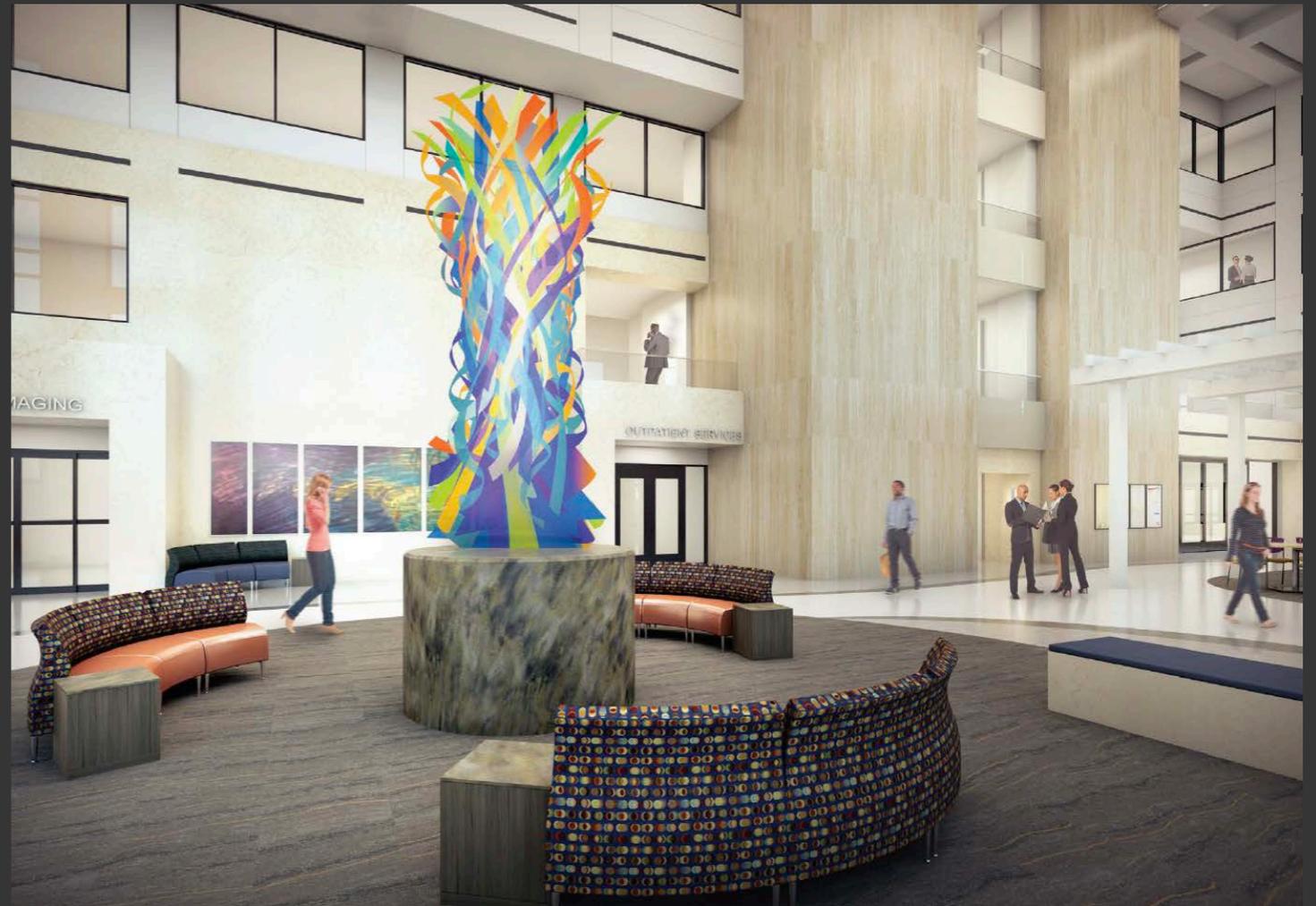


## Custom Floor Mounted Sculpture

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# Medical City

Medical City Dallas  
Women's Hospital  
Lobby Renovation  
Dallas, Texas



# Custom Floor Mounted Sculpture

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## Medical City Hospital

**Project:** Medical City Dallas Women + Children Hospital Lobby

**Completed:** 2019

**Location:** Dallas, Texas

**Specifier:** Perkins + Will (Title Page Rendering Credit: Perkins + Will)

### Project Overview

*My Role - Project Manager*

Perkins + Will specifying the design build refresh and expansion of the Medical City Dallas hospital campus, reached out to LightArt initially seeking a large suspended rainbow ribbon ceiling installation for the main entry atrium of the Women + Children medical services building.

The project went through a variety of design directions, changes, and special considerations taken to the custom nature of the intent and large scale of the space. The result was a 16ft tall overall, lit rainbow ribbon sculpture, mounted to a concrete pedestal.

During the project process I was able to learn a lot, overcome design obstacles, how to collaborate with challenging vendors, and to take initiative in developing and designing an installation guide that set a new precedent for project manager deliverables of large scale fixture installations. Overall, the project was a success and the hospital was pleased with the artistic end result.



(Above Photo Credit: Chris Bowden)

# Custom Floor Mounted Sculpture

## Project Process Details

The initial inquiry, concept, and budgetary quote was created by another project manager, whom I replaced upon being hired at LightArt. I relied on the sales rep to help catch me up on the details when the project came alive again, seeking a refreshed budgetary quote with in depth installation and design solutions. The design intent was for heat formed resin ribbons to span a ceiling footprint of approximately 65ft x 18ft, suspended from unistrut and mounted to the ceiling decorated with skylights.

Challenges arose when I calculated the weight of the material and explained how it would need to be mounted to the ceiling structure. Additionally, the specifying firm assumed that the unistrut structure AND installation was provided within the initial budget provided. Also, when I had a structural engineer verify the ceiling material and attachment capabilities, it was confirmed that the entire ceiling would need to be backed with additional mounting structure to support the suspended ribbon art installation.

As a result, it was back to the drawing board in terms of the art installation concept - ceiling mounted was out of the picture. The design intent moved to a floor mounted solution and the budget was drastically reduced, as the installation would require quotes from outside vendors.

**BUDGETARY QUOTE**  
MEDICAL CITY DALLAS  
PID # 261752

DATE PREPARED: (VALID 30 DAYS) 12/08/2016  
Rep: Susan Judkins  
susan.judkins@lightart.com

### BOTANICAL RIBBONS

Sculpture of suspended Varia ribbons

Fixture Price: \$157,000.000  
Dimensions: 75'L x 35'W x 26'H  
Lead-time: 10-12 weeks

#### MATERIALS

- 3/8" Varia Color with emboss texture (TBD, Traffic or Ridge), Patent/Sandstone
- Colors include: V11, B58, G29, 007, R20
- 1/4" Varia Dawn V08 + Dichroic, Supermatte/Supermatte

#### LIGHTING

- Lighting is architectural/existing (not provided by LightArt)

#### HARDWARE

- Stainless steel cable to ceiling connections, adjustable 12" - 8'0", (3) per (8") ribbon section
- 3form Align hardware with brushed stainless finish

#### ONSITE ASSISTANCE

Includes: (1) LightArt Artisan on-site for (4) days to coordinate with onsite supervisor for un-crating, assess and address onsite conditions throughout installation, and provide guidance in hanging the fixture

#### CRATING & SHIPPING

Estimated Total Cost: \$18,840.00

**Project Total: \$175,840.00**

\*Use of an incandescent bulb will negate the warranty and damage our product\*

\*\*Price does not include sales tax. State Sales Tax will be billed if 9-Form Light Art does not receive a valid Resale/Tax Exempt Certificate\*

\*\*Changes in quantity and/or material will affect the unit price of this product\*\*

*This document is prepared for budgetary purposes only. It does not represent a binding quote or an agreement for services. Pricing is valid for 90 days.*

**LightArt**  
A 3FORM COMPANY

4170 OHIO AVE SOUTH  
SUITE A  
SEATTLE, WA 98134  
lightart.com  
P. 206.524.2223  
F. 206.762.0580

**Lobby Elevation**

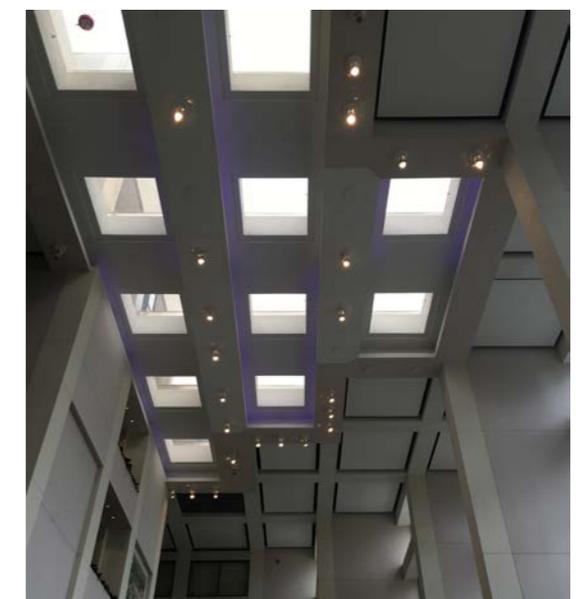
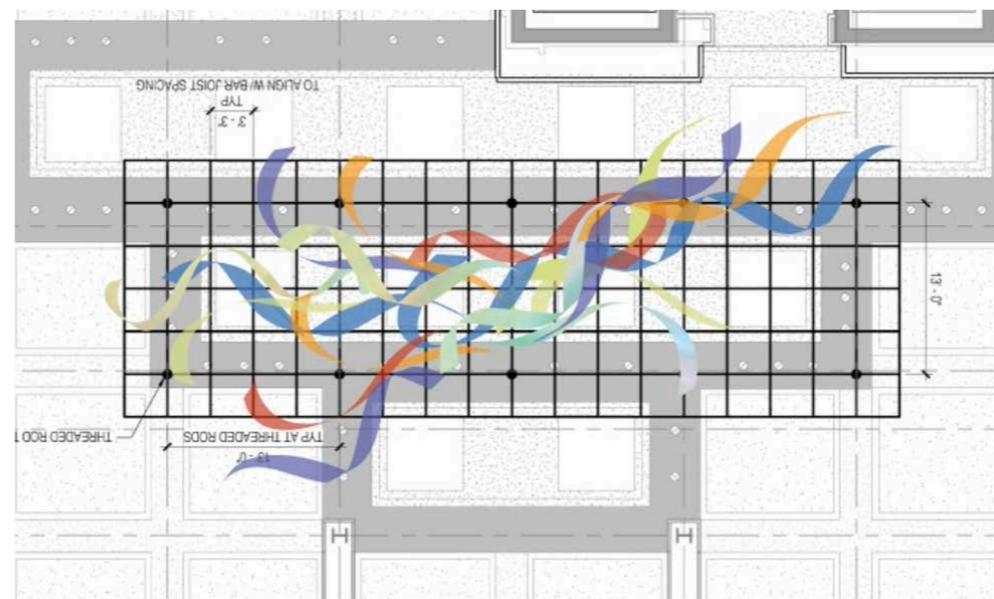
**Lobby Plan**

**Color Legend:** V08 LUNAR, V11, B58, G29, 007, R20

**Detail of Traffic Texture**

**Dichroic Material**

**Concept Image - Northern Lights**

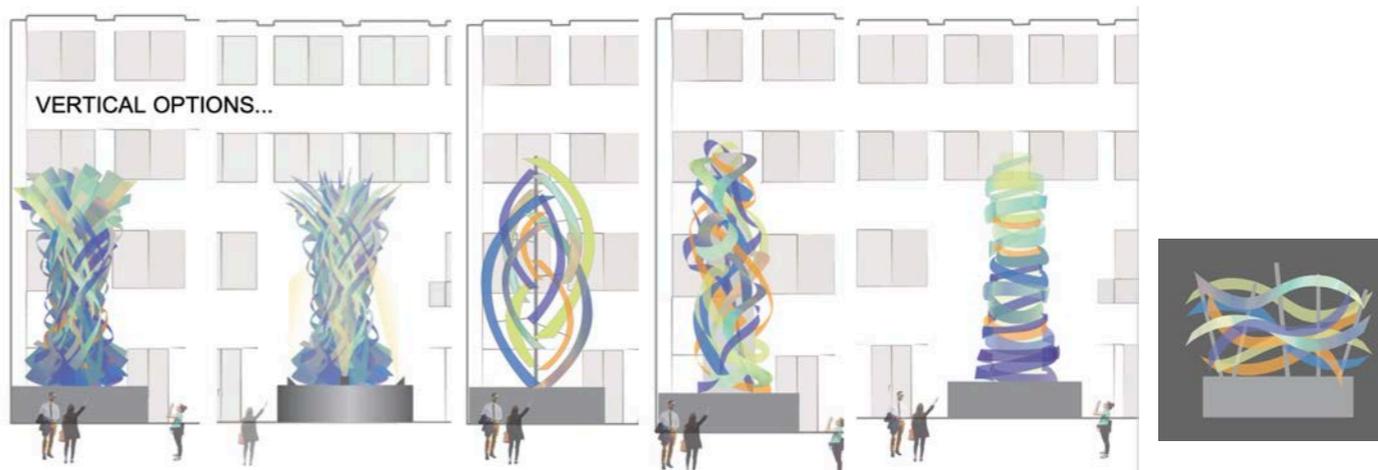


# Custom Floor Mounted Sculpture

## Project Process Details

When a board of people are making design decisions, it can be like trying to corral wild animals. In this project, that was the case working with the specifying design firm and the various opinions of the hospital board members. It was a challenge and exhaustive process of designing option after option for all parties to review and through a chain of communication glean what I could to create a new proposal, work up new pricing, that might finally gain approval. The top image is just a few screen shots of the various design concept proposals for the sculpture, there were many vertical option and then a suggestion to see a horizontal design option.

Below is some of the documentation and notes I would receive after the sales rep would meet with deciding parties. I will say, design school with stand up critiques was a good exercise in preparing me to not take feedback and changes personally.



Let's focus on option 1. If they choose to go w/ option 2, we know price is very similar or could be the same.

**BUDGETARY QUOTE**  
MEDICAL CITY DALLAS  
10/9/2017

**OPTION 1: RIBBON SCULPTURE**  
1780 LED internal balls illuminated by 1780 LED  
interior of sculpture hidden with White Opal Chroma cap.

Unit Price: \$113,300  
Quantity: (1) Ribbon Sculpture: 1780 LED internal balls  
Dimensions: Sculpture - 200" (5'1" covered by base) x 3'0" - 5'11" dia.  
Lead time: 10-12 weeks  
On-site Artisan Assistance: \$5,000 (4 days of on-site install assistance)

**MATERIALS** MAXIMIZE DIMENSIONS TO MEET PRICE GOALS  
Material: Vario Eco Resin in Dioxine, C1 color (shown on right)  
Gauge: 1/16" - 1/8"  
Finish: Bark Finish TBD  
Diffuser Material: Translucent Grade Vario  
Diffuser Gauge: 1/16"  
Interior Top Cap: White Opal Chroma 3/4" or 1/2"

**LIGHTING**  
1780 LED balls internal cap - for relamping, a lift will be required to pull down out of the top or alternatively can be relamped from the base

**HARDWARE**  
Sculpture will need to be secured to concrete sub-floor, stabilized by metal/rod hardware. Structural engineer approval advised - provided by others.  
3'0" x 4'0" dia. base to conceal mounting hardware and power source/hardware required for lighting. Base provided by others.  
\*Overall estimated weight = 1,500-2,000 lbs.

**CRATING & SHIPPING**  
Crating Price: \$1,400  
Shipping to Texas: \$5,500  
Project Total: \$175,730 → **\$135K**

\*Use of an unapproved ball will negate the warranty and damage our product.  
Lighting components are UL Listed.  
\*We do not include upon the client side. This will be listed if a Photo Center is an end service called "Studio Two Export Coordination".  
\*Always use quality and for review will list the unit price of the product.

DATE PREPARED: 10/16/2017 Rep: Susan Jurkiewicz susan.jurkiewicz@lightart.com

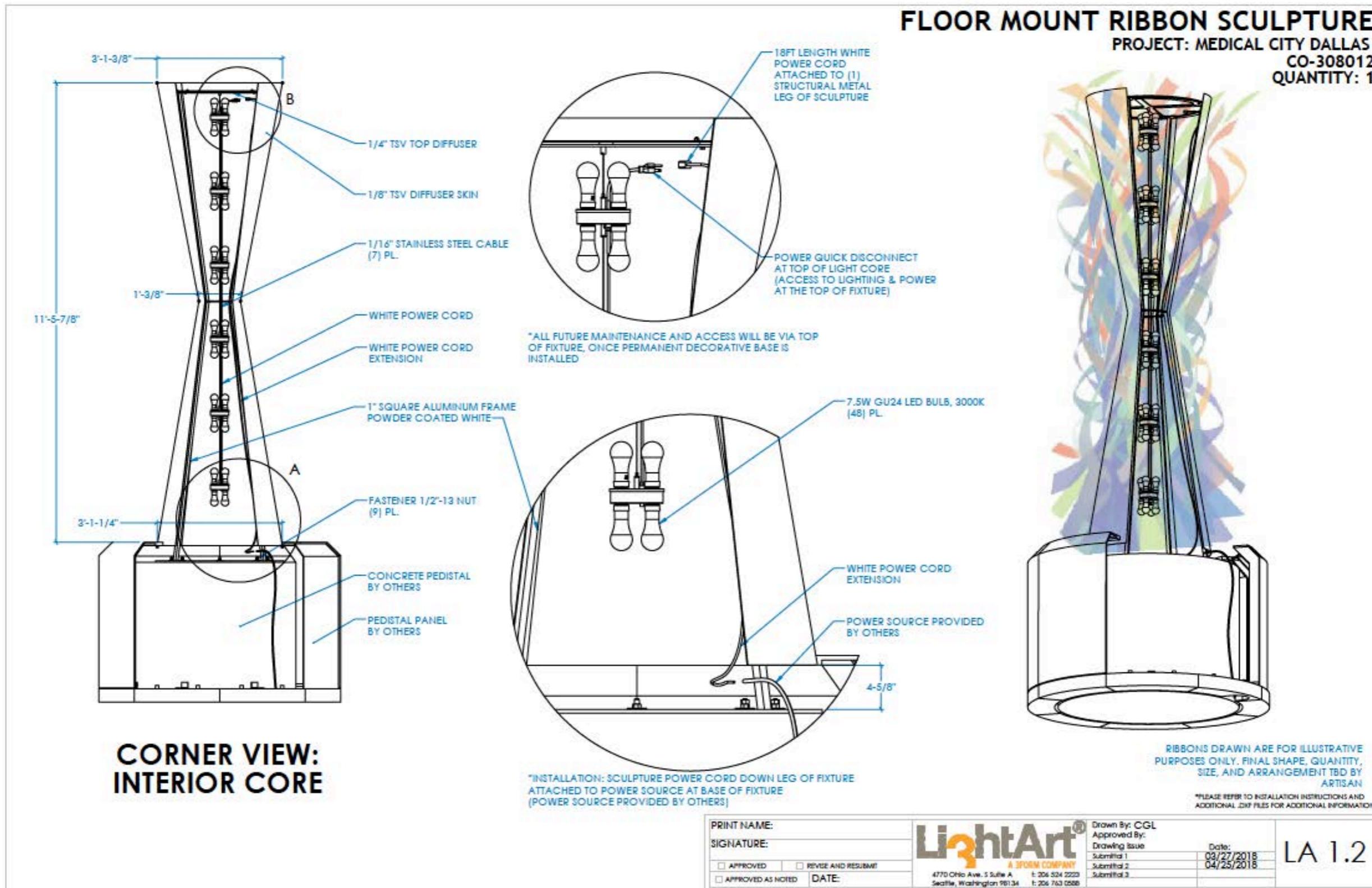
MAKE THIS THE FOCAL IMAGE ON PAGE  
LESS DENSE - MORE WISPY  
MAKE SURE BASE IS TO SCALE + DIMENSIONAL ACCURATE  
REMOVE  
HEIGHT 54"  
MAX DIAMETER 80"  
PHIL IS WORKING ON 5 NEW DESIGNS FOLLOWING TODAY'S MFG...  
REMOVE - WE NEED TO UPDATE BASE IN OUR RENDERING TO REFLECT NEW BASE DESIGN - TBD  
REMOVE IMAGES - LET'S DO A PG. 2 w/ CONCEPT IMAGES - DETAIL OF ~~DETAILS~~ RIBBONS + TOP DETAILS \* I WILL PULL IMAGES + SEND \*

LightArt  
SCULPTURE IS 2D  
PEOPLE ARE 3D - THEY NEED TO BE ON THE PLANE OF THE FLOOR - OR NOT INCLUDED



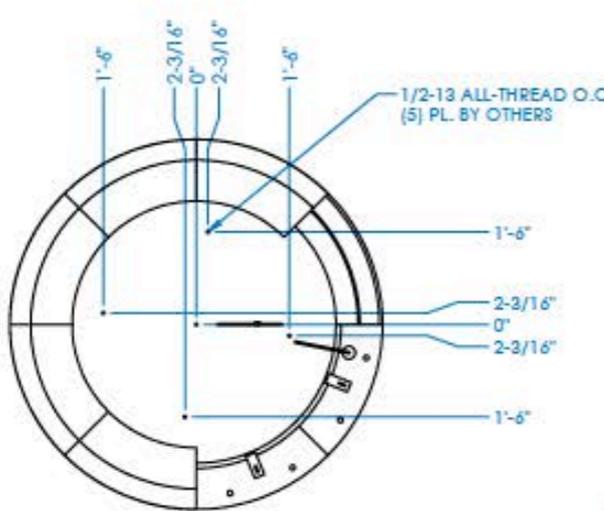
# Custom Floor Mounted Sculpture

**Below:** Putting myself in the place of the installer and end user, thinking about the function of the lighting and maintenance, below is the new solution for the power disconnect to be at the top of the fixture and all of the lighting to be attached to stainless steel cable, rather than a rigid core, to not require a lift to pull out the light core over 30 ft high in the air to change a lamp close to the base. A trap door, near the bottom of the sculpture, was designed to be concealed by the ribbons, that would allow the initial power hook-up of the sculpture light core to the power source (installed by others) at the core concrete base.

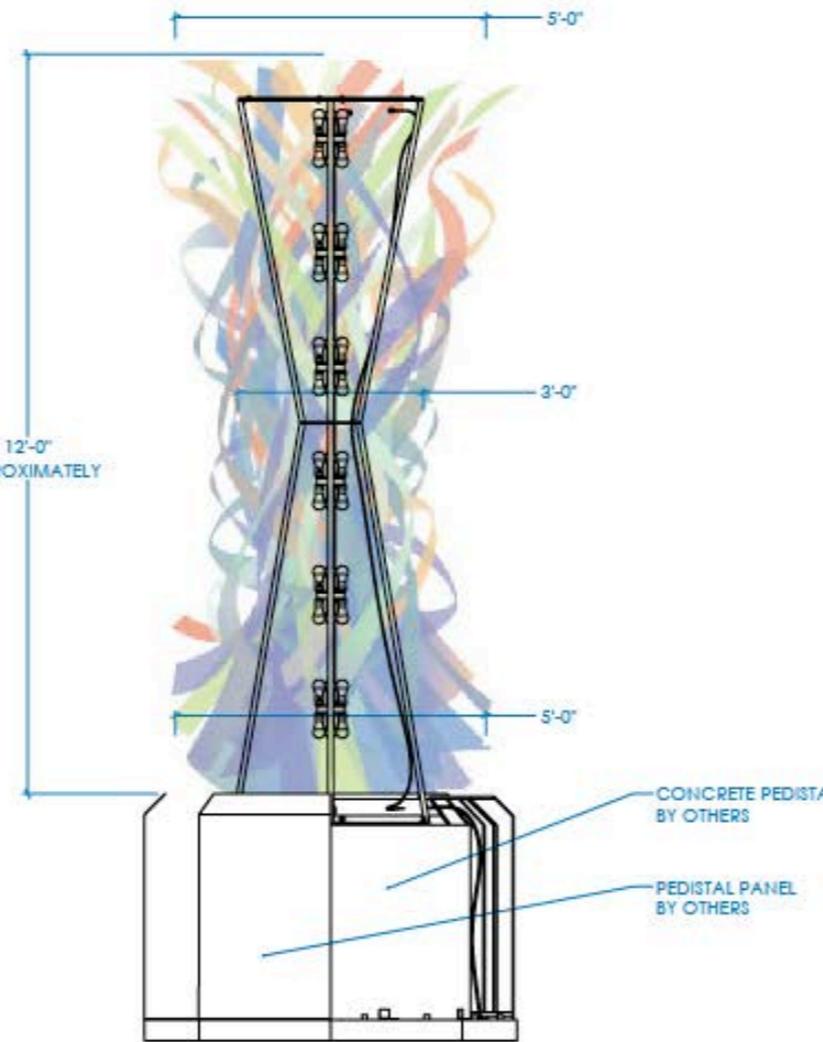


# Custom Floor Mounted Sculpture

**Below:** Project drawings below, depicting the core concrete base and the mounting points for the metal base of sculpture frame to attach. I worked with the contracted electrician and installer on-site to work out a plan for how power would be provided to the sculpture and shipped early a full scale paper template for the concrete base to be poured with threaded rods in the specific positions for hardware to secure the metal frame base of the sculpture.



**TOP VIEW:  
PICKPOINT LAYOUT  
(FIXTURE HIDDEN)**



**FRONT VIEW**



**PERSPECTIVE VIEW**

**FLOOR MOUNT RIBBON SCULPTURE**  
 PROJECT: MEDICAL CITY DALLAS  
 CO-308012  
 QUANTITY: 1

**PROJECT SPECIFICATION**  
 DIMENSIONS: 36" - 60" DIA X 12" H  
 SHADE MATERIAL: 1/16" - 1/8" GREEN (G32)  
 1/16" - 1/8" BLUE (B49)  
 1/16" - 1/8" RED (R35)  
 1/16" - 1/8" VIOLET (V08)  
 1/16" - 1/8" YELLOW-ORANGE (Y08)  
 1/16" - 1/8" DICHROIC + LUNAR  
 FINISH: VELLUM, PATENT, AND GRID COMBINATIONS  
 FIXTURE QUANTITY: 1  
 COLOR TEMP: 3000K  
 TOTAL WATTAGE: 360W - (48 LED GU24 7.5W BULBS)  
 VOLTS: 120V  
 DIMMING: YES

RIBBONS DRAWN ARE FOR ILLUSTRATIVE PURPOSES ONLY. FINAL SHAPE, QUANTITY, SIZE, AND ARRANGEMENT TBD BY ARTISAN

\*PLEASE REFER TO INSTALLATION INSTRUCTIONS AND ADDITIONAL .DWG FILES FOR ADDITIONAL INFORMATION

PRINT NAME:	
SIGNATURE:	
<input type="checkbox"/> APPROVED	<input type="checkbox"/> REVISE AND RESUBMIT
<input type="checkbox"/> APPROVED AS NOTED	DATE:



4770 Ohio Ave. S Suite A  
Seattle, Washington 98134

t: 206 524 2223  
f: 206 763 0588

Drawn By: CGL	<b>LA 1.1</b>
Approved By:	
Drawing Issue	
Submital 1	Date: 03/27/2018
Submital 2	04/25/2018
Submital 3	

# Custom Floor Mounted Sculpture

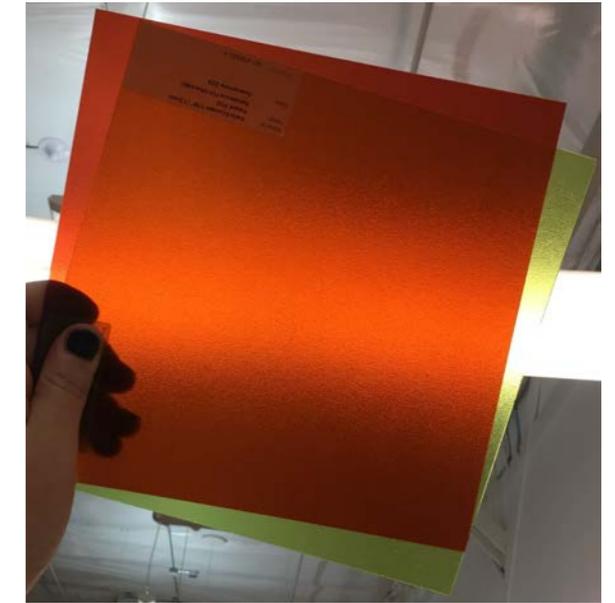
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## Obstacles

The top 2 photos on the right show the sample colors that were initially selected by the specifier and hospital board members for the heat formed hanging ceiling ribbon concept.

I personally had a strong distaste for the colors and how they were not all the similar in tone/saturation. So, when I realized that the colors in a layered backlit application would create a horrible brown-orange color to the overall fixture, I took it upon myself to create a more ideal and collaborative color combination.

Seen in the bottom picture is the revised color scheme for the ribbon light sculpture, versus the original colors chosen shown below. I provided this image to the specifier for comparison and approval.



# Custom Floor Mounted Sculpture

## Project Process Details

The LightArt sales rep wanting to provide excellent client support, mentioned that in some cases we will create a small scale mock up of the fixture for the client to approve. Usually this is discussed prior or during the quoting stage so that the materials and fabrication time can be budgeted into the overall project. In this case, this was a “little something extra” the sales rep felt compelled to provide to assist in the final approval pre-build process.

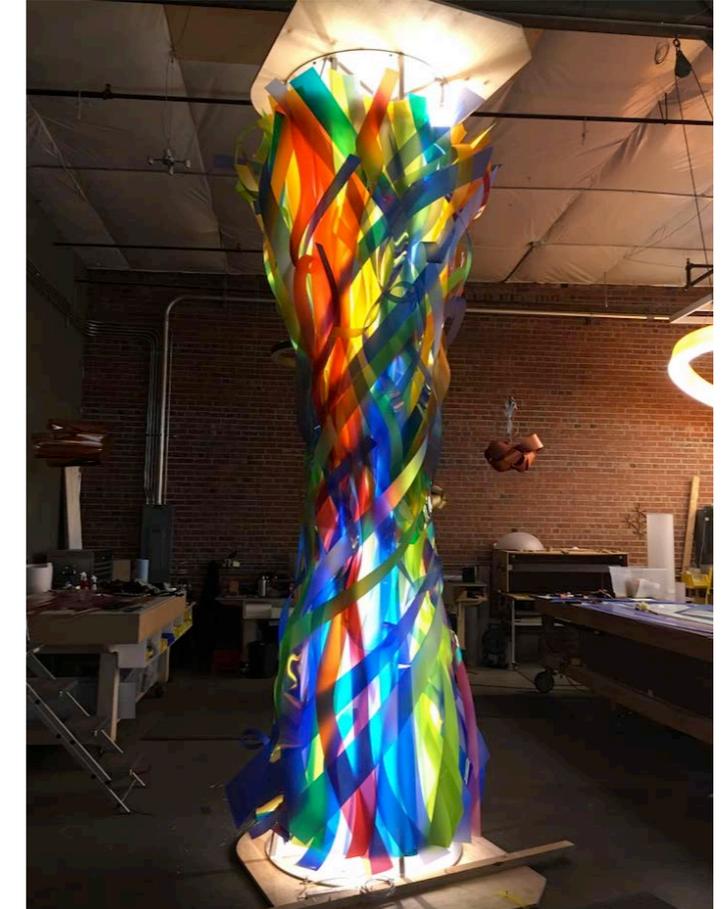
I worked with CAD to create the cut files for the white diffuser interior and ribbon pieces for the artisan, James, to attach in a representational pattern/style that the final fixture would be created as.

Ultimately, the large image shown far right, is the only mock up we sent to the hospital for final approval to build the full scale fixture. Along with the mock up I provided a small LED puck light so during review the hospital board members could see how the colors interacted with the light and layering, as well as how the colors would gradient from cool to warm at the top.



# Custom Floor Mounted Sculpture

## Project Process Details

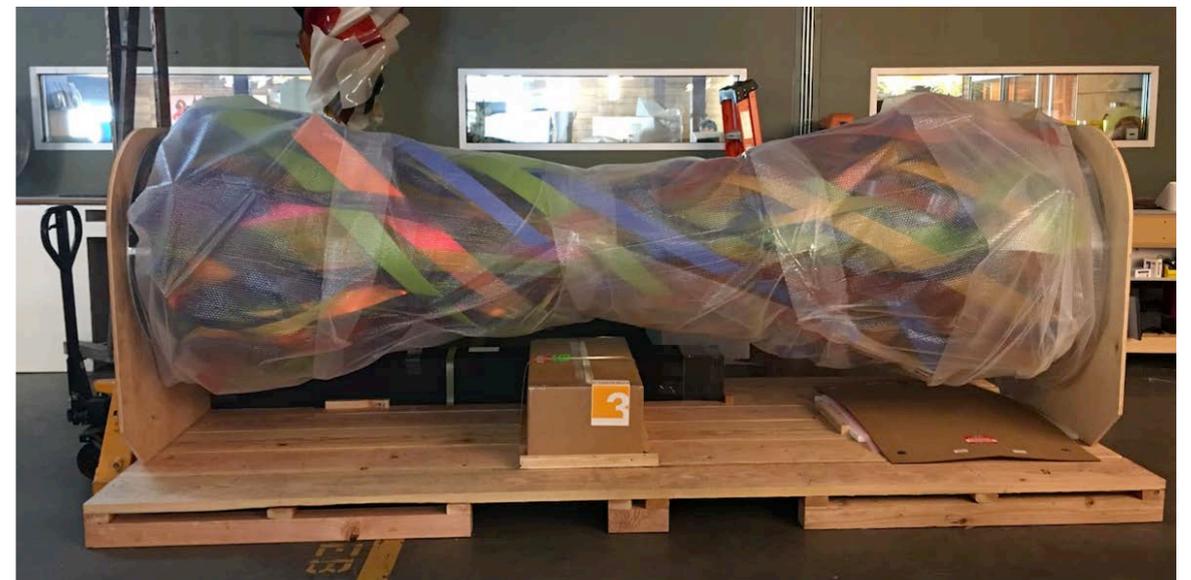


**Photo 1. + 2.** James, LightArt artisan, putting the final touches on the fixture with my final approval.

**Photo 3.** Last light test before palletizing.



**Photo 4.** Custom, reinforced strength pallet created for shipping the sculpture + parts.



**Photo 5.** All of the labeled parts + hardware secured to pallet with the fixture.

# Custom Floor Mounted Sculpture

**Below:** Is the project update email I sent ahead of the installation guide document. The following pages show the installation guide I created, which this email was a prelude with some of the images and written considerations that the receiver should be aware of prior to the installation. I found it was always helpful to be upfront, ahead of problems, and clearly communicate in a variety of formats to help set expectations for parties involved.

**From:** Carly Smith [mailto:[carly.smith@lightart.com](mailto:carly.smith@lightart.com)]  
**Sent:** Tuesday, May 15, 2018 11:01 AM  
**To:** Bachmeyer, Ryan  
**Cc:** Susan Judkins; [KWithrow@ipc.com](mailto:KWithrow@ipc.com); Nichole Culak; Charisse Tasset  
**Subject:** Re: Medical City Dallas - sculpture questions and details

Hi Ryan,

I don't yet have the tracking information, I will send that to you once our shipping manager arrives in the studio - anticipate around noon PST.

I have not yet finished the installation guide. I should have that done this afternoon or tomorrow AM, but definitely before the sculpture arrives.

To help you better understand how to maneuver and what to expect when the sculpture arrives - please see the image below.



The sculpture is shipped on it's side. You will want to use a fork lift on either short end for maneuvering, as the length of the pallet is weaker in the middle and may flex/break under the weight (approx. 400lbs) of the sculpture.



This box will contain the light bulbs and lighting suspension hardware. We will not want this to be pre installed in the fixture as the light core is a suspended cable and will move around within the structure when moved. The bulbs box will be fastened to the crate, along with the top diffuser and metal "X" armature which the light core cable suspends from. (I've attached the shop drawings again for your reference). The photo below shows where the top diffuser and metal "X" armature (lighting support) are packaged on the pallet, labeled. Both the box of lighting and the top diffuser and metal "X" (lighting support) will need to be removed from the pallet prior to disengaging the sculpture from the pallet.



The main power cord - that will connect at the bottom of the sculpture, to the on-site power source on top of the concrete pedestal, and then connect at the top to our light core, once the sculpture is fully installed at the base - is already affixed to the internal metal structure of the sculpture. See the image below:



We had a metal piece specifically fabricated for shipping this fixture, to protect the top of the fixture where the pieces extend past the top. As you will notice, the more orange-yellow-red top portion of the sculpture, the metal brace is labeled and will be removed after the sculpture is fully installed at the base. Once installed the light core, lighting "X" support, and diffuser will be very minimal and easy to install.



On both ends, there is a angle bracket bracing the pallet and the wood pieces on the top and bottom of the sculpture. James has marked those with red arrows and labels to indicate that they need to be removed prior to install. The top you will see below, has closed eye hooks and industrial strap for lifting and maneuvering the sculpture. The metal eye hooks are bolted through the wood and through the metal skeleton of the sculpture. Ignore the square and circle cut out in the wood top, this was used for the support we use when building the ribbon skin of the sculpture.

Top:



Bottom:



Details:



To reference the image above, "Remove when suspended", once the sculpture is lifted upright and suspended, the bottom wood piece will need to be removed to expose the base to connect to the concrete pedestal. There are (4) nuts and bolts that will need to be removed. You will want at least (3) persons during this process, one watching the lifted portion/machine, one assisting in stabilizing the suspended sculpture while the bolts and wood are being removed, and one removing the bolts.

ALL THAT BEING SAID...phew. I will put this in an organized install instruction digital document (pdf) and email to you for the on-site install. I'm hoping in reading through this, it will help set expectations of what will be received on-site. I would be more than happy to review with you over the phone, just to ensure that everything goes smoothly on-site.

Thank you and I will be in touch,

Carly

# Custom Floor Mounted Sculpture

**Below + Following 2 Pages:** I took the initiative to create a installation guide for the installers on-site, in hopes that sharing the document ahead of the arrival of the shipped sculpture, that there would be time for review, provide a better understanding about what to expect and allow more time for questions in preparation. This document ended up in the hands of my manager, then the operations manager, and then the hands of LightArt owner, Ryan Smith. The tool I created set a precedence and started a conversation about studio completing similar documents for detail intense, large scale installation LightArt projects in the future.

I take pride in a job well done, paying attention to and communicating the details, and making a process more efficient for everyone involved - this document being just one example and format of the work I initiate and create to do so.

## INSTALLATION GUIDE

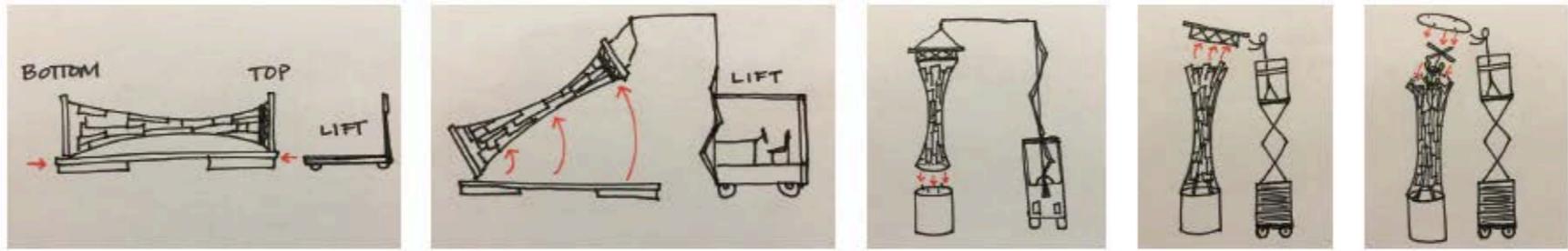
### MEDICAL CITY DALLAS

CO-308012

Project Manager: Carly Smith  
carly.smith@lightart.com  
801-994-8120

#### INSTALL SHORT OVERVIEW

\* This is for illustrative purposes, break down of how the fixture should be positioned into place, the drawn machinery is not an actual representation of what should be used.



**STEP 1**



< The sculpture will arrive wrapped in entirety on the pallet. Do not remove the outer wrapping (not shown in this image) until the sculpture is inside and ready to be lifted. During the install process keep the bubble wrap around the varia ribbons to keep them from being damaged.



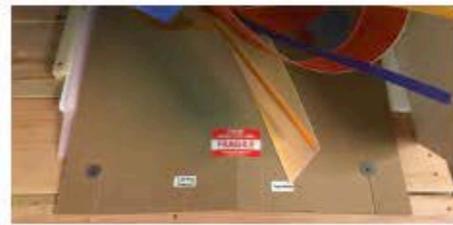
Light core parts and pieces.



Bulbs and hardware

**STEP 2**

\* REMOVE ALL OF THE BOXES/COMPONENTS (3) below prior to the sculpture being disengaged from the pallet for installation.



Metal "X" for light core and top diffuser



PLEASE HANDLE WITH CARE  
**FRAGILE**  
\*\*THANK YOU\*\*

Lighting Support      Top Diffuser

# Custom Floor Mounted Sculpture



< The sculpture is shipped on it's side. You will want to use a fork lift on either short end for maneuvering, as the length of the pallet is weaker in the middle and may flex/break under the weight (approx. 400lbs) of the sculpture.

## STEP 3



Top

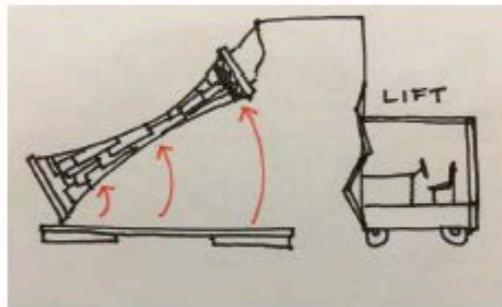


Bottom



REMOVE angle brackets when sculpture is ready to be lifted

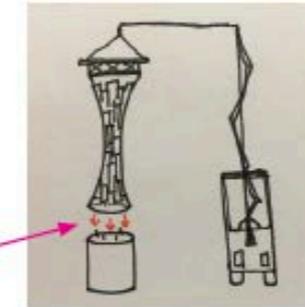
## STEP 4



< Once the sculpture is suspended over the concrete pedestal and ready to be positioned to be installed - remove the (4) bolts that secure the piece of wood to the base.

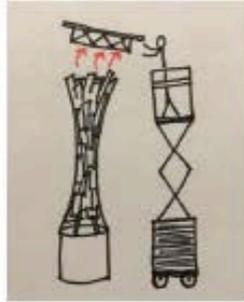
The connection points to the base will be visible. We allowed some wiggle room in the metal for positioning and fit.

## STEP 5



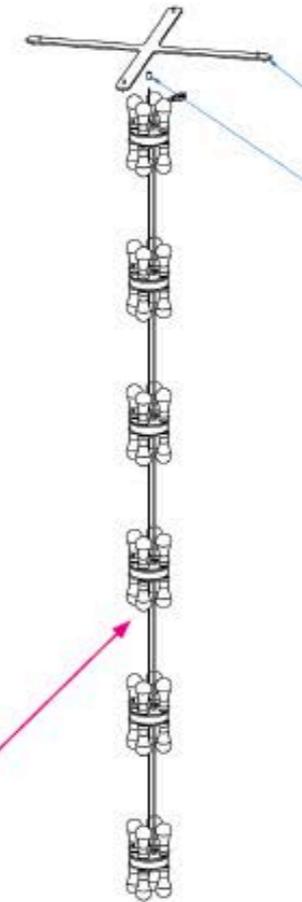
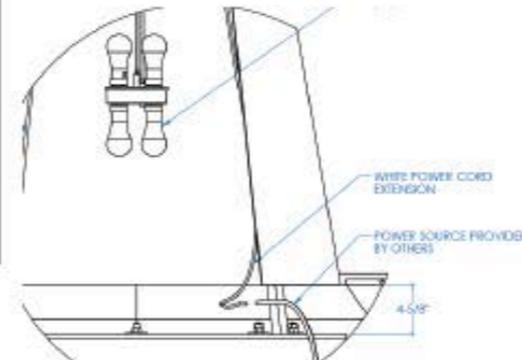
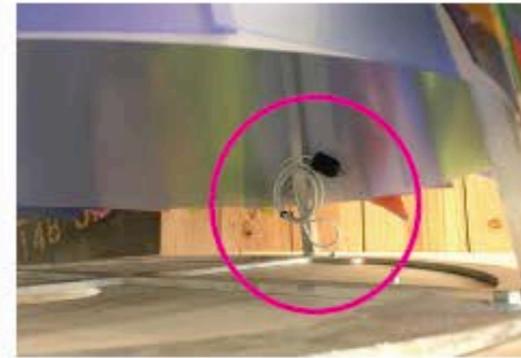
# Custom Floor Mounted Sculpture

## STEP 6



< Once the sculpture is secured/bolted to the concrete pedestal, remove the top wood and top labeled metal piece.

These pieces were fabricated for fabrication and installation purposes only.

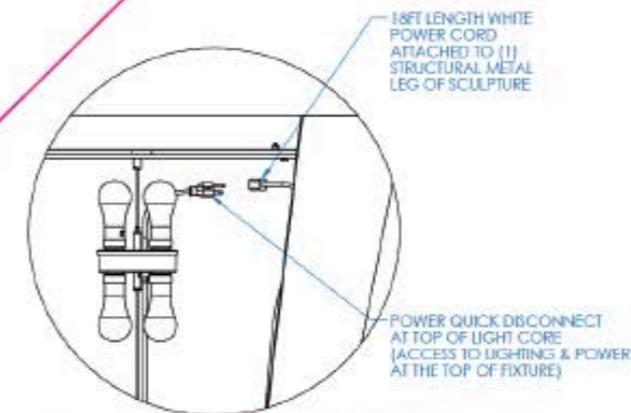


## STEP 7



< Prior to installing the diffuser and metal "X" that the light core suspends from. Unpackage the boxes containing the light bulbs and the light core and hardware.

Assemble the light core and attach to metal "X" support frame. Connect power at top and bottom to make sure all is properly working prior to attaching top diffuser.



\*ALL FUTURE MAINTENANCE AND ACCESS WILL BE VIA TOP OF FIXTURE, ONCE PERMANENT DECORATIVE BASE IS INSTALLED.

# Custom Floor Mounted Sculpture

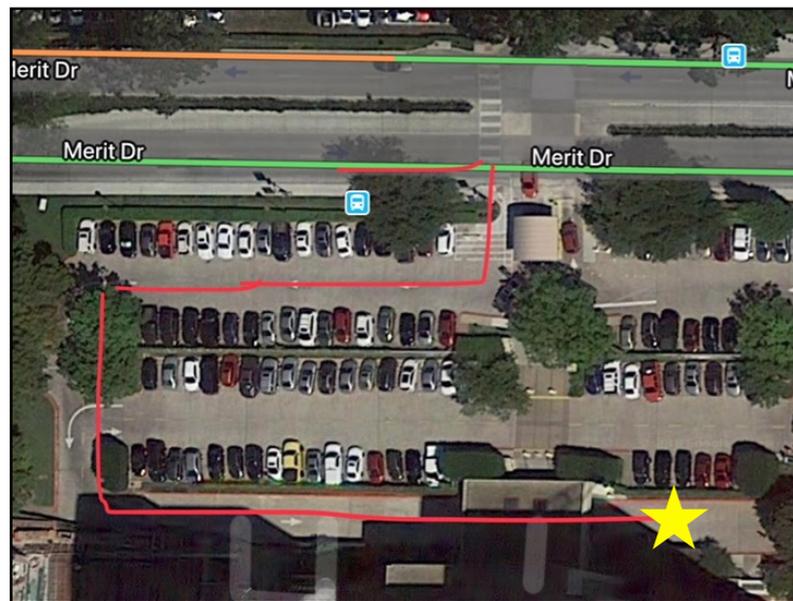
## Obstacles

**Photo 1.** I had confirmed that the fixture would have no issues fitting through doors to enter the hospital for installation. However, an oversight occurred when I received a call from the purchaser that the truck delivering the sculpture was too large to maneuver the turns in the hospital parking lot, to arrive at the main entry delivery point (red route map below, star = planned delivery point).

**Photos 2. 3. 4.** Details in labeling the shipment can be seen in photo 2, when the sculpture was being removed from the truck bed. The purchaser sent me photos of the broken ribbon, luckily we had additional material left over and the ribbon the broke was easily concealed at the breaking point by layering another ribbon piece on top of the area.



2.



1.



3.



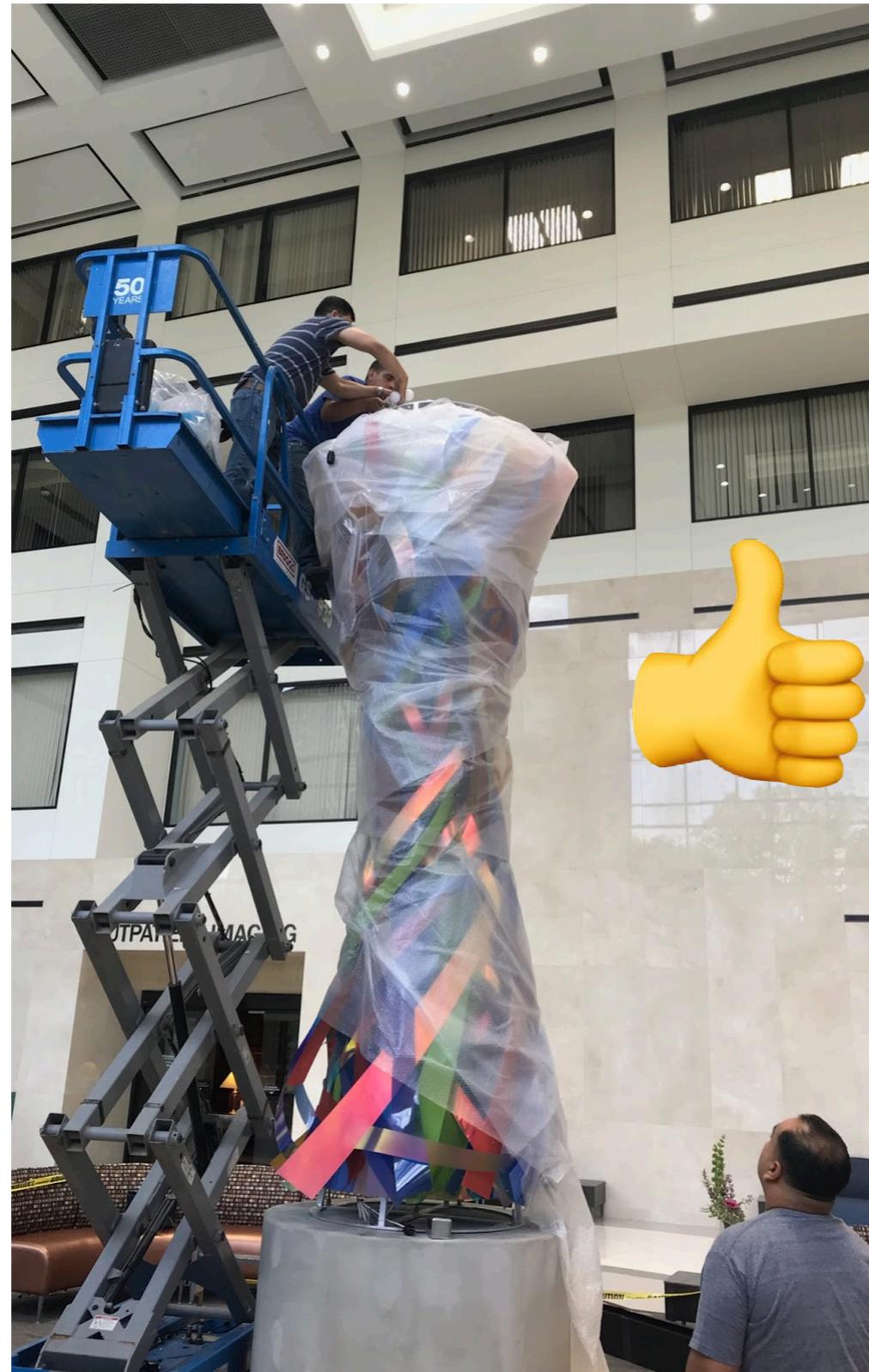
4.

# Custom Floor Mounted Sculpture

## Obstacles

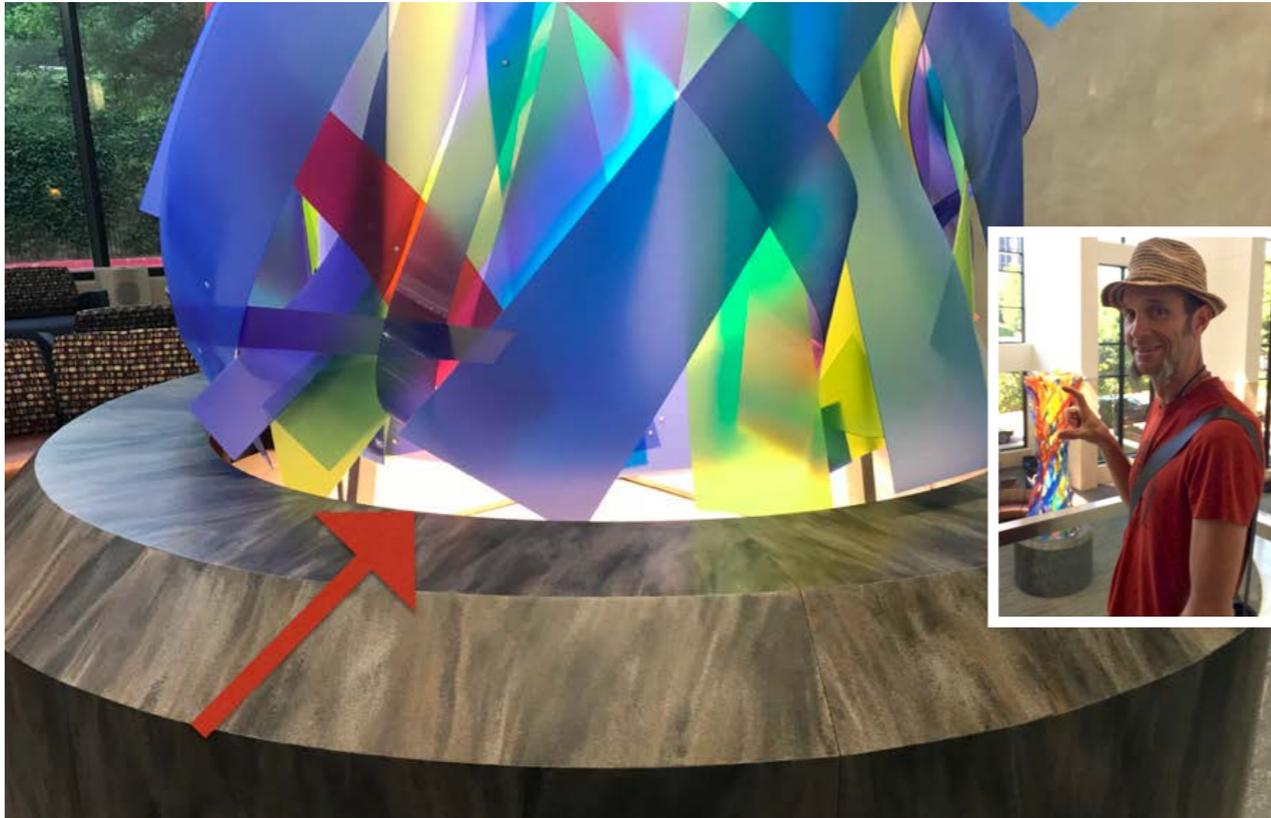
**Photo 1.** The installer (AEC) is an acoustical contractor hired by the hospital to install the ribbon sculpture. I was told that they were locally known for installing unique items, so I was hopeful that with my detailed install instructions with drawings and photographs, along with stickers on the fixture indicating what parts to remove, that the installation would be efficient and correct.

**Photo 2.** After the installation, I received another photo of the sculpture from the GC. Despite all my efforts, the top piece for shipping and maneuvering, labeled to be removed after installation - had in fact been left still attached to the sculpture, without the final diffuser top piece attached in place. Fortunately, this was easily solved by getting back in the lift to make the final installation adjustments.

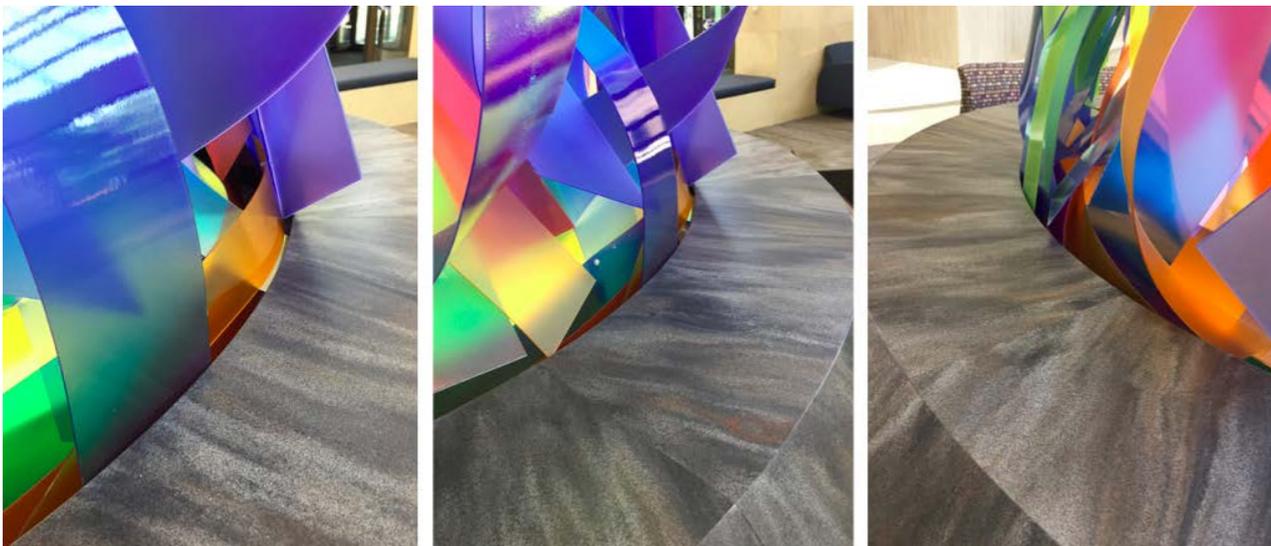


# Custom Floor Mounted Sculpture

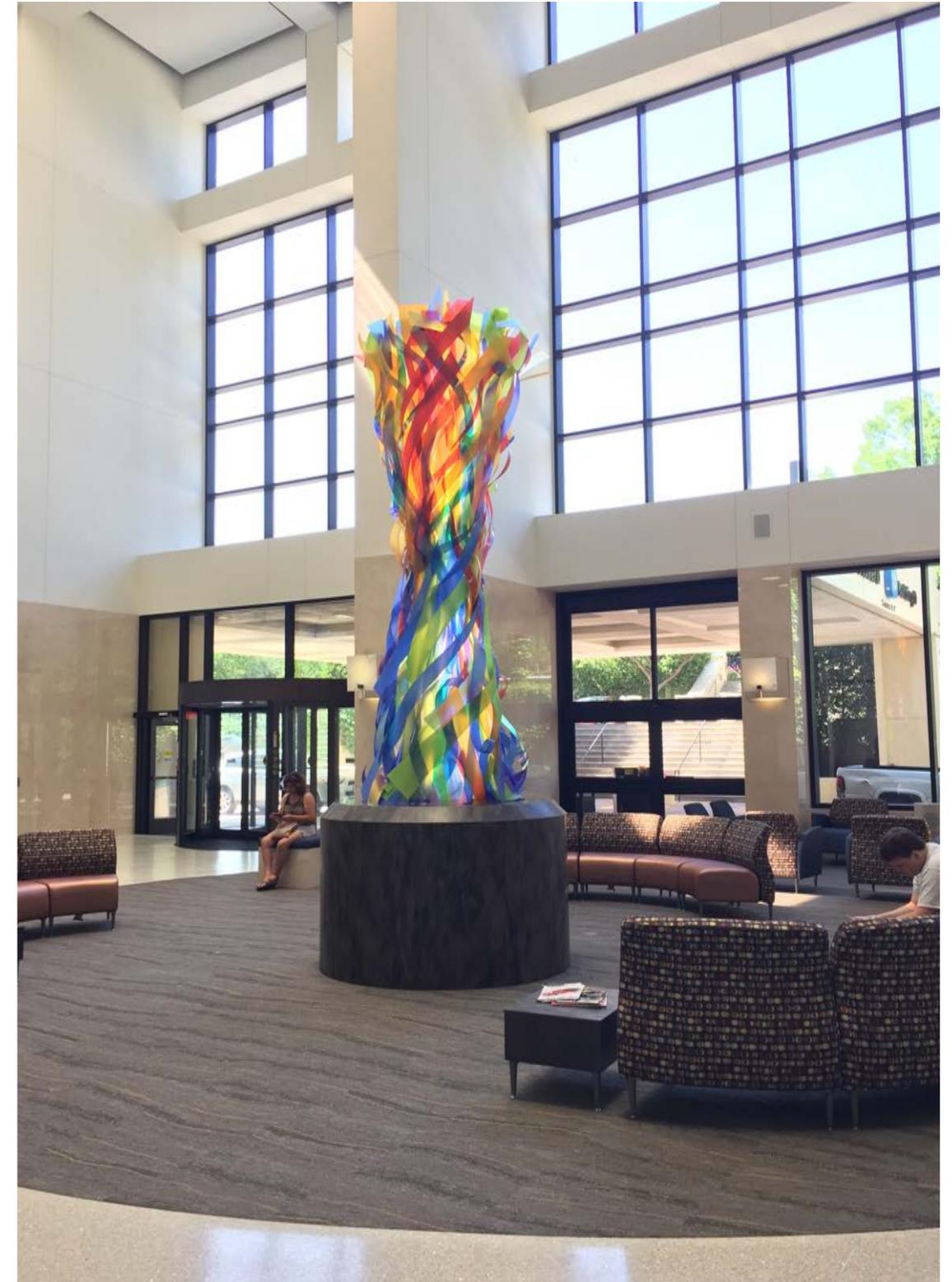
## Obstacles



**Photo 1. BEFORE** After the local base manufacturer completed installation of the base surround, I scheduled LightArt artisan James to visit on-site with additional material for final touches - concealing the light leak at the top of the base + repairing the ribbon piece that broke during the transition of sculpture from delivery truck to hospital lobby.



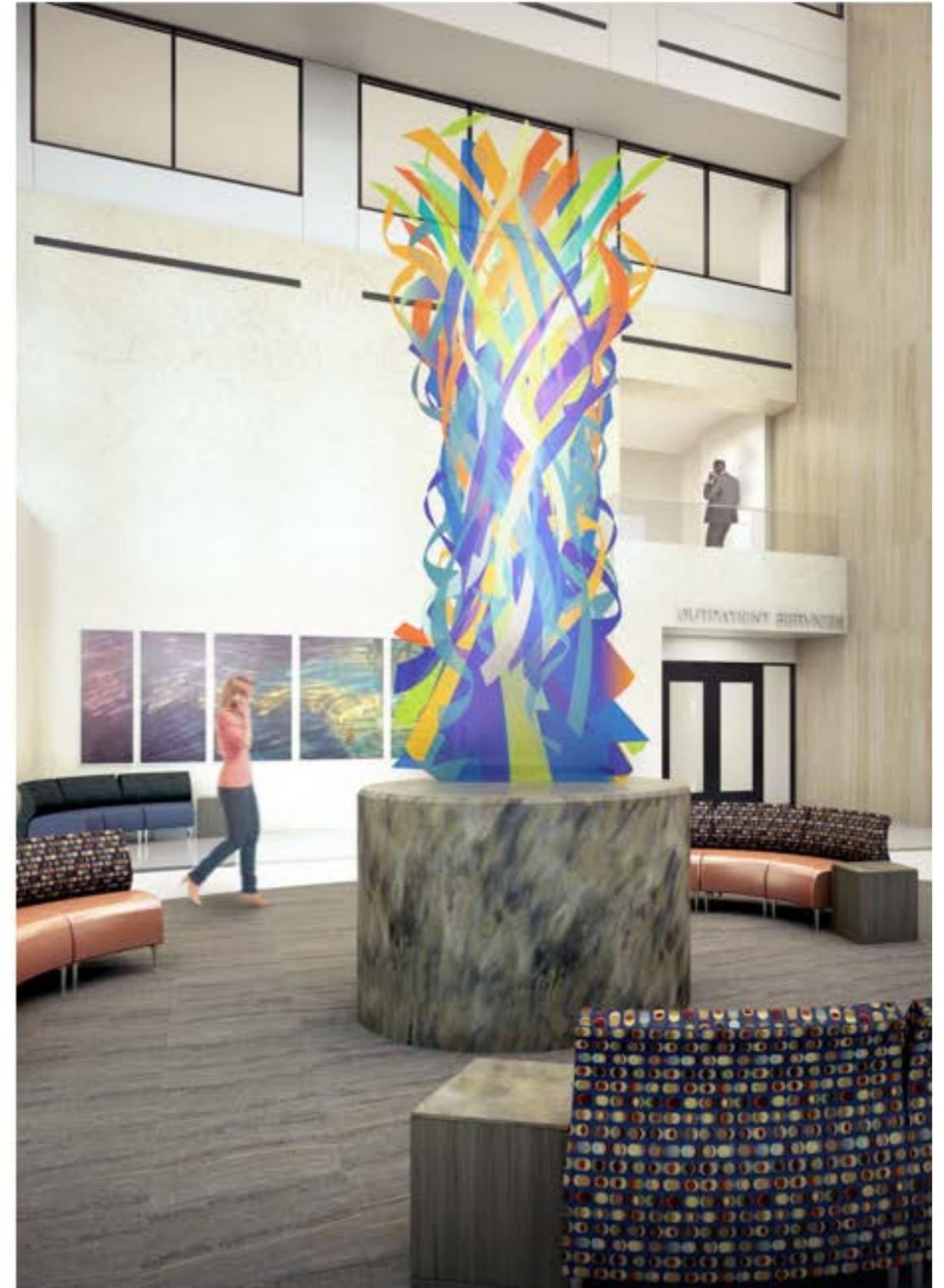
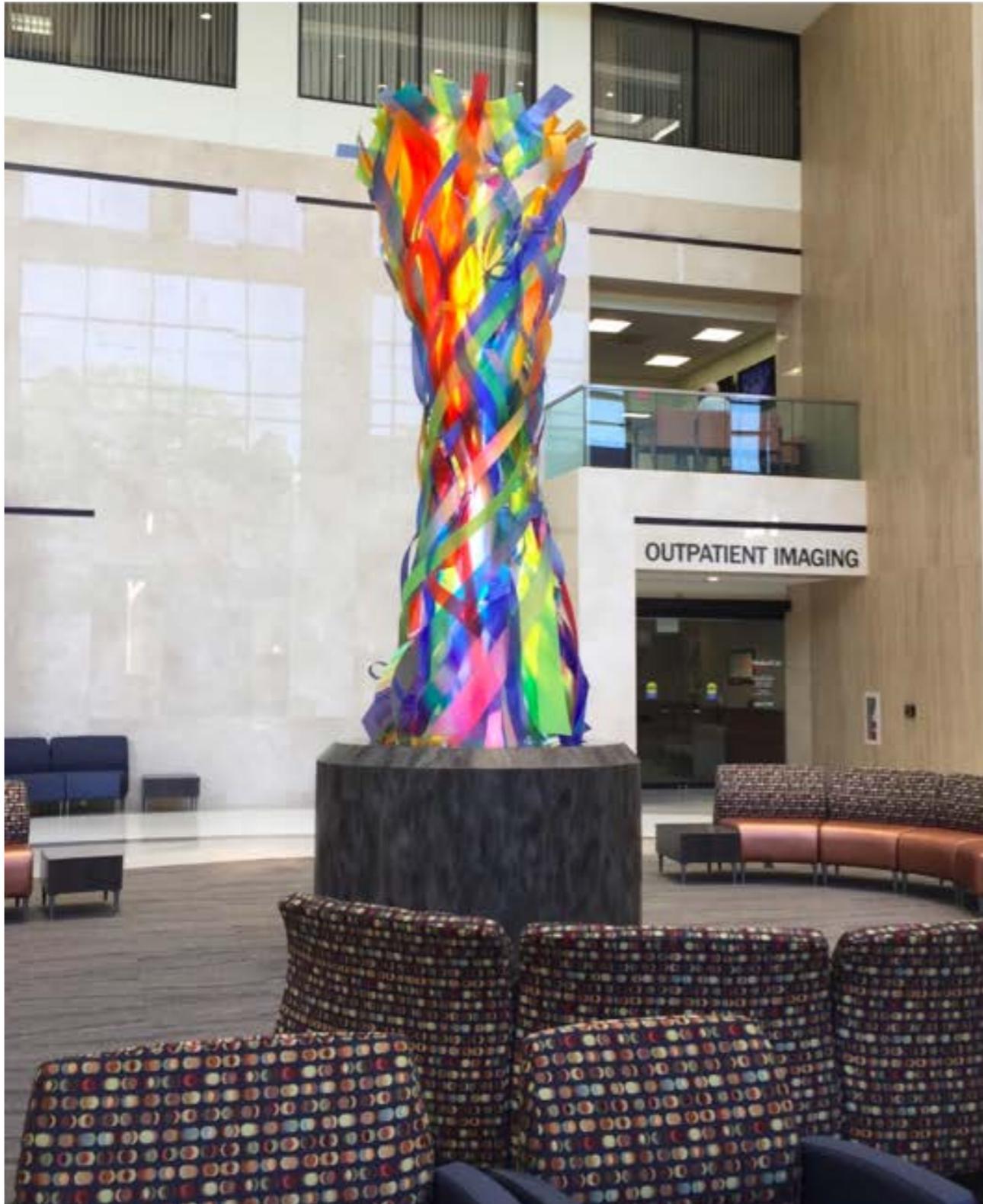
**Photo 2. AFTER** No more light leak at the connection of the base to the sculpture.



**Photo 3. FINAL** Above the completed installation being enjoyed by visitors.

# Custom Floor Mounted Sculpture

**Below:** Reality vs. Rendering - The final rainbow ribbon light sculpture in the hospital entry, as seen below left, closely achieves the conceptual rendering of the sculpture and space, seen below right.



# Custom Floor Mounted Sculpture

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## Project Takeaways

- Expectation setting and clear communication with the specifier, sales rep and project manager during the initial design and quoting stages is hugely important for managing the project and personalities involved.
- Making sure to explain what budget includes up front, will help in maintaining the design intent. On large scale projects, mentioning a mock up in the early stages will allow for time and money to be allocated to suit the desires of the client, as well as the fabrication needs in the studio.
- It is important to work closely with contractors on-site to best understand site conditions, existing building structure, and mentally visualizing all the installation steps it would take to account for errors that might occur - for example, say the delivery to the site.
- Sampling and reviewing material for its specified use, examining how the colors interact with each other in the scheme and interact when lit or unlit is important for ensuring that the fixture meets client expectations.
- Putting in a bit of extra effort to over communicate instructions in drawings, writing, and photos can be super helpful to all parties involved in the project to understand the intent and installation. However, mistakes may still be made, but additional future benefits can be had from creating a learning reference tool (or setting a new and improved project standard).

