NATALIE ABBOTT

PORTFOLIO OF WORKS

www.natalieabbott.com

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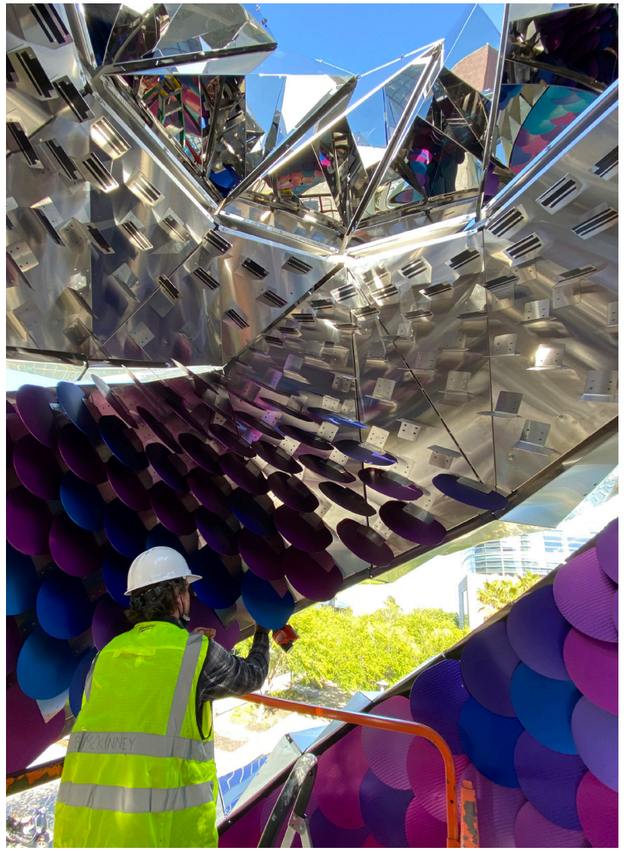
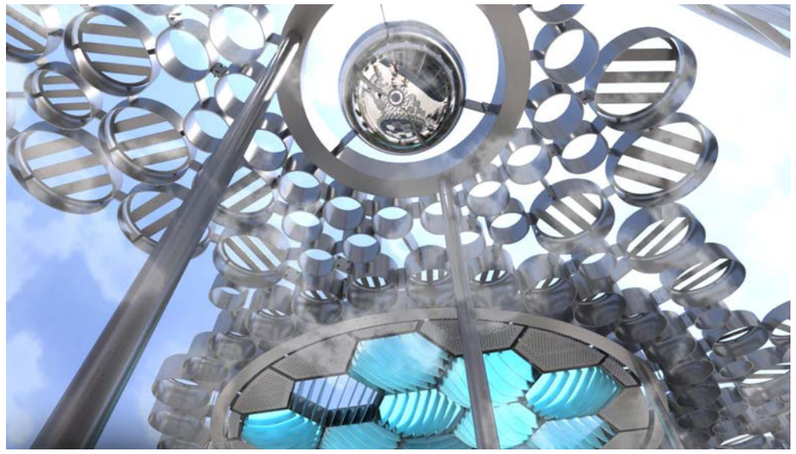


01

03

04



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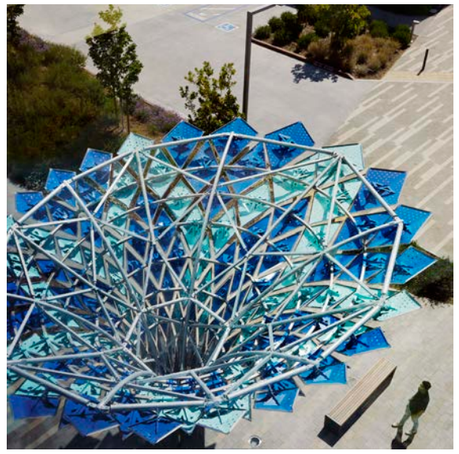
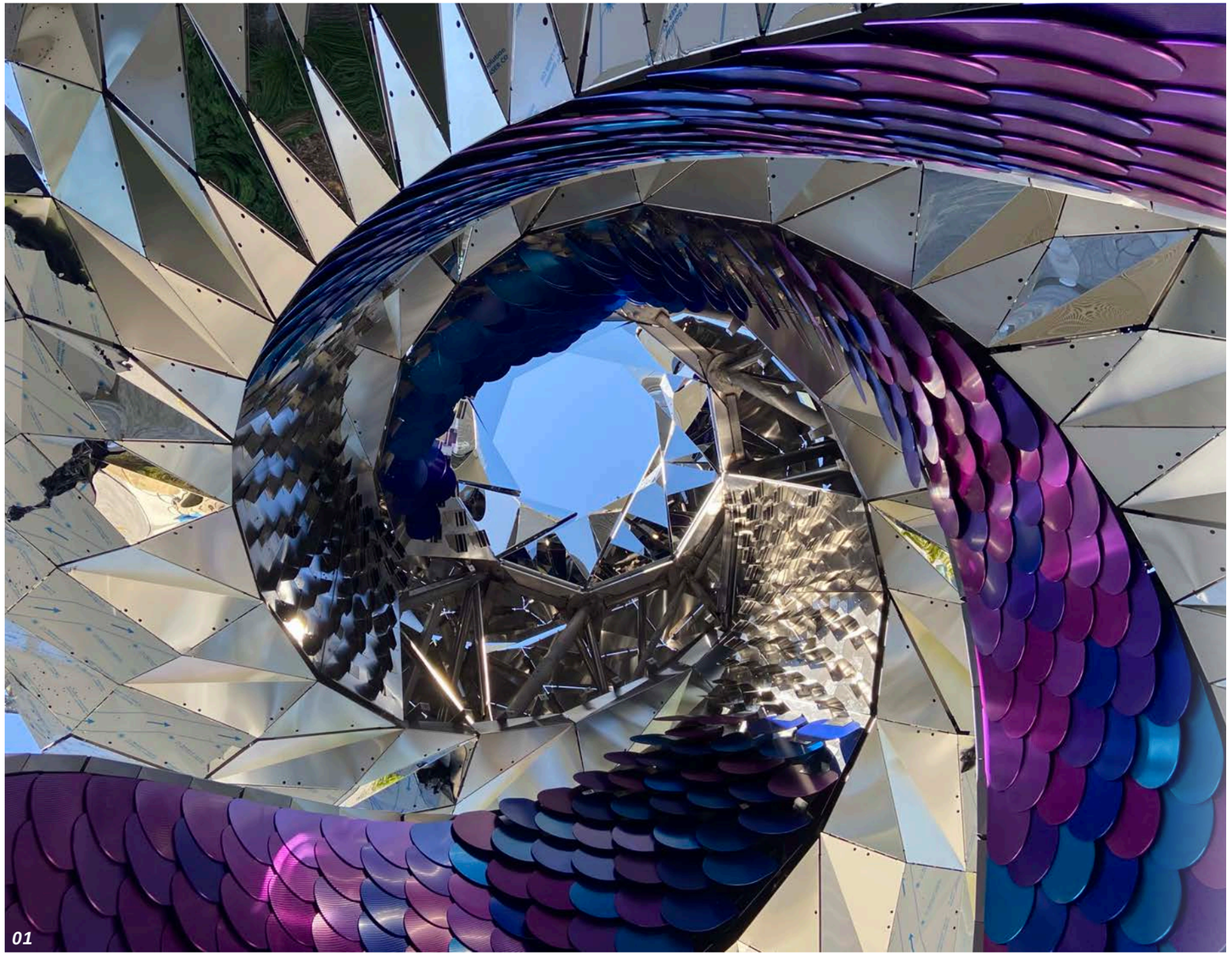


02

SURROUNDED BY
THEATRICAL
LIGHTING



01

02

03

01
Looking up through the Anodized Aluminum shingles and reflective oculus.

02
*Structure, **skinnless**, bearing only its secondary framing*

03
On site with the first leg enveloped in Stainless Steel skin

Orbital's 3 monstrous legs twist towards the sky in the courtyard of the new Uber Headquarters in San Francisco. It's hard exterior is made of bent stainless steel panels that jump between highly reflective and matte as they twist upward. While the mysterious legs maintain a hard exterior their underbelly is clad in delicately milled aluminum shingles colored in hues of purples, blues and pinks.
I **scripted construction details**, **laid out part files**, worked with various fabricators to have parts formed and finished, and **managed a team** to assemble both interior and exterior skin part**s**.

TITLE
ORBITAL

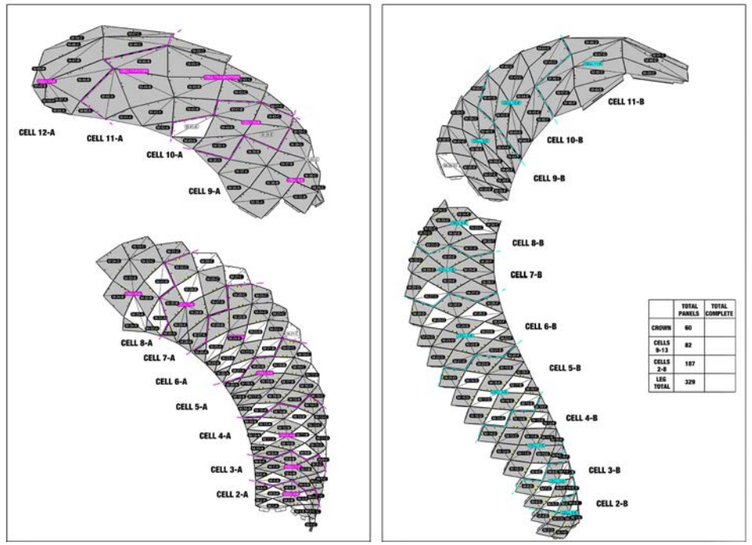
ROLE
Fabrication Manager

DESIGN TEAM
FUTUREFORMS
ARUP
Olson steel

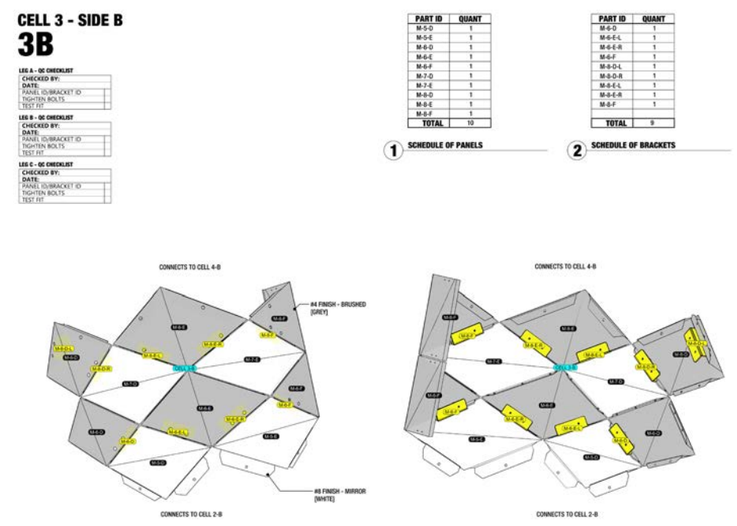
LOCATION
Uber Headquarters
Mission Bay, San Francisco

YEAR
Completed 2021

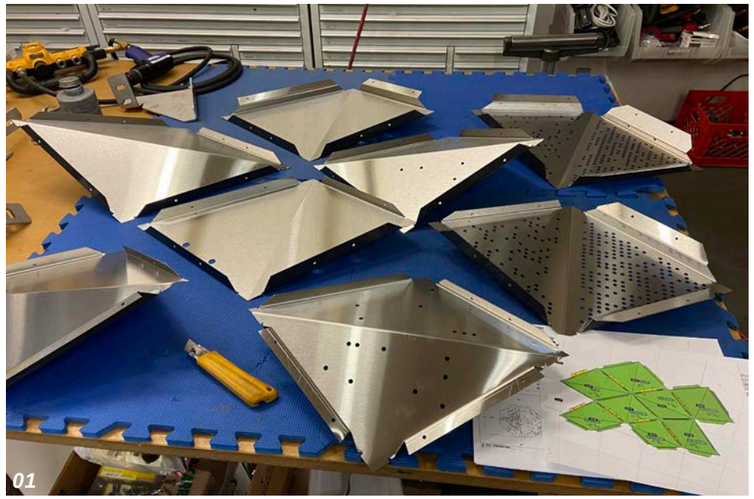
THREE LEGGED MONSTER 1



1.1 *Leg A Unrolled assembly diagram*



1.2 *Cell 3 Side B Bracket and panel assembly*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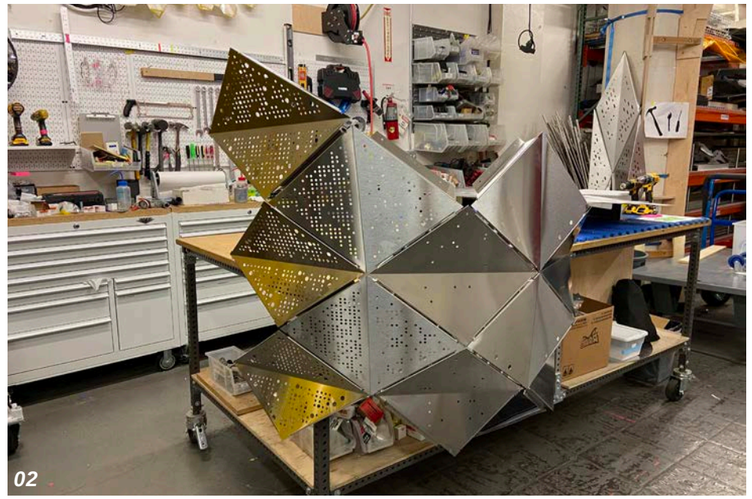
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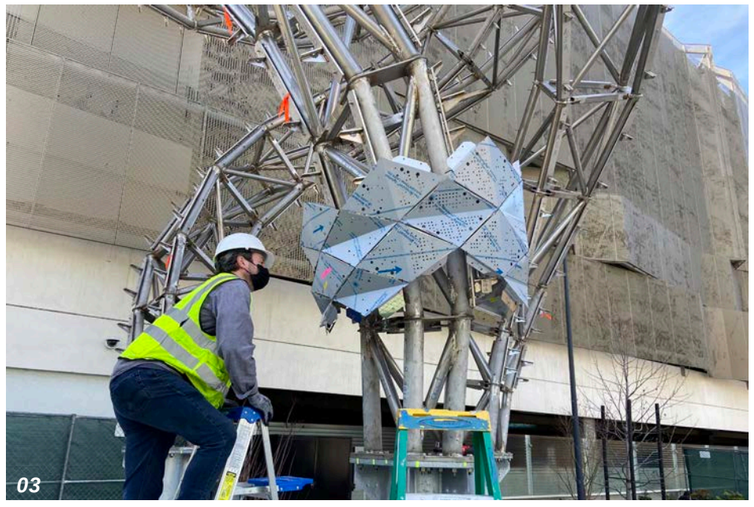

03

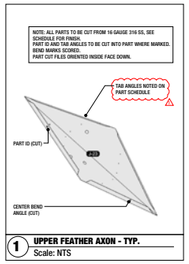
04

01
Pyramid panels, quality control passes, awaiting assembly

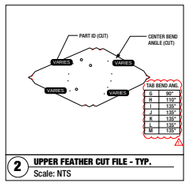
02
Pyramid panel cluster assembled and studio fit up confirmed

03
Clusters 3A and 3B test fit on site with access panel

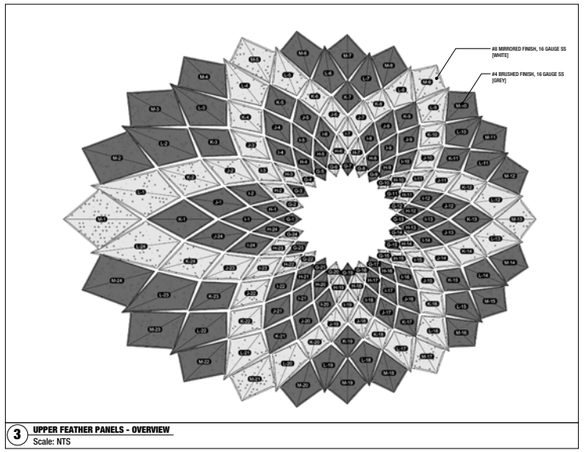
04
Close up of Leg B panel installation



1 **UPPER FEATHER AXON - TYP.**
Scale: NTS

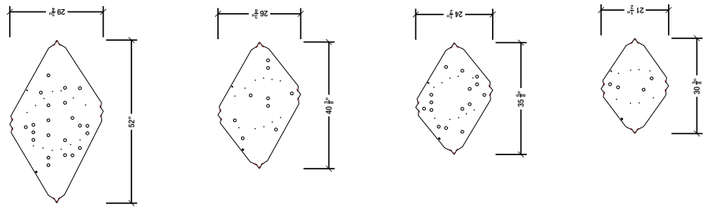


2 **UPPER FEATHER CUT FILE - TYP.**
Scale: NTS



3 **UPPER FEATHER PANELS - OVERVIEW**
Scale: NTS

2.1 *Feather Panel Fabricator Details*



2.2 *Feather Panel CUT FILE reference*

TITLE
COSMOS

ROLE
Fabrication Manager

DESIGN TEAM
FUTUREFORMS
Endrestudio
NJM

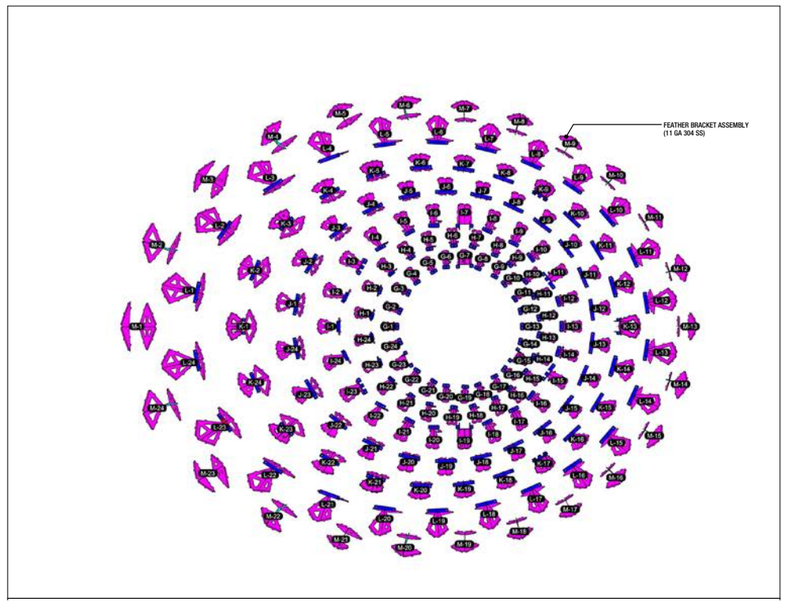
PROJECT LOCATION
Intuitive Surgical Campus
Sunnyvale, CA

DATE
Installed 2020

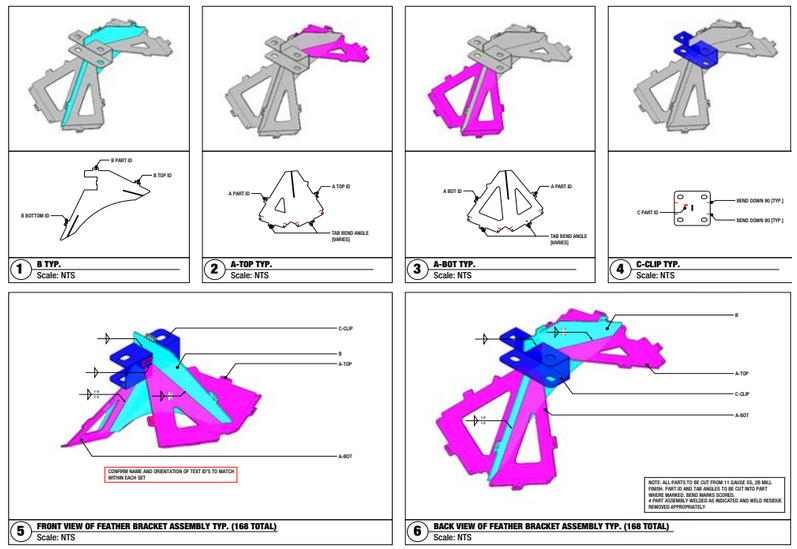
2 PARASOL WITH A GOLDEN RATIO

Located at the entry of Intuit Surgical's main building, Cosmos's stainless steel feathers use Leonardo Da Vinci's fibonacci sequence as inspiration to parasol over the pathway. The feathered parasol welcomes employees and visitors into their research facility for robotic surgical tools. I **scripted technical details** for this project, **laid out part files**, worked with fabricators to have parts made and finished, and **organized the team from assembly through final install**.

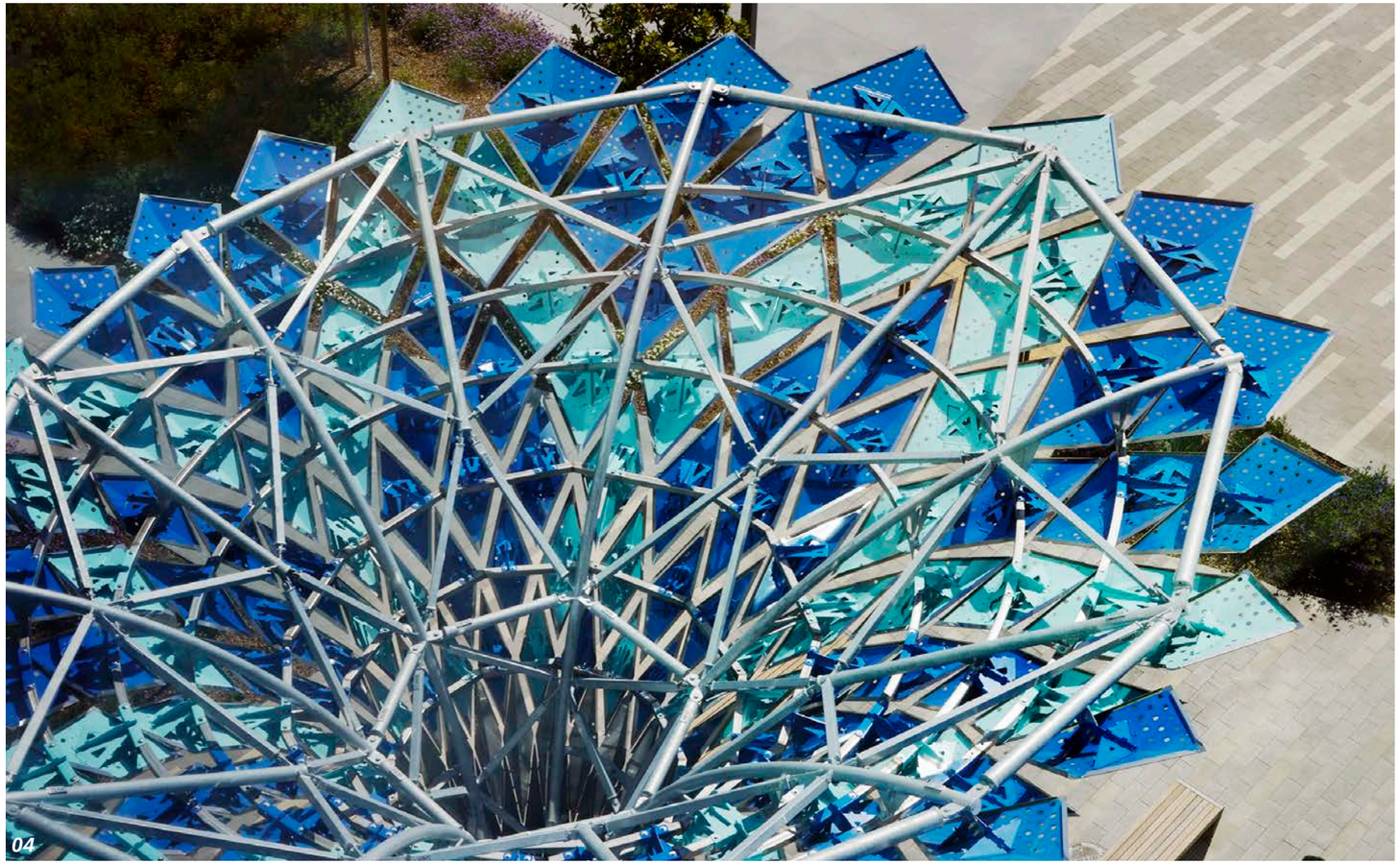
01
Photo by Matthew Millamn
View of Cosmos at Entry



2.3 *Feather Bracket Layout*



2.4 *Feather Bracket fabrication guide (cut, assemble and weld)*



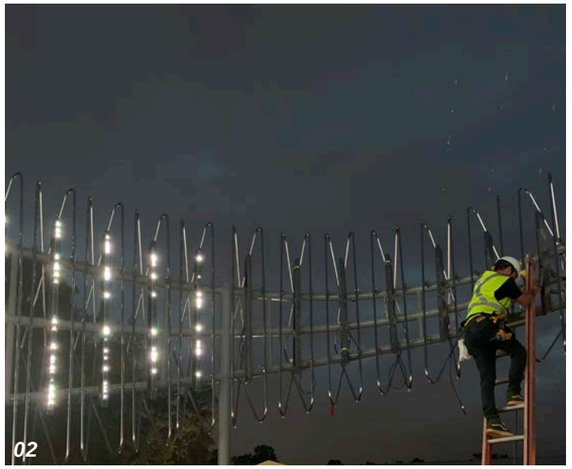
01
Inner panels between stainless steel fabricator and powder coating

02
Feather Panel, Inner Panel and Feather Bracket Assembly

03
View of Cosmos from above Mid Installation

04
Photo by Matthew Millman
View of Cosmos from above


01


02


03


04

01
view through the preforming art center field of the cloudscape animation

02
Mid installation, LEDs coming online as they are connected to main controller hub

03
Program testing in SF studio

04
Sculptural element staging

Constellations is a digital theater in the round located on the University of West Florida Campus. The welcomes students and visitors to step inside the low res pixel display woven through stainless steel lattices. Animations mimics natural typologies of the world around us and pull from Pensacola weather data.
I designed the lighting system for constellations, **laid out wiring diagrams**. **I created animations using Touch Designer pulling various data sets to inform graphics and then translating these into DMX language for both test sequences and the final artwork scenes**.

TITLE
CONSTELLATIONS

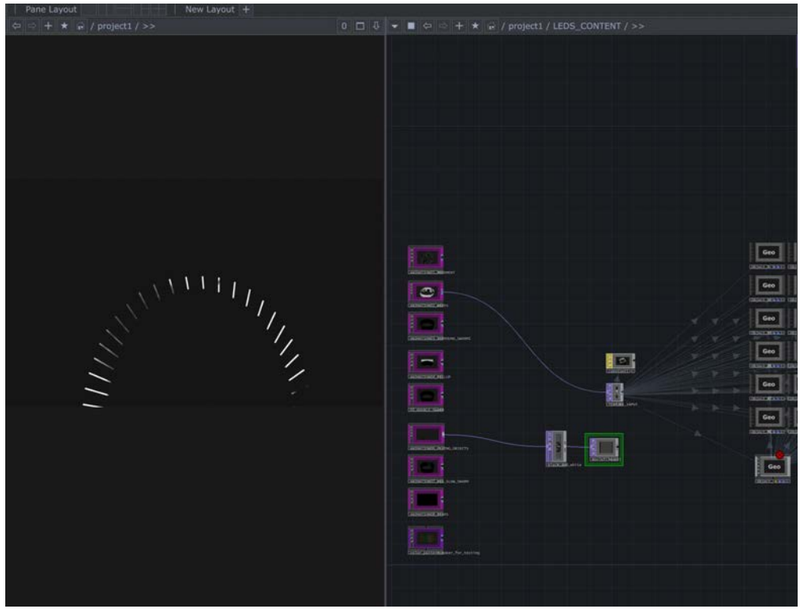
LOCATION
University of West Florida
Pensacola, Florida

DESIGN TEAM
FUTUREFORMS

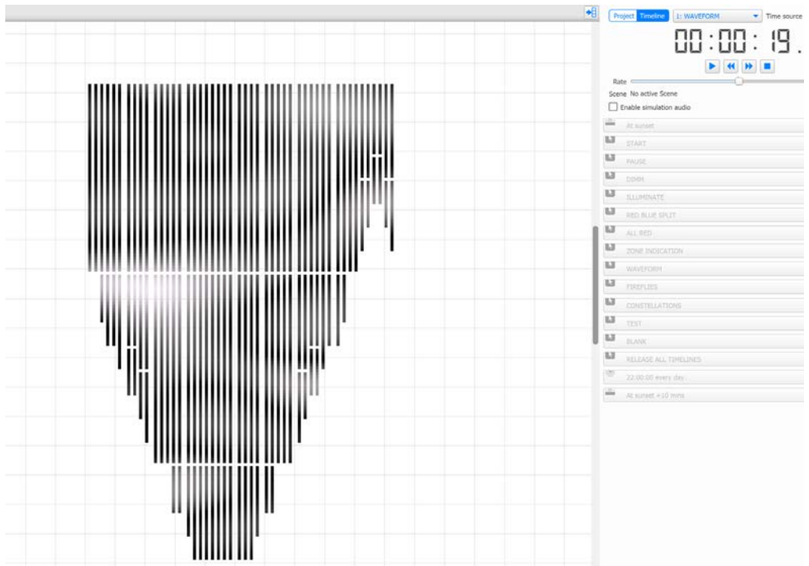
YEAR
2020

ROLE
Lead Programmer,
Fabrication Manager

TECHNOLOGY
Touch Designer, Pharos
Designer, Grasshopper



3.1 *TouchDesigner animations and scene preview*



3.2 *Pharos Designer sequencing and preview*


01


02


03

04

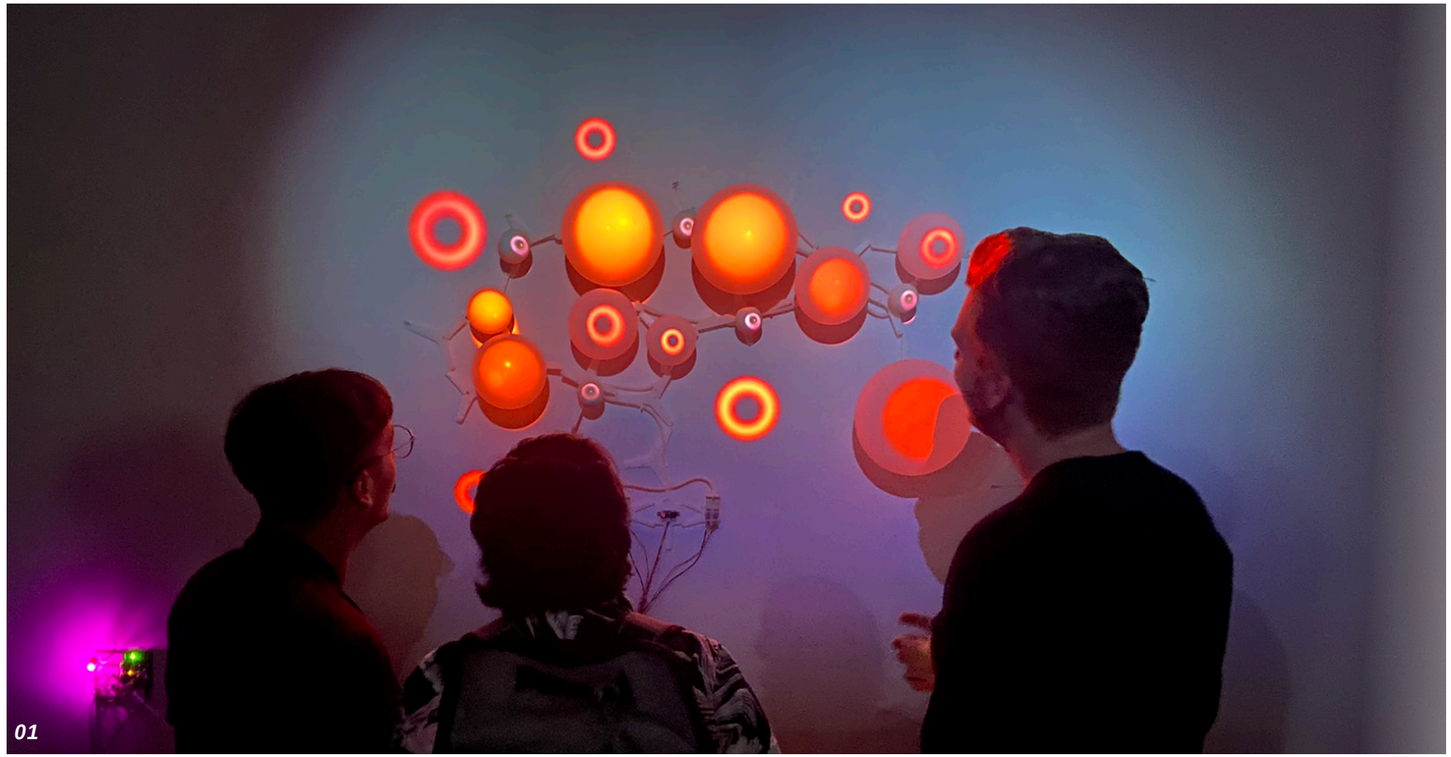
01
Constellations starscape Animation

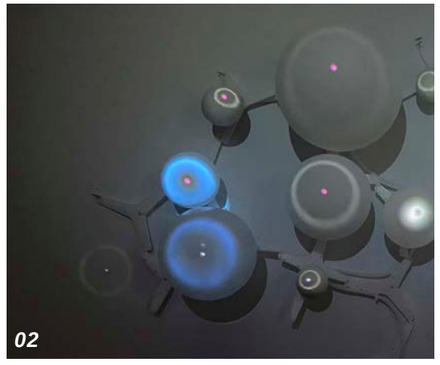
02
Cloudscape Animation

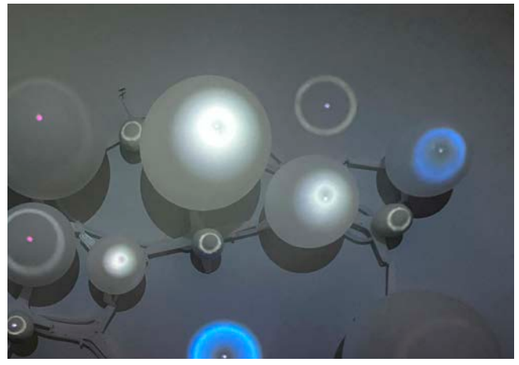
03
Blue Wave Animation

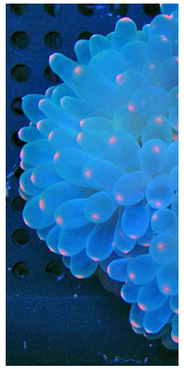
04
Resolution and color range testing in the studio

3









01
Gallery viewers approaching the expanding and contracting cscape

02
Detail views of cspace layered skin construction

03
Anemone and cepholopod inspiration images
Process, inflation testing

In Cephaloscape the porous and textured screen will mimic the cellular makeup as it exists in a carefree daily motion and as it's impacted by external forces, threats, food sources, potential mates and symbiotic counterparts. As viewers move around the piece they can trigger both touch and sensor events, acting as threat or rewards in the cellscape system. Events will illuminate the cellscape with different projections, changing its looks, feel, color and texture for the viewer to fall prey to the show. **I designed the physical skin, coded the inflation and approach responses, and developed projection mapped artwork for Cephaloscape**.

TITLE
CEPHALOSCAPE

PROJECT LOCATION
Grey Area Gallery, San Francisco

PROGRAM
Grey Area Creative Coding Immersive

DATE
2022

MATERIALS
PLA, latex balloons, Silicone Tubing, motorized pumps

TECHNOLOGY
Arduino, IR sensor, Mad Mapper

APPROACHABLE ATTACKING SKIN 4


01


02


03

TITLE
WEATHERSCAPE

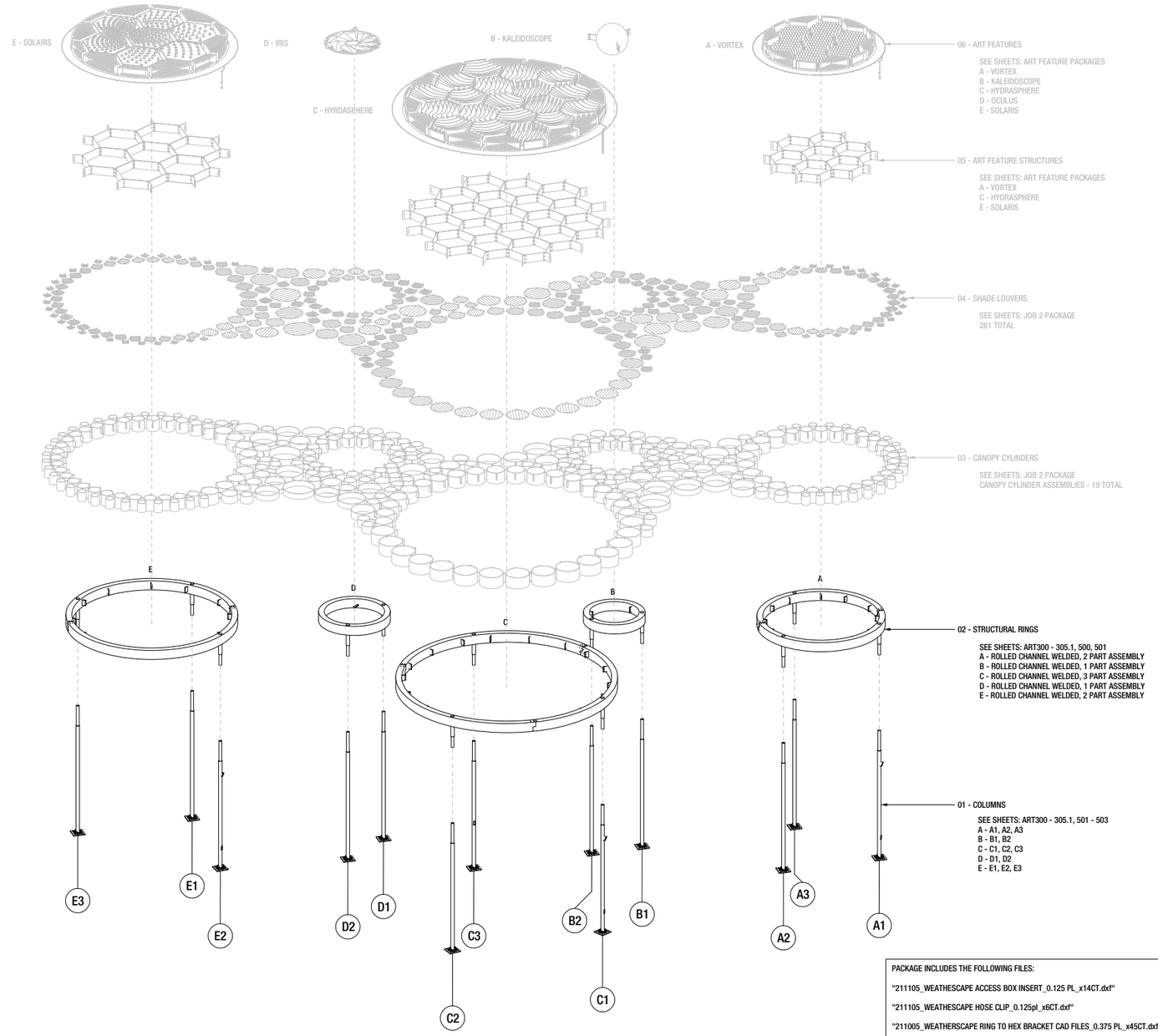
ROLE
Fabrication Manager

DESIGN TEAM
FUTUREFORMS
Endrestudio
NJM

PROJECT LOCATION
EL PASO, TX

DATE
IN PROGRESS

PROGRAM
Interactive shade canopy for the El Paso Children's Museum



PACKAGE INCLUDES THE FOLLOWING FILES:

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"211105_WEATHESCAPE HOSE CLIP_0.125pl_x6CT.dxf"

"211005_WEATHERSCAPE RING TO HEX BRACKET CAD FILES_0.375 PL_x45CT.dxf"

"211005_WEATHERSCAPE RING TO HEX BRACKET AREA D CAD FILE_0.375 PL_x3CT.dxf"

"211027_WEATHERSCAPE_JOB 1_FULL MODEL.dxf"

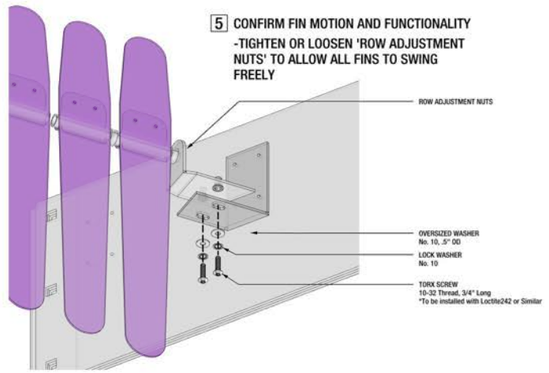
5.1 *Exposed structural axon*

01, 02
Photo taken at NJM (steel fabricator of canopy layout and welding

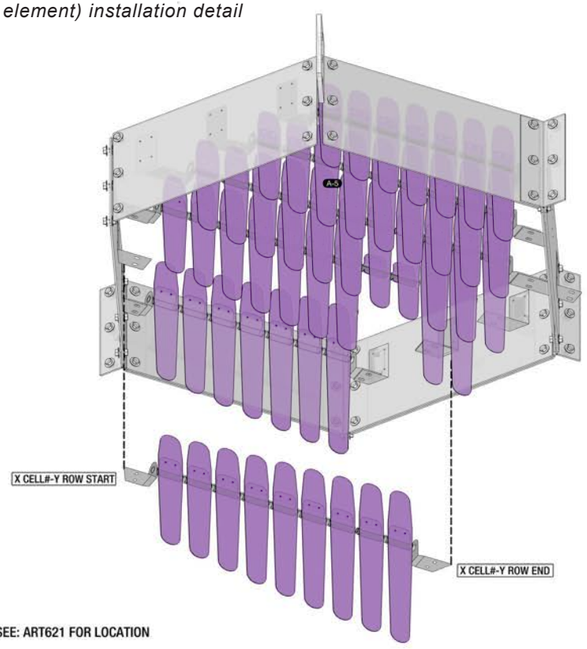
03
Design Rendering by FUTUREFORMS
View of the canopy from above

5 MUSEUM MIST MACHINE

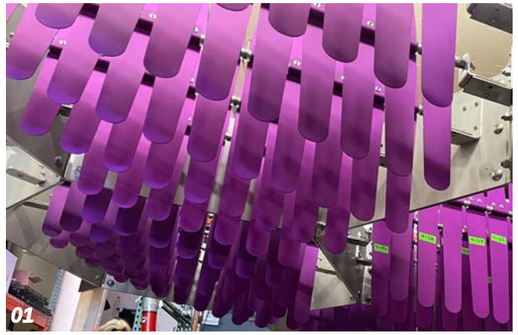
Weatherscape is a functioning ecosystem of weather systems contained into a single shade canopy. Each circular zone contains a different event (Wind, Sun, Water etc) Integrated misting and fog systems activate the canopy and provide additional cooling in the Texas heat.
I working with our team and engineers to make **construction drawings for the structural steel**. I **scripted and designed fabrication details** for various weather event pods and **facilitated the fabrication**, assembly and packing of these elements.

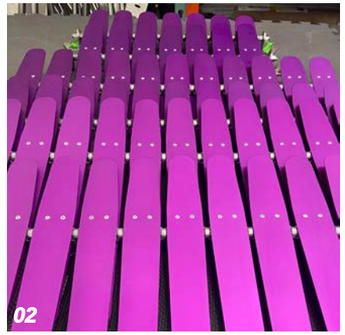


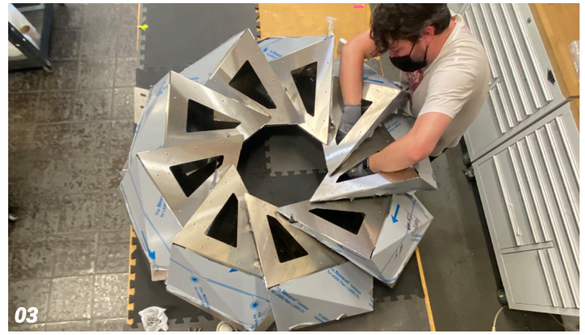
5.2 *Vortex (wind element) installation detail*

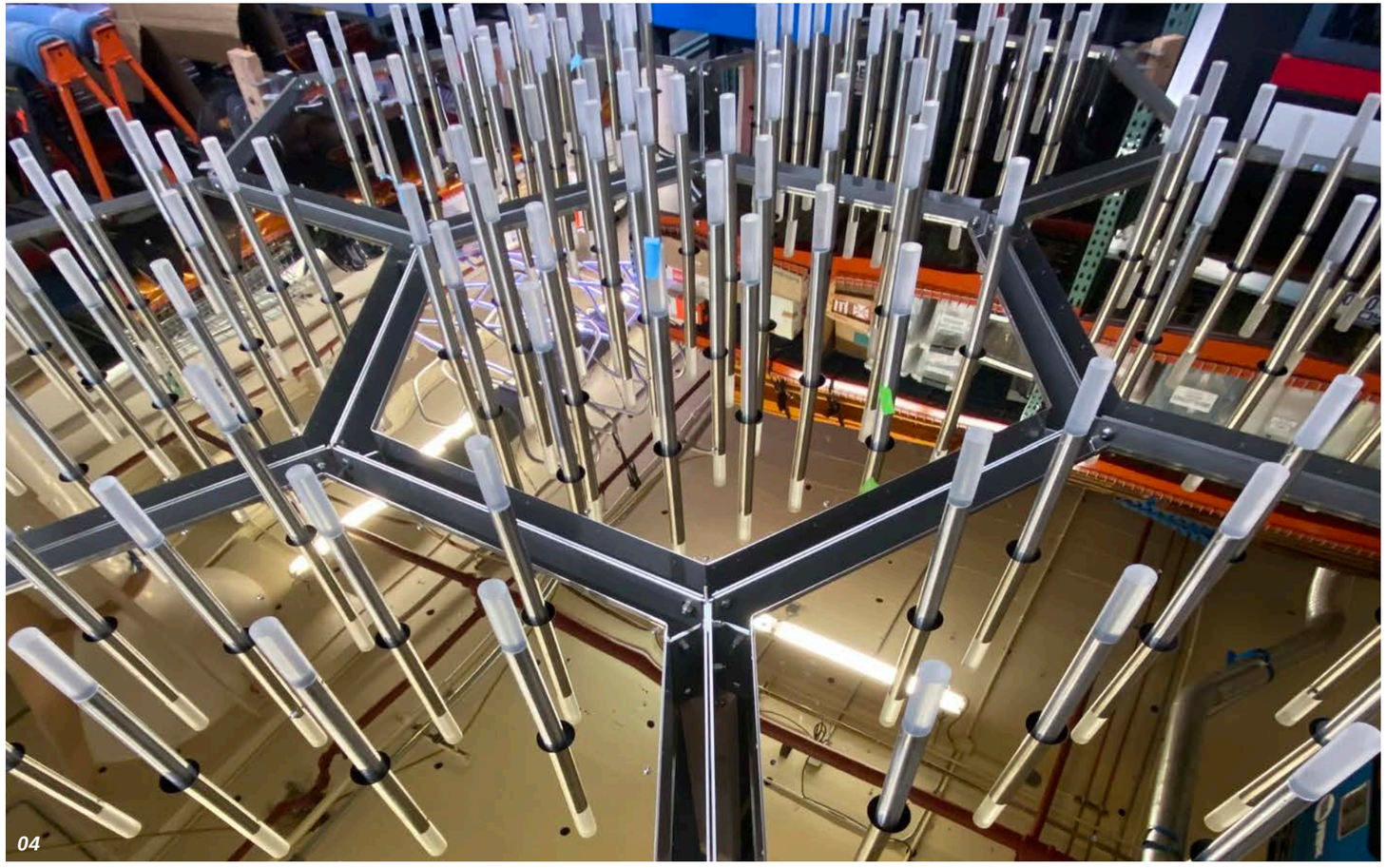


5.3 *Vortex Installation sequence*









01
Vortex (wind event) studio assembly and fit up

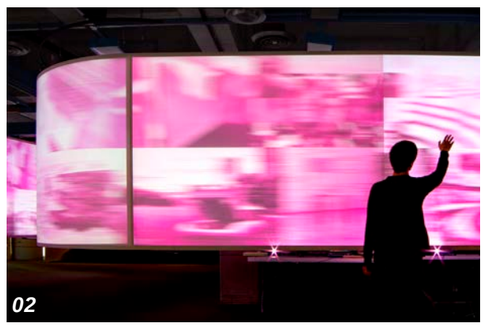
02
Vortex anodized fins laid out for packing

03
Iris (aperture event) mid assembly

04
Solaris (sun event) assembled and installed facing upwards in the studio

5

01



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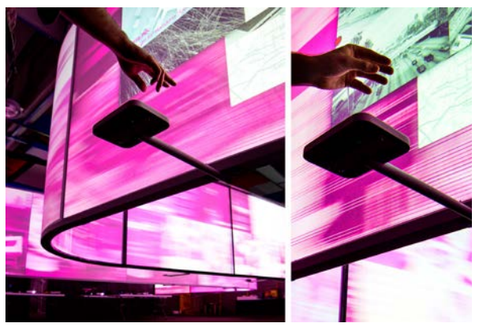
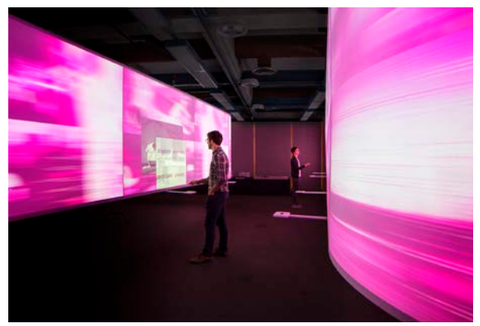
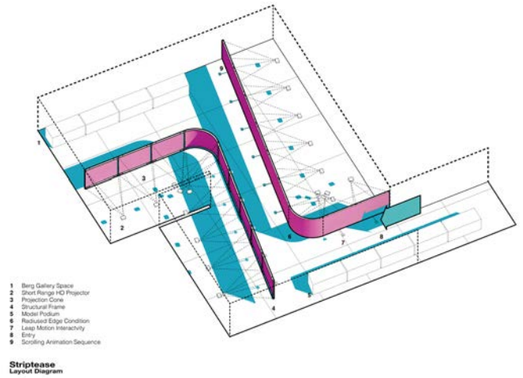
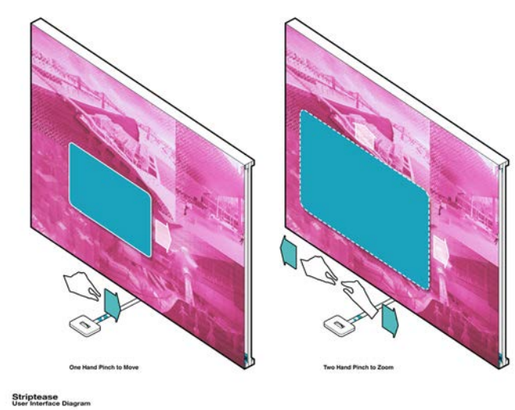






6.1 Gallary Layout Axon



6.2 Interaction Diagram

TITLE
STRIPTEASE

PROJECT LOCATION
Berg Gallery, Cal Poly San Luis Obispo

TEAM
Studio Jackson

DATE
2015

MATERIALS
Custom Projection Screens (MDF, Steel, Fabric)

TECHNOLOGY
Leap Motion Sensors, Projectors

01
Everyone who enters the gallery is surrounded by content streaming around them.

02
Individual viewers have control of selecting and viewing content in front of them

Striptease, was an immersive, interactive show presenting all of the thesis projects from Doug Jackson's studio 2015. As a studio we deigned, and constructed two screens that ran the length of the Bulge gallery. We projected a streaming ticker tape sequence onto these screens. Viewers were surrounded by content streaming on either side of them through the gallery. Viewers were able to use sensors to pick projects from the ticker tape stream and view them at their leisure while the other projects streamed by.
I built a website to view gallery contents before and after the opening and organized the opening day live stream from the gallery.

INTERACTIVE TICKER TAPE 6

NATALIE ABBOTT

www.natalieabbott.com