

diatom

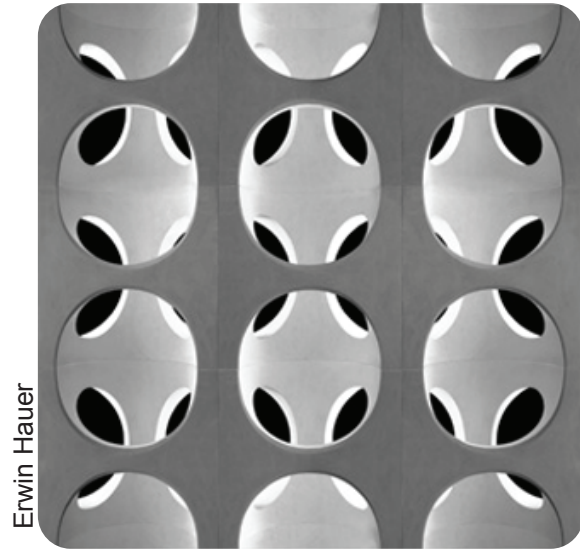
Circuit Wall

by Ella Peinovich

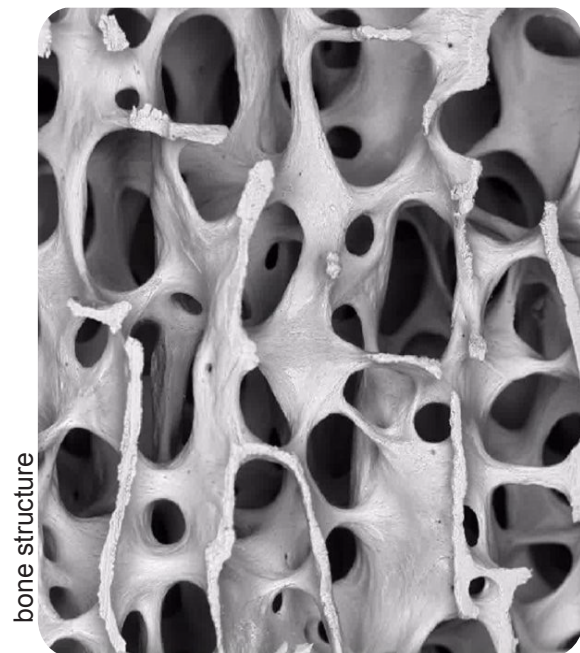
My goal is to create a wall system that integrates the conduit to perform animated functions, yet is also beautiful when static. Functioning either as autonomous units or a ganged set, a conductive material will be integrated into each unit, so it will behave like a wall size circuit board. I plan to utilize continuous surfaces systems based in the mathematics of bone structure and diatoms, and inspired by sculptors like Erwin Hauer and Norman Carlberg, in order to maintain structural integrity while removing unnecessary materials.

It will respond to the light conditions from the sun as a screen and artificial light from within the wall. **Light Screen** | Responding to outdoor sun the circles collapse in to close up the screen and block the direct rays, while still allowing ambient light related to the height difference between the interlocking units. **Light Source** | Similarly, when the lights within the wall are activated on the underside of the wall scoop the circles will collapse in order to provide more surface to bounce light into the room, as well as screen from the outside looking in.

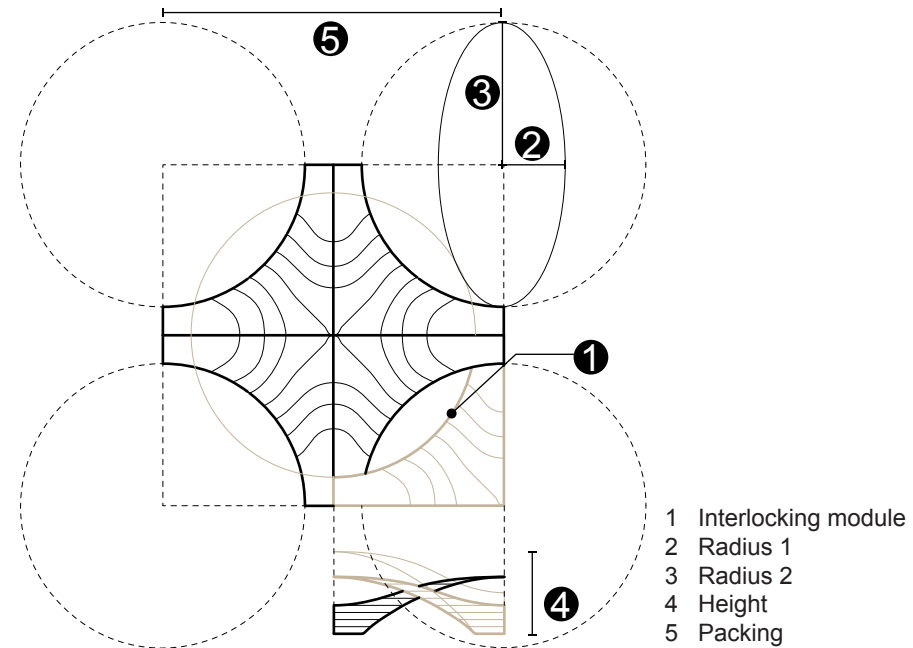
The parameters of the scripted surface (height, cut-out radii, and packing) can be manipulated through the integrated circuit to allow for the transformations.



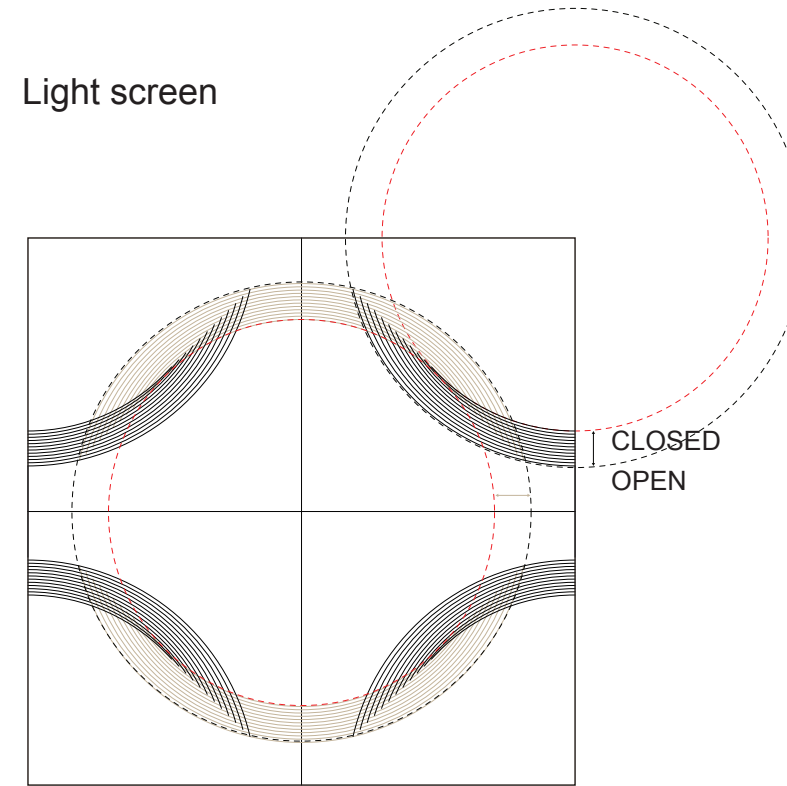
Erwin Hauer



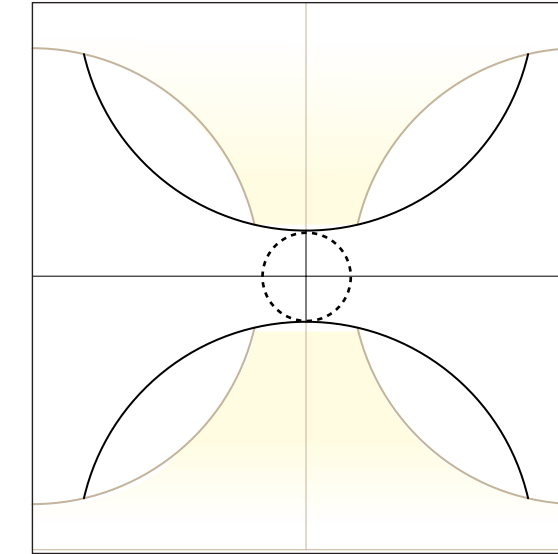
bone structure



Light screen



Light source



Integrated conduit

