

Category: 2 - Meeting the Challenge of a Difficult Job - Specialty Contractor

Specialty Contractor: Living Design Studios

Project Name: Bulkhead Cladding and Skylight Baffle System, Anschutz Health and Sciences Building - New construction of 7-level, 394,419 sq. ft. building by JE Dunn Construction Group with Anderson Mason Dale (AMD) and ZGF Architects to be completed Fall of 2021

Overview Statement:

There were significant challenges to the design/build project of the bulkhead cladding and skylight baffle system at the Anschutz Health and Sciences Building. The final shop and install drawings could not be produced until the as-built conditions of the atrium skylights, purlins, and trusses were measured and captured. As field conditions permitted, the atrium was 3D scanned which enabled the team to design in real time with construction, creating a model in cadence with the design intent. The complex atrium installation challenged our team to invent tools and processes to hoist and install at 110 feet above the finished floor. This was compounded by the 85-day installation window. At multiple times, our work was considered critical path and the schedule was regularly compressed adding pressure on the team.

With all that we faced, Living Design Studios overcame the obstacles and successfully completed the project ahead of schedule with glowing reviews.

Project Narrative:

The bulkheads were designed to reduce the span of the skylights and allow for smoke evacuation intake while mimicking the angles and design aesthetic of the overall building. Living Design Studios changed the cladding material from steel to aluminum, reducing the weight significantly.

The baffles were designed in cloud-like shapes using a parametric process where a 3D model was leveraged to assign a value to the floors and elevations of the atrium to dictate the sunlight/glare levels. Originally specified as aluminum, Living Design Studios recommended 3form for the baffles, which is an environmentally sustainable product that is semi-transparent and diffuses direct sunlight. A full-sized mock-up was built for review and adjustments were made to improve constructability prior to fabrication.

Once the site was ready, measured and the final design was approved, the team began organizing and installing hundreds of individually shaped waterjet cut panels. It's important to note this was a functional art piece that needed to be treated with great care during the fabrication, delivery, and installation process. Comprised of mechanical engineers to rope access certified installers, Living

Design Studios' onsite team worked in two lifts in frigid temperatures at times. No matter what the conditions were, the team consistently made safety the highest priority for our own crew and other trades working directly below the lifts.

Every design/build project has its issues, but this was particularly challenging because our work occurred at 110 feet above the building floor with an 85-day completion window. The end-result is a prominent focal point in the atrium that will contribute to the well-being of the staff, students, and patients as they experience and occupy the building for years to come.















