

Osnap!

LEE SU HUANG

University of Florida

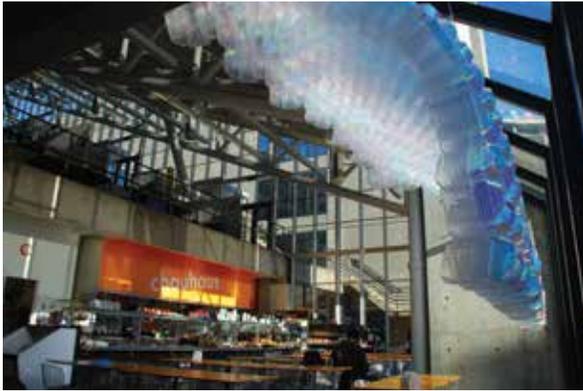
GREGORY SPAW

American University of Sharjah

Initially inspired by the material efficacy of commercial plastic packaging, Osnap! is a project exploring the pairing of digital fabrication with traditional vacuforming, each employed to their own unique advantages. Digital fabrication techniques ensured the consistent precision and quality of the working molds, while allowing for fast turnaround times in iterative design development and proofing of concepts. Vacuforming enabled immediate testing and swift mass-production of a sufficient number of modules for effective evaluation of performance. Cohesively these processes resulted in time-effective inquires and development of different joinery techniques, geometries, and optimized production workflows.

The resulting installation employs the inherent thermoforming capabilities of PETG plastic laminated with laser-etched dichroic film, which is fashioned through the use of CNC milled molds. These similar units are in turn tectonically joined through their innate geometry without the use of foreign fasteners or joinery. Consisting of 666 body modules and 333 joined cap units, the design incorporates snap joints, folds, friction fit button joints, and tension slip joints into one cohesive whole. The dichroic film creates a multitude of filtered optical effects depending on the prevailing lighting conditions and the observers' relative angle of reflection to the units. Thus a dialogue is created between the observer, the construct and broader environment.

This research opens possibilities regarding speed/ease of deployment of units on an architectural scale, with advantages such as weight, flat packing, tool-less assembly, adjustable geometry, variable opacity and recyclability. While the forefront of digital fabrication is obsessed with mass-customization of unique parts in unprecedented numbers, Osnap! endeavors to find an advantageous middle ground in utilizing both new and old technologies selectively, achieving hybridized benefits while working within an economy of means.



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