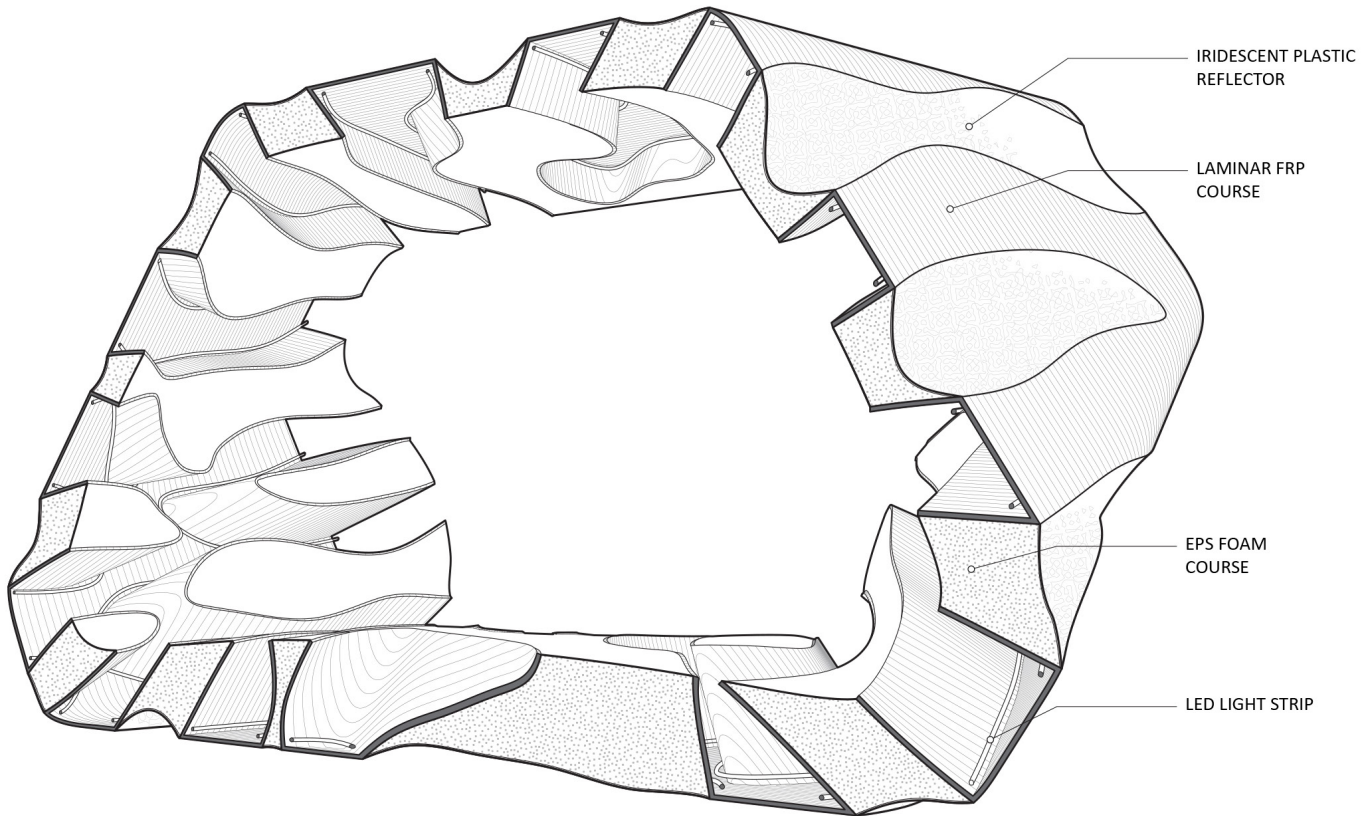


PLASTIC STEREOTOMY

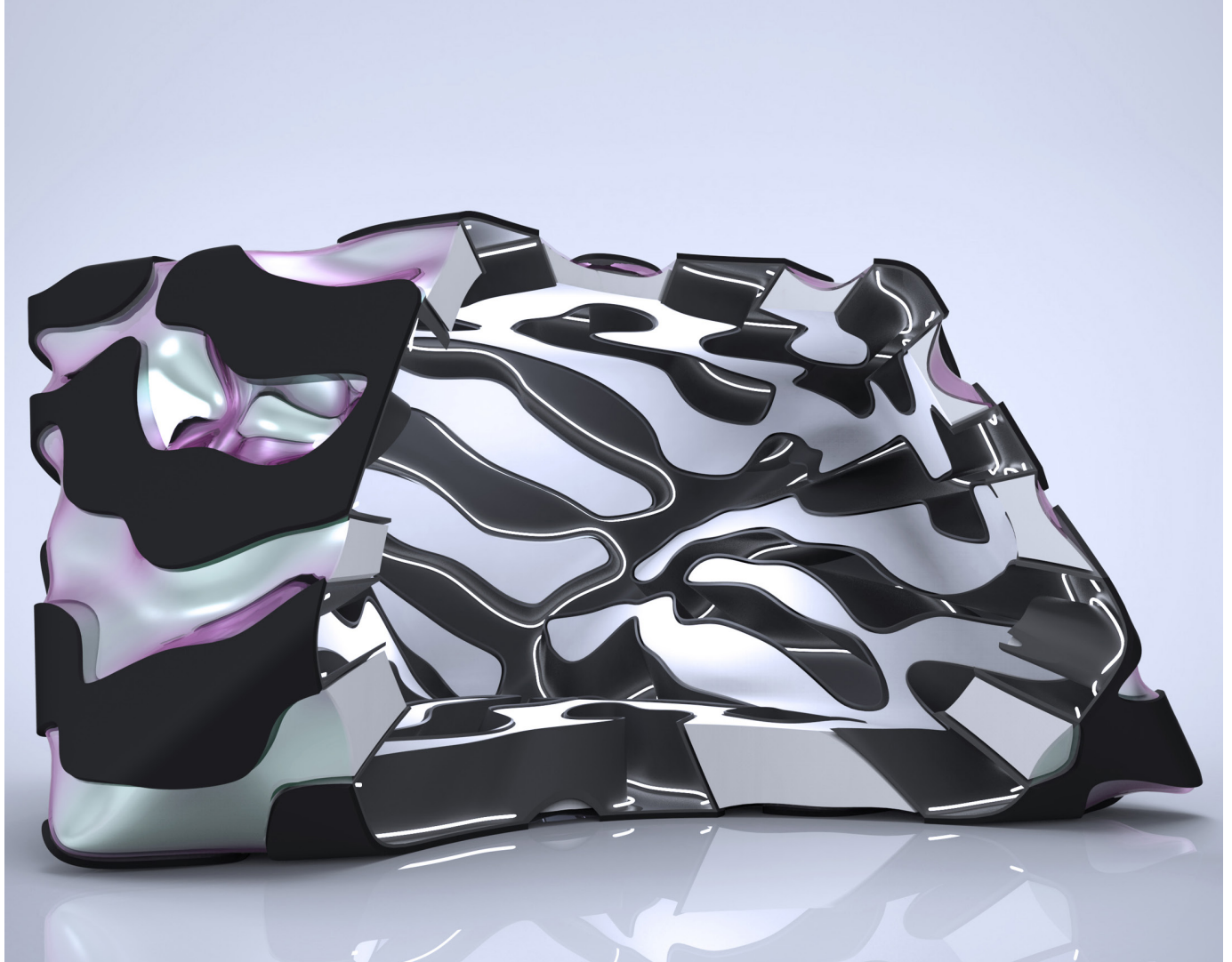
TOWARD AN ARCHITECTURE OF LAMINAR POCHÉ

Justin Diles Knowlton School of Architecture



1 Plastic Stereotomy Pavilion—Transverse section perspective showing interlocking courses of molded FRP composite surfaces and milled EPS foam

Our TexFab proposal positions plasticity at the beginning of the design process by exploring the multiple, latent volumetric tessellations hidden in simple structural configurations, opening rich possibilities for architectural design and construction. Assisted by FEM software, our project develops strategies for reviving stereotomic masonry assembly with both cut solid and molded, hollow laminar plastics. Through our design, we reimagine a once vital field of knowledge to investigate contemporary formal and aesthetic questions related to the relationships between the subdivision of volumes, constituent materials, surface depth and finishing, and construction methods. Our proposal argues for the continuing relevance of stereotomy, a rich field of architectural technique that we hope can be reinvigorated by computation and our most intriguing material invention.



2 Plastic Stereotomy Pavilion—Perspective showing the volumetric assembly with integrated illumination and vividly finished plastic and foam courses

IMAGE CREDITS

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JUSTIN DILES is currently an Assistant Professor at The Knowlton School of Architecture at the The Ohio State University where he previously held the Howard E. LeFevre Emerging Practitioner Fellowship. He received his Bachelor's Degree in Architecture from Washington University in St. Louis and his Master of Architecture from the University of Pennsylvania, where he was awarded the Faculty Prize for distinguished work. He previously taught at The University of Applied Arts, Vienna in the studio of Greg Lynn and at the University of Pennsylvania as a lecturer in the post-professional program.