

"Intertwine"

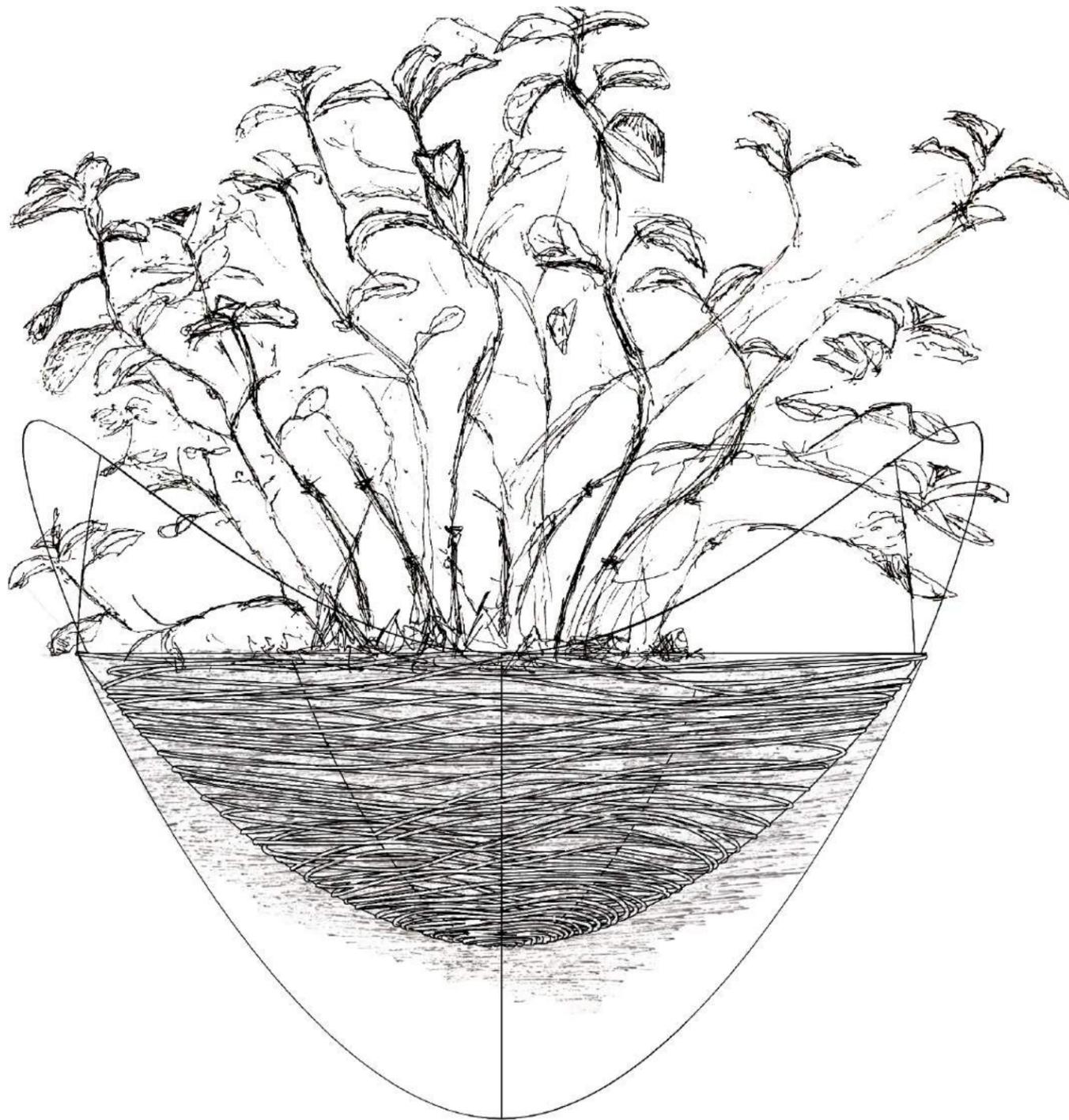
Folded Garden Project I

Plant: Greek Oregano

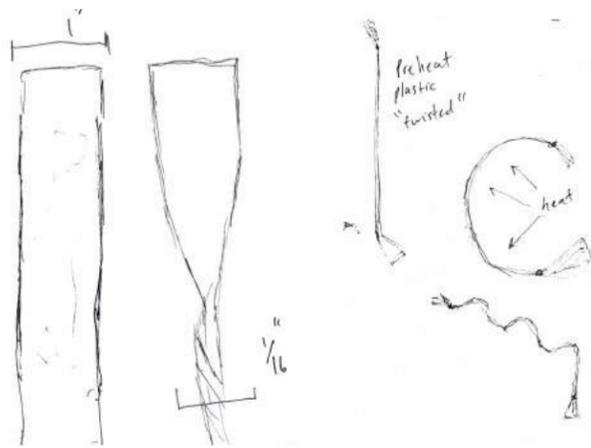
Carnegie Mellon University School of Architecture

48-200 Grow Collective

Professors: Josh Bard & Brian Peters



The two week process involves a series of testing and exploring the quality of plastic for the benefits of Greek Oregano. The skeleton form is based off of its complement and relationship with the plastic weaving.



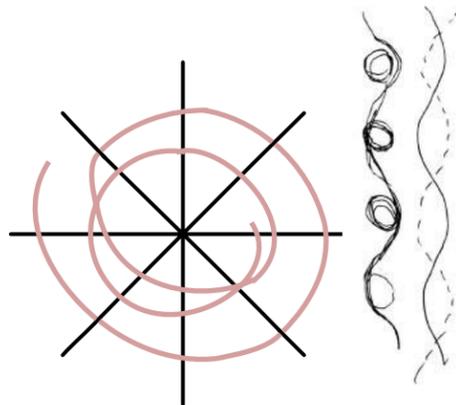
"a" represents the basic plastic strand before manipulated into structured twisted strips (b, c, d).



Closing conditions of the ends tests whether the twisted strips would uncurl. Tied ends creates a bulkier but more reliable condition. Rolled strips (e) in one direction has a less reliability in keeping the strip in place as opposed to opposite twisting (b, c, d).



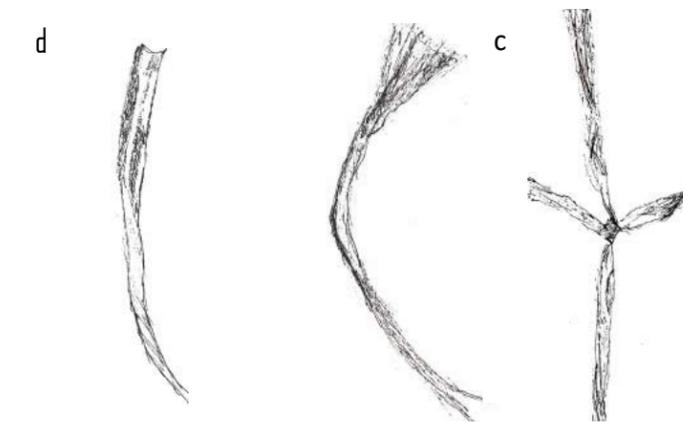
Over and Under Technique



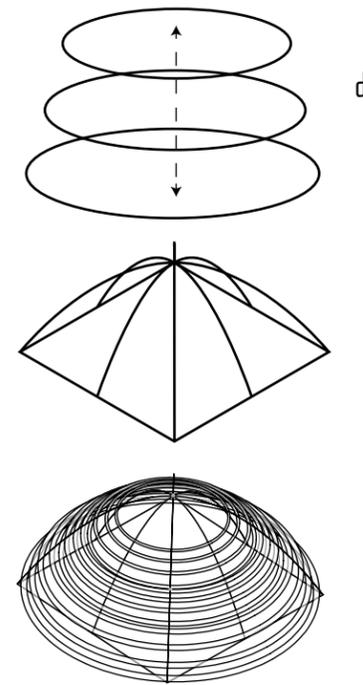
Tests of shrink wrap involve preheating before twisting and post-heating. Plastic strips curl towards heat source



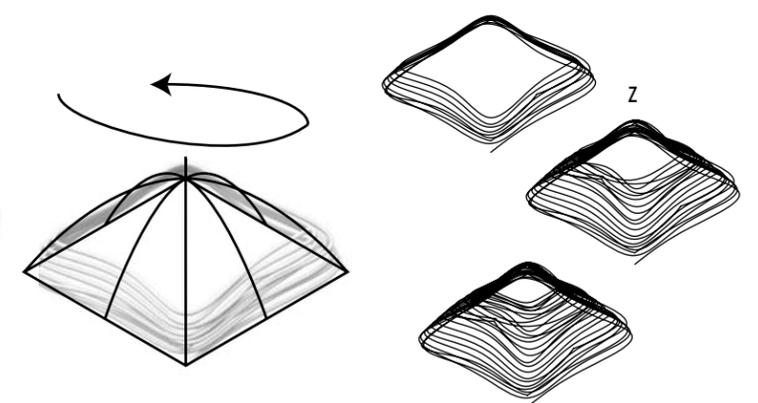
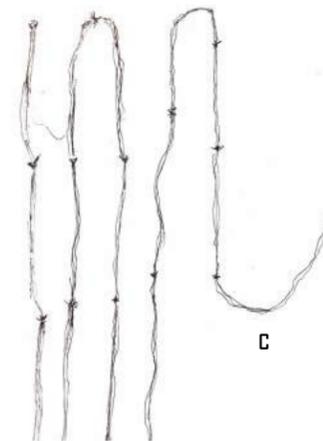
Sequence and order affect the quality of the shrink wrap. The wrinkles caused by early heating creates a thicker condition than the preheated state.



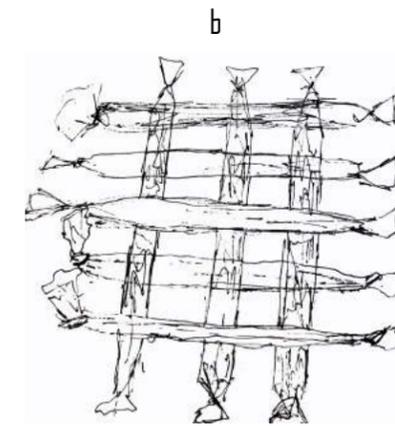
Joints consists thicker copper tubes (stronger than aluminum). Strings bonded through tied ends.



Each strip after manipulation ties to each end, creating an opportunity for overlapping itself and weaving around the frame.

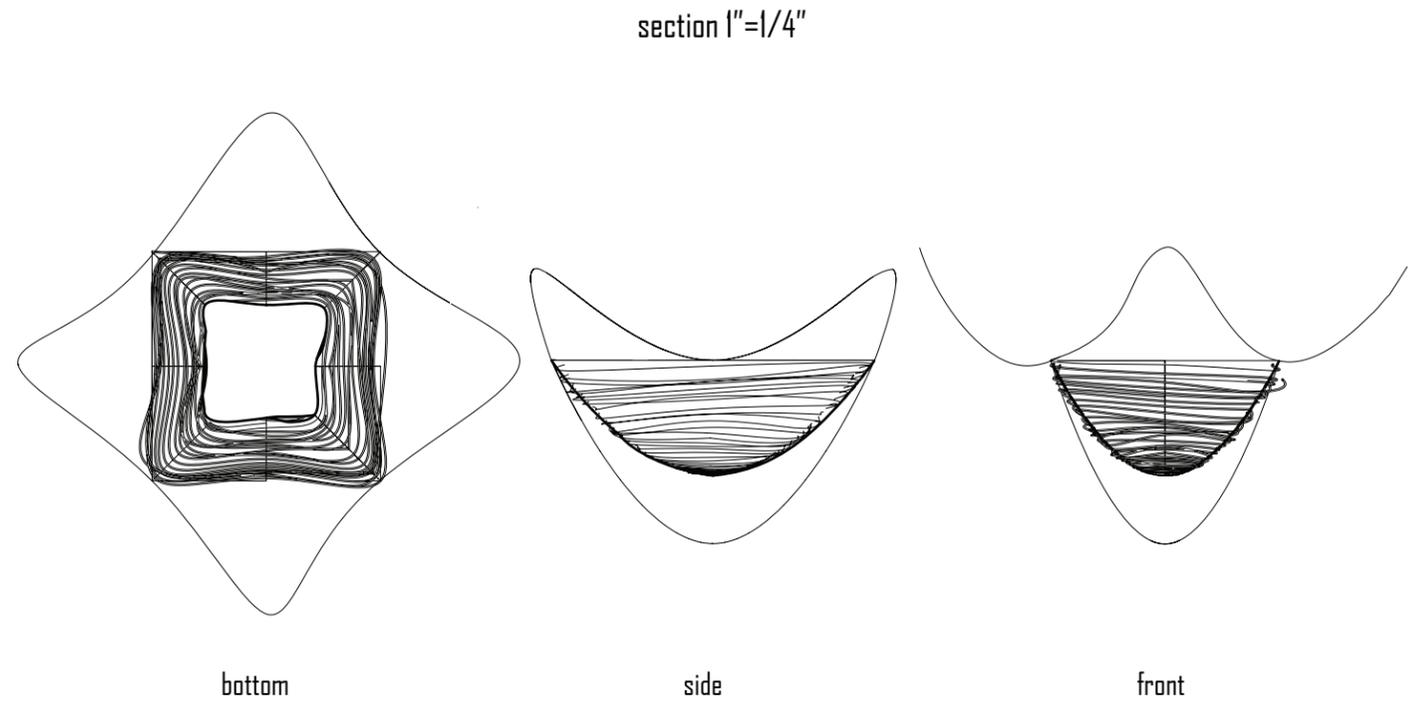
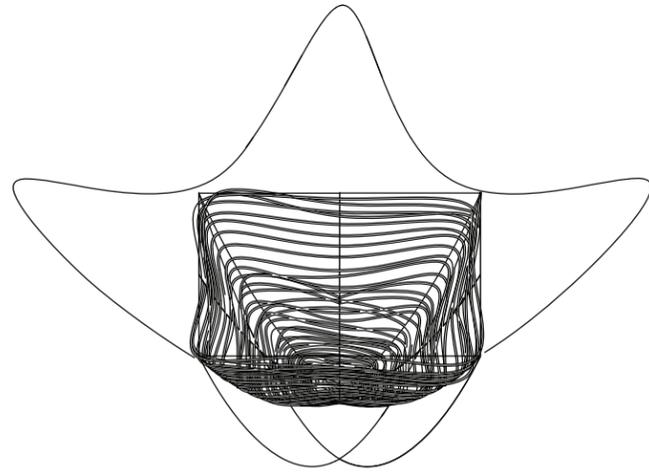
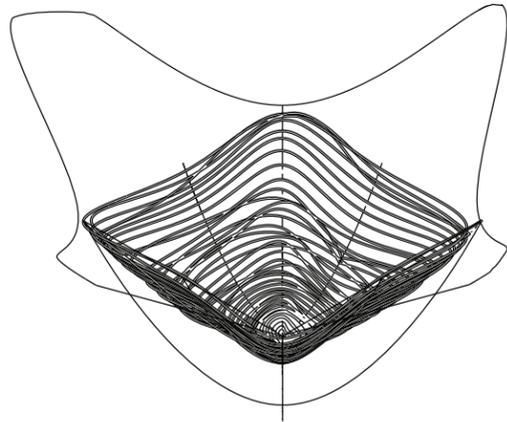


A negative visual interpretation of soil seeping through the gaps of weave as well as excess watering.

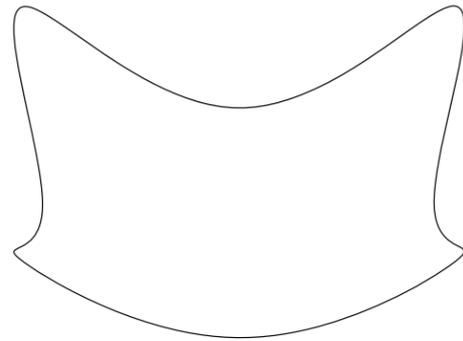


Early models focus on string tectonic form and weaving.

Concentric circular strips creates larger gaps due to lack of overlapping intertwined strips.

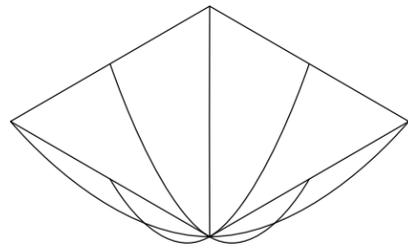


x



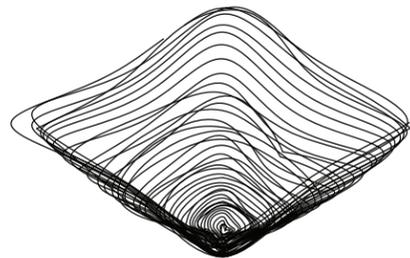
0.064 music wire form a petal-like shape to collect rain water.

y

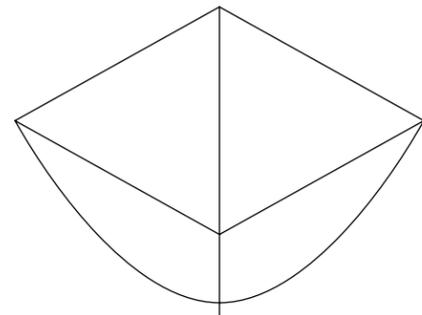


Four individual 0.064 piano wires supports dome-like structure; curvature not only offer rigidity to hold soil, but also complements and anchors the plastic weaving.

z



After series of testing on the shrink wrap, the finalized form provides a tougher tension and more suitable drainage for the oregano.



Shrink plastic wraps outer layer frame, providing heat insulation for the plant during winter season.

Overlapping of the four corners creates an interlock by the two frames. The two variables provides a self supported anchor for heavy load. Since x was originally square-shaped, y keeps x from bending from its current shape.

