

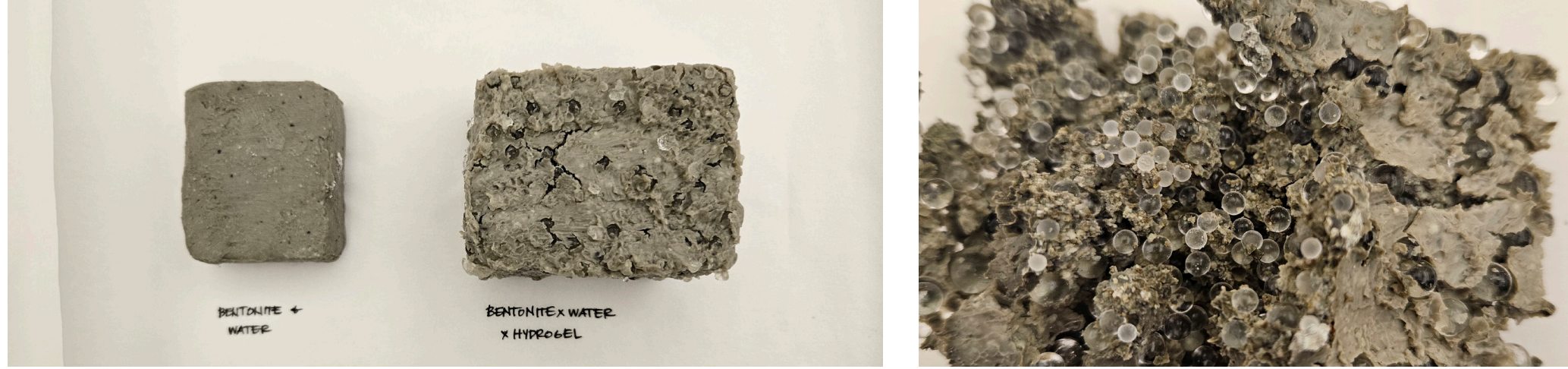
DISTENSION

DISTENSION Constrained Polymer Growth

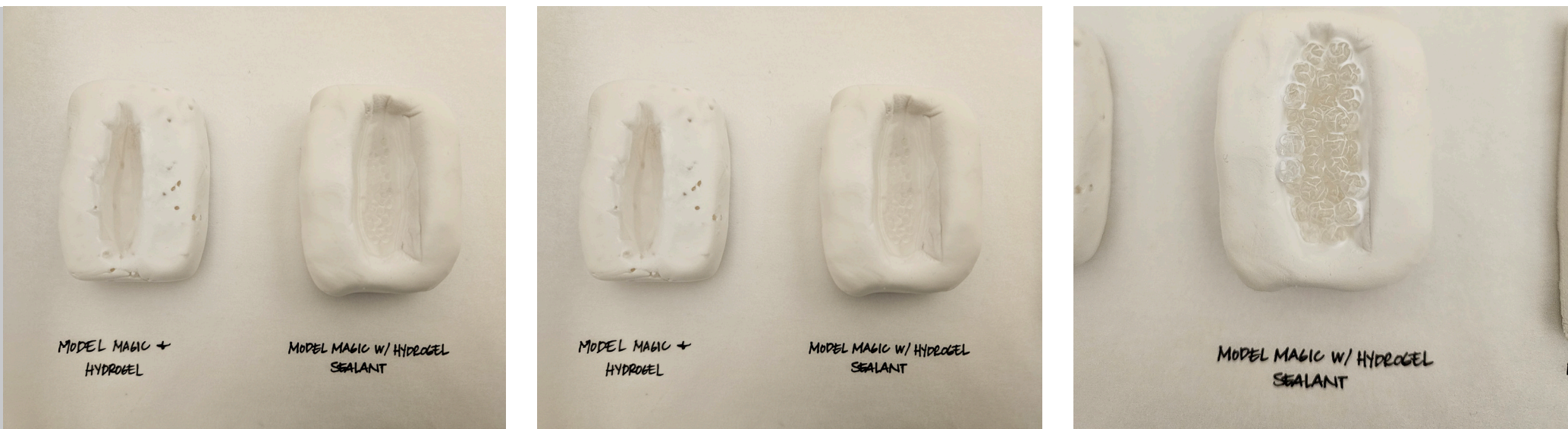
Allie Galis | Toni Sarmiento

RESEARCH

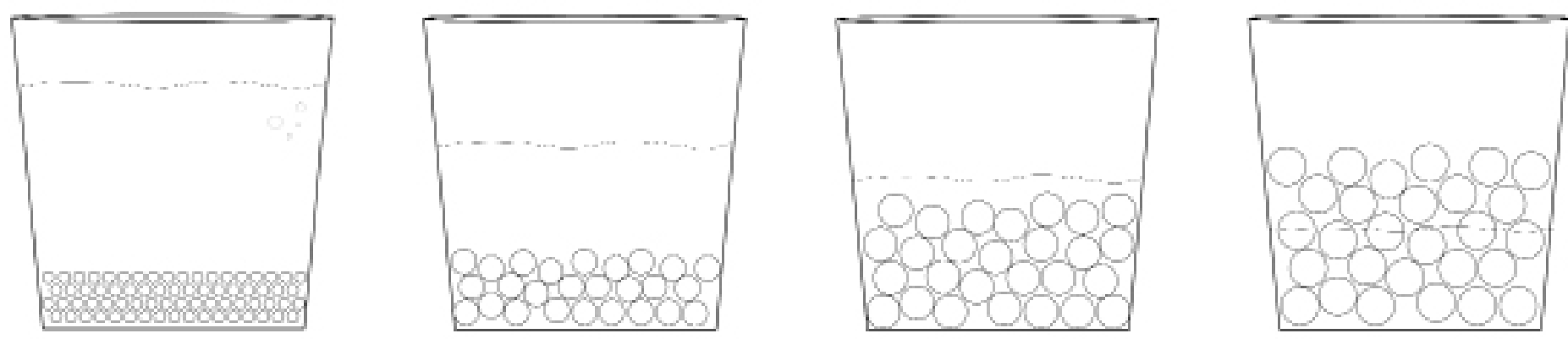
Upon deciding to explore the realm of self healing, we became focused on polymers. We first investigated autoic healing polymers and were gravitated by its properties of breaking and reforming when damaged. After experimenting with "orbeez" polymers, we realized we needed a polymer with bigger growth potential that held its shape better under pressure. We are intensely intrigued by the use of polymers against different constraints. We have experimented with different types, forms, and elasticities of constraint materials. Our fascination lies in the ways a polymer can fill the spaces of these constraints and push their boundaries.



Self Healing

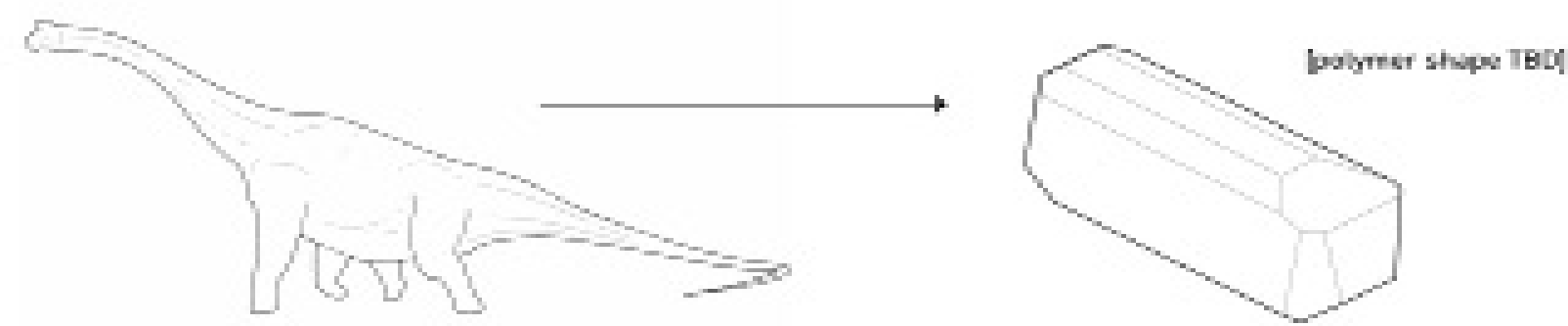


Encapsulation

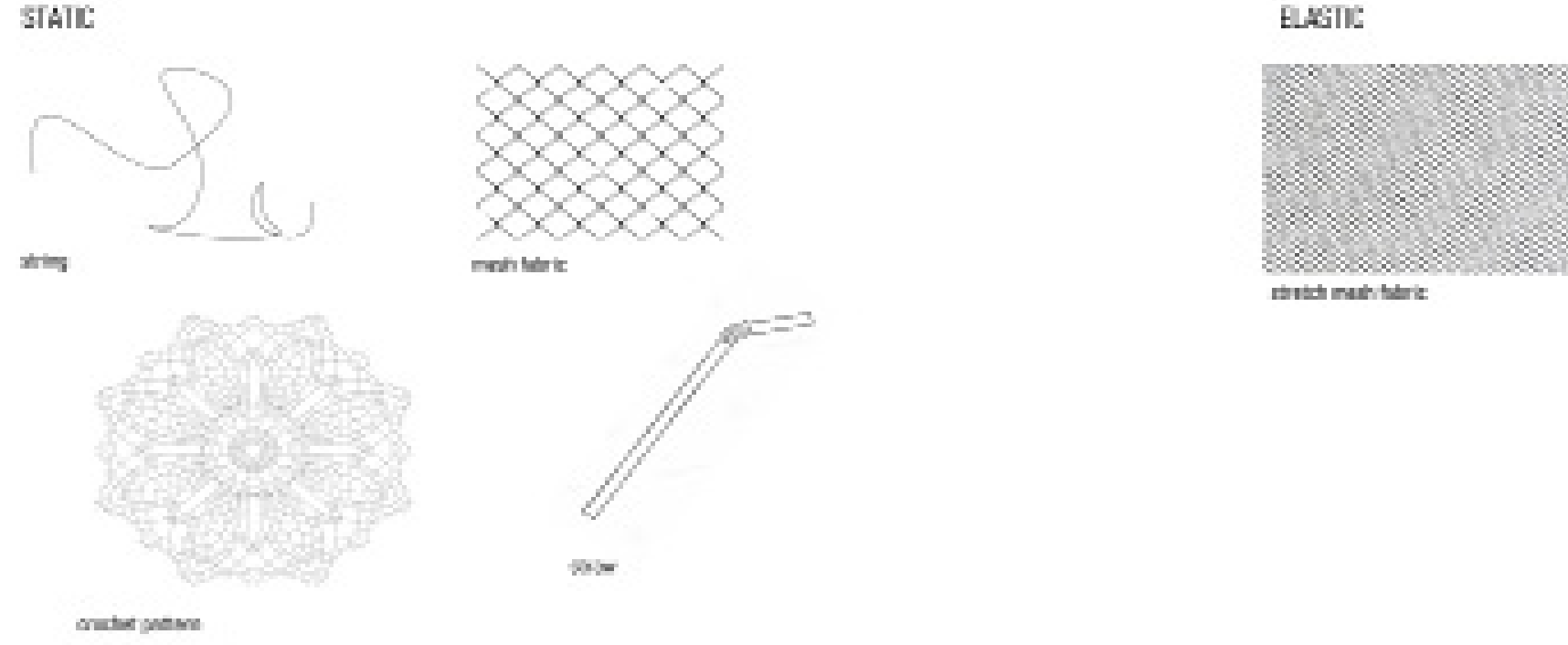


Rate of Expansion

POLYMER AND CONSTRAINT PATTERNS



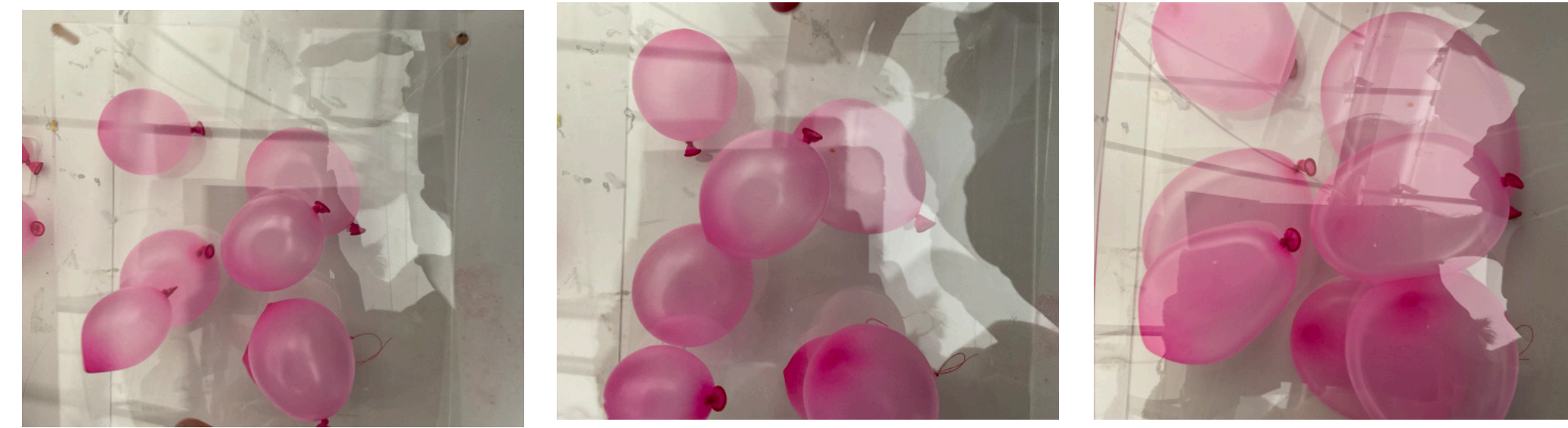
CONSTRAINT TYPES



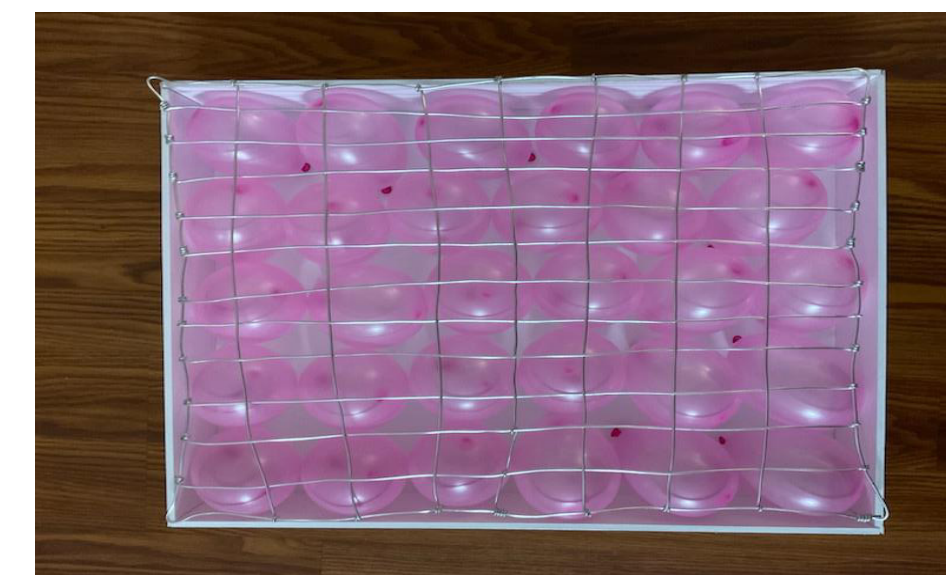
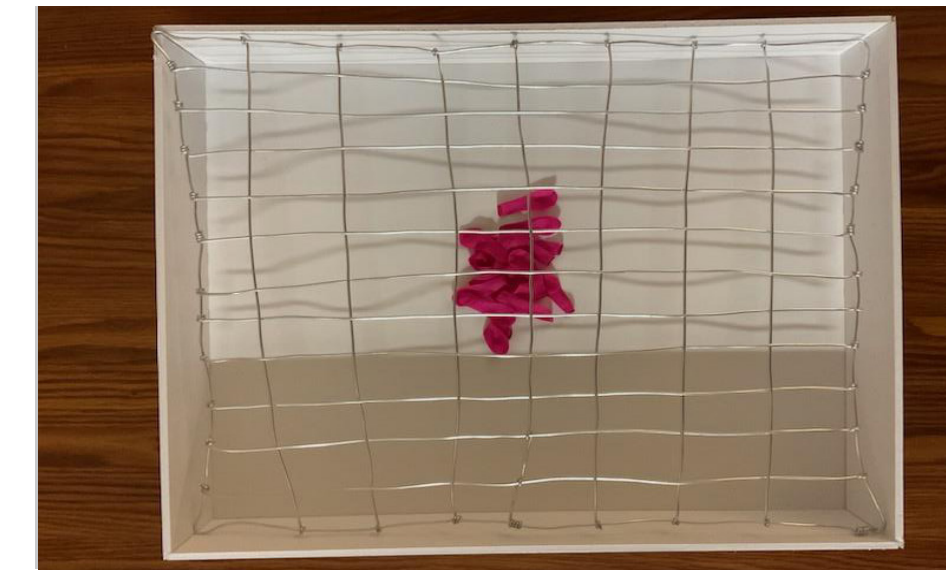
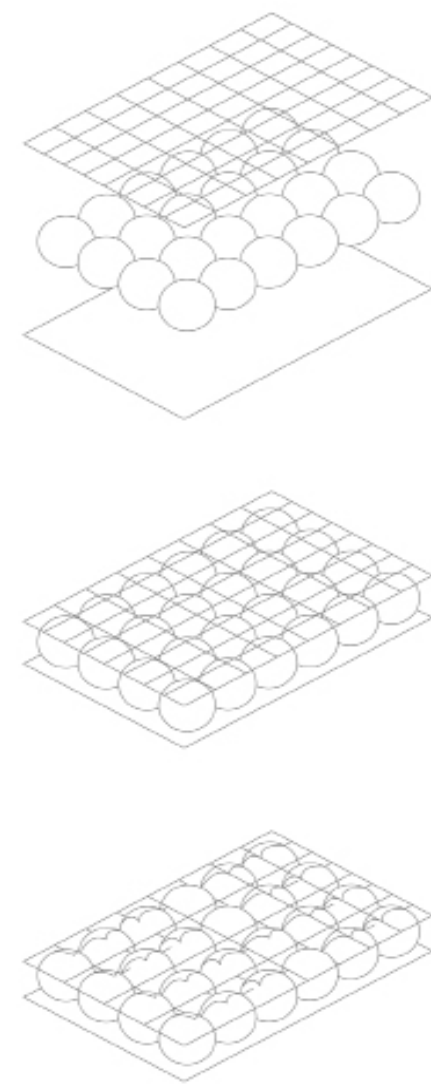
Super absorbent polymers
Side By Side Comparison

CONSTRAINTS STUDIES

Static vs. Elastic

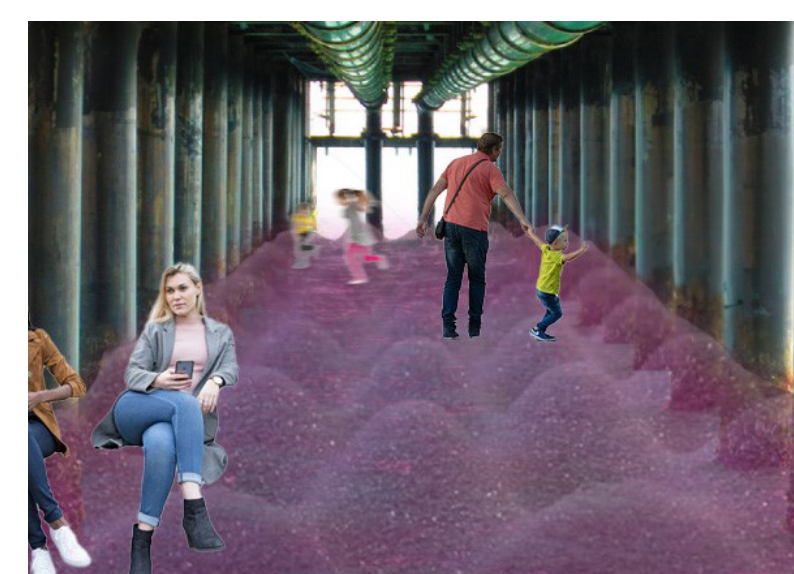
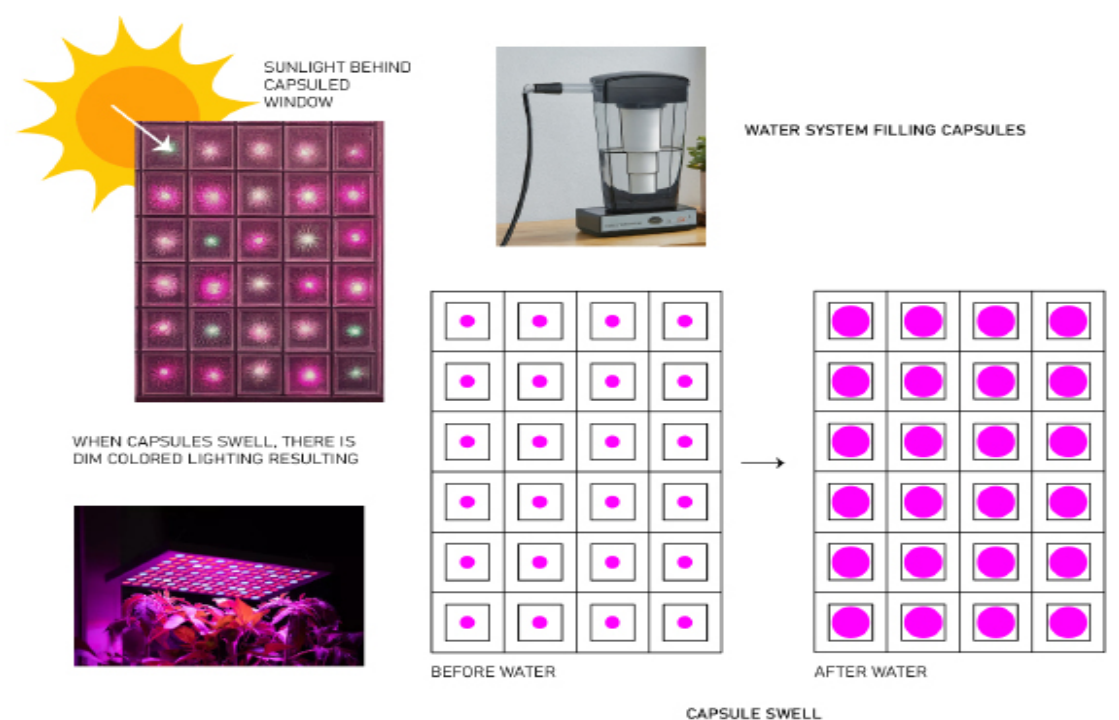
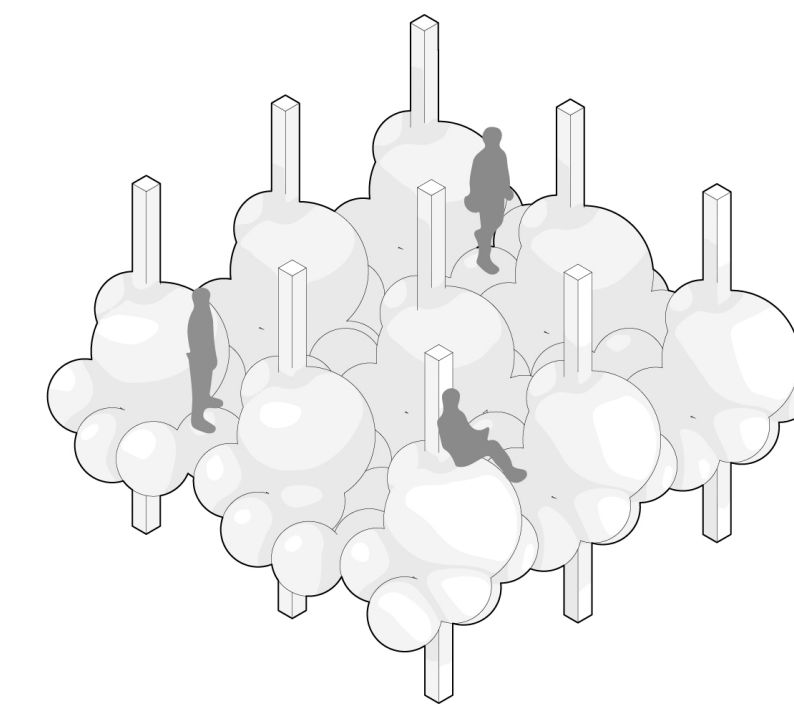
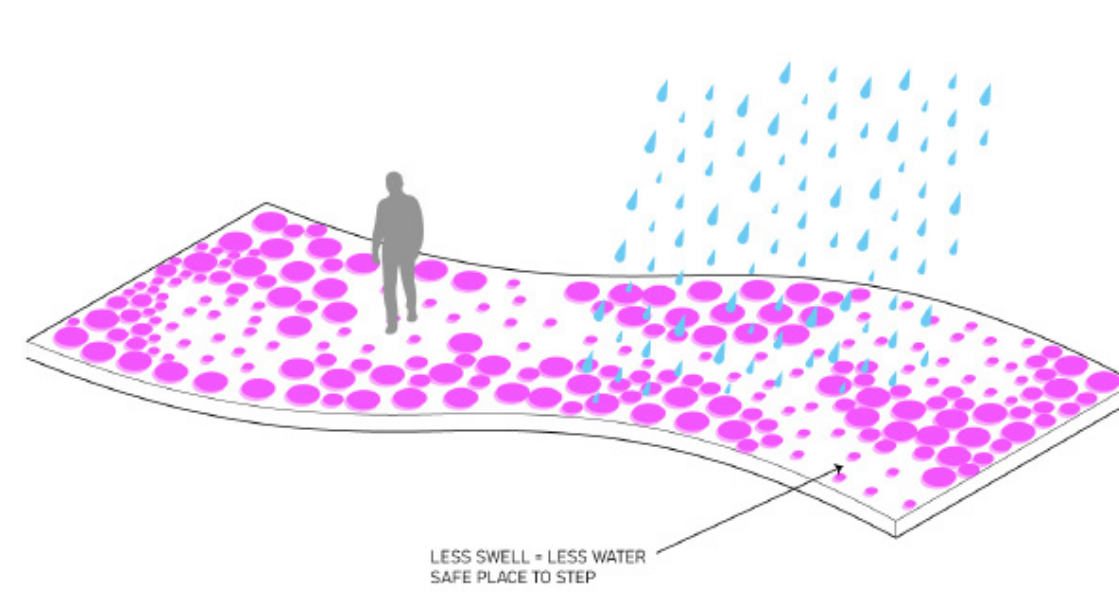
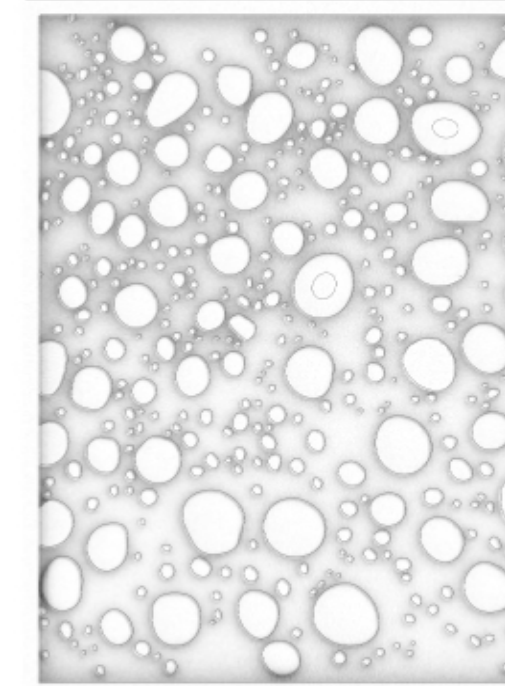
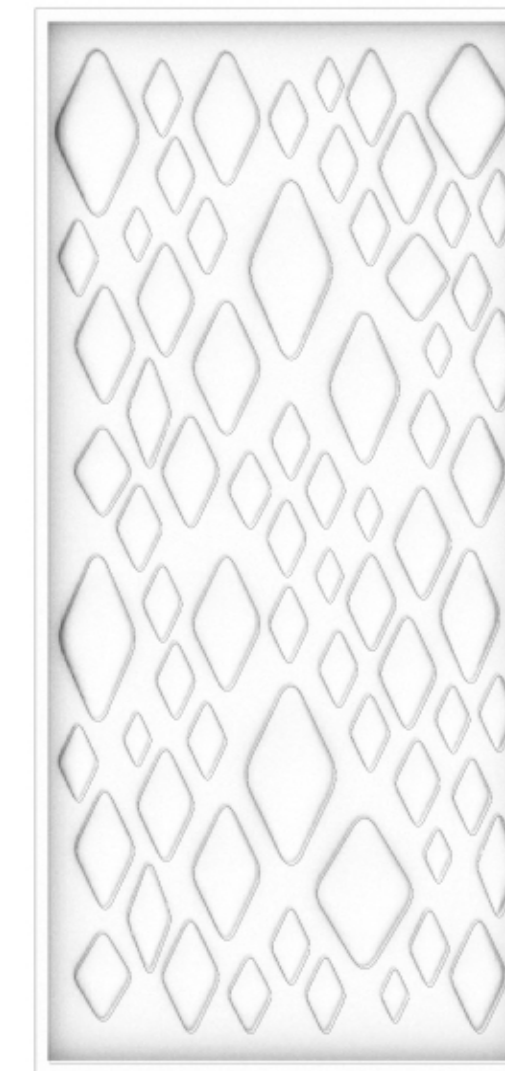
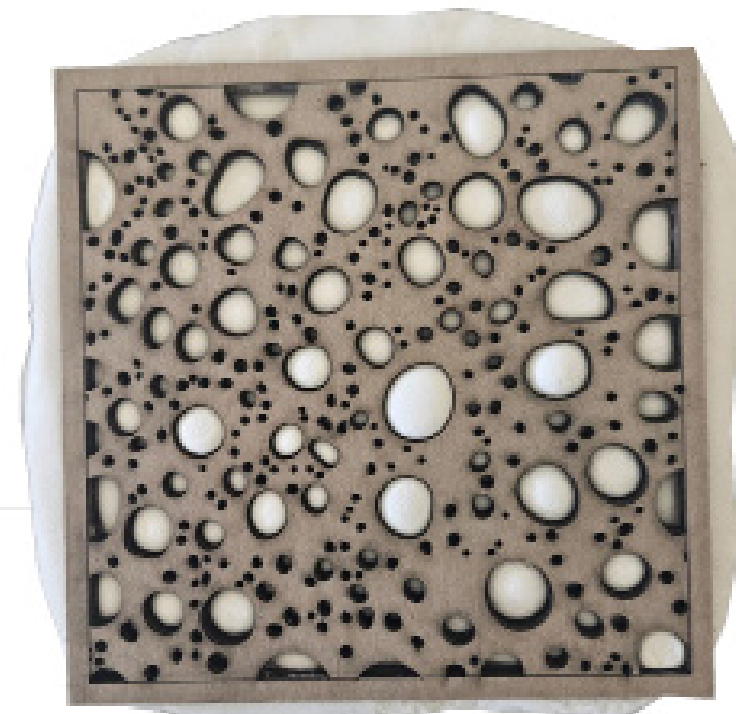


Static



Static

PATTERN STUDIES



Elastic

SPECULATIONS

