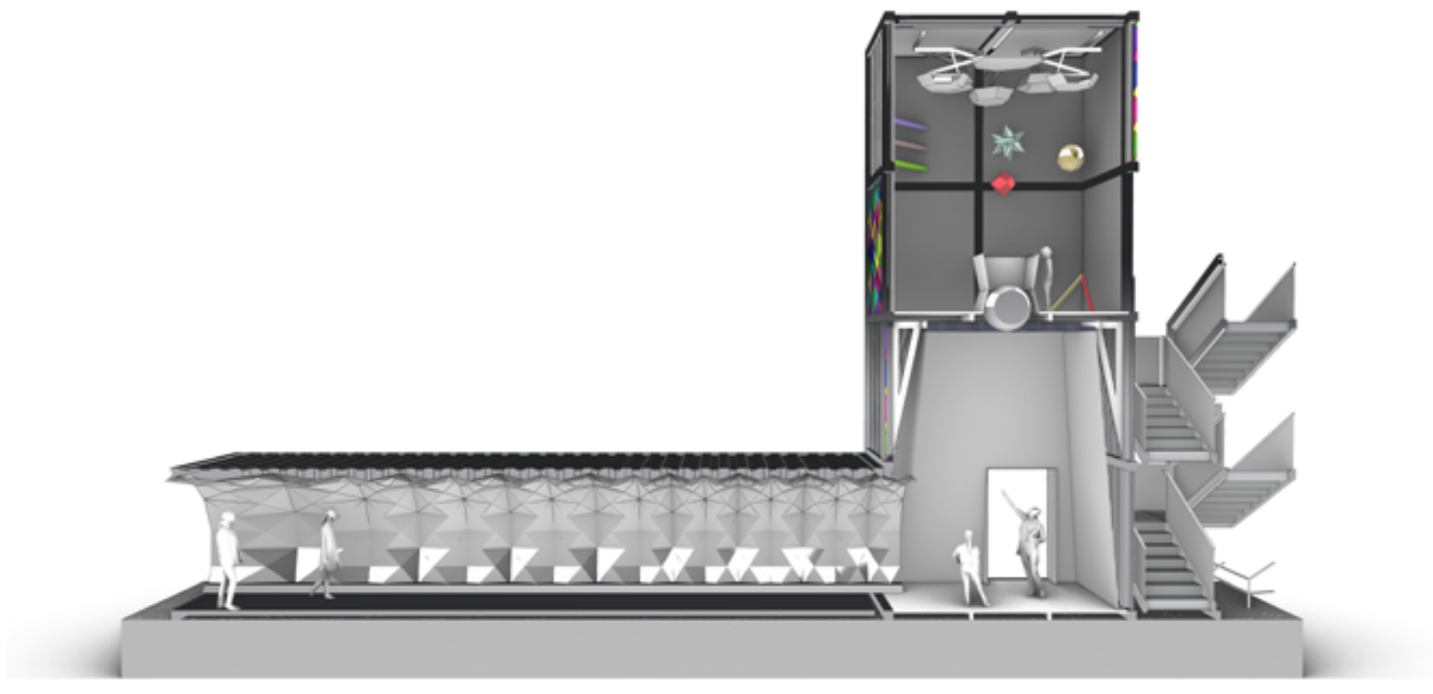
OVERVIEW

We are all familiar with the Kaleidoscope - three mirrors, long rectangles in shape, positioned in a triangle, pointing inward, and everything that you look at is multiplied a hundredfold, creating a mesmerizing effect.But what will happen if we use triangles instead of rectangles? Instead of a prism, we get a bottomless pyramid, and while looking into the inner (only) corner, you get an inner sphere from the multiple reflections. Add some holes on the side and you can slide in and our colorful tubes, that miraculously create more shapes and patterns.

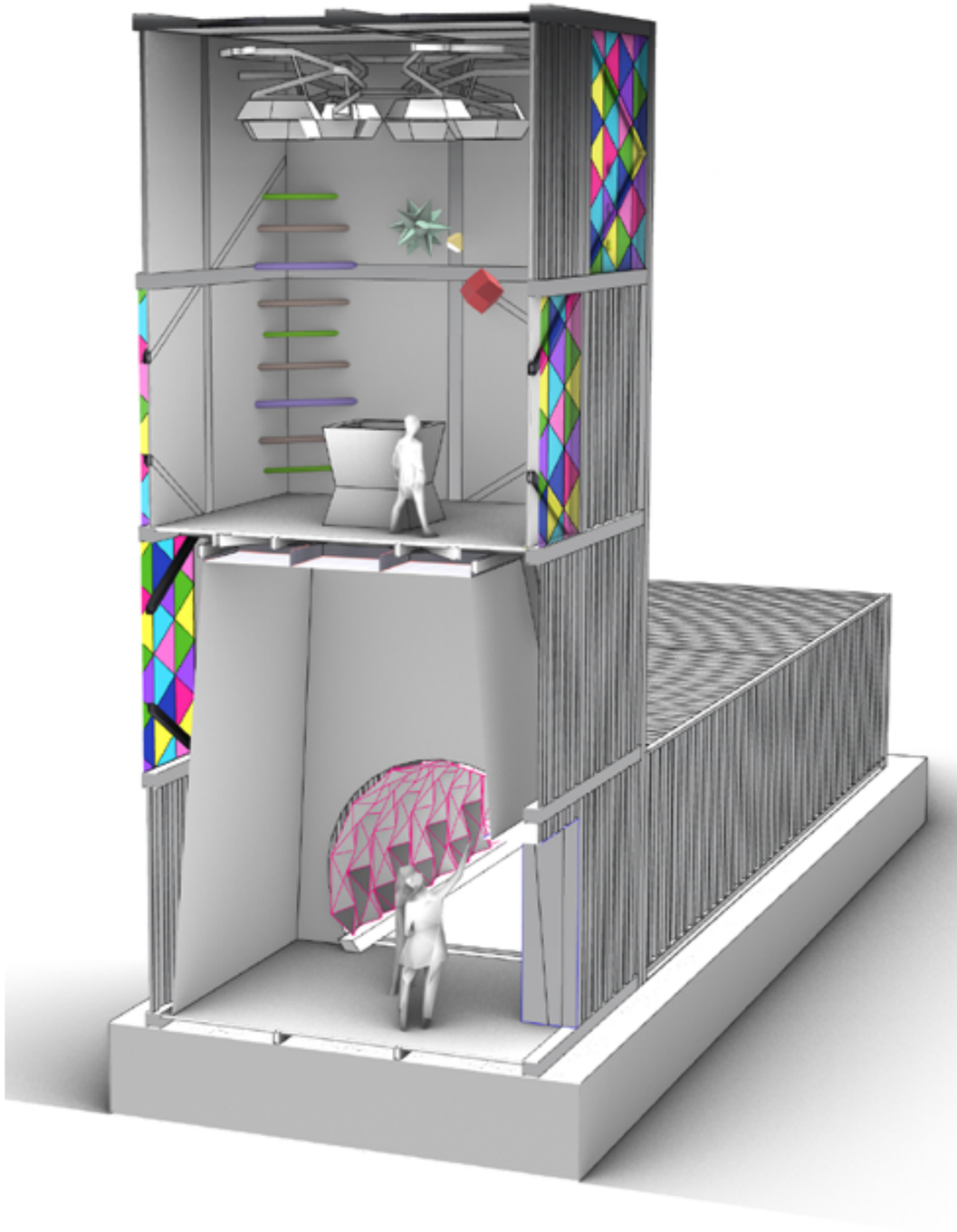
Many mistakenly think that a mirror is made out of glass. Glass is transparent and most mirrors will have it because it is much easier to coat the glass from behind with a thin layer of metal, which creates the reflection. The glass helps keep the metal clean, flat, smooth, and cheap because we only need a thin layer of it. But glass is hard to drill through and to allow holes. This is why we are going to use mirror-polished stainless steel to build a large scale of a Kaleidospace.

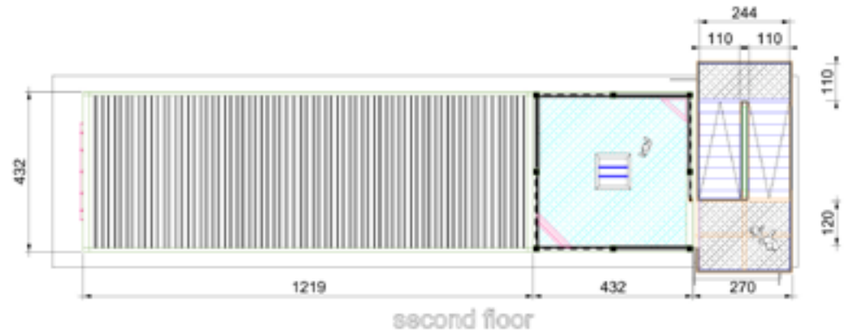
The shape and measures of the triangles are important and can change the view in a substantial way. The holes' sizes and locations are important as well and having tools to change them will make this exhibit fully interactive.

TECHNICAL DRAWINGS

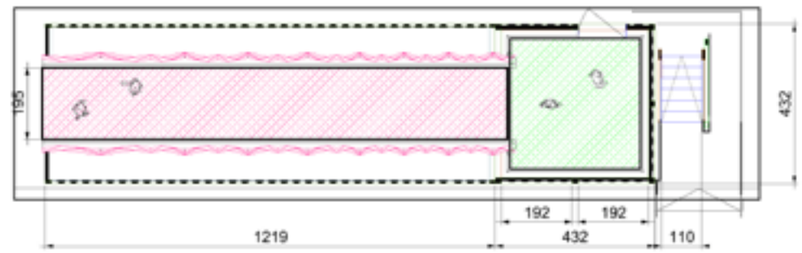


ALL LIGHT | Technical Drawings

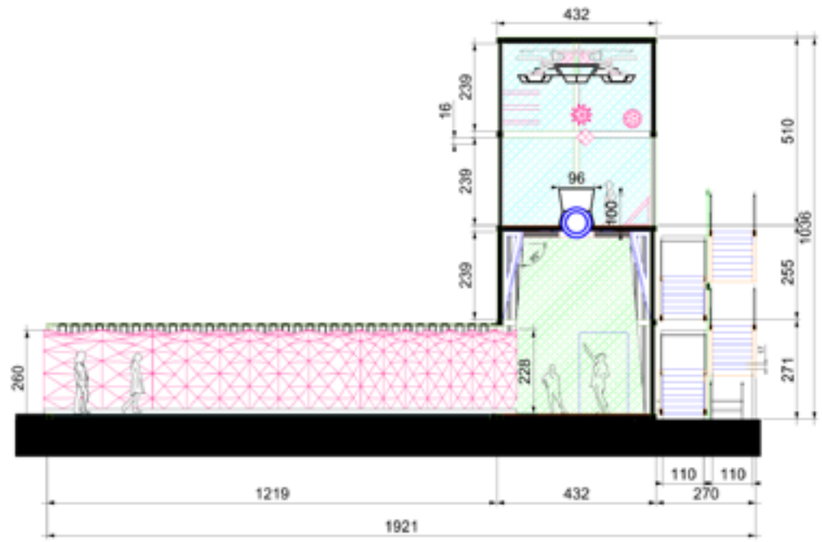




second floor

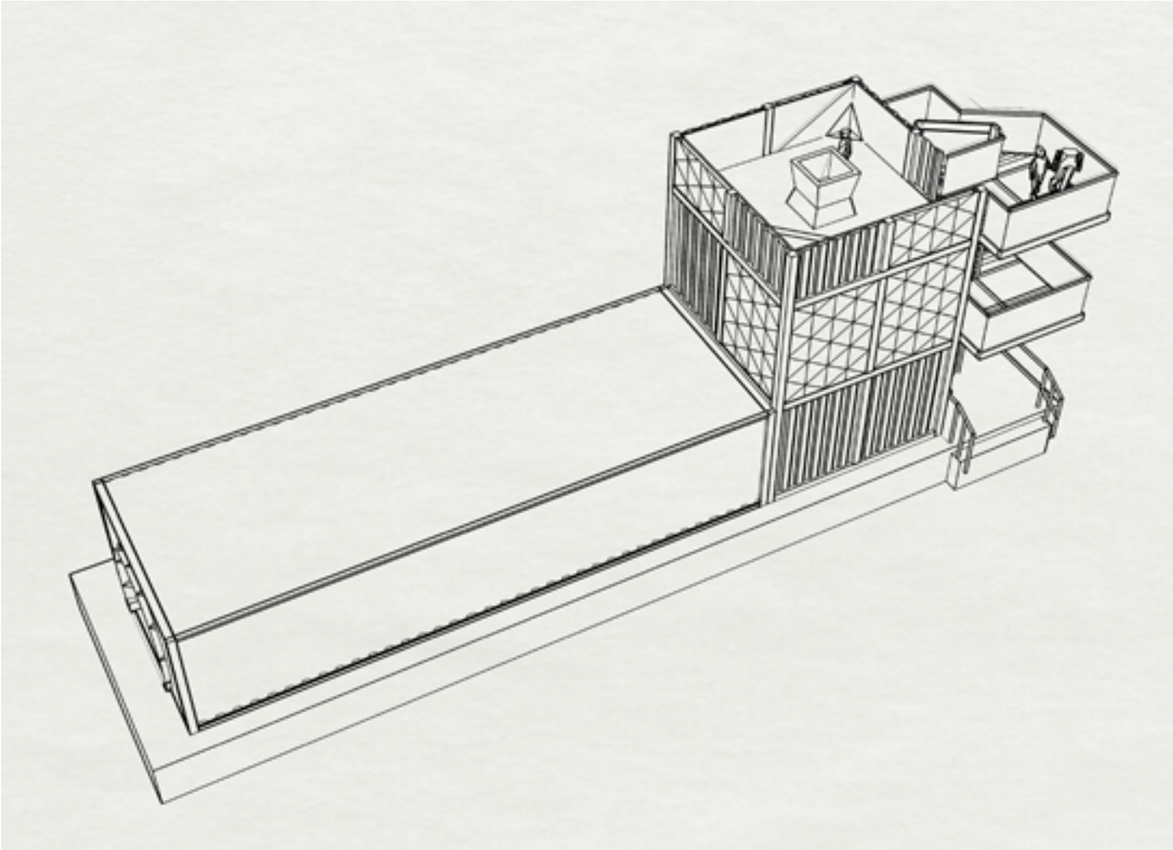


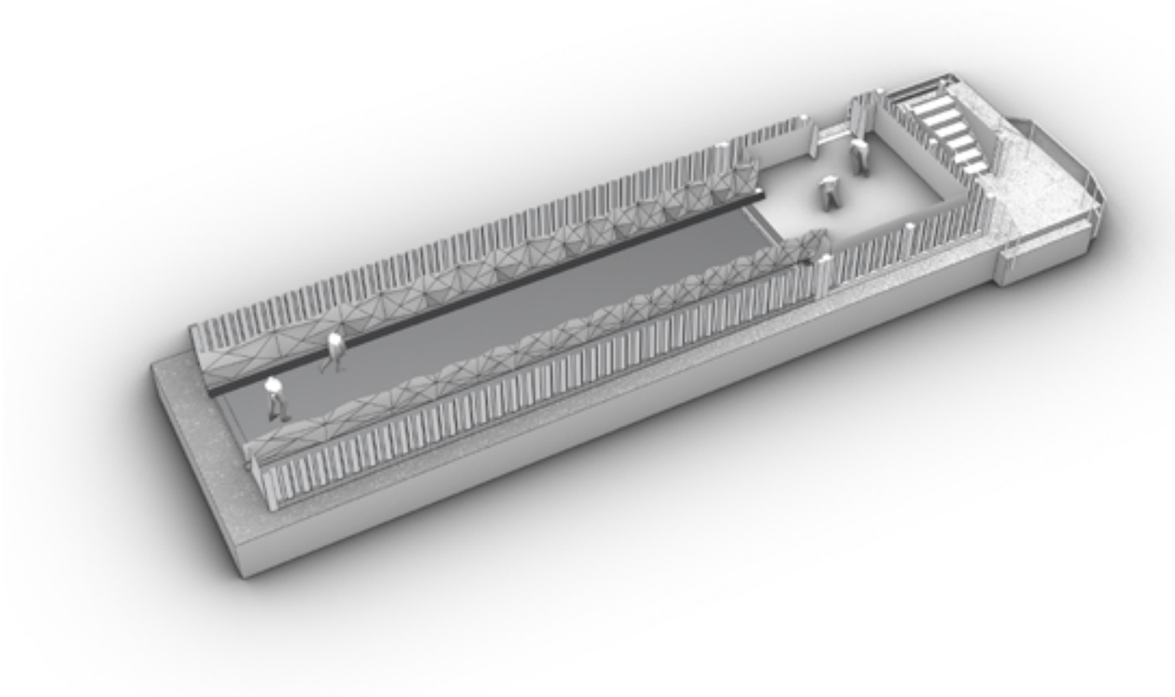
first floor

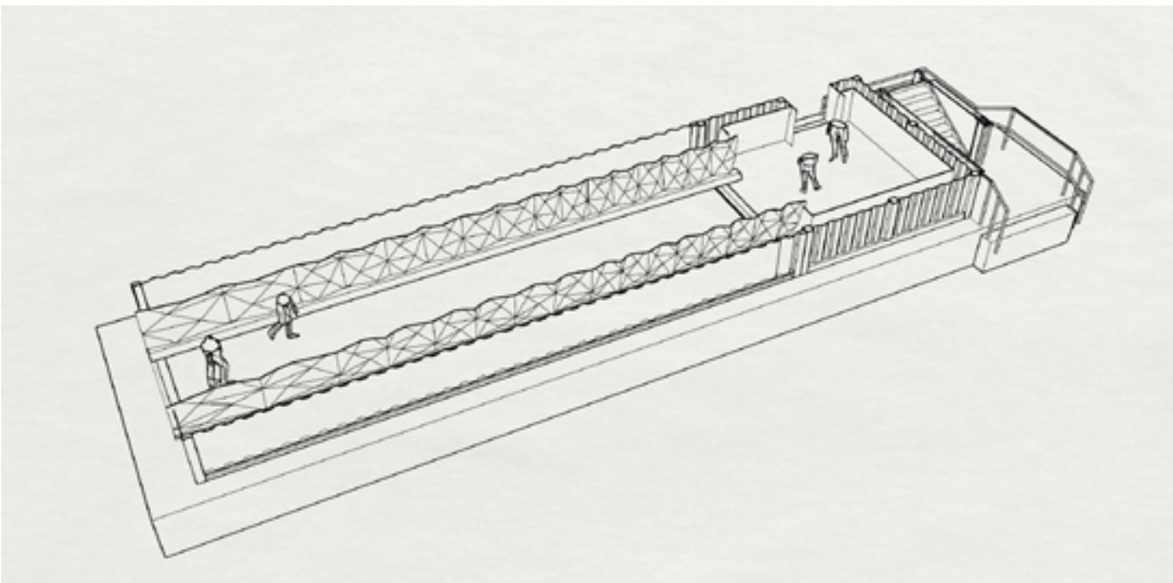


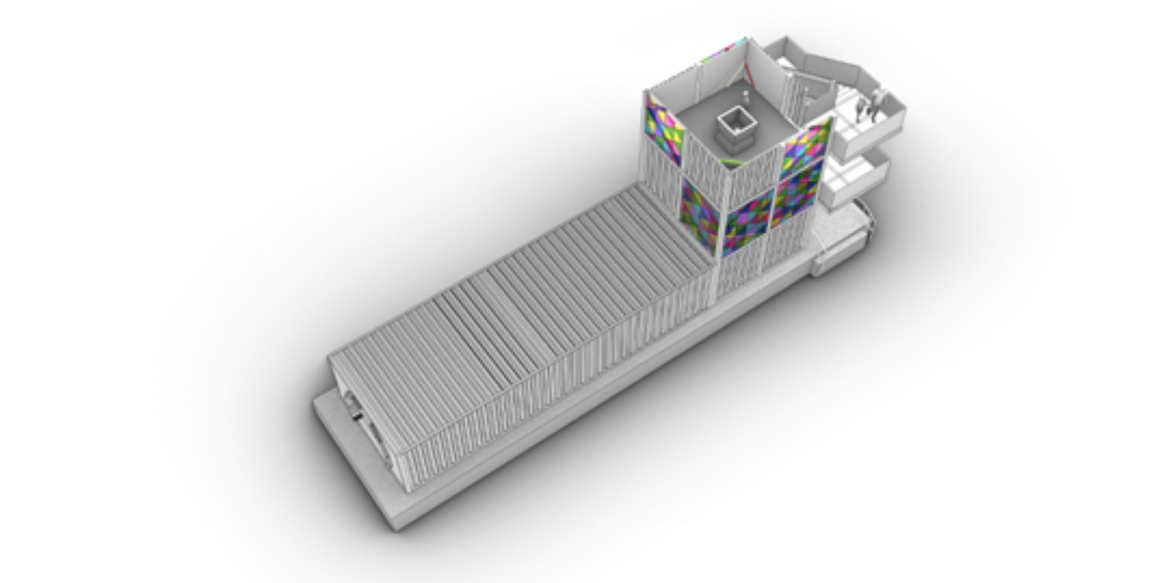
section

ALL LIGHT | Technical Drawings

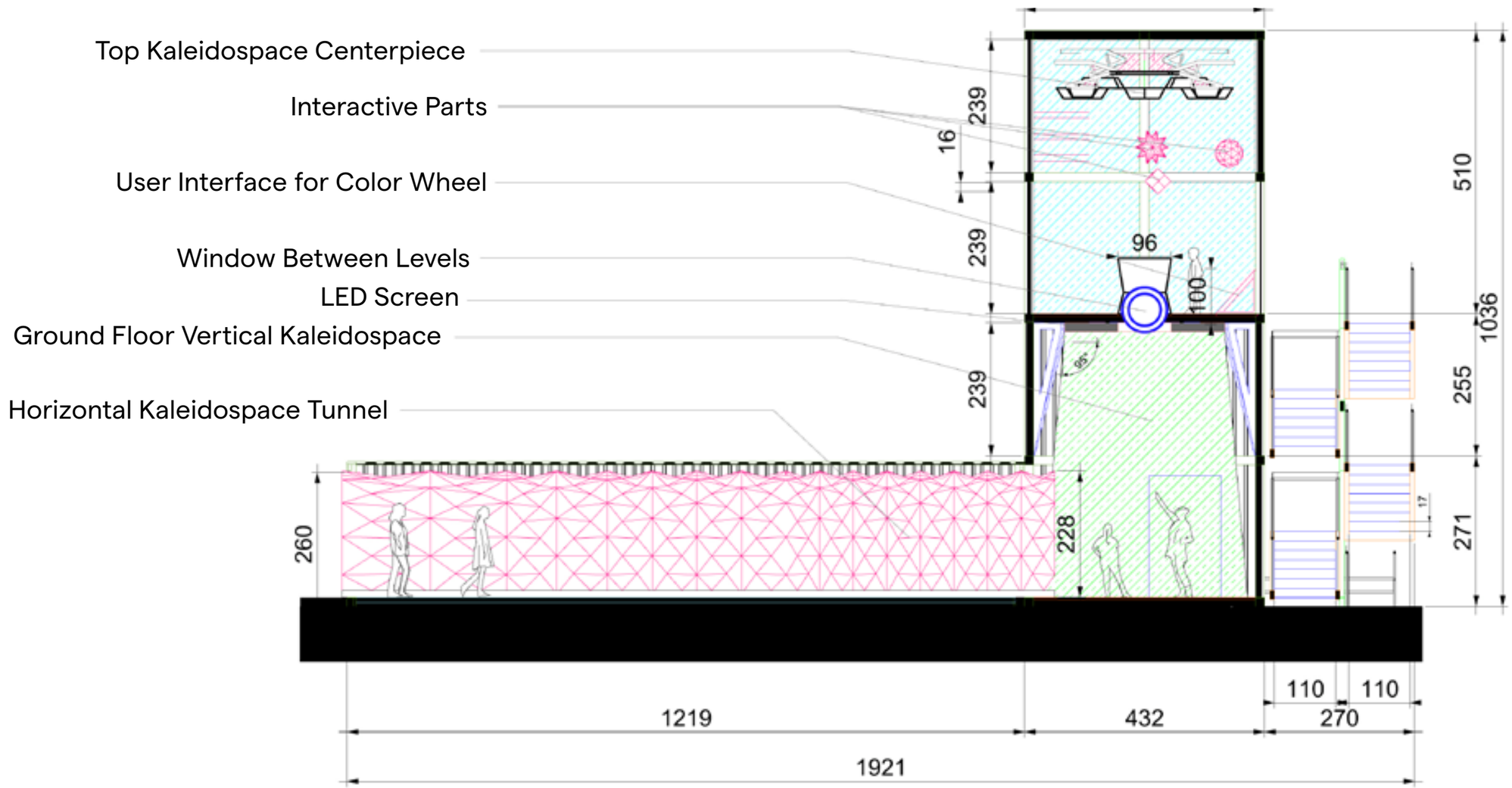






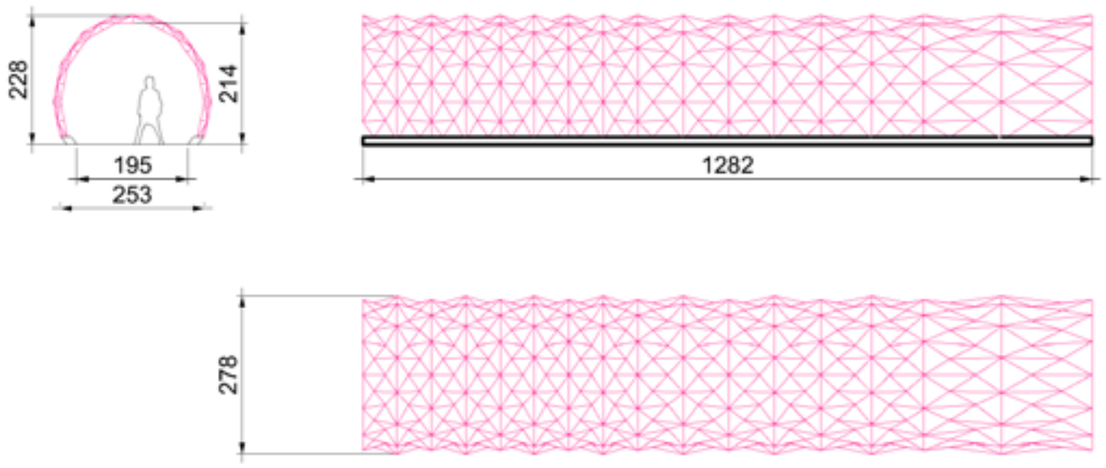


EXHIBITS


Top Kaleidospace Centerpiece
Interactive Parts
User Interface for Color Wheel
Window Between Levels
LED Screen
Ground Floor Vertical Kaleidospace
Horizontal Kaleidospace Tunnel
239
16
239
239
96
100
510
1036
255
271
260
228
110
110
1219
432
270
1921

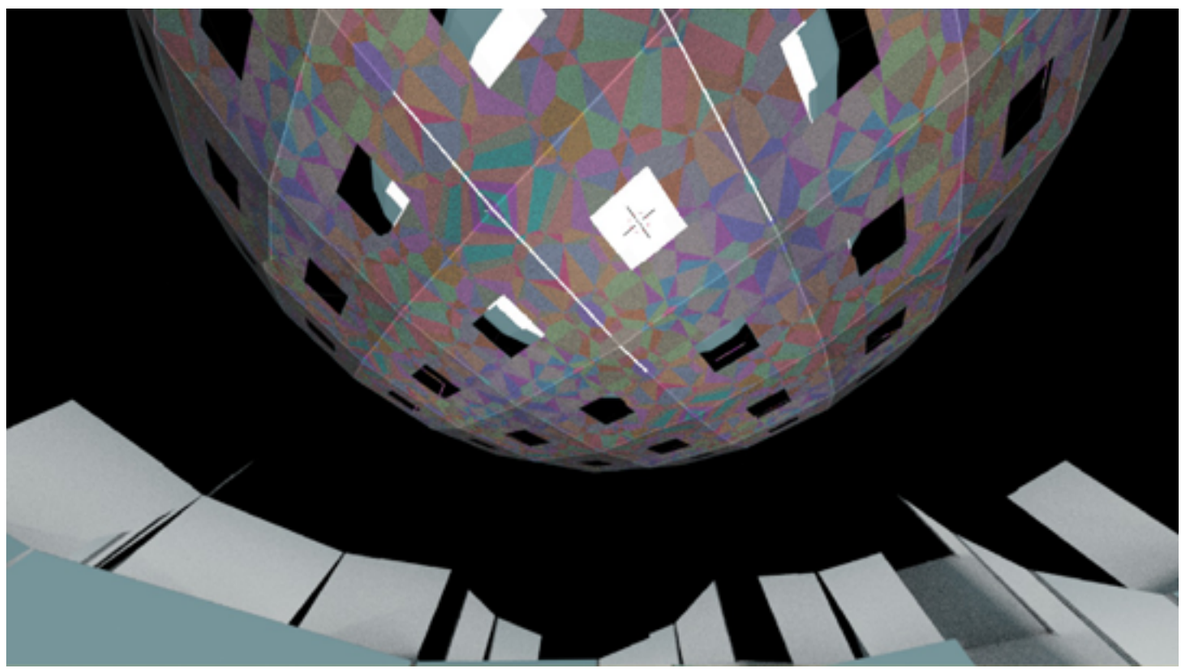
Horizontal Kaleidospace

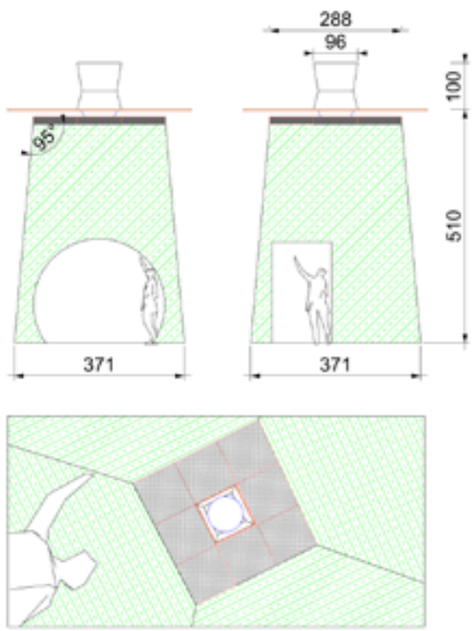
Built of laser cut stainless steel sheets, this 12meter long tunnel is a real Origami work.



Ground Floor Vertical Digital Kaleidoscope

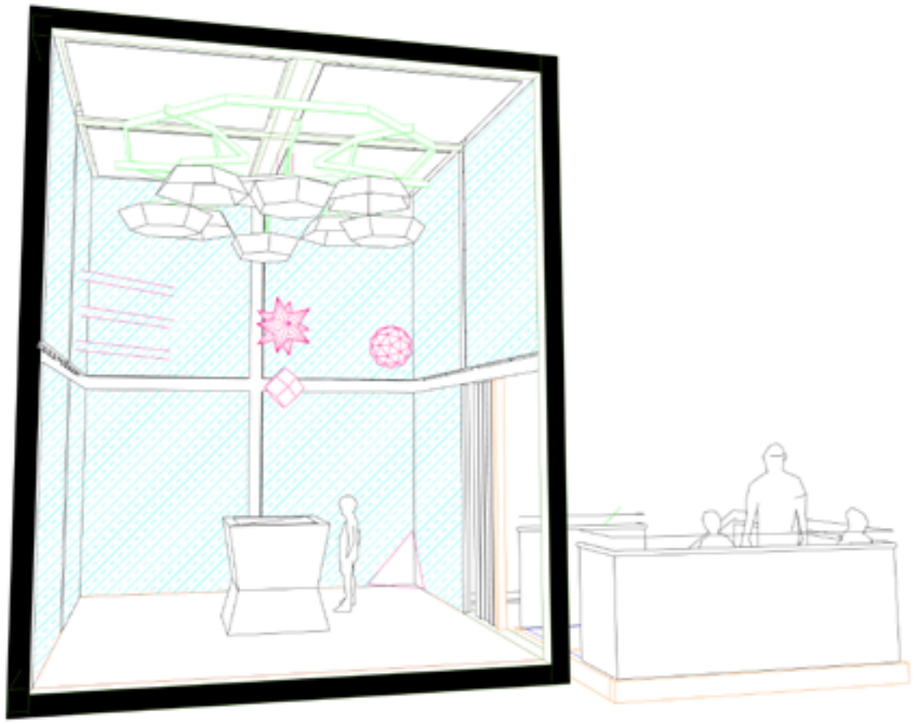
Built with 4 mirror walls this is the first part of the vertical tower. It is has an LED screen at the top that gives the ilussion of a giant Ball. at the center of the screen there is a window to the top Floor that allows the user to see the full scale of the tower.

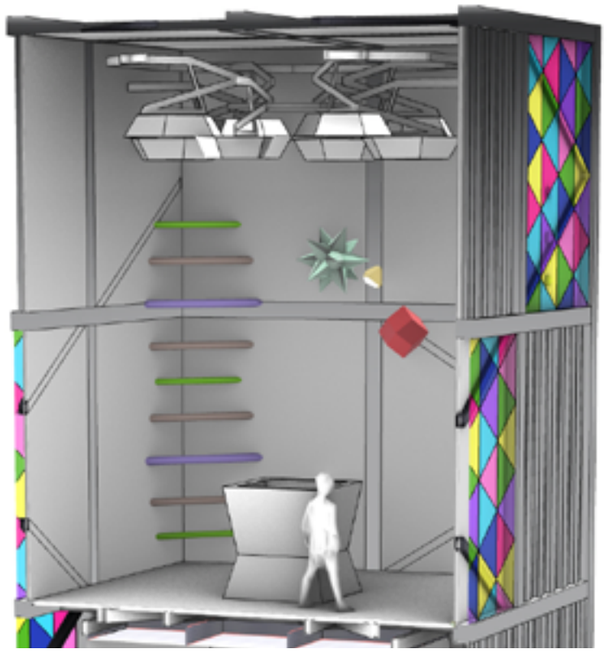




Top Floor Overview

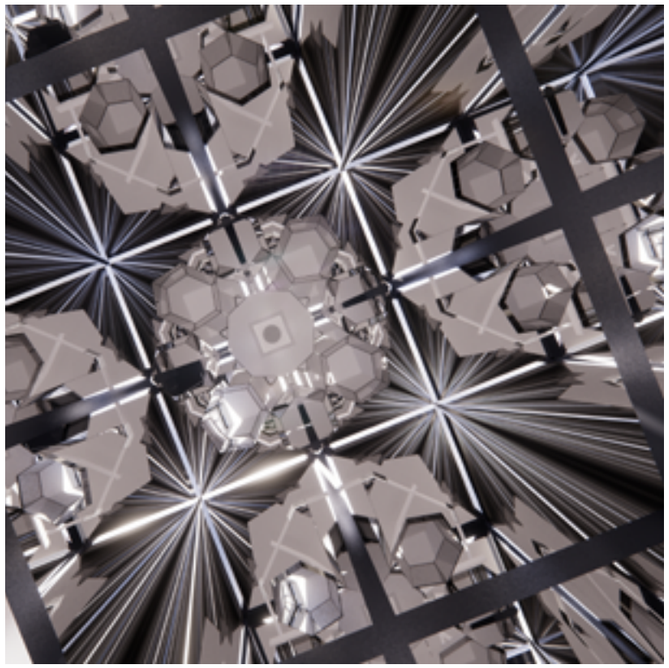
The top floor of the tower contants a 4x4 room featuring various mirror relates optical exhibits with a comibiation of digital lights and screens.

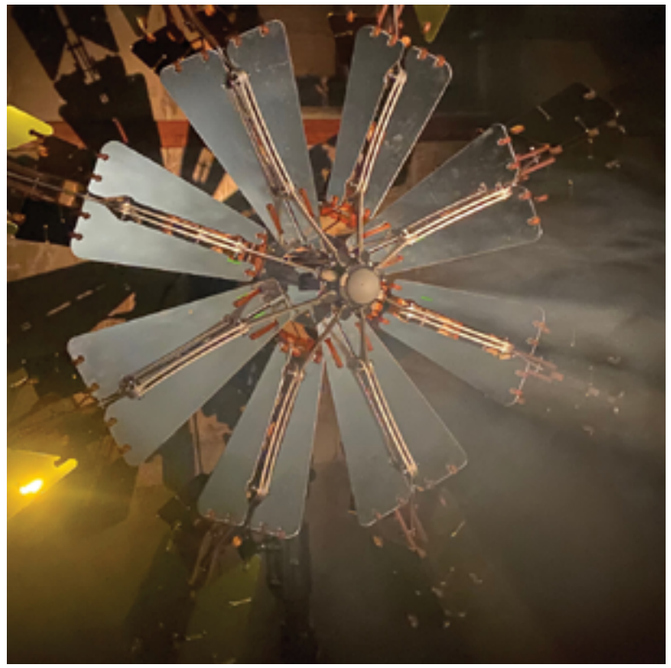


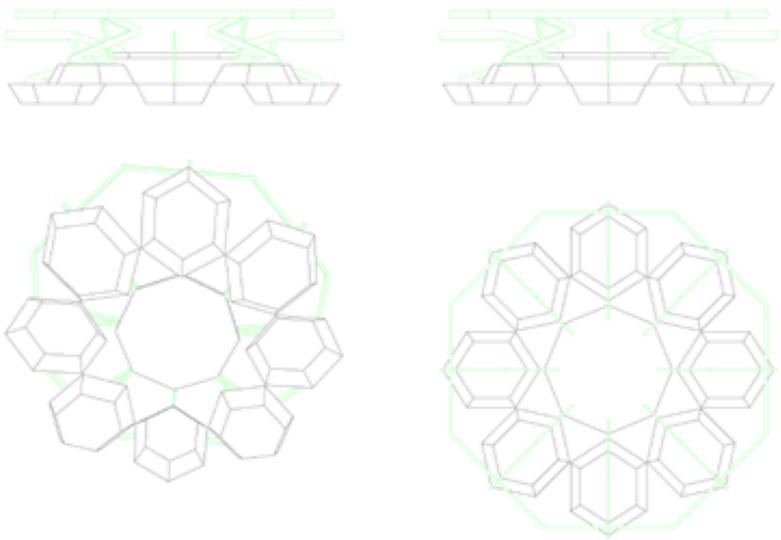


Centerpiece

A kinetic installation made of mirrors that shapes like a flower, which is hanged at the center of the kaleidospace axis.

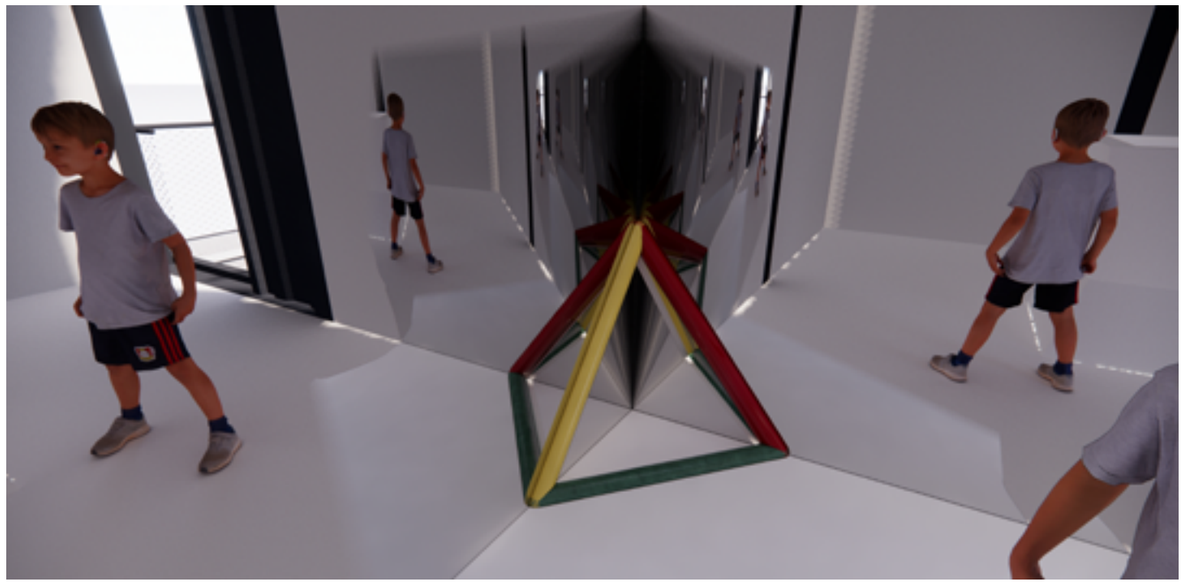


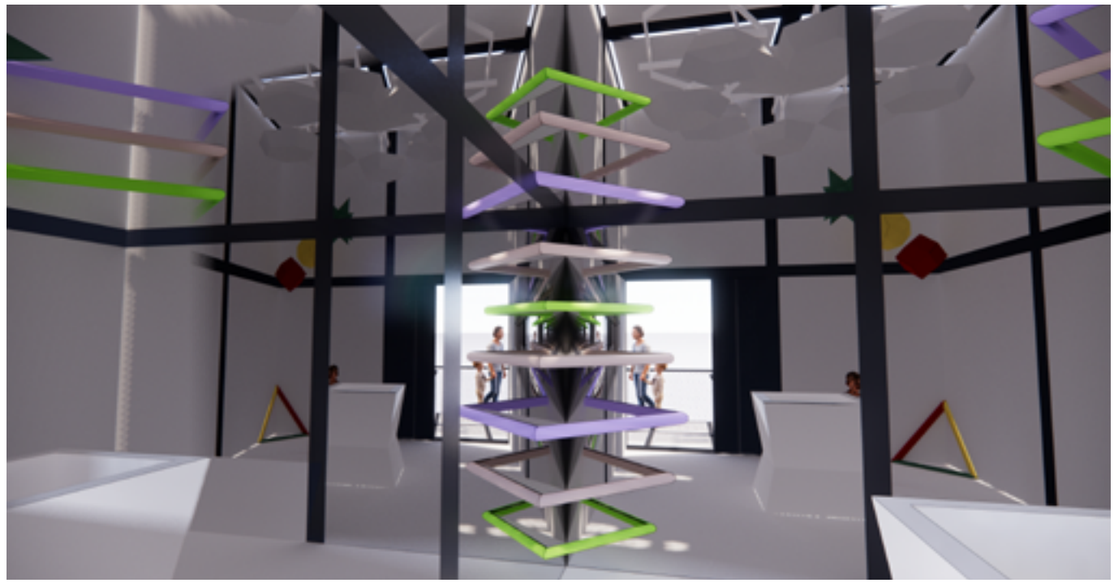


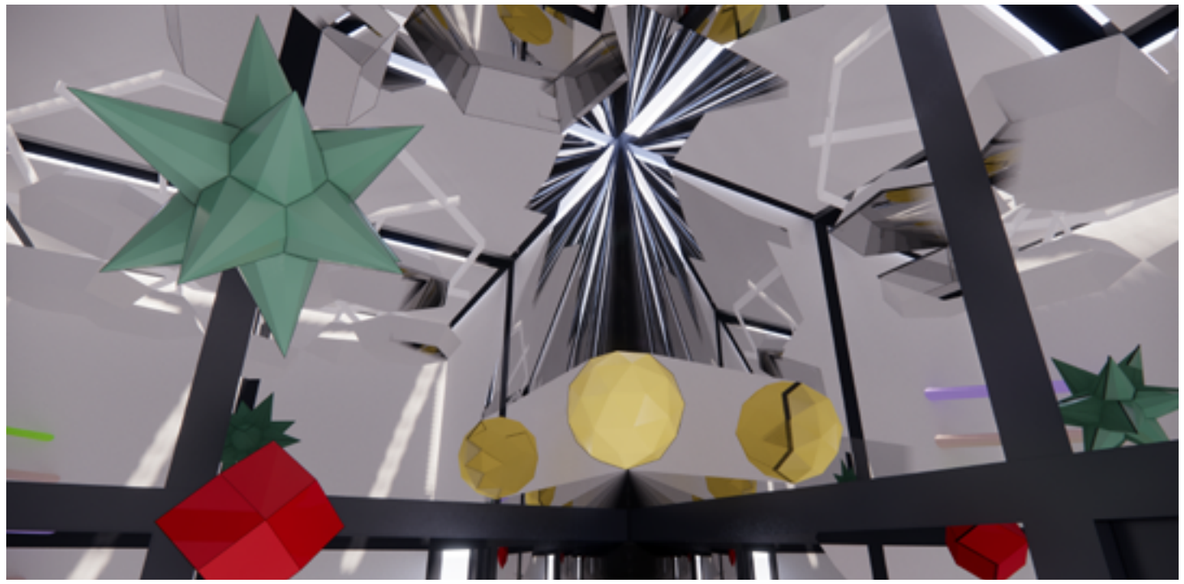


Color balls / Pendulums / Ropes / Swings

→ A collection of Interactive props.







Color Mixing Machine

Color Mixing Machine is an interactive exhibit that allows visitors to mix colors on massive translucent, colorful wheels in front of them. The back wheel is stationary and features several large and double amounts of small different colored films. The front-wheel contains three large and three small colored films. As visitors spin the helm in front of the large color wheels, they can see the different effects of moving a blue film over yellow, green over orange, and so on.

By placing this exhibit in a large window, Color Mixing Machine takes advantage of the natural light streaming in and provides a dramatic visual presence.