CU Boulder Village Center-Dining & Community Commons

Best Building Project – Specialty Contractor $2 - $6 Million

University of Colorado Boulder was looking to upgrade services they provide to students at the Darley Commons building inside Williams Village, a fifteen-minute walk from the main campus. Students who have been assigned to live here feel as if they are living off-campus and that they are missing all the amenities of the main campus. CU wanted to change that perspective and make Williams Village a destination that allowed students an area to congregate, enjoy great food and have a space to call their own. Built in 1969, the Darley Commons was an iconic building but too small, lacked modern amenities and had significant deficiencies that would cost a considerable amount to refurbish.

KSQ Architects was tasked with leading the design of the new Village Center to not only meet student and campus needs but be complementary to the modernist towers within Williams Village, offer views of the Flatiron Mountains and aim for LEED Platinum status, the highest ranking green certification. Working in a design-build partnership with GE Johnson the beginning of a 109,000-square-foot building started in July 2015 with services and features including;

- A state-of-the-art dining center featuring the option to blend a smoothie while pedaling a bike.
- A late-night café featuring a stage and outdoor fire pit
- Indoor and outdoor seating
- A large, divisible multipurpose room with separate break out space
- Free tutoring office suite for on campus residents
- Study and lounge areas
- A new Wardenburg Health Center Annex with three clinic and counseling rooms
- UPS store

- 3,000-square-foot greenhouse that will produce year-round fresh greens for the salad bar and dining center.

GE Johnson awarded the $2.2 Million drywall package to Interior Contractors Inc., LLC (ICI.) The scope of work included exterior framing, sheathing, air barrier, interior framing, spray foam, drywall and finishing.

EXCELLENCE IN PROJECT EXECUTION AND MANAGEMENT/TEAM APPROACH

KSQ Architects worked with multiple design consultants to create very different looks for each space but one consistent theme was in the curved soffits. The soffits went around every individual restaurant, dining station and included a light cove. The challenge came when we needed to frame these soffits as the amount of MEP overhead for kitchen areas created less space. ICI rose to the challenge:

- Once MEP overhead was installed ICI framed the soffits around all pipes and ducts. This was slower for ICI but allowed MEP trades to install faster and no rework had to be done. The use of this sequencing provided open working space and cost savings for all trades involved.

SOLUTIONS OF SPECIAL PROJECTS

The project had a 16-month construction schedule with ICI's work being in the last 10 months. With the project going through a design build process, it did slow down progression of work creating trade stacking as the project got closer to completion date. To stay on track and assure detail and intricacy, GE Johnson, ICI and other trade partners started daily morning walks. These were vital to the project to assure everyone was in the correct area, discuss what was delaying each trade and improve production. Some of the challenges the team came across and could resolve quickly were;

- At the 2nd floor, soffits and skylights were still needing to be finished while floor polishing was going on. Both trades would coordinate flow of work and so ICI could work in areas before and after flooring was completed and keep both crews on schedule.
- At some light coves, once the light was installed it was shining directly vertical into the ceiling tile. KSQ Architects wanted it to shine away from the soffit towards the center of

the grid ceiling. Daily walks allowed for the team to help determine a framing idea to allow the light to focus in the direction desired.

- A rounded soffit at the grill space had millwork and needed all threads installed to be supported. ICI framed portions of the soffit while leaving out space for install of all threads to the decking. With the speed of project, this could have been a cost impact if not managed correctly.
- Sequencing of S lights with chain curtains. ICI had to work with Encore Electric to coordinate multiple mobilizations to frame main ceiling, rough in first light feature, frame another drop ceiling and install second light feature, which allowed ICI to finish the ceiling and have chain curtains install.

CONSTRUCTION INNOVATIONS/STATE OF THE ART ADVANCEMENT

The exterior wall system originally called for Thermax sheathing with Tyvek Commercial Wrap but CU Boulder representatives were open to finding a better system. Three options were offered up:

1. Thermax Xarmor which works as the sheathing, rigid insulation, air barrier and has a 15-year thermal and water resistive warranty.
2. Thermax CI which works as the sheathing, rigid insulation, air barrier and has a 15-year thermal warranty.
3. Traditional sheathing, liquid air barrier and rigid insulation.

CU Boulder representatives were not comfortable with Thermax Xarmor and CI because how the air barrier is achieved, sealing at joints and screws only. They wanted to use Thermax sheathing but with a liquid air barrier that would pass a pull test and have a minimum 10-year warranty. This type of system had not been fully tested or used on other buildings, so finding the solution became a challenge.

ICI started speaking to manufacturer representatives for Thermax and were notified that there has been some testing of liquid air barrier over aluminum faced insulation board. First call was to W.R. Grace to see if they would warranty Perm-A-Barrier VPL over Thermax sheathing, as this is a product ICI uses a great deal of, however they would not warranty the system. Second call, to see if DOW Defendair 200 could be used as Thermax sheathing is a DOW product, but in

testing on an exterior mockup it would not adhere. Last was a call to Dryvit and they offered up Backstop NT Spray. It was tested on the mockup and adhered, passed a pull test and Dryvit would give a 10-year warranty for the system.

During construction, as Thermax sheathing and Backstop NT was a new system, there was no drawn details on how everything comes together. There was a lot of collaboration between ICI, the Dryvit Representative, and KSQ to assure installation would meet requirements of other traditional or known systems.

ENVIRONMENTAL/SAFETY

With the trade stacking that occurred, crews were working on-top, next and below each other. Along with large pieces of kitchen equipment, ducts, pipes, drywall and other material being stored within the building. It was daily goal to assure that material was in corners or in rooms that were not being worked it. Trash was removed quickly after it was found, swept and/or cut to assure crews had clean areas to work in. ICI's superintendent and foreman walked constantly and did weekly safety talks. For the amount of manpower and work that was going on in small spaces, ICI came out of the project with **NO** lost time accidents.

EXCELLENCE IN CLIENT SERVICE AND/OR CONTRIBUTION TO THE COMMUNITY

When ICI's was award this contract by GE Johnson, it was the company's largest. ICI stepped up to the challenge to build this innovative space by providing GE Johnson and CU Boulder with the best team members.

- Weather was starting to play a major role in the schedule. By starting three weeks early, ICI was able to pick up some of the lost time that had already occurred but also manage weather delays that occurred while on-site.
- Weekly picture maps were sent to GE Johnson showing areas where ICI was waiting for more information, being held up by other trades, or needed to go back to complete. As the schedule became more in depth, putting completion dates on the map helped manage ICI crews but also trades coming behind.

As commendation for our work, ICI was awarded the Association of Walls and Ceilings Industry Colorado Excellence in Construction Quality Award 2017 – Commercial $1,000,000 + for the work on this project.

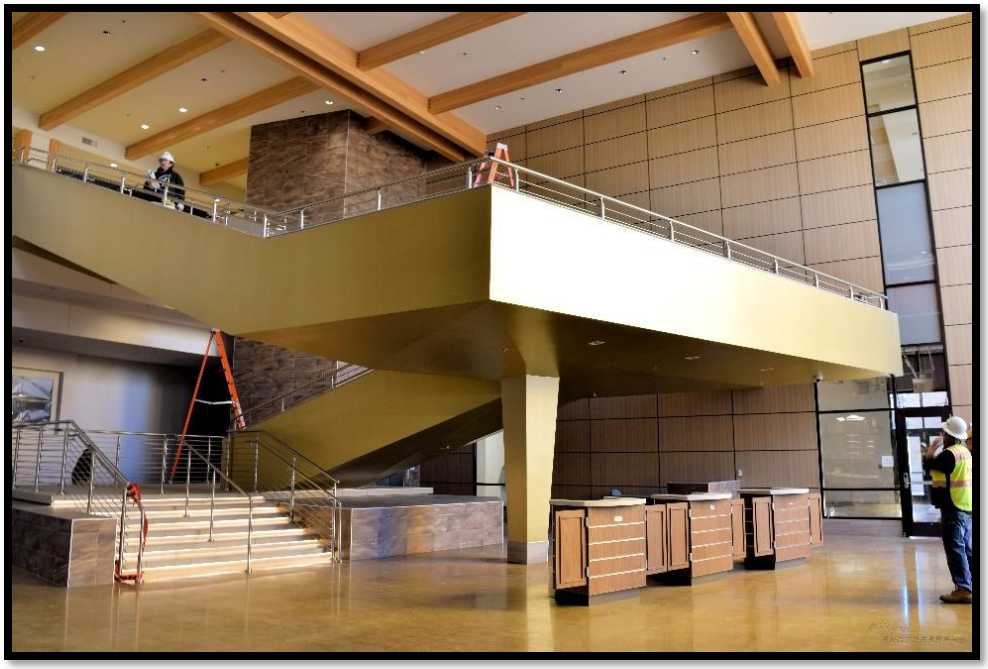
THAT'S A WRAP

The project that CU Boulder set us out on was a challenge but one that ICI was more than proud and ready to take on. Each day an obstacle was met with a team that gave its best to finish this project on time and with every detail that CU was looking for. The end product is exactly what we wanted to accomplish and a product that not only kept everyone safe but a place for current and future students to call home.

Finished soffit

Grand dining room

Exterior entrance

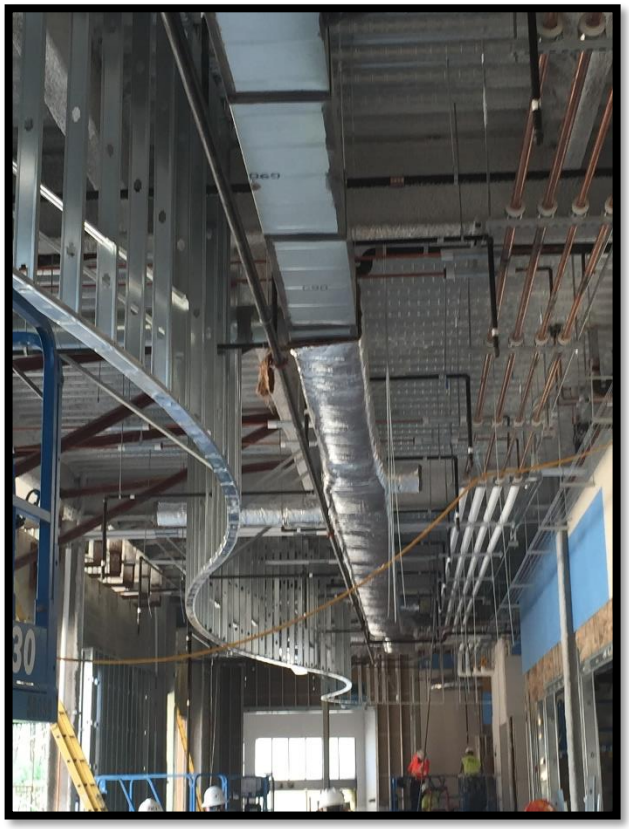


Grand staircase

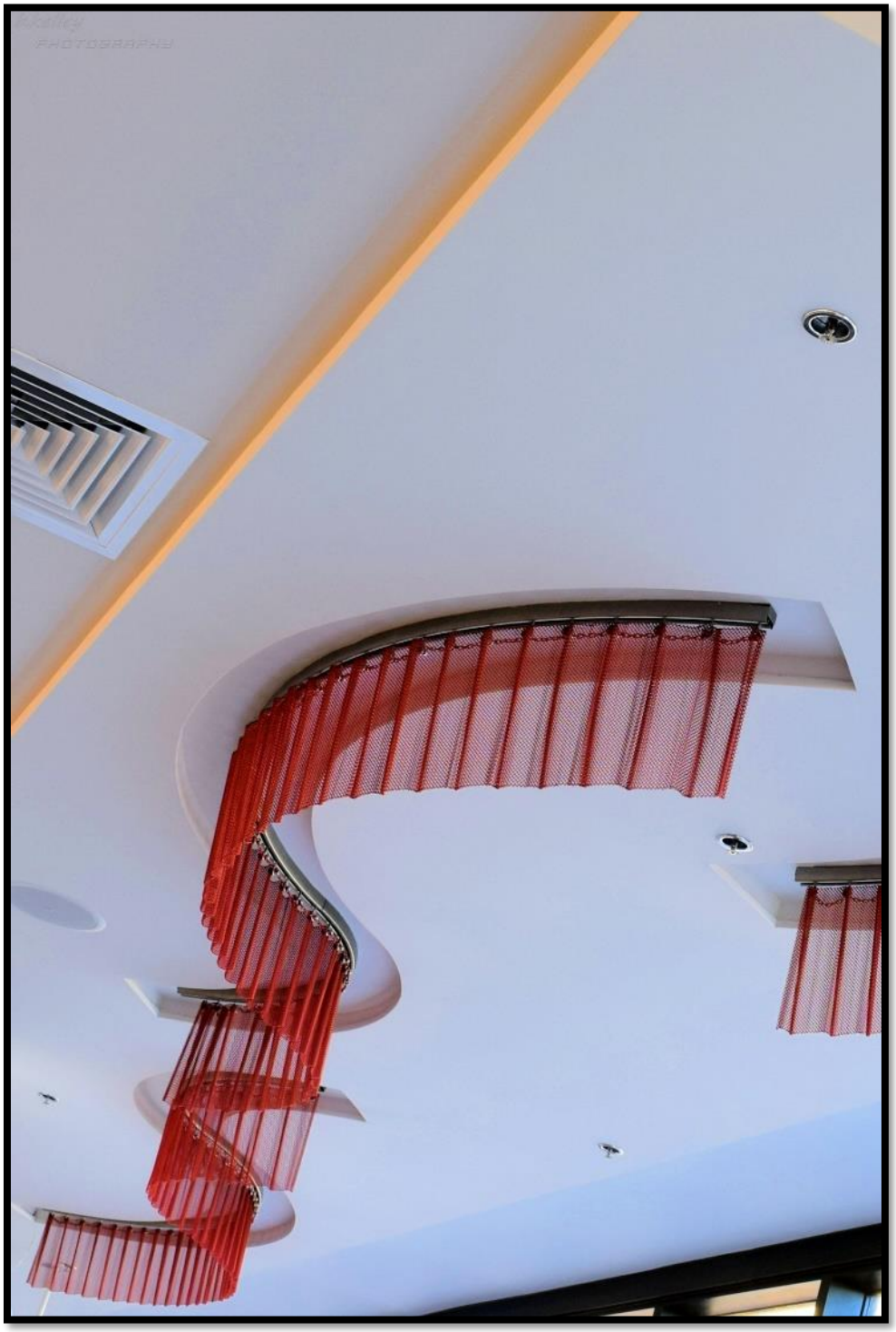
Soffit framing at grill

Finished serpentine soffit

Curved soffit above breakfast bar



Serpentine soffit framing



Finished "S" light fixture