



FARHORIZON
studi  llc.

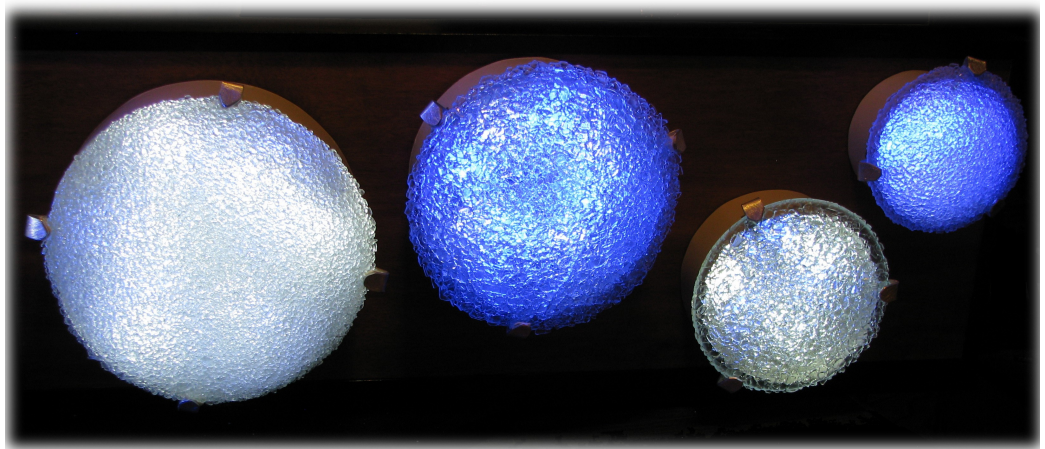
David Farquharson

+

Kaiser Permanente

Grand Stairwell Sculpture

***Breathe In;
Breathe Out***



Breathe In; Breathe Out

Visitors and staff members entering the Kaiser Permanente Grand Stairwell will become a part of this interactive sculpture installation. 400 recycled glass fixtures diffuse the light of 6000 blue and white LEDs. On its own the lights in the sculpture fade back and forth between white and blue light, at a pace that mimics a nice slow relaxing breath - in and out. When someone uses the stairwell, they trigger a motion detector that causes the piece to “breathe” faster. As if the stairwell is exercising along with the climber. After the person has left, the sculpture will start to catch its breath, back to its slow meditative pace.

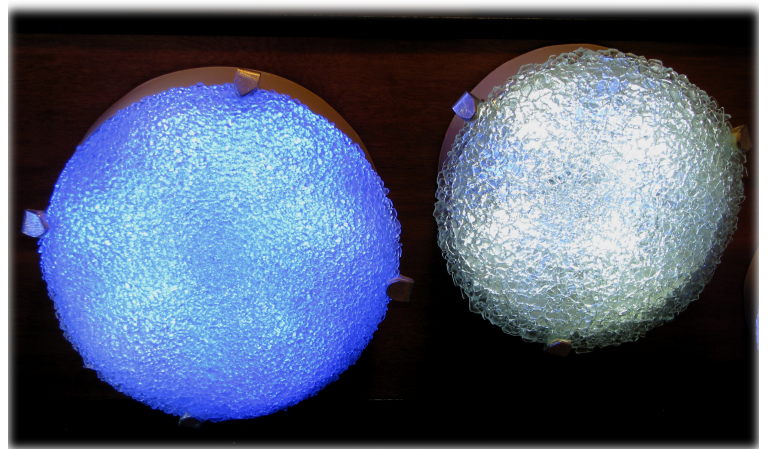
Since *Breathe In; Breathe Out* is illuminated and always morphing, it will be extremely eye-catching for any visitor entering the facility. They will know that there is something exciting to investigate in the stairwell. The sculpture is designed to encourage curiosity, and instill a desire to explore further. This sculpture is playful, and engaging; meditative and exciting all at once.

The glass facade gives the Kaiser Permanente building a sense of lightness and brings it a close connection to the Colorado outdoors. This sculpture mimics that sentiment. The gentle morphing of the blue and white lights remind one of gentle clouds rolling across a blue Colorado sky, hopefully encouraging people to get out-side and breathe deep!

At night the sculpture will settle into its slow meditative breathing. Against a dark exterior the piece will shine brightly, and should be visible all the way to I25. With its organic design the whole building will appear as a living, breathing entity.

Fun Facts, Neat Info, Other Stuff!

- Largest Interactive Sculpture in the State
- The audience becomes a part of the art
- 900lbs of Recycled Glass
- 6000 LEDs
- Impossible to miss
- Almost 2 miles of control wires
- Should be seen all the way to I25 at night
- Meditative and exciting at the same time
- Night time presence. Artwork visible after hours
- Always changing, but overall light level stays the same
- Green materials and processes: Recycled Glass, fired in a solar powered kiln
- Can include motivational signage by the elevator: “Give the stairs a workout!”
- Light nodes will be assigned at random, some starting white, some starting blue
- Physical resemblance to alveoli in lungs, particle tracks, grapes on a vine, clouds in the sky



Layout:

Breathe In; Breath Out will run uninterrupted for the entire 80' height of the wall, and will be approximately 12' wide. Each stair landing will have a motion detector and circuit of lights that runs up to the next landing or the ceiling. Making 5 circuits total.

Two 2" steel pipes will run from floor to ceiling in the center of the piece. Approximately 98 steel pipes $\frac{3}{4}$ inches in diameter will be bent and rolled into organic "vines" that connect back to the central spine. Each vine will split off, ending with 4 nodes. At the end of each node there will be a pan with the blue and white LEDs covered with a recycled glass lens. The lenses will come in four different sizes with one of each size per vine.

The welded steel armature will also serve as a conduit for running the wiring to each node. It will be broken up onto smaller sections for transport and installation purposes.

The LEDs are exterior signage grade, expected to last over 30 years.

The glass is made up of clear crushed recycled materials, fused together and slumped to a slightly rounded shape. The finished lens is approximately $\frac{1}{2}$ inch thick. All sharp edges end up rounded off during the firing process. Their textured surface is tempting to be touched by the visitors, and that is perfectly fine!

Mounting:

The piece should be centered along one of the vertical gaps in the terracotta tiles.

The 2 center spines should be bolted firmly to the wall, perhaps using a 2" pipe tie. This will serve as the main support for the piece.

Each of the vines of the piece will cross 2 more vertical gaps in the tiles on each side of the piece. Approximately every 4' along each of these vertical gaps I would like to install a $\frac{3}{8}$ " threaded rod. $\frac{1}{8}$ " steel cable can be run from floor to ceiling along each of the vertical gaps and connected to the threaded rod. This will create a sturdy secondary support as well as a shock absorber as the piece can attach to the steel cables whenever they intersect. The steel cable will not cause a visual distraction as it will be hiding in line with the gaps. This allows for the piece to be securely fastened to the wall without disturbing the visual of the wall tiles. (see picture, next page)

Colors:

White and Blue LEDs

Clear glass

Steel armature - enamel coated with an orangy-yellow color similar to the ones provided in the Accent Paint samples – See the included "Hot Sun" sample

Pans to attach glass – enamel coated with a sandy color similar to Accent Paint samples – See the included "Sand Pearl" sample

After visiting the Rock Creek facility I would describe the overall Kaiser Permanente color scheme as "Earthy Vibrant."

These colors continue that trend, and should complement the natural terracotta color of the wall, as well as the colors throughout the building, including additional artwork.

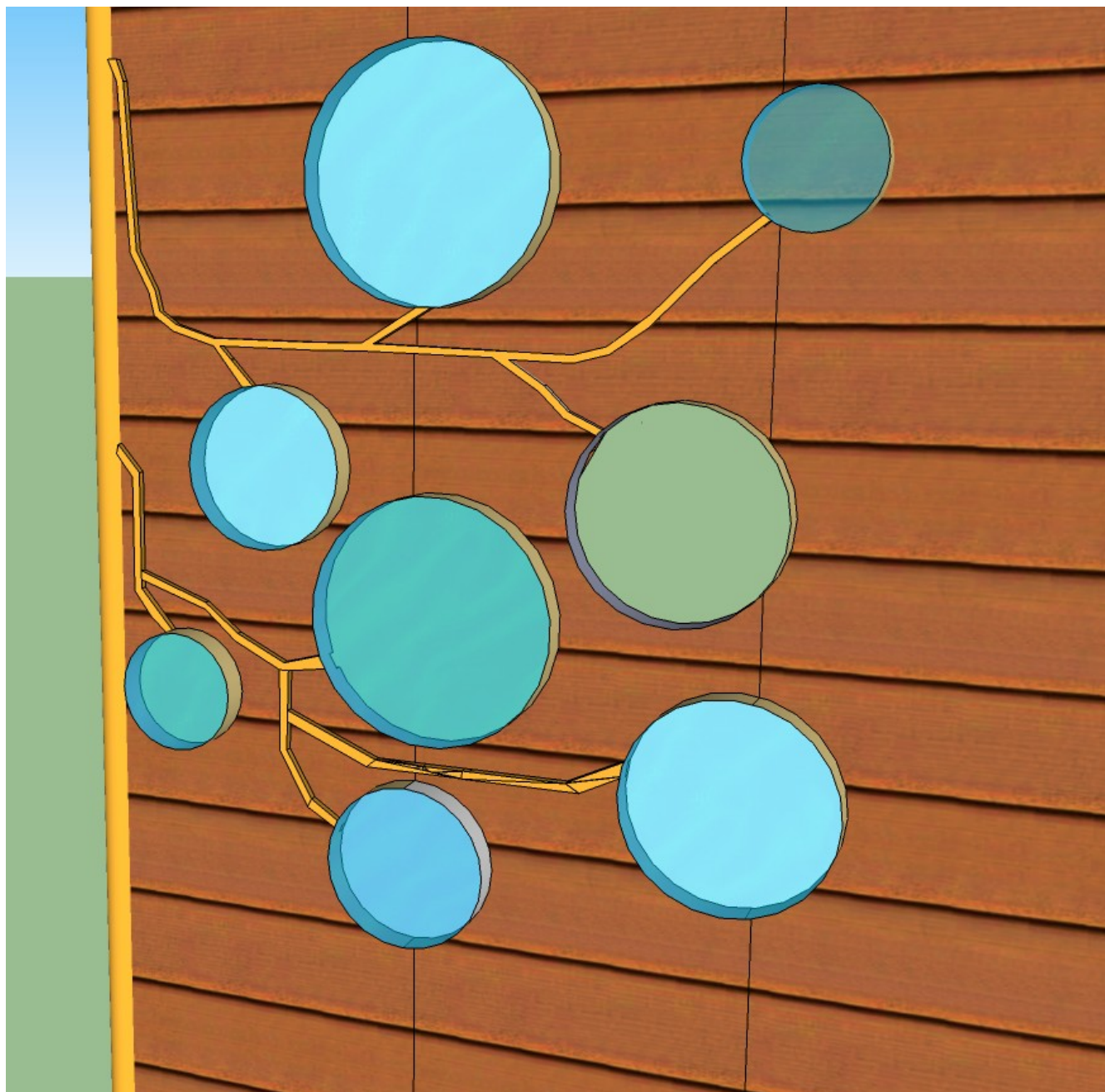
Electrical Requirements:

120v power at each landing.

Location to hide circuit and power supply. ~1 square foot should be sufficient.

Remove wall wash lights shown in architectural plan

Steel cables for extra mounting support.
Running vertically along gaps in terracotta tile.



Project Budget

Total: \$35,000

	Item	Quantity	Cost unit	Cost total
Materials:	Lights			
	LEDs white	1500	0.66	990
	LEDs blue	1500	0.66	990
	Steel Armature Vines			
	2" Pipe	16	15	240
	3/4" pipe	300	4	1200
	T-fittings (1.5" pipe cut 4")	14	10	140
	End fitting to pan 3/4	400	2.16	864
	Elbow pipe 3/4	100	3.24	324
	Tube roller (equipment)	1	300	300
	yellow/ orange enamel paint	3	30	90
	Light Nodes			
	Steel pans 10"	100	1.88	188
	8"	100	1.31	131
	6"	100	0.83	83
	4"	100	0.83	83
	Steel side walls			475
	Bolts (100 pack)	13	6.5	84.5
	Nuts (100 pack)	13	4	52
	Washers (100 pack)	13	5	65
	Z bar (lens clamps)	100	6	600
	Foam tape (108' roll)	5	30	150
	Enamel paints (sandy/almond)	3	30	90
	Wiring			
	Wire (18-10 spool)	6	255	1530
	Wire terminal block	42	8	336
	Wire nuts	16	5	80
	Electronics			
	Power supply	5	100	500
	Arduino controller	5	56	280
	Case	5	13	65
	Motion sensors	5	15	75
	Misc electronics	5	50	250
	Mounting			
	Pipe clamp (center pipe to wall)	24	3.5	84
	Steel cable 1/8"	1	133	133
	Tumbuckles	4	20	80
	Ferrules 50pack	4	12	48
	3/8 all thread	80	0.58	46.4
	Hanging wire (attach pans to cable)	2	15	30
	Glass Lens			
	Glass pieces 12" (electrical costs)	100	2	200
	10"	100	2	200
	8"	100	2	200
	6"	100	2	200
	Plate glass support	50	13	650
Labor:	Welding armature Labor (hours)	500	25	12500
	Glass lens Labor (hours)	300	25	7500
Other:	Installation Assistant	1	1000	1000
	Insurance	1	500	500
	Transportation	1	200	200
	Design fees/misc			1173.1

Contact info:

David Farquharson
11490 East Kentucky Ave.
Aurora, CO 80012

303-578-0340

david@farhorizonart.com
www.farhorizonart.com

