

## **Category 4 - Best Building Project – Specialty Contractor (Under \$2 Million)**

**Contractor: Heartland Acoustics & Interiors**

**Project Name: UCD Academic Building 1**

The downtown campus of the University of Colorado Denver has had a substantial increase in students and the rapid growth has caused a need for a large student academic building. So when the University decided to build the new academic building, they went all out. The new UCD Academic Building 1 built in part by Heartland Acoustics & Interiors is over 150,000 square feet and consists of large instructional lecture halls, academic department office space and student affair functions. The building has a mix of brick and limestone walls, modern aluminum panels and dark wood accents to make it feel like a modern work space. The project plays a key role in the evolution of the University of Colorado Denver and now serves as a focal point for downtown student life. The new building is an architectural masterpiece that makes a distinctive first impression to all visitors, students and alumni making it worthy of the AGC 2014 ACE Award.

Large complex projects are nothing new to Heartland Acoustics & Interiors, but this building presented some very unique challenges. Since this higher learning academic building was built to promote the university brand and serve as a source of pride for students and alumni, it's no surprise that the wall and ceiling products that were used in the construction help define the building as such. Over 17,000 square feet of Rulon wood ceiling and wood wall treatments add a rich warm feeling to the design features throughout the building. Aside from the massive quantity of wood ceiling and wall finishes, Heartland Acoustics & Interiors also faced many challenges building the complex designs. Linear wood walls and coordinating wood grille walls showcase and integrate with the audio visual systems installed at the Lynx Center and in the Tower Conference Rooms. These technical installations required Heartland Acoustics & Interiors' most veteran installers to ensure the finished products were put in correctly and met the high standards of the owner and architect.

The building also houses multiple hi-tech conference spaces which required daily coordination meetings with other trades to help insure that the installation went smoothly. Bold features such as the Center Conference Room multi-sloped linear wood ceiling that up turned into a grand skylight feature. Numerous exterior window alcoves required linear wood that had to seamlessly integrate with exterior windows and terminate into the interior masonry. Heartland Acoustics & Interiors installed 17,500 square feet of Accent Ceilings metal ceiling system. The original design called for 2x8 real wood

ceiling panels to be used on the exterior canopies of the building. Heartland Acoustics & Interiors provided an alternate solution using metal panels with a painted finish to emulate the look of real wood. The alternate product provided lower maintenance that would withstand the environmental conditions of an exterior system. The large 2x8 metal panels were installed on the interior common area ceilings as well as the exterior roof canopies. Both the interior ceilings and exterior canopies, which wrap around the majority of the building, were laid out in a running bond configuration. The architect wanted to be sure that the running bond layout be carried from the interior ceilings to the exterior ceilings to give the appearance of a continuous visual look. As a result, layout was crucial to keep the interior and exterior systems aligned due to the angled glass exterior walls. The exterior ceiling support system was designed to be constructed using a standard ceiling suspension grid and wind uplift compression posts but had to be redesigned due to a structural change during construction. This change required a complete re-engineering of the support system to allow for the structural changes and still be built to meet the strict wind uplift and code requirements. The new support system included heavy gauge hat channels and adjustment brackets to allow for leveling. The 2x8 exterior ceiling panels then were designed, constructed, finished, and installed with the use of non-exposed fasteners to give the finished appearance of being installed into a standard ceiling grid so it would match the look of the interior ceiling system.

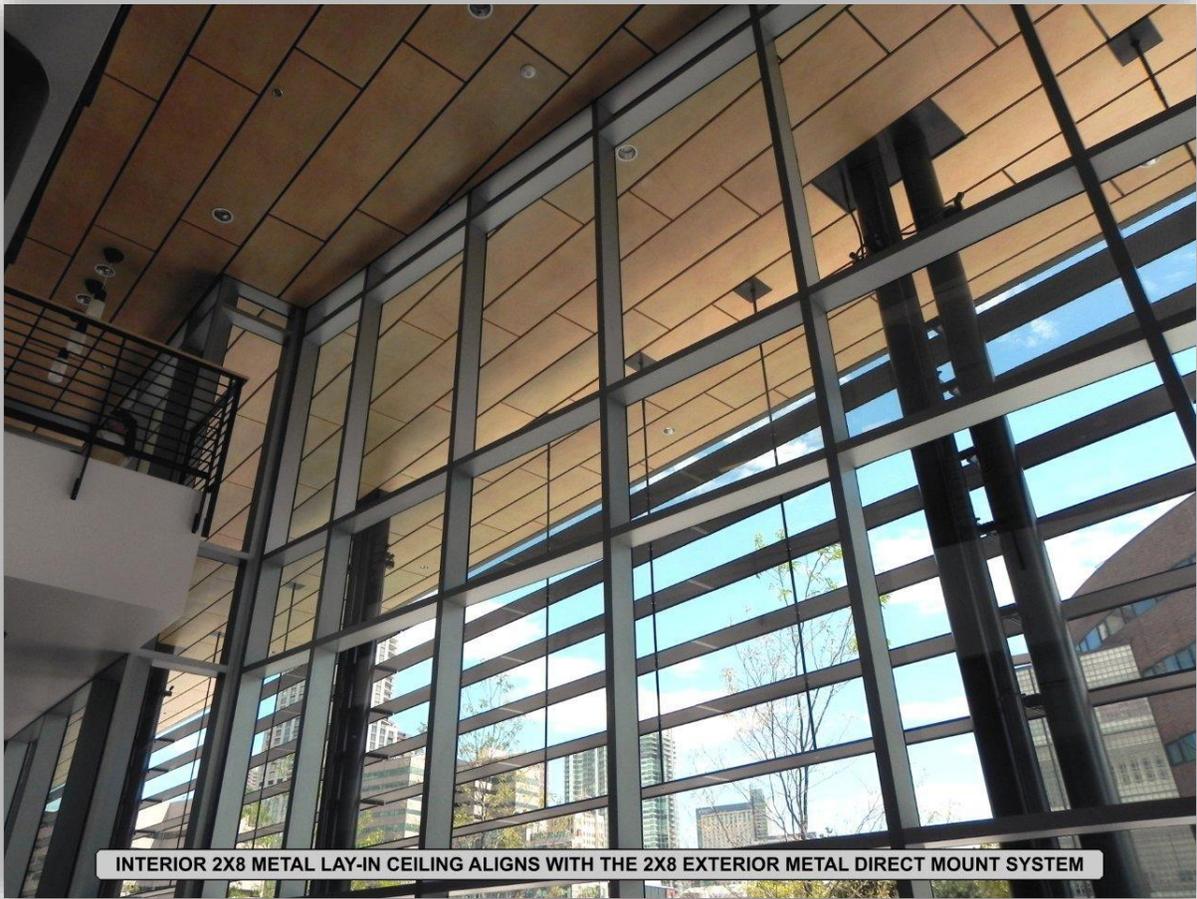
Heartland Acoustics & Interiors installed nearly 100,000 square feet of acoustical ceiling systems throughout the building and 1,300 square feet of acoustical wall treatments. The auditorium, learning labs, and general educational rooms included Armstrong high-NRC acoustical ceilings, Wall Technology acoustical wall panels, and a large Rulon wood ceiling cloud. Due to manufacturing delays with the wood ceiling materials, all of the wood ceilings had to be installed on top of finished floors. An additional challenge came into play at the learning lab ceilings since the rooms had stepped floors and seating already installed requiring Heartland Acoustics & Interiors to use custom tower scaffolding to complete the installation. The manufacturing delays also meant that most of the wood systems had to be installed at the end of the project requiring extra care to be taken to ensure the protection of the surrounding completed finishes.

Safety is Heartland Acoustics & Interiors' top priority and their entire project team was involved in the management of their Project Safety Plan to assure accountability and enforcement. Heartland Acoustics & Interiors is a member of an exclusive insurance risk-sharing plan and they have the best loss ratio in their group at less than 1%. All onsite employees were required to read and acknowledge understanding of the Project Safety Plan, attend and participate in safety meetings, and wear all required PPE including OSHA approved safety shirts and vests. Heartland's Safety Manager conducted weekly job walks with

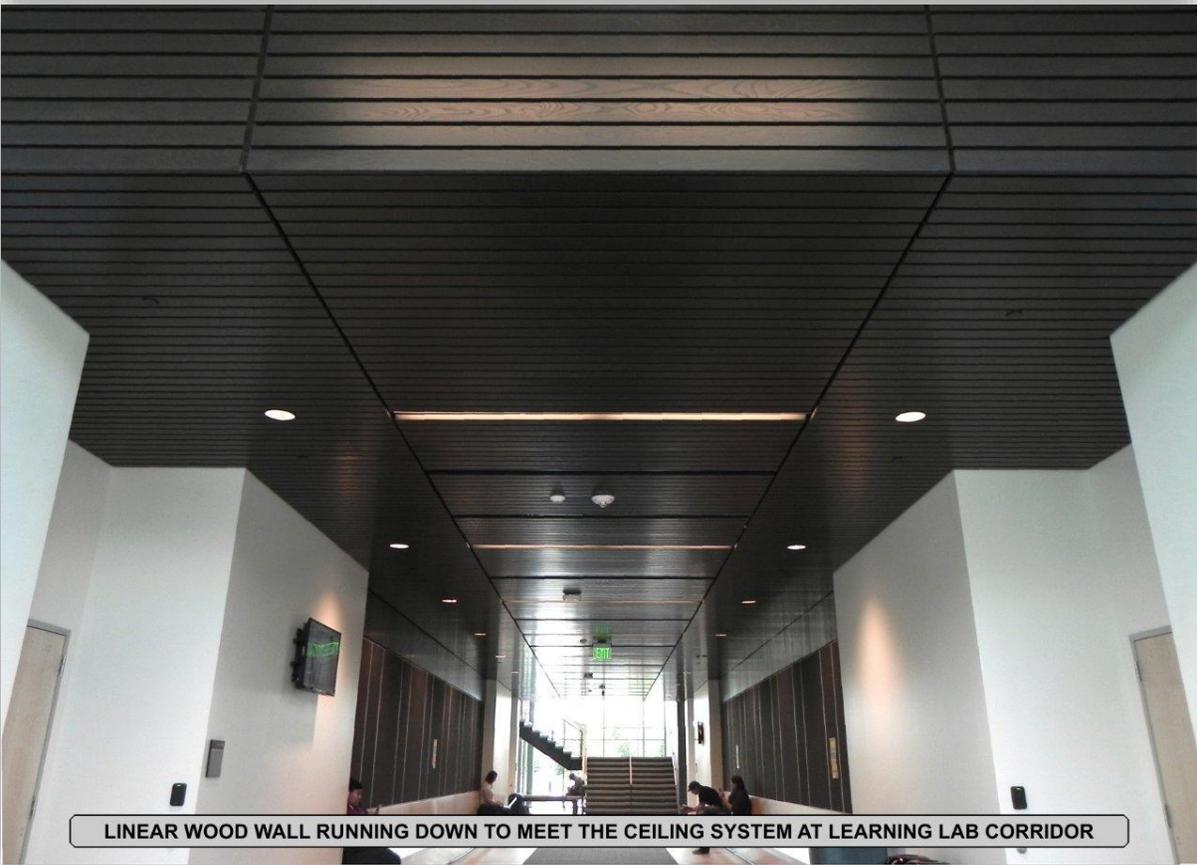
the lead Foreman to address any concerns or changes needed. Visits were documented in writing and submitted to Heartland's General Manager and Project Manager. Random unannounced visits were also conducted by the Safety Manager twice a month. Heartland's Superintendent conducted weekly toolbox safety talks with the crew and provided signed acknowledgements to the Safety Manager. The Lead Foreman was responsible for the onsite management and enforcement of the plan and alerted all potential safety hazards and reported all injuries promptly. The proof that the Project Safety Plan was a success came from the fact that the Heartland crews worked over 11,500 man hours onsite with no injuries.

The Field Superintendent and Lead Foreman for Heartland Acoustics & Interiors' did an outstanding job coordinating with Saunders Construction and other trades to manage all of the field installers and build this large project over a seven month period. The entire team at Heartland met the high standards of this project and worked collaboratively with Saunders Construction and Anderson Mason Dale Architects to collectively brainstorm solutions to overcome issues with products, schedule and coordination.

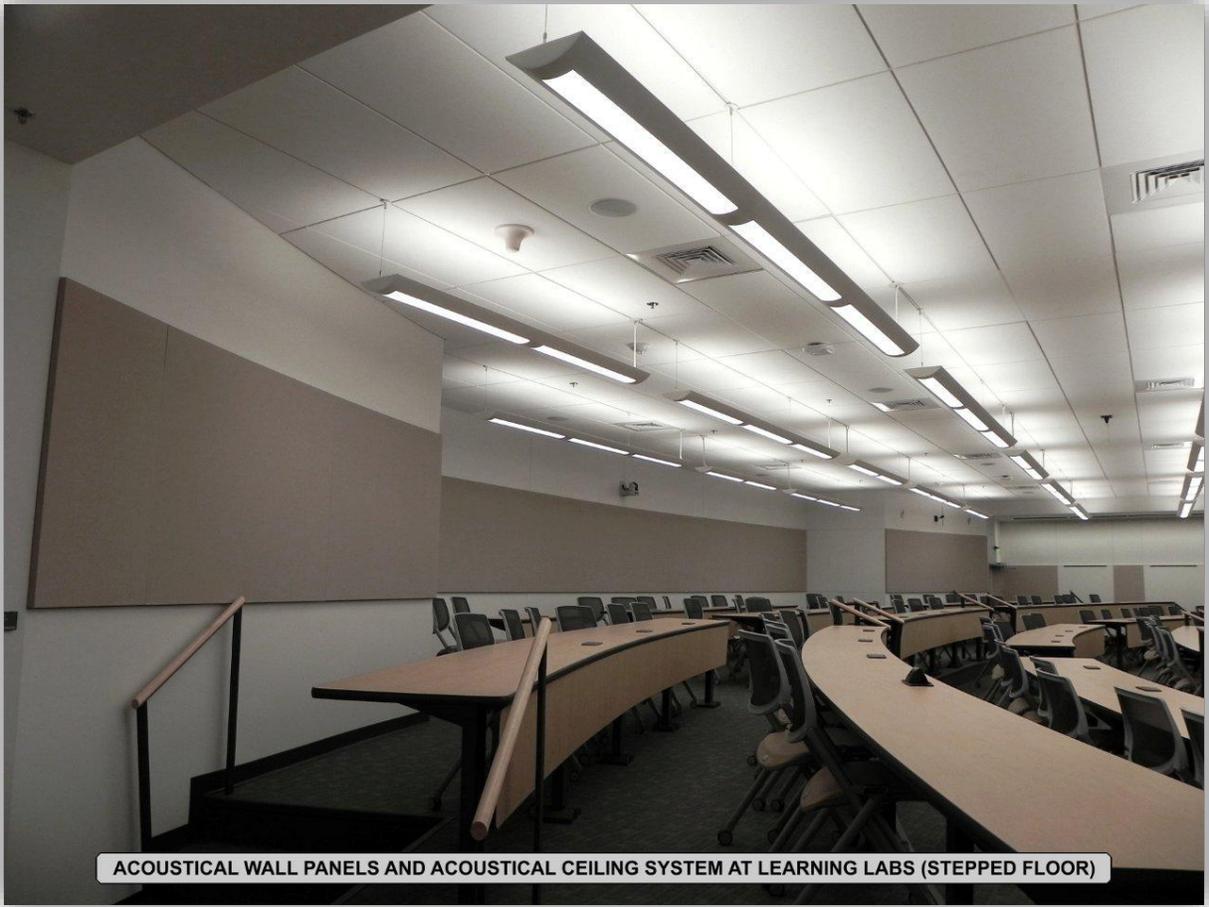
This new building is not just another higher education building full of computer labs and lecture halls—it's an innovative space designed specifically to benefit the students. The building is seeking LEED Gold certification from the U.S. Green Building Council and has quickly become a city and university landmark with a strong identity for the campus.



INTERIOR 2X8 METAL LAY-IN CEILING ALIGNS WITH THE 2X8 EXTERIOR METAL DIRECT MOUNT SYSTEM



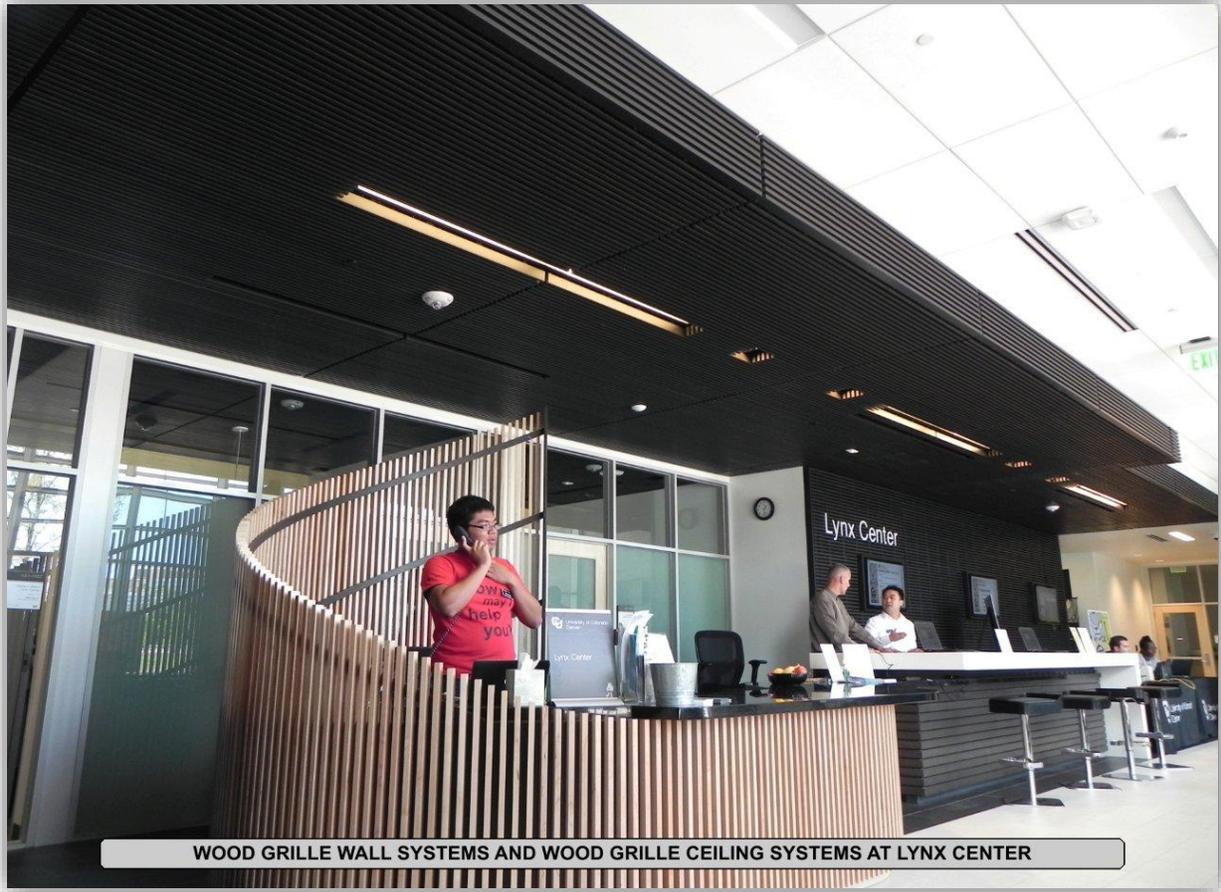
LINEAR WOOD WALL RUNNING DOWN TO MEET THE CEILING SYSTEM AT LEARNING LAB CORRIDOR



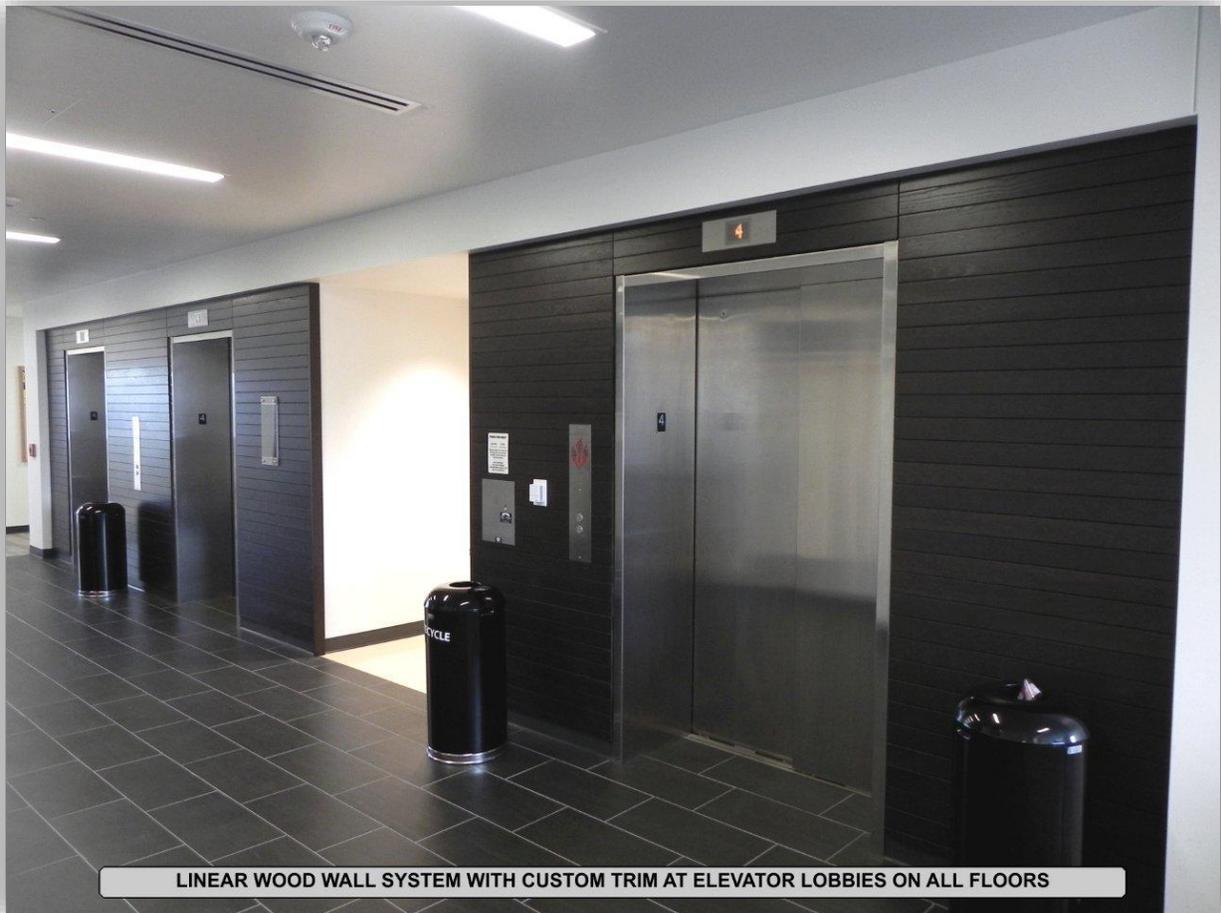
ACOUSTICAL WALL PANELS AND ACOUSTICAL CEILING SYSTEM AT LEARNING LABS (STEPPED FLOOR)



MULTI-SLOPED CEILING GRID SYSTEM INSTALLED AT THE CENTER CONFERENCE ROOM



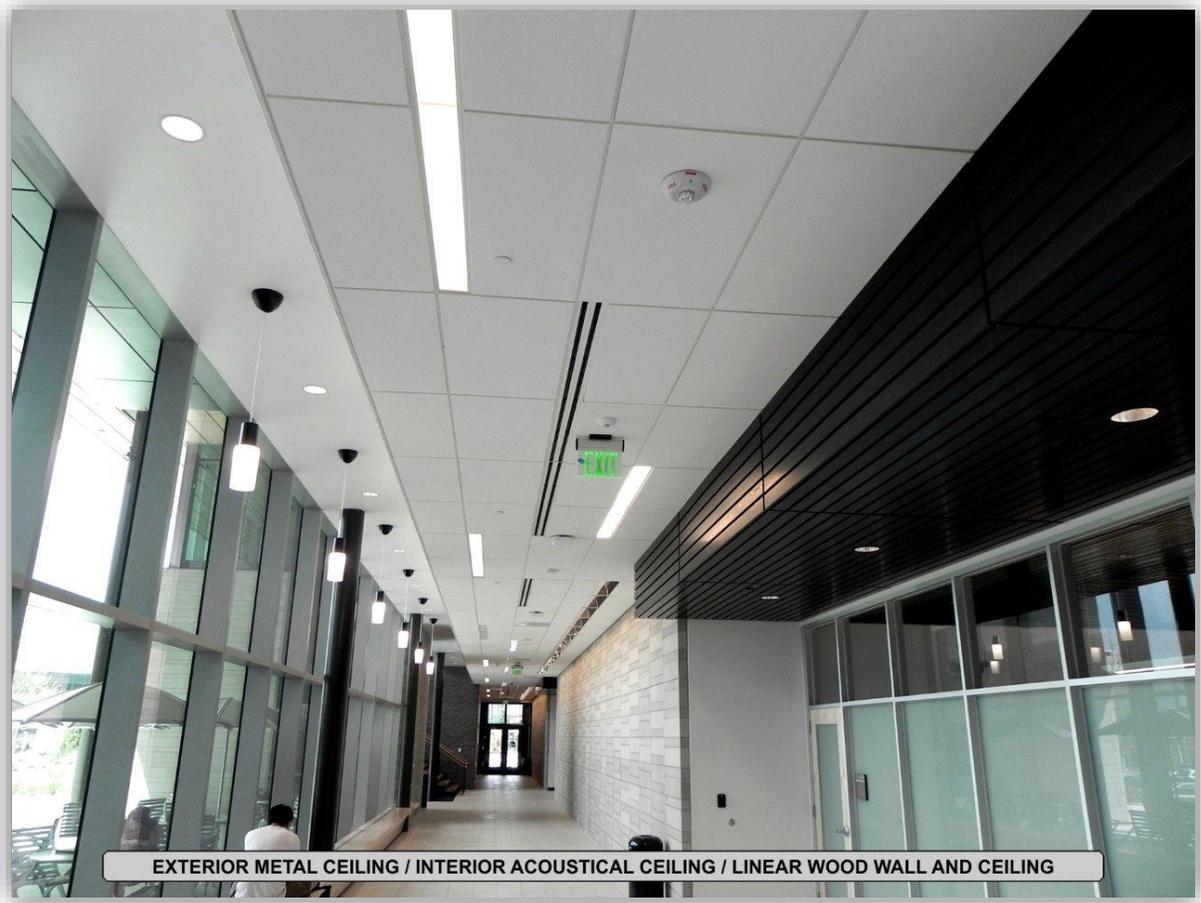
WOOD GRILLE WALL SYSTEMS AND WOOD GRILLE CEILING SYSTEMS AT LYNX CENTER



LINEAR WOOD WALL SYSTEM WITH CUSTOM TRIM AT ELEVATOR LOBBIES ON ALL FLOORS



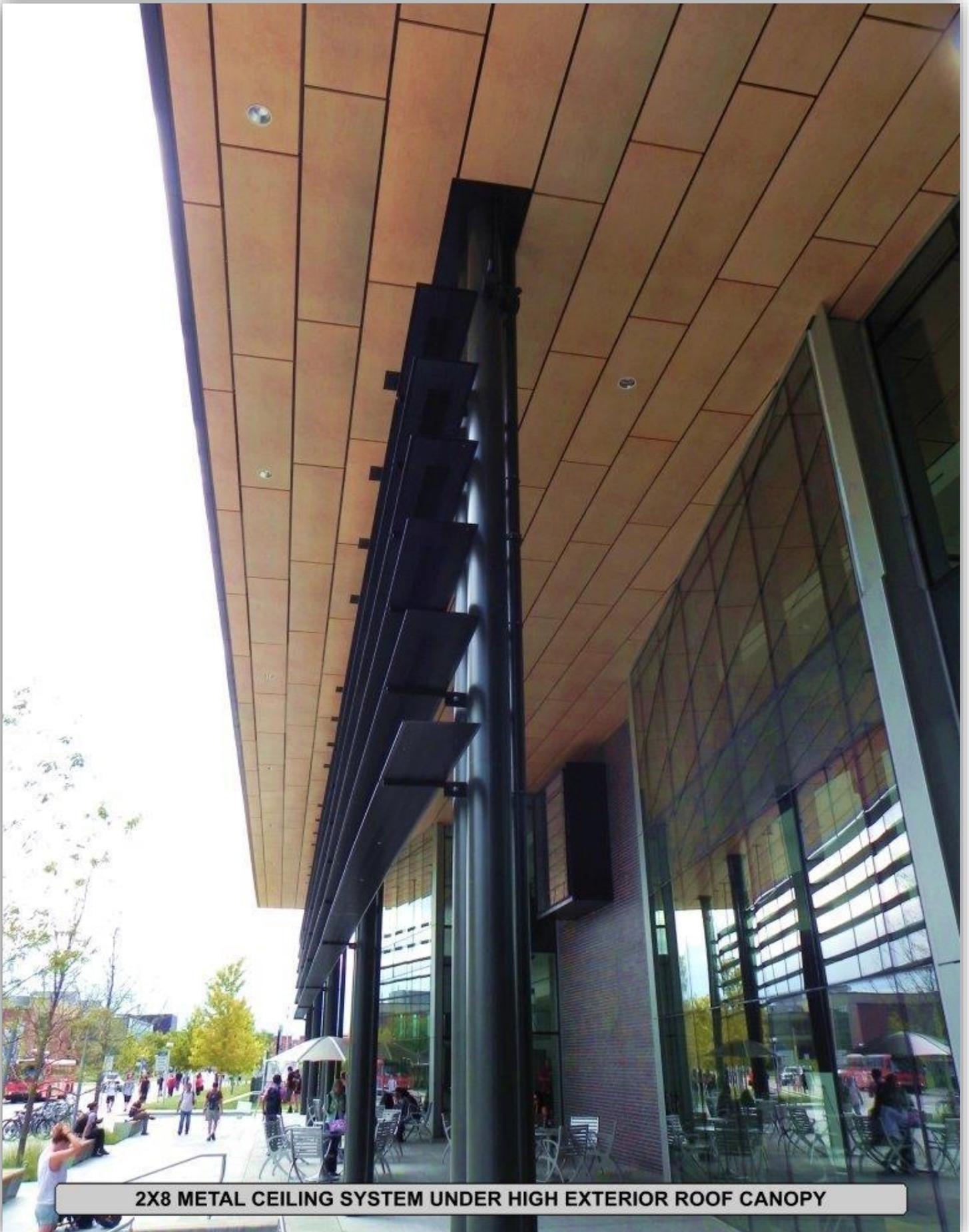
LINEAR WOOD CEILING SYSTEM INSTALLED UNDER ACOUSTICAL CEILING SYSTEM AT AUDITORIUM



EXTERIOR METAL CEILING / INTERIOR ACOUSTICAL CEILING / LINEAR WOOD WALL AND CEILING



**2X8 METAL CEILING AND LINEAR WOOD CEILING AT GRAND STAIRS**



**2X8 METAL CEILING SYSTEM UNDER HIGH EXTERIOR ROOF CANOPY**