

SALT WALL

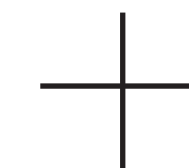
A 3D PRINTED WALL MADE OF SALT FROM THE FLORIDA KEYS

Salt preserves, prevents decay and is used to sustain life. Homer called it a divine substance. Plato describes it as especially dear to the Gods. The Romans call a man in love *salax*, in a salted state. Women in France salted their men to make them more virile. A French folktale relates the story of a young girl who told her father "I love you like salt" and he, angered by the slight, banished her from his home. Only later when he is denied salt does he realize the value and depth of his daughter's love.

Salt: A World History -Mark Kurlansky

Miami, we love you like salt.

Salt today is so common, so easy to obtain and so inexpensive that we propose to make a 10' long by 4' deep by 8' high wall of 3D printed salt, one of the most sought after commodities of our time. We have developed a strong and highly successful recipe for printing with salt and propose to use our 4 zcorp printers to print the 315 pieces necessary to construct the wall. The pieces will be printed, strengthened with an eco polymer and labeled. 9 units at a time will be adhered together using a clear silicone masonry adhesive. Those 35 units will be shipped to Miami, where they will be stacked and mechanically fastened together onsite.

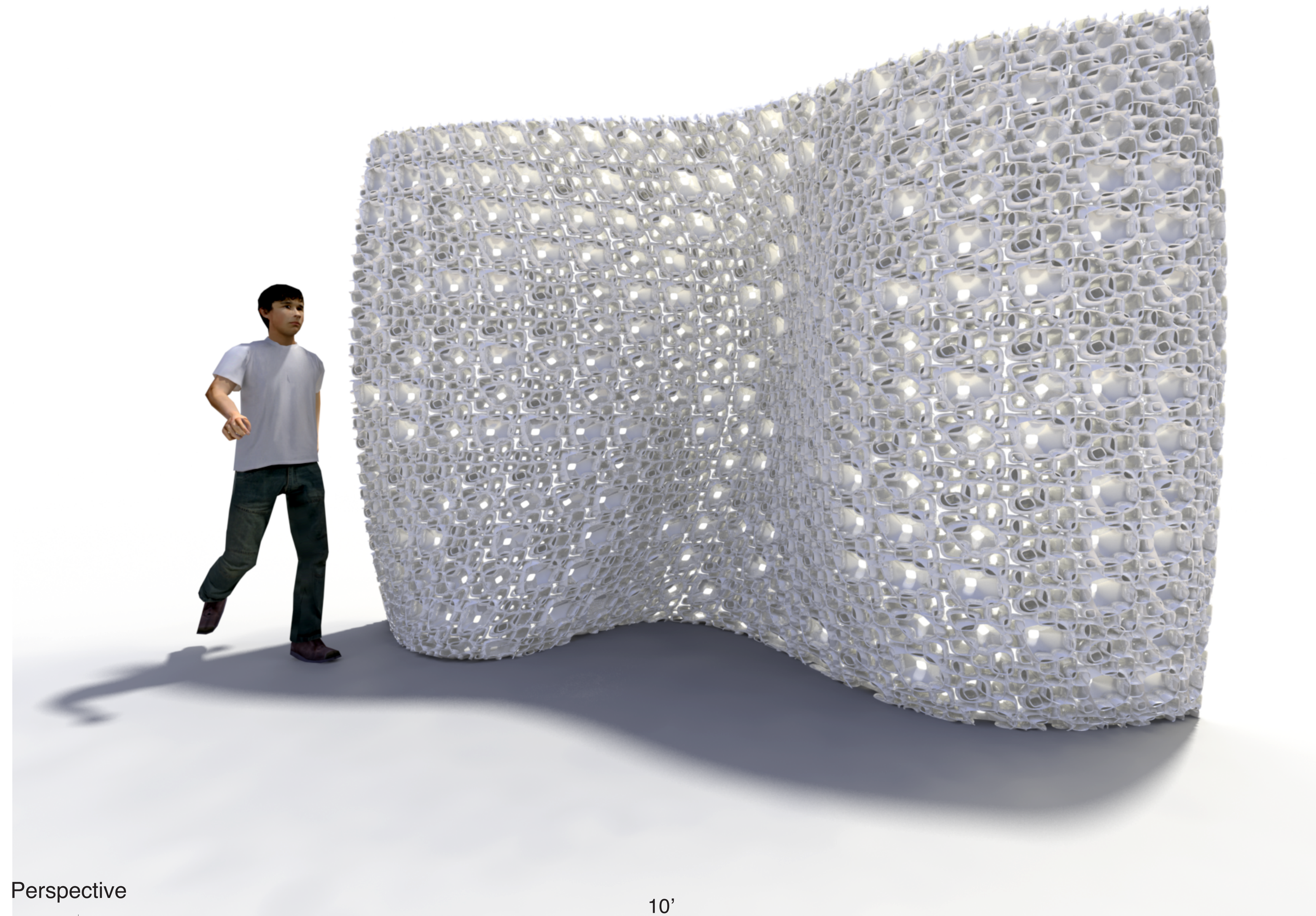
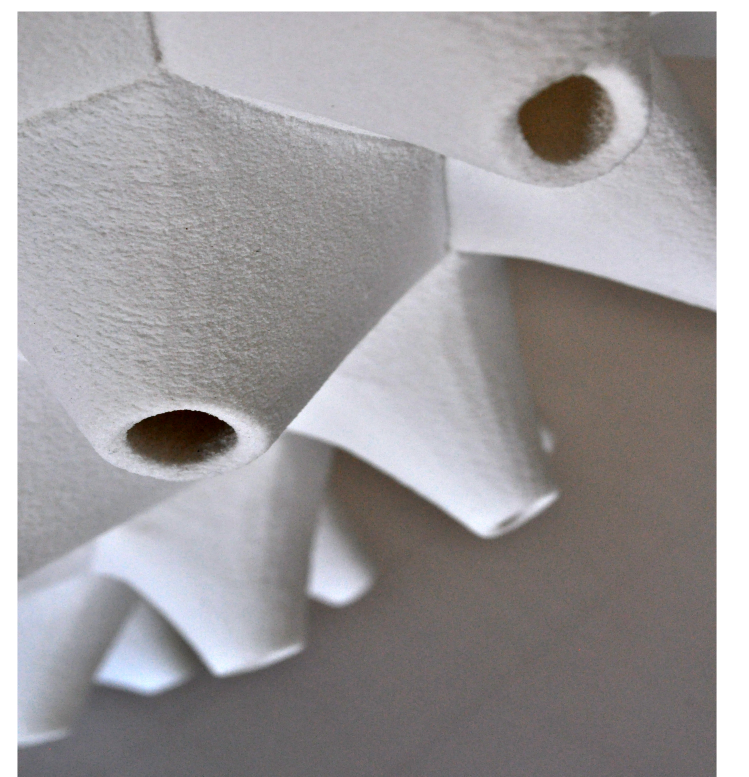


Salt

The Salt Wall will be the first of its kind. A 3D printed wall, a 3D printed piece of architecture, a salt building. The form of the Salt Wall is intended to embrace the visitor as he or she enters the History Museum. It is concave towards the entrance, so visitors might walk up to it and feel as if they are in it. The apertures through the wall will allow for visitors to peer through the wall to the exhibits and spaces beyond. Conversely, the other side of the wall is covered with convex surfaces and apertures that will allow the light from the exterior to pass through the wall to dramatic effect. The 3D printed salt has some translucency and glows when light passes through it.

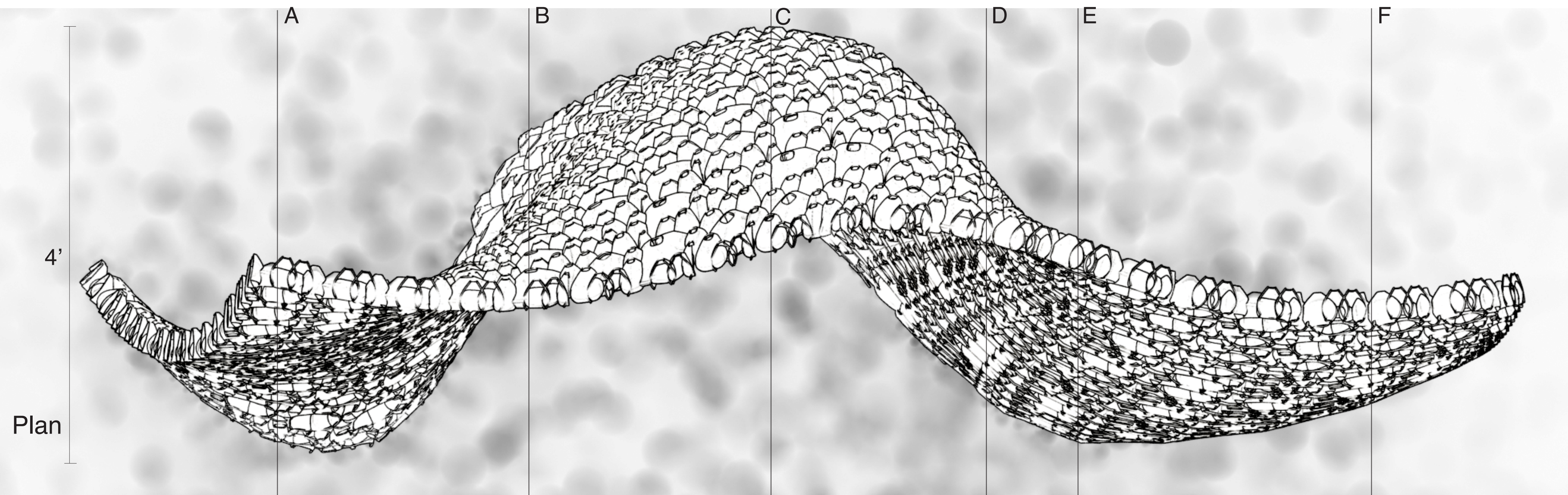
3D Printing

3D Printed Salt Parts



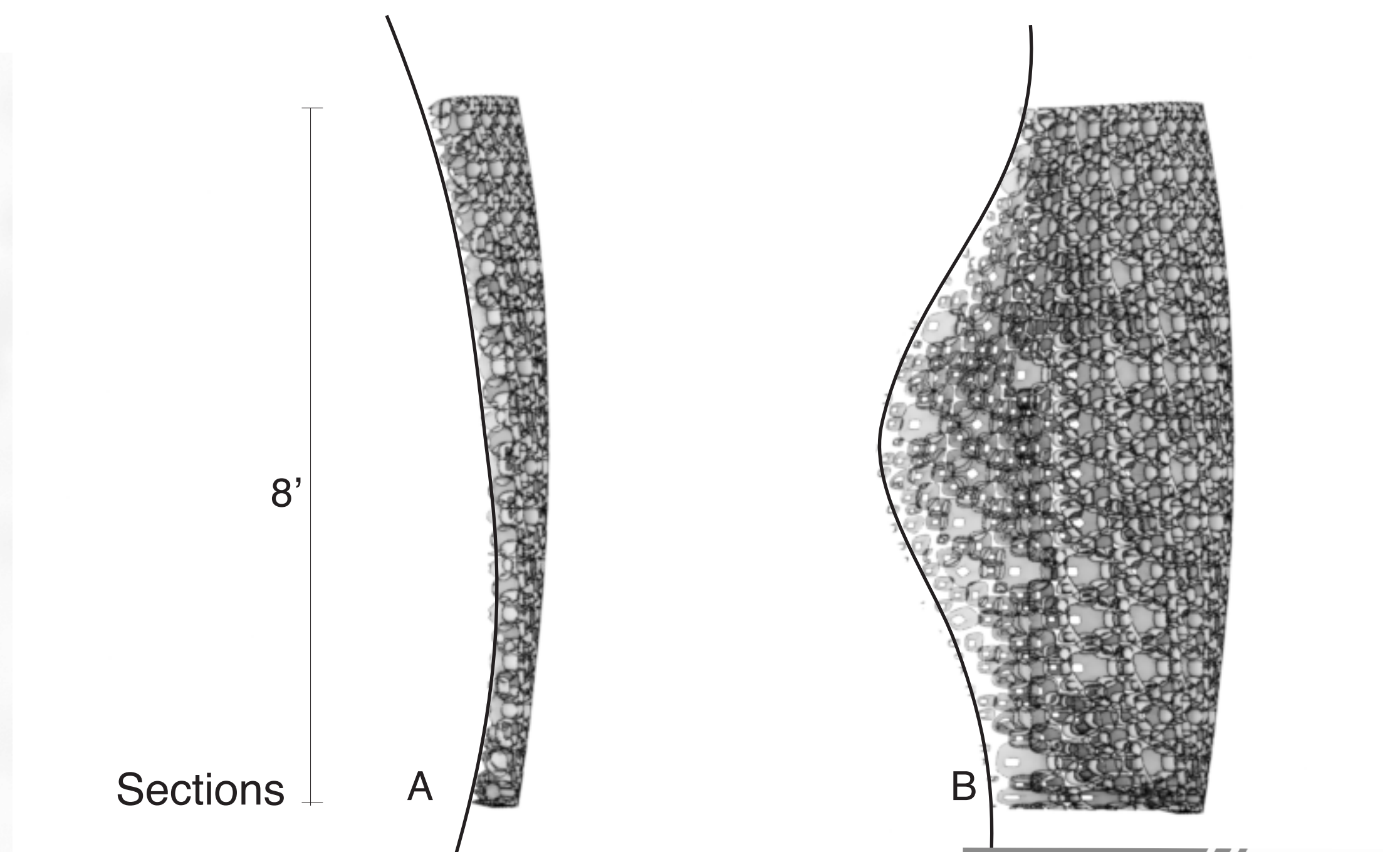
Perspective

10'



Plan

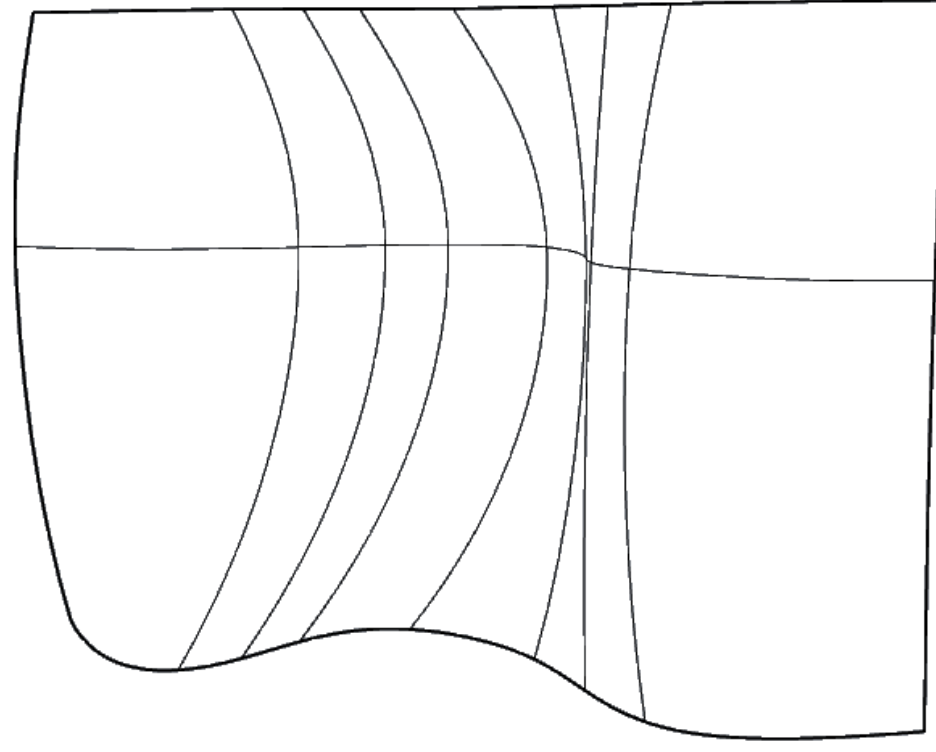
4'



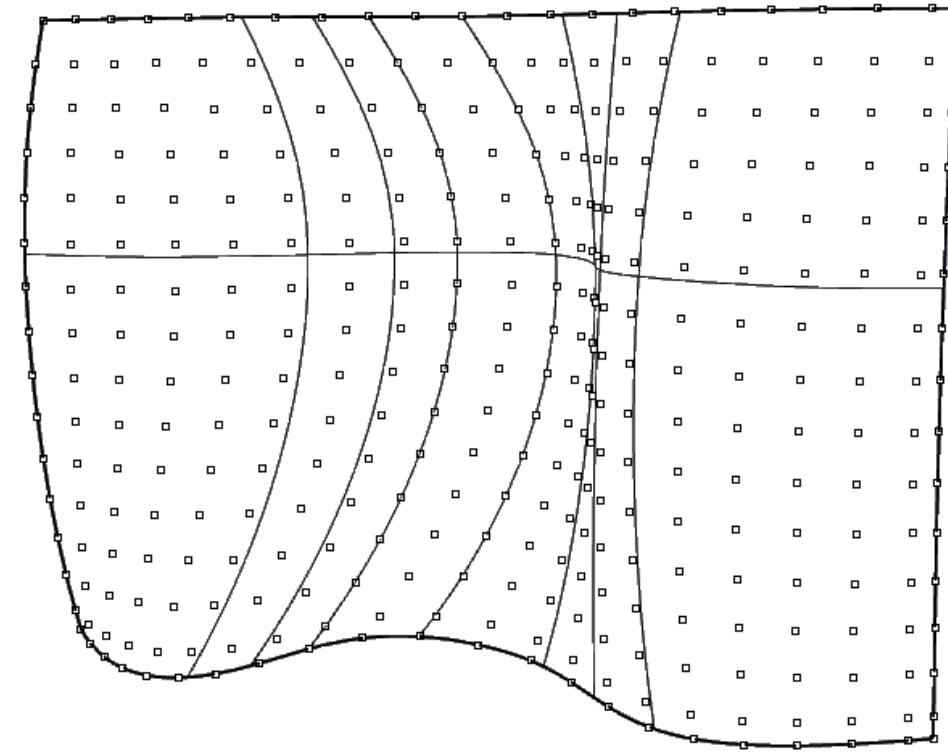
Sections

8'

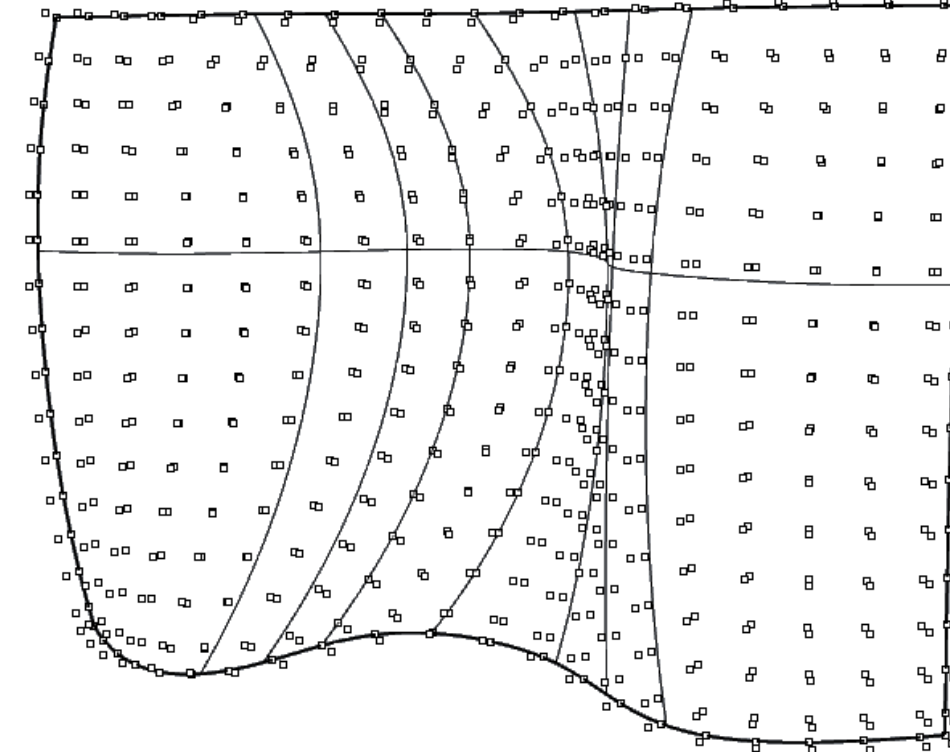
Development of Salt Wall Surface



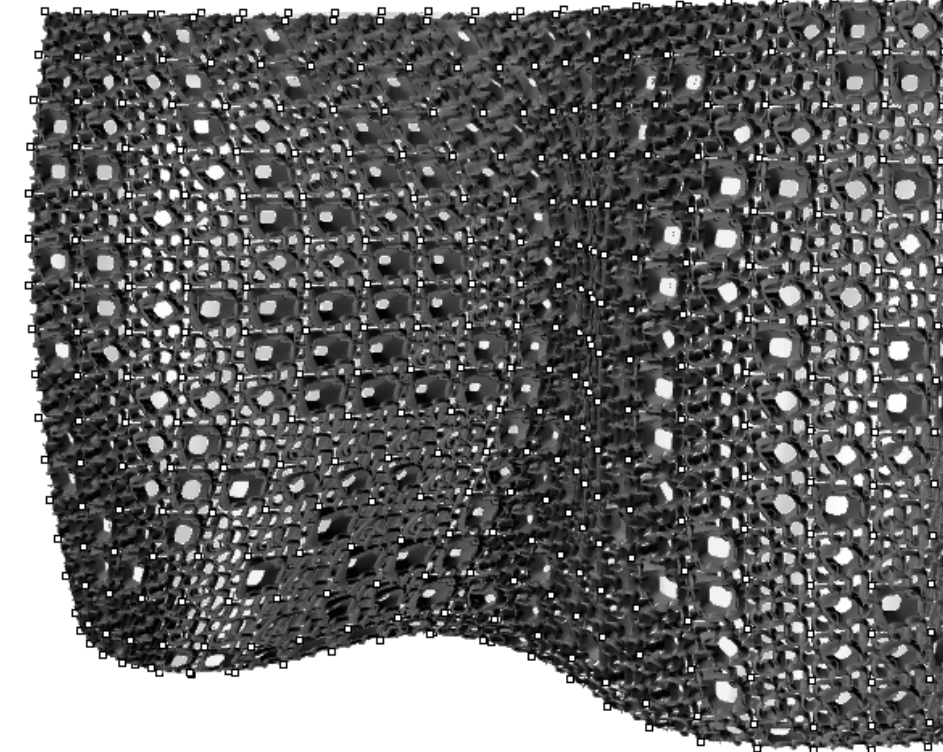
Surface designed to envelope the body as one enters the museum lobby



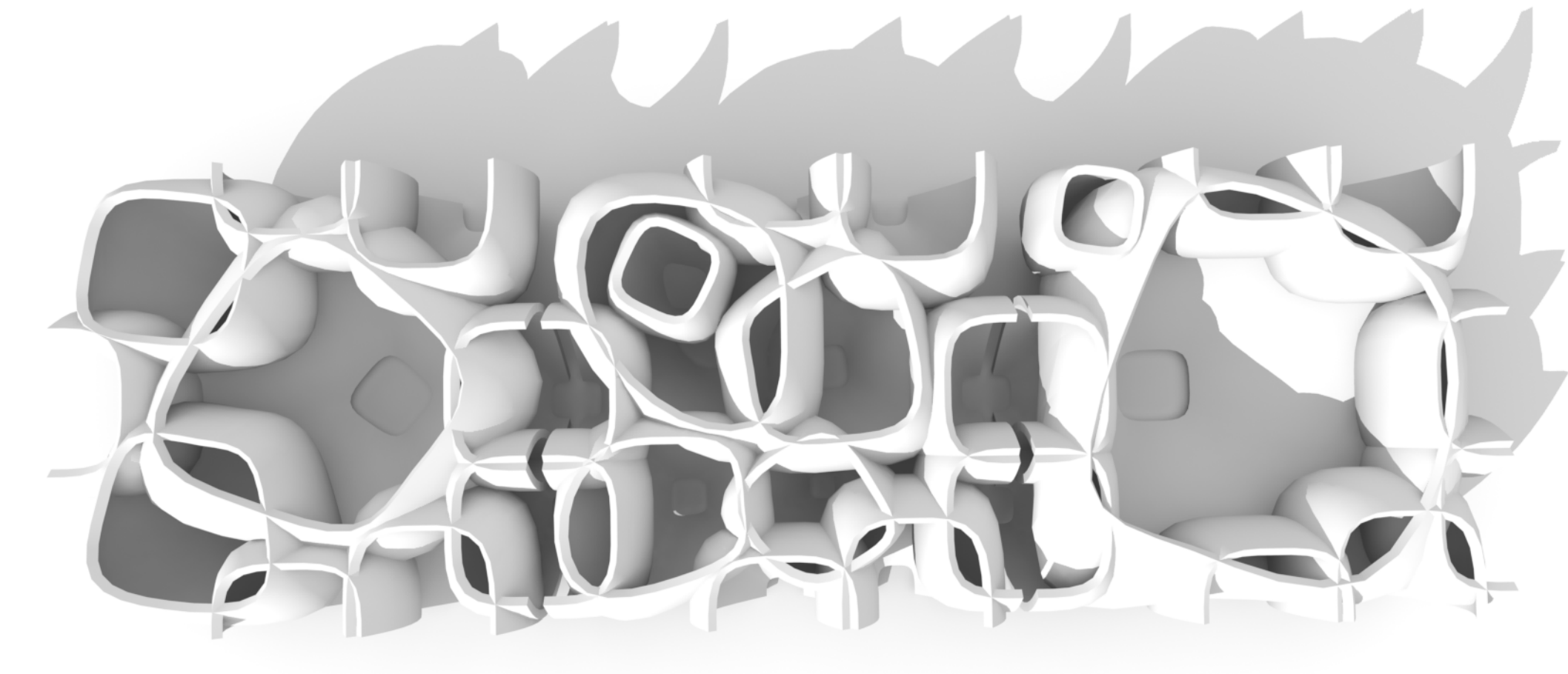
Point distribution on surface. Points are spaced for all salt tiles to fit within the dimensions of the 3D printer bed.



Offset point distribution. Each salt tile will be approximately 3" thick.

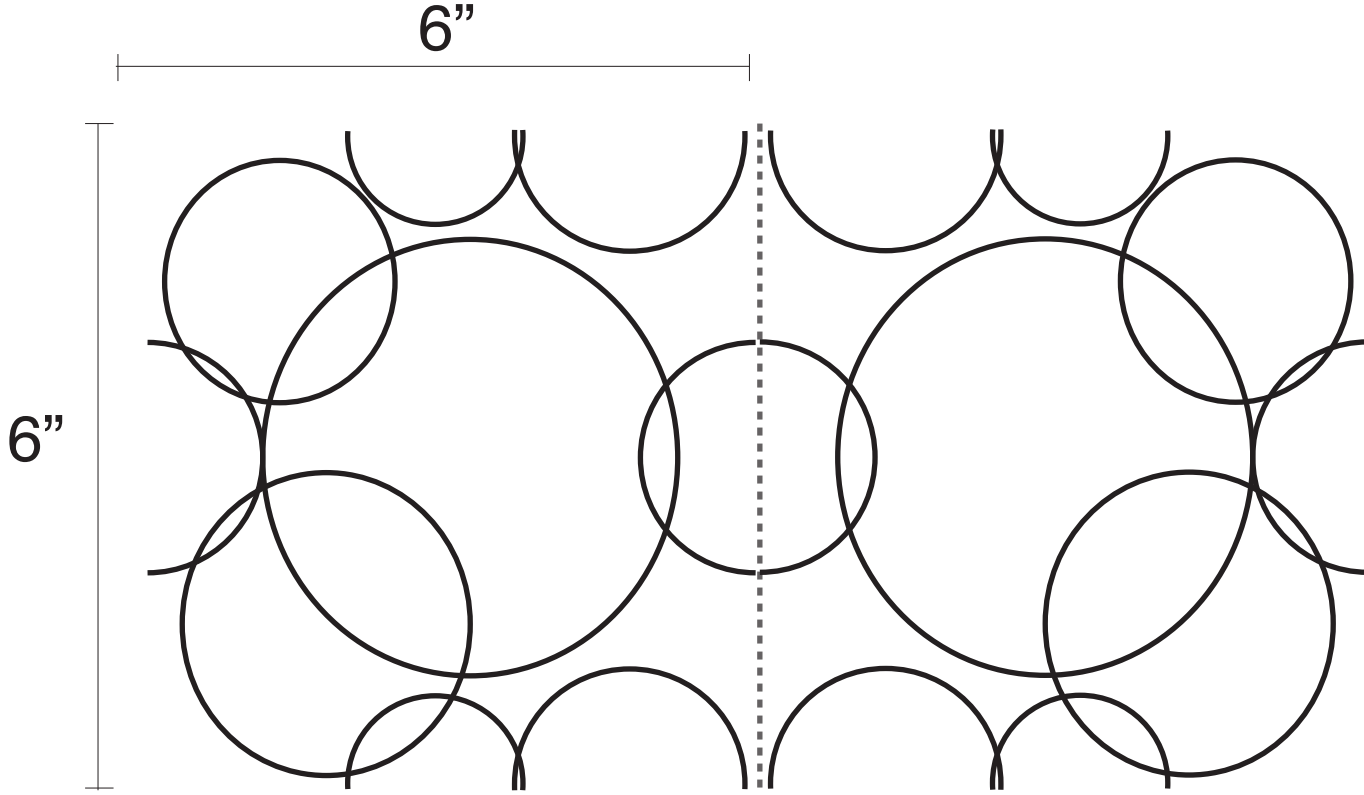


Random, variable distribution of 3 unique salt tiles across the surface. There are 315 tiles and each one is completely unique in form.

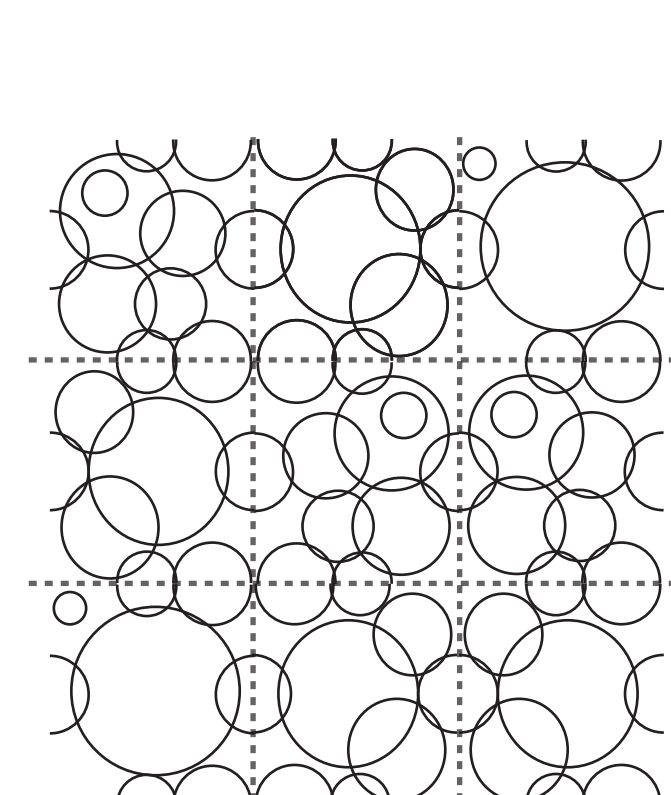


The 3 unique salt tiles that are randomly distributed across the surface. Each tile is different but has the same connection points.

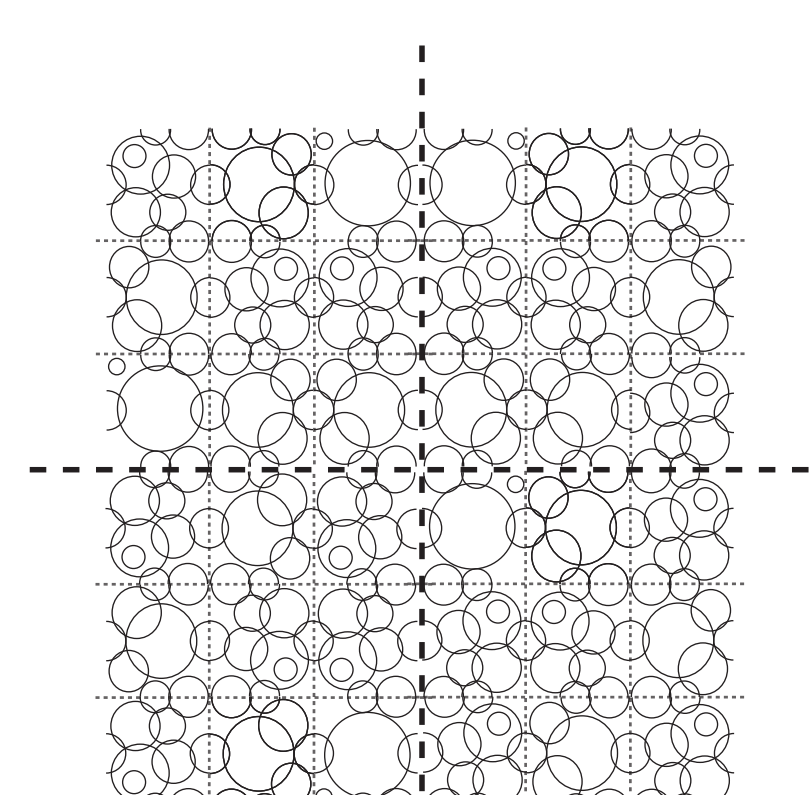
Assembly of Salt Wall Tiles



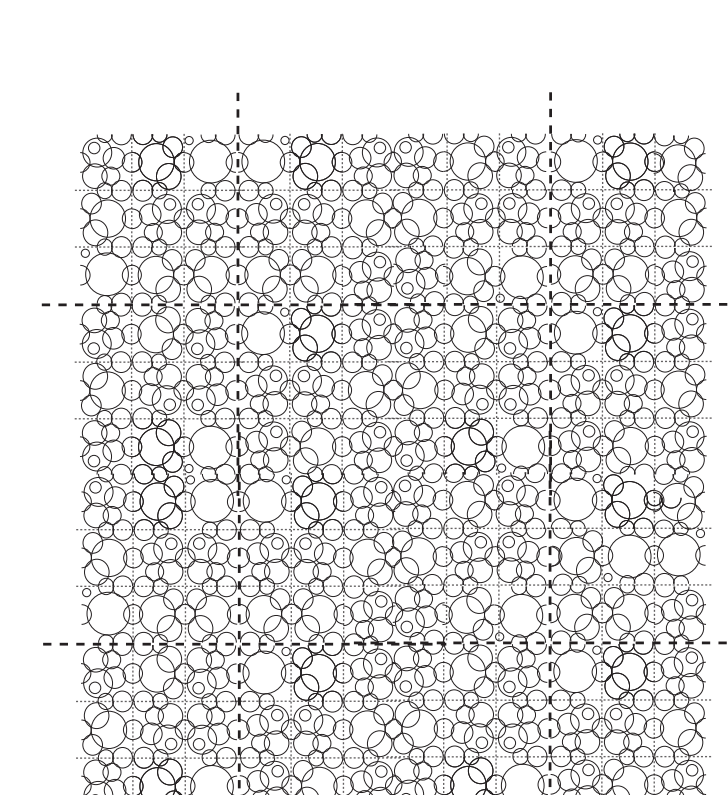
Each tile is designed using a karakusa pattern which allows tile to connect seamlessly both horizontally and vertically.



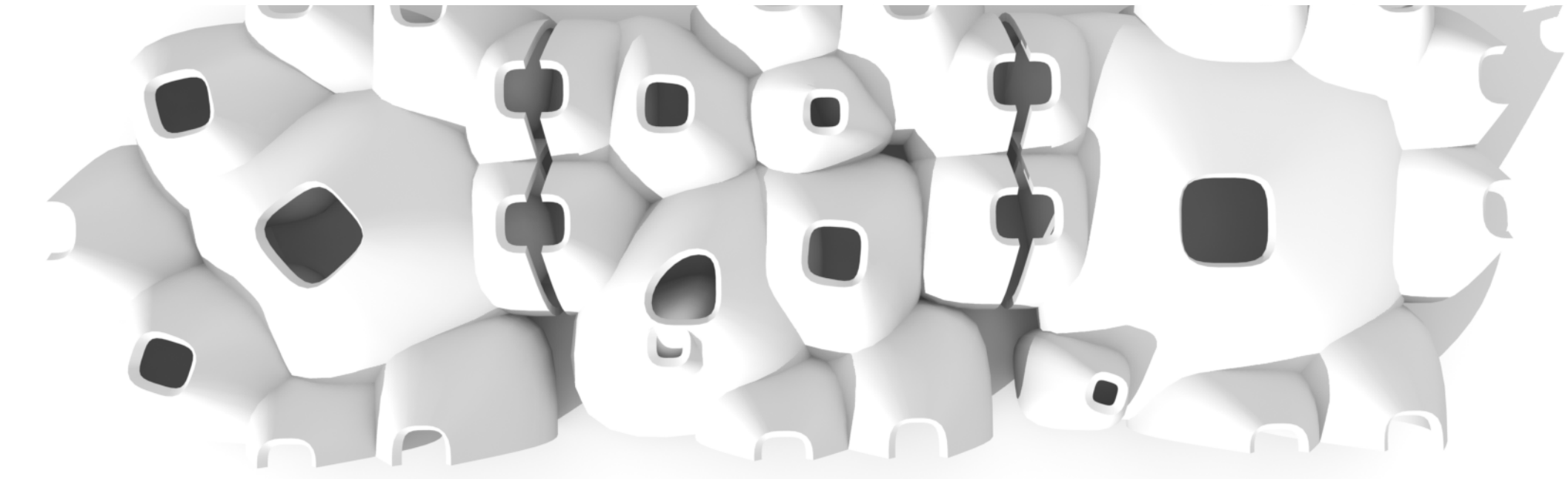
9 tiles will be adhered together using a masonry adhesive



9 unit chunks will be stacked and mechanically fastened together

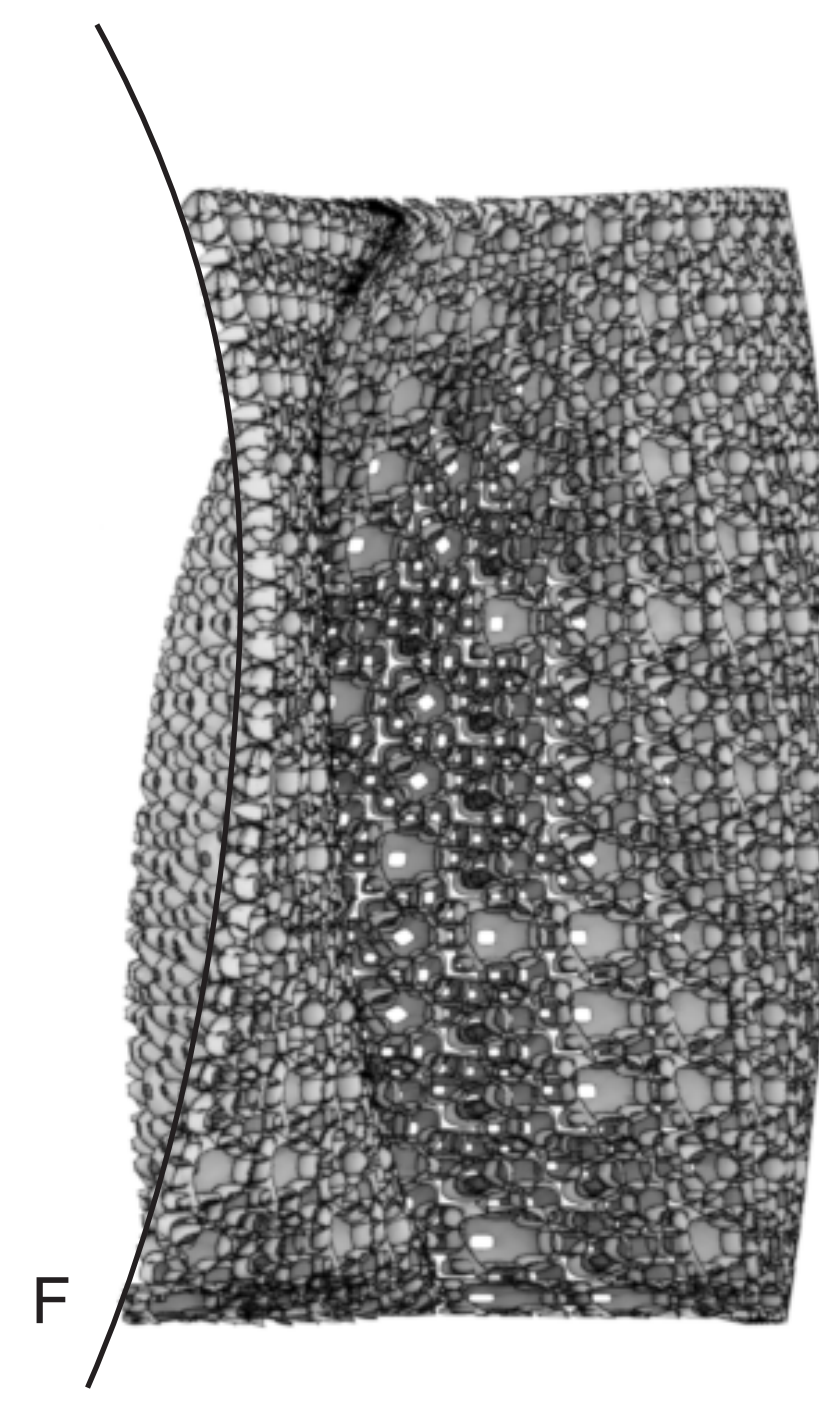
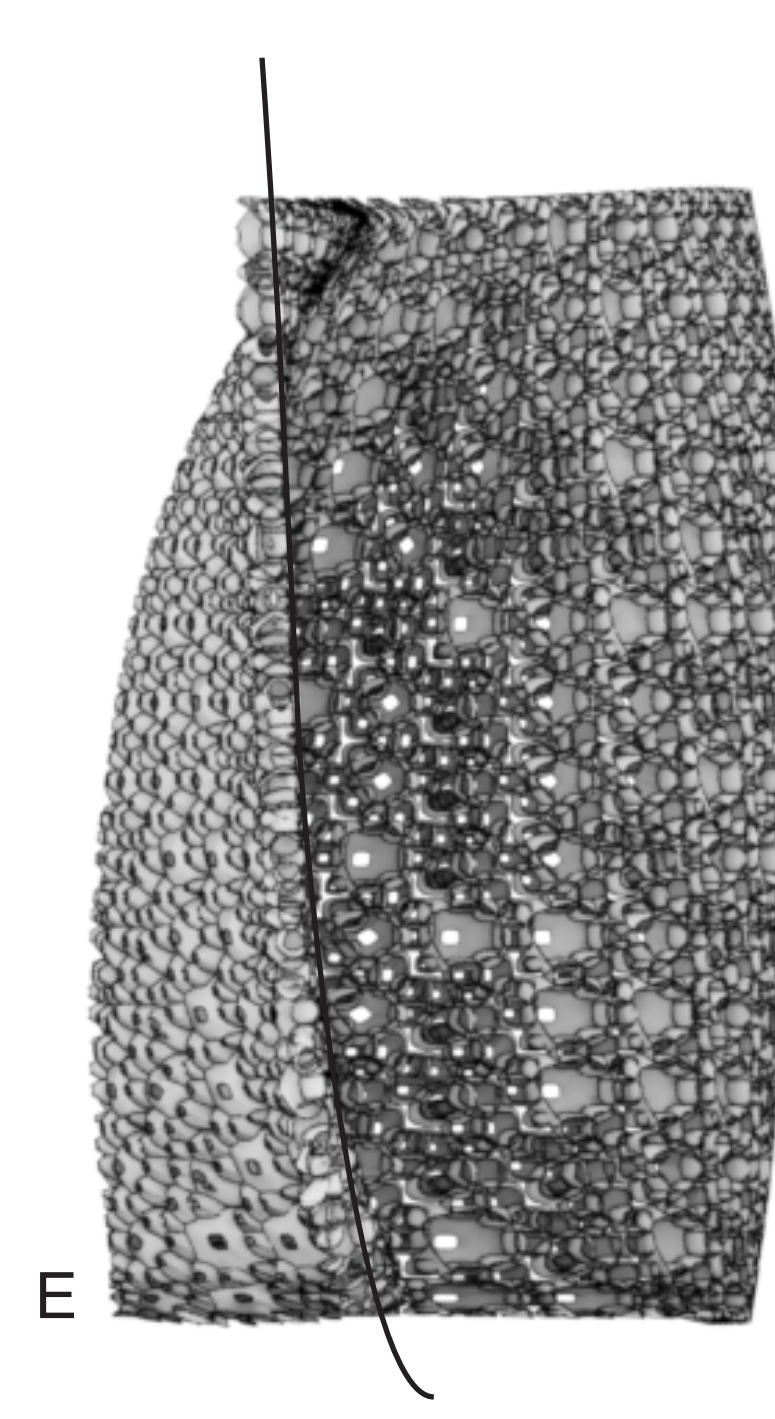
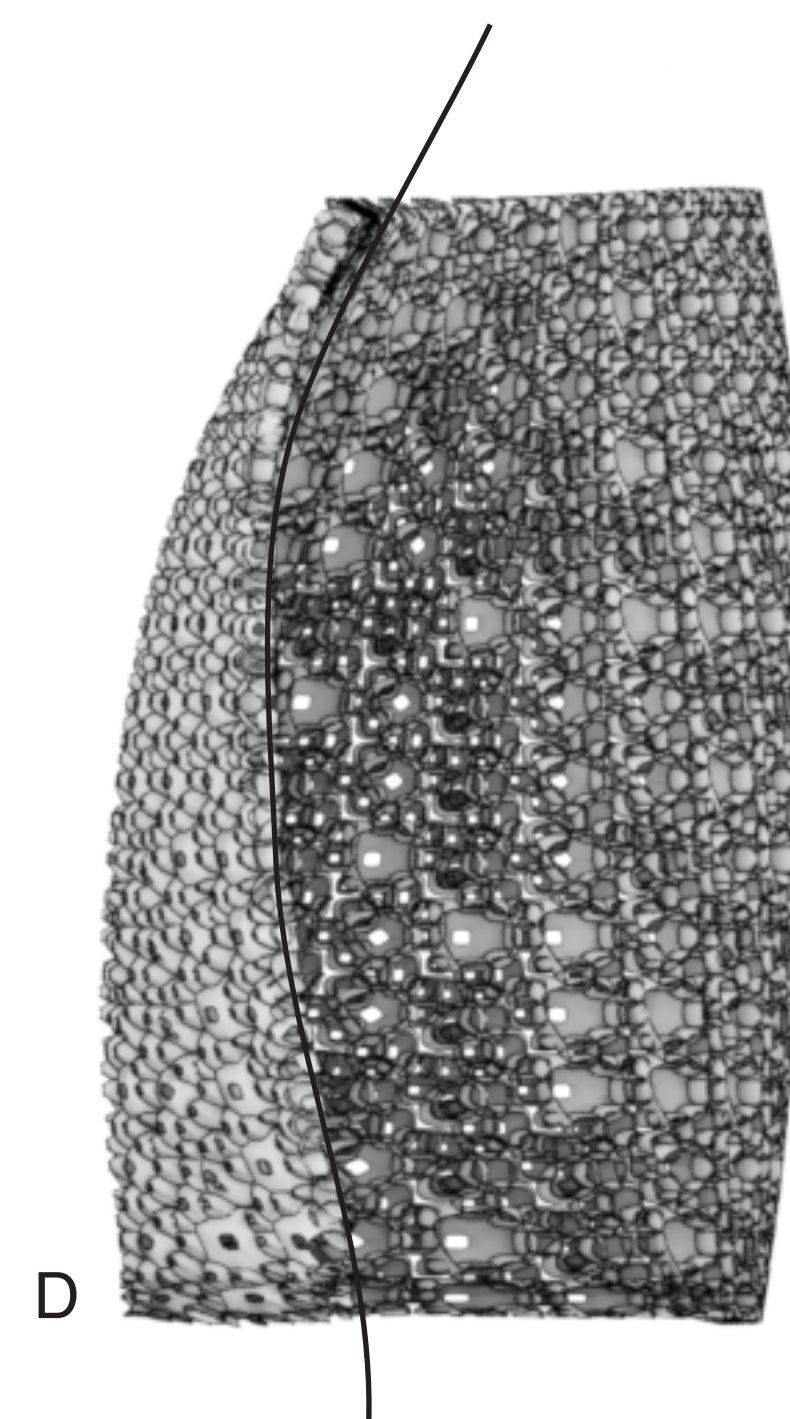
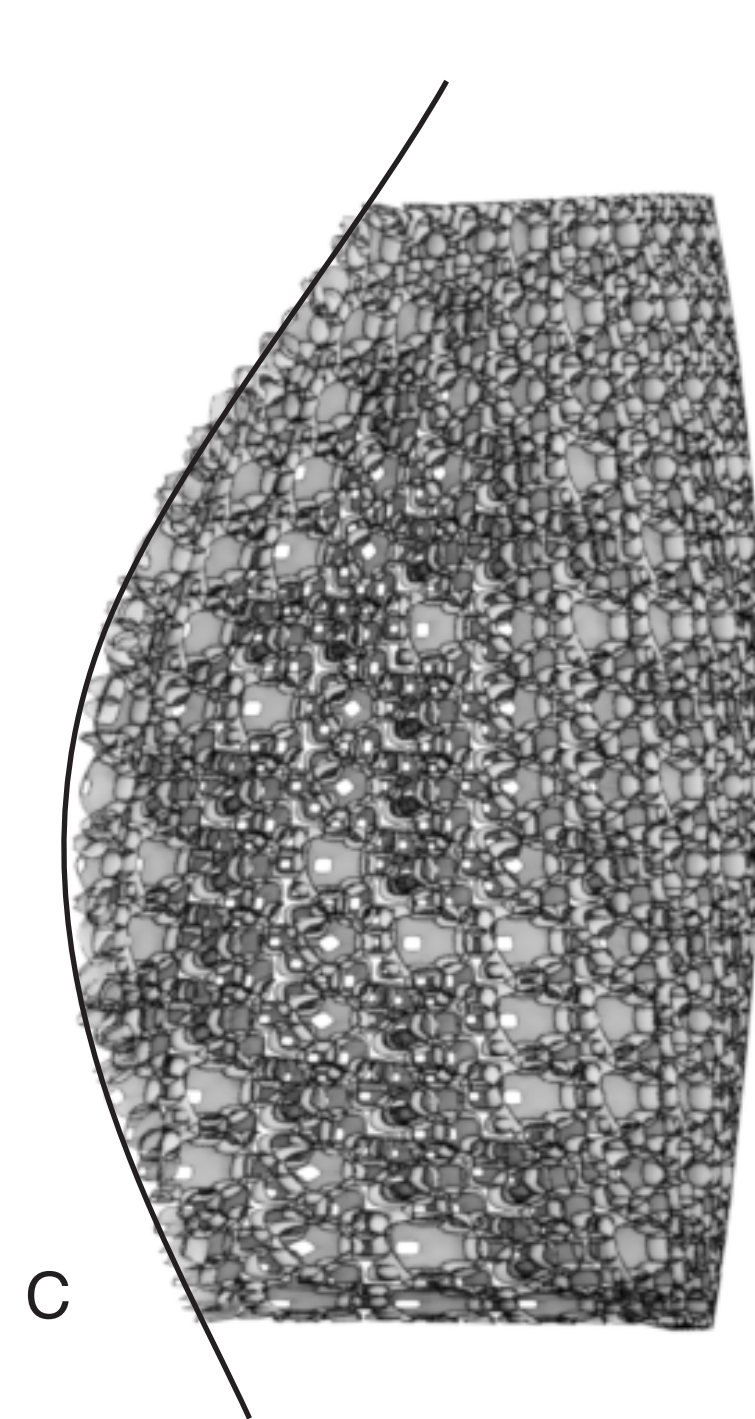
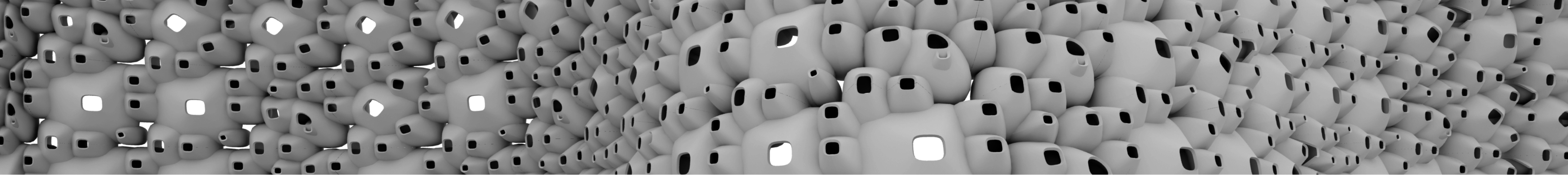


The 3 unique salt tiles provide endless variation across the surface.



The backs of the salt tiles are inherently different from the front. Therefore both sides of the wall will be unique. The tiles take their geometry and form from barnacles.

View of Salt Wall from Rear



Actual 3D printed salt tile.