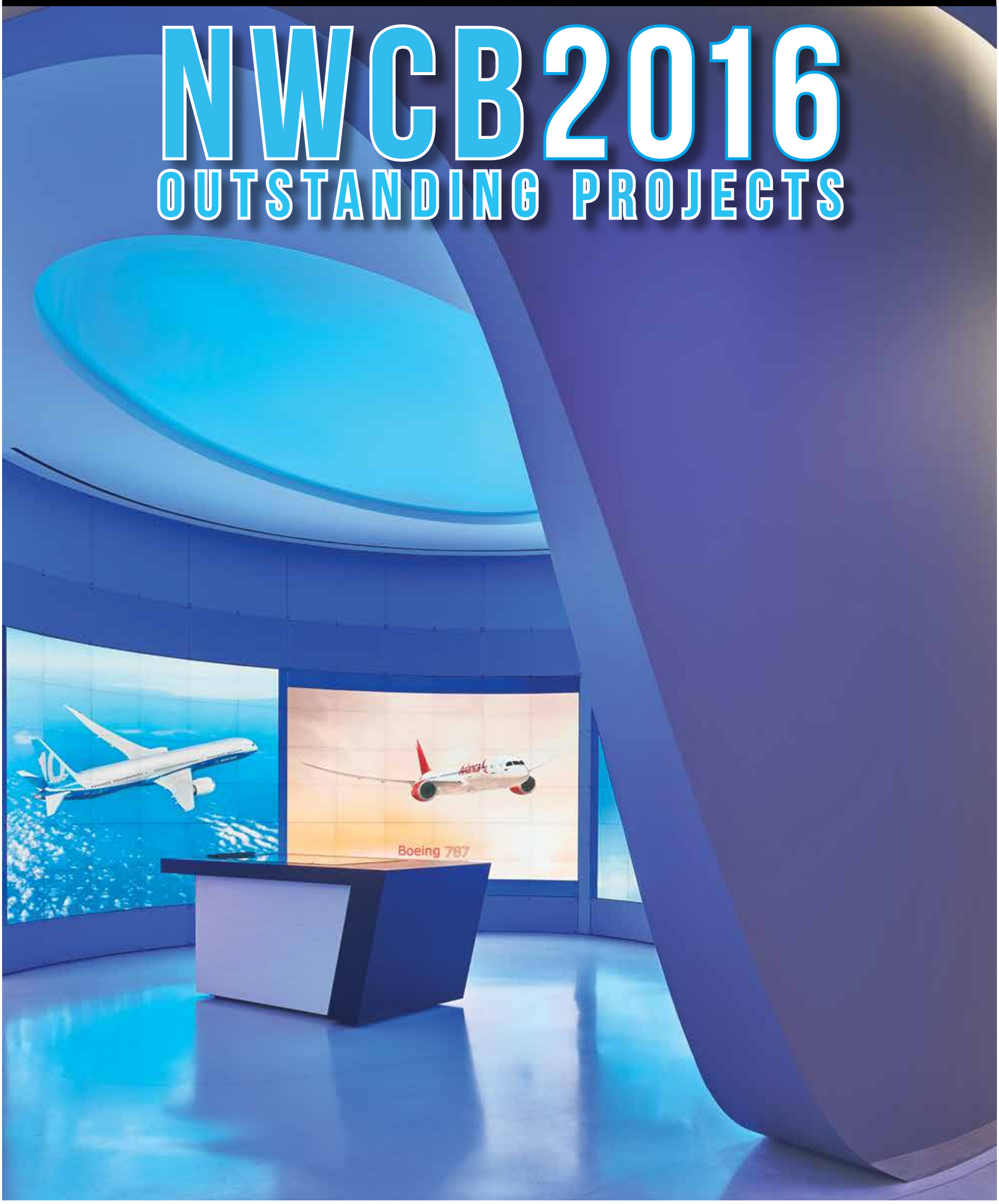
NWCB 2016
OUTSTANDING PROJECTS



NWCB HONORS OUTSTANDING PROJECTS

The Northwest Wall and Ceiling Bureau on April 28 handed out 17 awards for outstanding wall and ceiling projects at the association's annual convention and trade show in San Diego.

Awards were given for interior and exterior finishes on commercial and residential projects. They also were given for light-gauge steel framing, suspended ceilings, exterior panelization and renovations/restorations. Nine awards were given to projects in Oregon, seven in Washington and one in Alaska.

Multiple award winners were Western Partitions, Performance Contracting, Applied Restoration and Expert Drywall.

Two projects — Oregon State University Learning Innovation Center and Boeing Customer Experience Center — won in two categories.

Projects were judged on design, jobsite innovation and/or conditions, quality of workmanship, use of materials and overall effect.

The judges were retired architects John Greiner and Ray Ernst; NWCB Director of Technical Services Terry Kastner; former NWCB executive director and industry expert Bob Drury; NWCB Executive Director Mark Eisenmann; and John Killin, executive director of the Associated Wall and Ceiling Contractors of Oregon and Southwest Washington.

2016 OUTSTANDING PROJECT OF THE YEAR AWARDS

WASHINGTON

Suspended Ceiling Commercial
Auburn High School
modernization and reconstruction
Performance Contracting

Renovation/Restoration Commercial
Allen Institute
Performance Contracting

Light-Gauge Steel Framing Commercial
Boeing Customer Experience Center
Expert Drywall

Interior Commercial
Boeing Customer Experience Center
Expert Drywall

Exterior Commercial
Marriott Residence Inn University District
Applied Restoration

Exterior Panelization
Block 45
Western Partitions

EASTERN WASHINGTON

Interior Commercial
Gonzaga University
John J. Hemmingson Center
Western Partitions

OREGON

Suspended Ceiling Commercial
Portland Community College
Rock Creek Building 5 addition
Performance Contracting

Light-Gauge Steel Framing Commercial
Oregon State University
Learning Innovation Center
Western Partitions

Interior Restoration Commercial
Oregon State University
Strand AG Hall renovation
Western Partitions

Interior Renovation Commercial
Lane Community College CLASS
The Harver Co.

Interior Residential
University of Oregon
The Hub student housing
Western Partitions

Interior Commercial
Oregon State University
Learning Innovation Center
Western Partitions

Exterior Commercial
University of Oregon
Student Recreation Center
Western Partitions

Exterior Panelization
Cameron Apartments
Billings and Cronn Co.

Exterior Renovation Commercial
Tigard City Hall exterior wrap
Applied Restoration

ALASKA

Exterior Commercial
Stanton Optical
Bradshaw & Associates

ON THE COVER

Boeing's Customer Experience Center won two awards — for interiors and light-gauge steel framing — from the Northwest Wall & Ceiling Bureau.

PHOTO BY BENJAMIN BENSCHNEIDER

INSIDE

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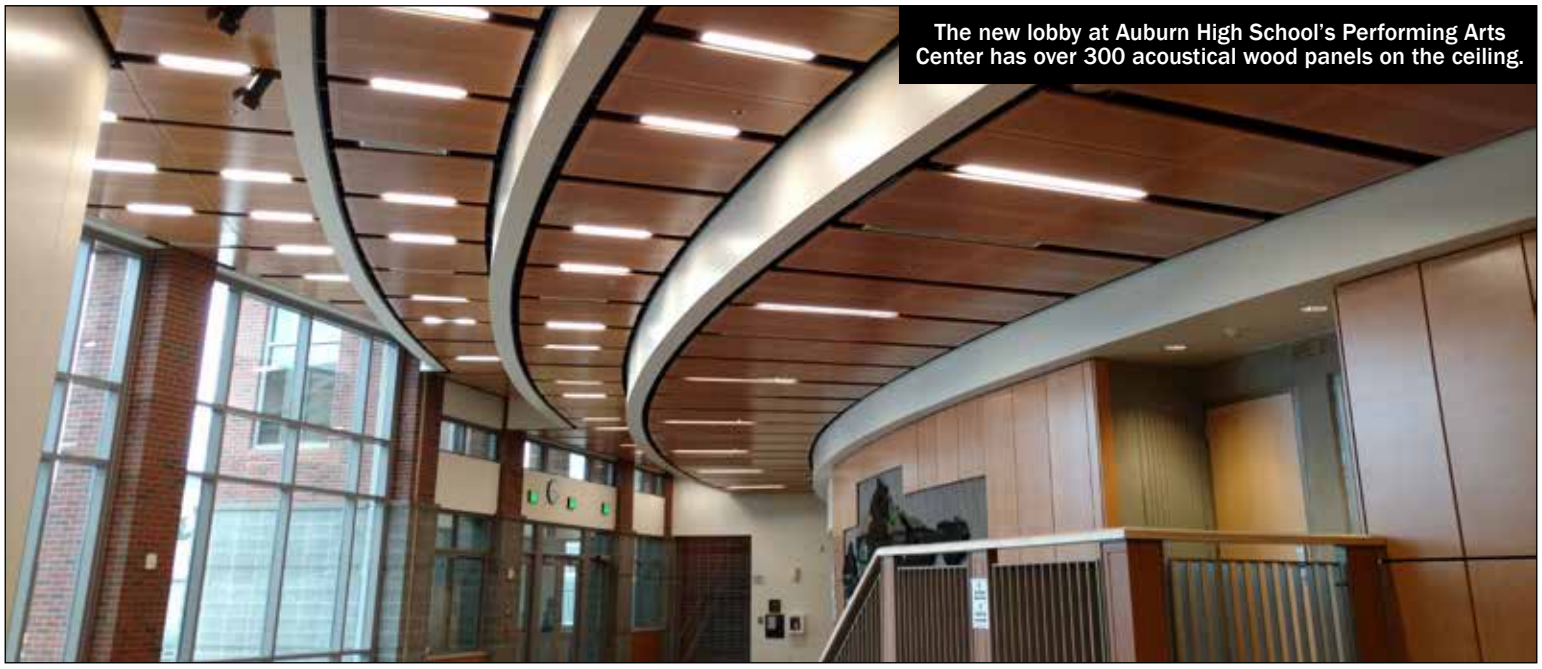


The new lobby at Auburn High School's Performing Arts Center has over 300 acoustical wood panels on the ceiling.

PHOTO COURTESY NWCB

SUSPENDED CEILING COMMERCIAL
WASHINGTON

Auburn High School modernization and reconstruction

Location: Auburn
Contractor: Performance Contracting
Architect: NAC Architecture
Team: GTS Interior Supply, The Supply Guy, Armstrong World Industries, Hilti, Rulon International

This project is a combination of new construction and modernizations at Auburn High School, which was built in 1950 and had several additions since.

The project replaced every building on campus with the exception of the Performing Arts Center and the Auto Shop, both of which were modernized. All buildings are now under one roof and designed to maximize energy efficiency.

The new entry and lobby to the Performing Arts Center has a radius of over 125 feet with four changes in elevation and over 300 custom-sized radial, acoustical wood panels on the ceiling. This required extensive field measurements before fabrication, as well as skilled installers.

The project was carried out in three phases with demolition and construction occurring simultaneously. This presented unique logistical challenges as well as a paramount need for communication and preplanning. Phasing it also allowed for students to remain on campus during the entire construction period.

Judge's comment: "The beauty provided by the new wood- and mineral-fiber acoustical ceilings give Auburn High School the new look it needed. The fabulous design, fabrication, and installation of the wood ceilings are an example of the enrichment acoustical products can bring to a project."

RENOVATION/RESTORATION COMMERCIAL WASHINGTON

Allen Institute

Location: Seattle
Contractor: Performance Contracting
Architect: Perkins+Will
Team: GTS Interior Supply, Salmon Bay Sand & Gravel, CertainTeed Gypsum, GC Products, Scafco Steel Stud Co., USG Building Systems

The new headquarters for Allen Institute covers 270,000 square feet and six stories in Seattle's South Lake Union neighborhood.

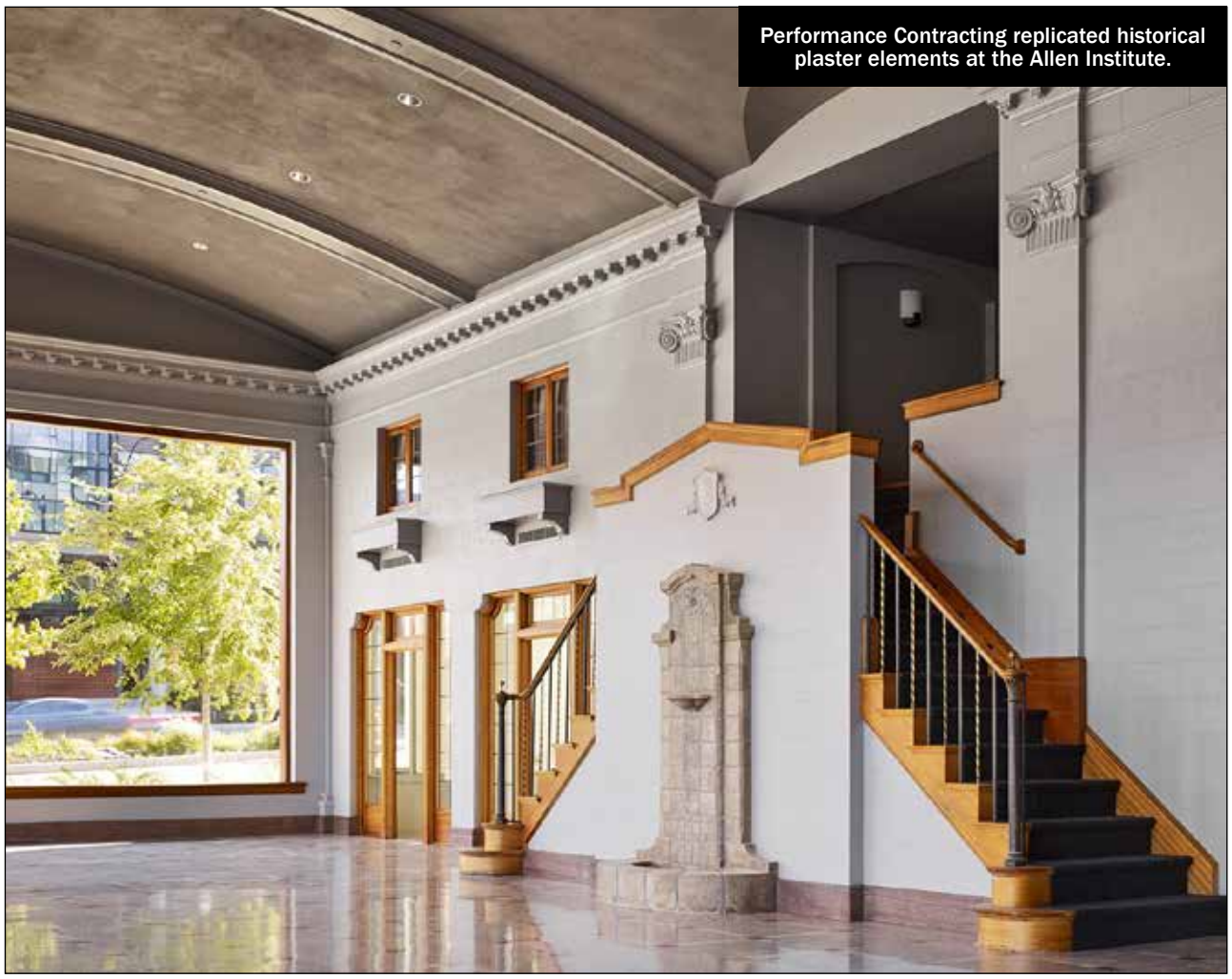
The institute features an ornate terra-cotta exterior, while the interior showroom floor display has ornamental plaster elements, columns, and veneer resembling wall tiles. The east entrance facade was created with salvaged elements from the historic Ford McKay and Pacific McKay buildings.

Before the old buildings were razed, facades and plaster elements were removed piece by piece, inventoried and placed in protective storage.

Performance Contracting's work included metal stud framing, drywall, wood ceilings, demountable glass partitions and replicated historical plaster elements. In early 2015, specialty teams from Performance Contracting unpacked and inventoried the salvaged plaster pieces at a warehouse. Plaster molds for over 400 corbels, capitals, pedestals and entablatures were precisely made.

Performance Contracting also applied over 3,500 square feet of veneer plaster and 1,800 linear feet of score lines to replicate the showroom floor. It was a meticulous and intense process to restore the facade and bring it back to its original glory.

Judge's comment: "A breathtaking integration of old and new. The finishes bring to life the character of this beautiful structure. The attention to detail employed by the project team was a key factor in replicating the beautiful historical features."



Performance Contracting replicated historical plaster elements at the Allen Institute.

PHOTO BY NICK MERRICK/HEDRICH BLESSING

INTERIOR COMMERCIAL WASHINGTON
LIGHT-GAUGE STEEL FRAMING COMMERCIAL WASHINGTON

Boeing Customer Experience Center

Location: Renton
Contractor: Expert Drywall
Architect: Teague
Team: L&W Supply, Cemco, USG Building Systems

The Boeing Customer Experience Center project was an upgrade of a warehouse shell.

The layout of the walls and ceilings used 3-D modeling from the architect's CAD designs during the design, layout and construction phases.

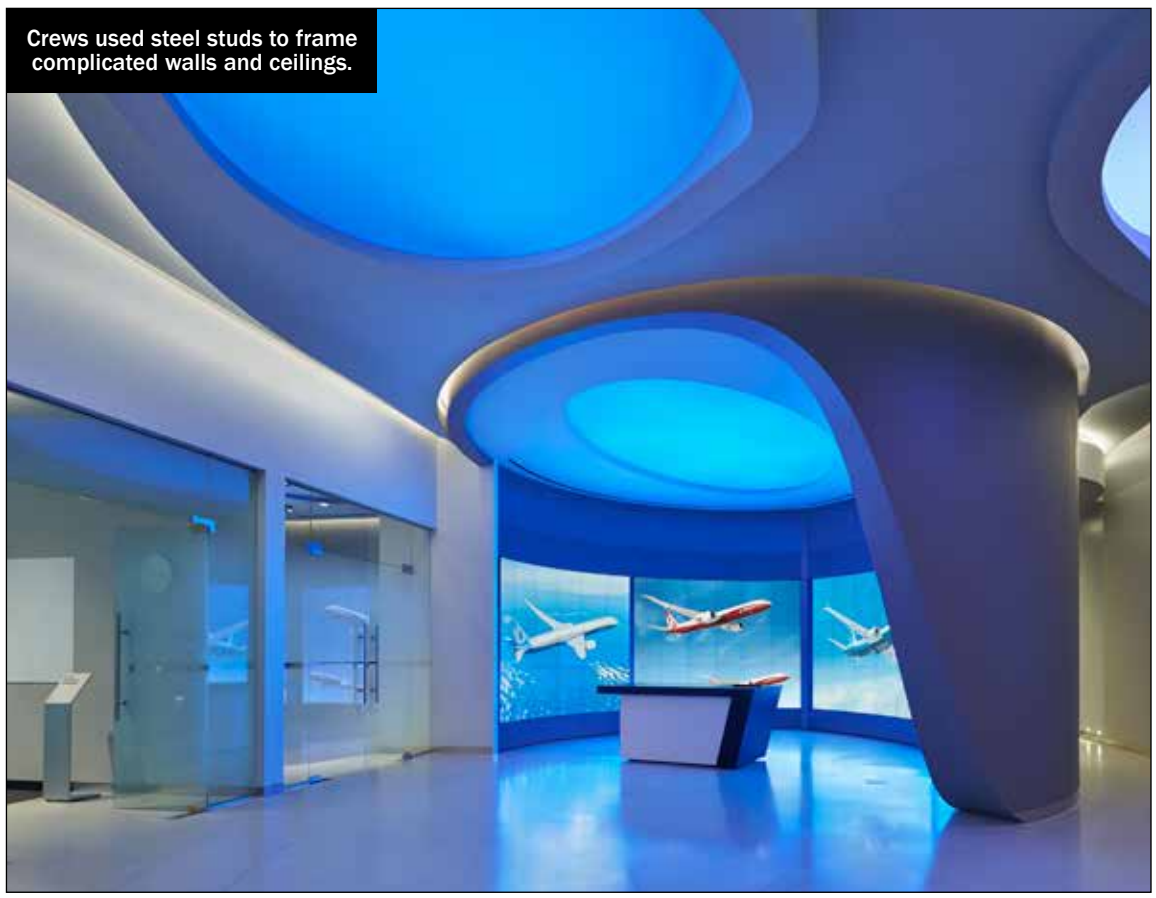
Expert Drywall used its in-house robotic layout tools to create a custom solution for the design team's goal of creating serpentine lines for the control-joint locations.

Not only do the finished drywall surfaces symbolize organic shapes, they also provide a high degree of acoustic deadening. Light-gauge sub-joists were used in the overhead space to provide support for the mechanical, electrical and plumbing components.

Another challenge was using the GypSorb panels chosen by the design team for the ceilings because they were square-edge and had perforated edges. The finishers had to make these panels appear seamless while not filling in the perforations. Once the contractor added tape-in, linear-slot diffusers and teardrop custom cutouts for lights, these perforated drywall ceilings became gypsum artwork.

Judges' comments: "If we had an award for innovation this project would have won that category as well. The unusual use of products, creative design, and quality workmanship bear testament to the creativity of the entire project team."

"How do you frame complicated, three-dimensional walls and ceilings, similar to the ones on this project, using steel studs? The craftsmen on this project showed us how it can be done. The unusual features have created an interior masterpiece."



Crews used steel studs to frame complicated walls and ceilings.

PHOTO BY BENJAMIN BENSCHNEIDER PHOTOGRAPHY

EXTERIOR COMMERCIAL WASHINGTON

Marriott Residence Inn University District

Location: Seattle
Contractor: Applied Restoration
Architect: Johnson Braund
Team: L&W Supply, Salmon Bay Sand & Gravel, Dryvit Systems

This 50,000-square-foot building was originally designed to be clad with a stucco system, thin brick veneer and composite metal panels.

Instead, Applied Restoration proposed an EIFS system that included a liquid-applied air-and-weather barrier, moisture drainage and true-continuous insulation. Three unique finishes were selected to meet energy codes and to be accepted by the city of Seattle.

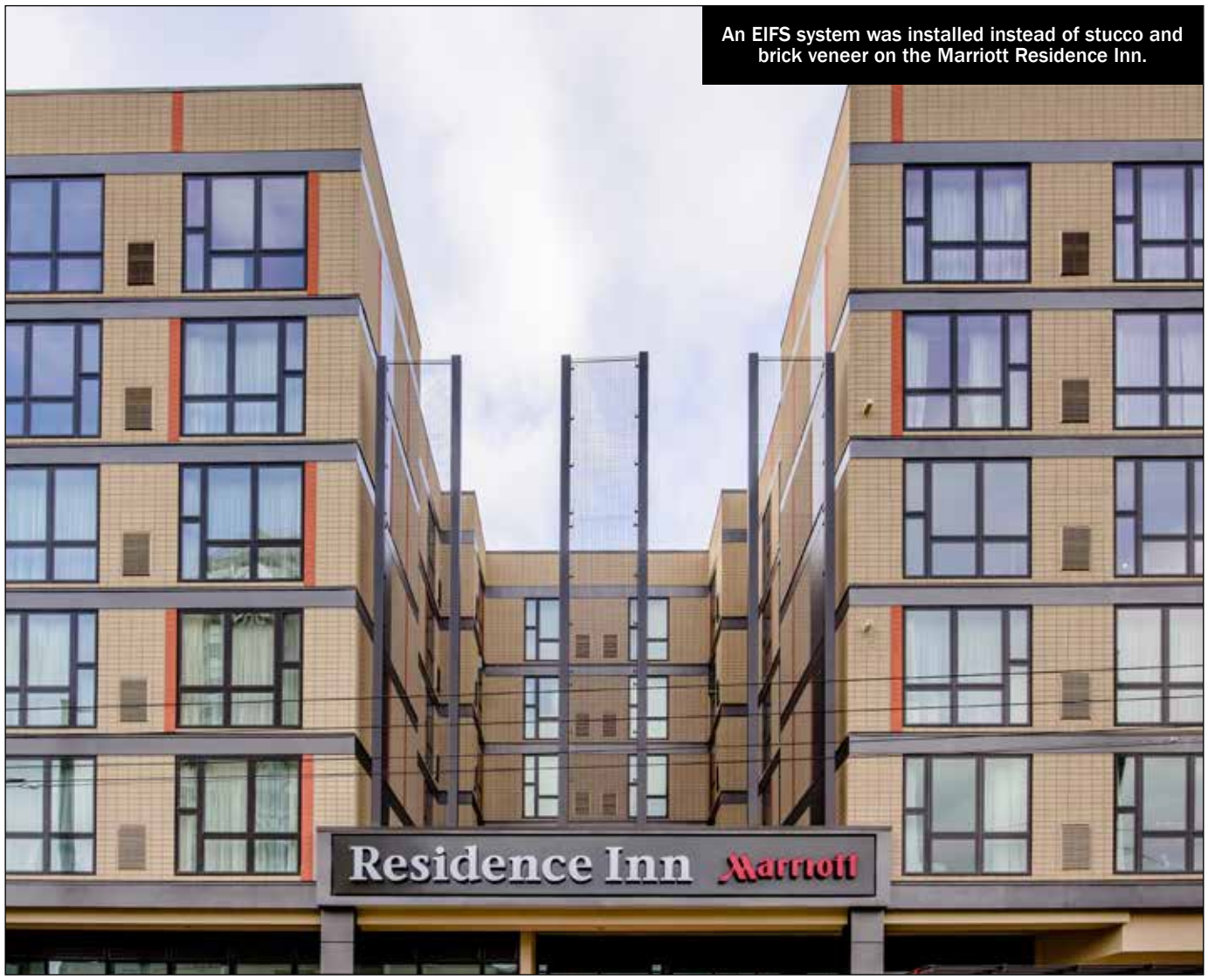
The team's first challenge began with creating finish samples and colors for the brick pattern. The next challenge came as Applied Restoration was installing EPS foam on the first elevation and was notified that half of the windows were wrong and would have to be reordered and reinstalled.

Once the window issues were resolved, crews had to work on multiple elevations at the same time.

The smooth metallic finishes had three different colors and required 12 steps from installing to final finish.

The Applied Restoration team persevered and completed a unique building with an energy-efficient, functional, durable and high-quality envelope with the finished look the owners desired.

Judge's comment: "Not only have the owners received the energy efficiency benefits of a true continuous-insulation system provided by EIFS, they have also benefited from its beauty and efficiency. This project is a showcase for the many design possibilities EIFS can provide."



An EIFS system was installed instead of stucco and brick veneer on the Marriott Residence Inn.

PHOTO BY WHITNEY LEWIS

EXTERIOR PANELIZATION WASHINGTON

Block 45

Location: Seattle
Contractor: Western Partitions
Architect: NBBJ
Team: Drywall Distributors, Georgia-Pacific, Hilti, Scafco Steel Stud Co.

Vulcan Block 45 is a 13-story, 317,000-square-foot office building in Seattle's South Lake Union neighborhood. It consists of private and open offices, conference rooms and break areas on floors three to 12 for Amazon employees.

Through a collaborative process using building information modeling, Western Partitions completed this fast-paced panel project in 14 months. Western Partitions' work included light-gauge metal-stud framing, prefabricated panels, drywall, moisture-and-air barriers and insulation.

Due to constricted site conditions and limited storage space, a "just-in-time" material management system was used. Western Partitions built 385 individual panels, complete with sheathing and air/vapor barrier, at an off-site facility in Salem, Oregon, and trucked them over 200 miles to the jobsite.

Western Partitions also framed, in place, hundreds of linear feet of soffits and parapets. The team installed and secured an average of 10 tower panels (31-by-12.5 feet) and 16 podium panels each day. The work was done at the same time as concrete pours and while using a non-dedicated crane.

Turner Construction was the general contractor.

Judge's comment: "This is an excellent example of a successful project using panels prefabricated off site. Panelization of the exterior walls on this project accelerated the schedule, reduced congestion on the project and enhanced the project collaboration process through the use of BIM."

Western Partitions built 385 panels at an off-site facility and installed them as they arrived.

PHOTO COURTESY NWCB

INTERIOR COMMERCIAL EASTERN WASHINGTON

Gonzaga University John J. Hemmingson Center

Location: Spokane
Contractor: Western Partitions
Architect: Opsis Architecture
Team: GTS Interior Supply, L&W Supply, Hamilton Drywall Products, Scafco Steel Stud Co., USG Building Systems

The John J. Hemmingson University Center was an unforgettable project for Western Partitions and has become a crown jewel for the Gonzaga Bulldogs.

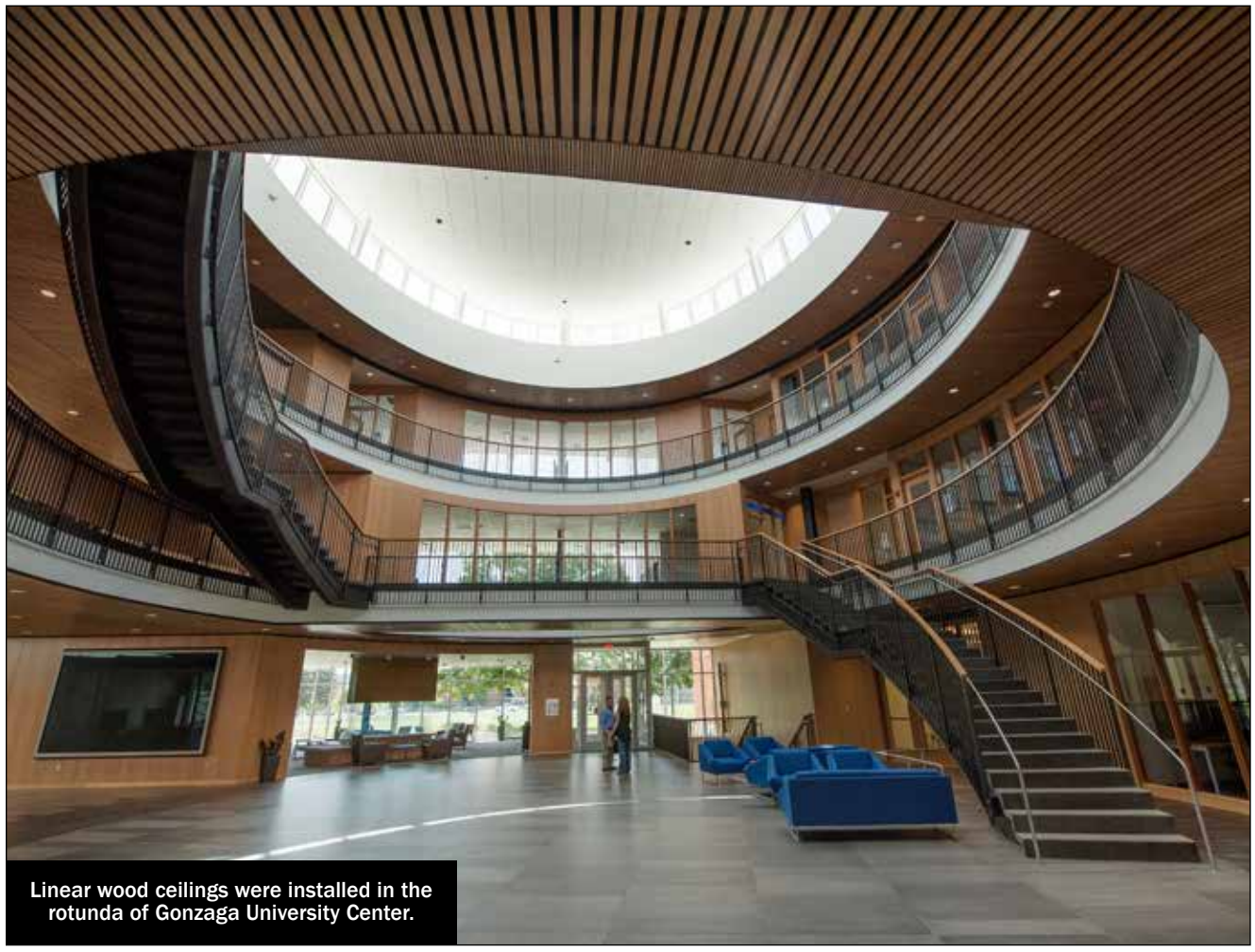
General contractor Hoffman Construction and Opsis Architecture led the project team through a collaborative process to complete the 168,000-square-foot building in 15 months.

Western Partitions' work included nonstructural metal framing, exterior load-bearing framing, drywall, air-and-weather barrier, acoustical ceilings and linear wood ceilings.

The location and restricted space created extreme storage and logistical issues with over 382,000 square feet of drywall, 70,000 square feet of acoustical grid and 20,000 square feet of linear wood-ceiling panels to be installed. School was also in session during three quarters of the construction process, requiring Western Partitions to use "just-in-time" delivery.

Looking up in the atrium and rotunda area, one can see the amount of work it took to establish and transfer the entire radius working points.

Judge's comment: "The superb design, exceptional choice of products, and impeccable installation created a warm and inviting building that has become the most treasured structure on the Gonzaga University campus. The outstanding work on this project resulted in a magnificent environment for the students."



Linear wood ceilings were installed in the rotunda of Gonzaga University Center.

PHOTO BY RAJAH BOSE/GONZAGA UNIVERSITY

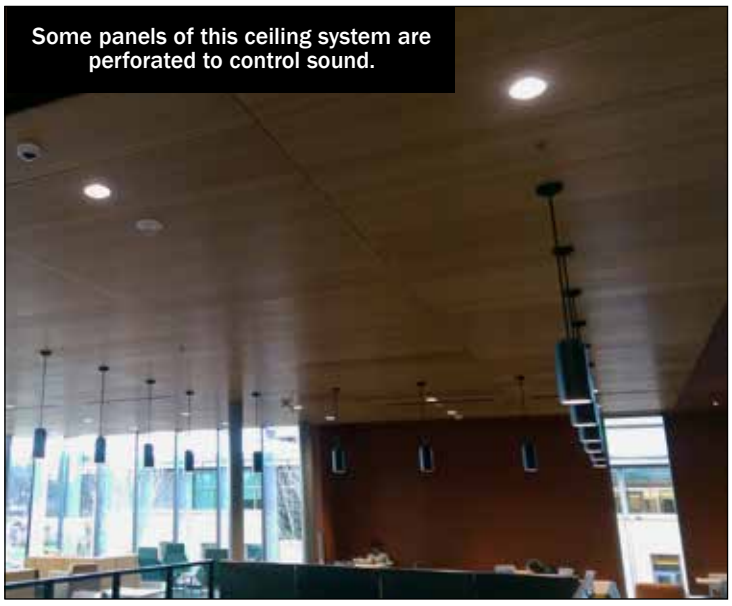

Some panels of this ceiling system are perforated to control sound.

PHOTO BY KYLE DANBURY

SUSPENDED CEILING COMMERCIAL OREGON

Portland Community College
Rock Creek Building 5 addition

Location: Beaverton-Hillsboro
Contractor: Performance Contracting
Architect: Opsis Architecture
Team: GTS Interior Supply, Armstrong World Industries

The Portland Community College Rock Creek campus is about 12 miles west of Portland. With a growing student base of nearly 24,000, the college was in need of additional educational and community space. The solution was Building 5, designed by Opsis Architecture and managed by Fortis Construction with Performance Contracting as the specialty ceilings contractor.

The two-story, 62,000-square-foot multipurpose building houses faculty offices, a campus bookstore, dining options, student resources and meeting areas. It also has classrooms for health, wellness, and physical education and fitness programs.

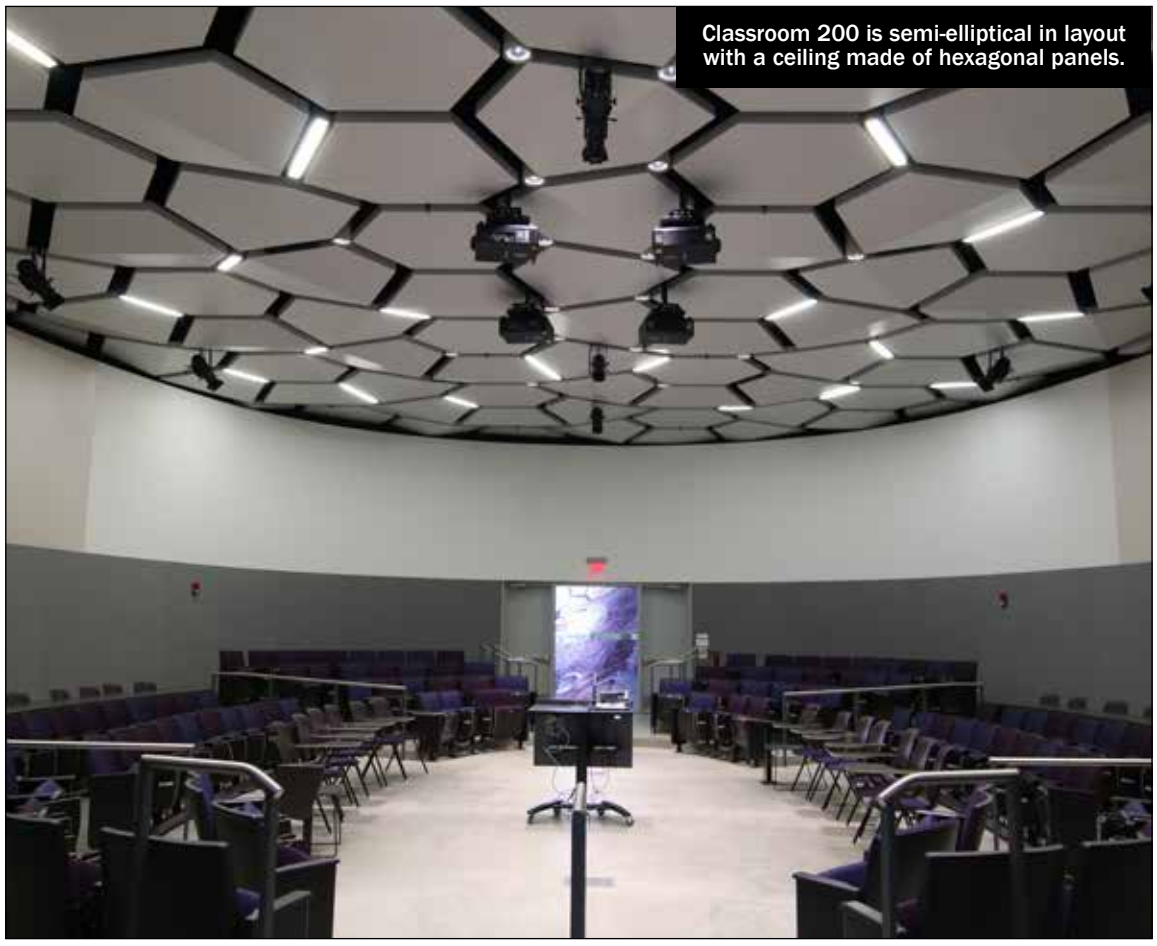
Performance Contracting worked on three different specialty ceiling systems. The ceiling system above the main lobby, lounge and Farm Cafe used Hera Design's wood-fiber ceilings that were custom-ordered and delivered from Germany, which presented scheduling challenges.

The second ceiling system, above the student dining area, required 1,800 square feet of Geometrik wood-grille ceiling and Armstrong acoustical ceiling grid. The installation, design and construction teams worked together to achieve the exacting detail needed at the penetration and slat lines.

The third area was the second-story wood-plank ceiling system, which used Geometrik perforated and unperforated wood panels within an Armstrong acoustical ceiling grid. The panels were precisely located to maximize acoustical benefits and aesthetics.

Performance Contracting also overcame the challenge of working on the ceiling over a stairway by building a stable rolling tower scaffold to gain safe and direct access.

Judge's comment: "The team's upfront effort on coordinating products from out of the country resulted in new and striking acoustical ceiling systems. These unique systems have created a wonderful study environment for students at Portland Community College."


Classroom 200 is semi-elliptical in layout with a ceiling made of hexagonal panels.

PHOTOS COURTESY OF NWCB

INTERIOR COMMERCIAL OREGON
LIGHT-GAUGE STEEL FRAMING COMMERCIAL OREGON

Oregon State University Learning Innovation Center

Location: Corvallis
Contractor: Western Partitions
Architect: Boora Architects
Team (interiors): GTS Interior Supply, Armstrong World Industries, CertainTeed Gypsum, Creative Design Concepts/Mork Associates, Hamilton Drywall Products, Scafco Steel Stud Co.
Team (light-gauge steel): Scafco Steel Stud Co.


Classroom 100 has a 360-degree elliptical screen.

From the outside, this four-story, $65 million brick building looks like most campus buildings, but according to Michael Tingley of Boora Architects, "This is the most unique and sophisticated lecture hall in any university in the world."

The building contains seven classrooms with raised, circular seating areas supported by radius and sloped framing systems.

Classroom 100 has a ceiling consisting of hand-troweled and fireproofed beams. A Uni-Strut system supports the lighting and a state-of-the-art sound and visual display system includes a 360-degree elliptical screen.

Classroom 210 has a multilevel acoustical ceiling tile system commonly referred to as a "saw-tooth ceiling."

Classroom 200 is the building's showcase. It was constructed in a semi-elliptical shape with sound panels and video screens on two walls. The ceiling has hexagon-shaped metal panels supported by a Uni-Strut system hung from the deck above.

Several locations contain a full-height radius sound wall intersecting a large mechanical duct. Special care was taken to ensure the walls were not only structurally sound but also airtight and soundproof to avoid sound transfer from one room to another.

Judges' comments: "This project incorporates a large variety of products yet provides a very clean appearance without clutter. The unique design complements the historic scheme of the existing campus buildings but incorporates modern technology that will benefit OSU students for many years."

"Some of the features on this project left the judges wondering, 'How did they do it?' This project demonstrates the endless possibilities of steel framing. These systems couldn't have been constructed without the exceptional knowledge of the craftsmen involved."

Corridor walls of Strand Agricultural Hall were patched with Imperial Veneer plaster.

PHOTO COURTESY OF NWCB

INTERIOR RESTORATION COMMERCIAL OREGON

Oregon State University
Strand Agricultural Hall renovation

Location: Corvallis
Contractor: Western Partitions
Architect: Hennebery Eddy Architects
Team: Building Specialties, GTS Interior Supply, Armstrong World Industries, Cemco, USG Building Systems

The Oregon State University Strand Agricultural Hall project is a four-story renovation of a 102-year-old brick building in the center of the campus. The age of this structure created some challenging situations, including areas where the floors had settled nearly a foot over time.

The overall project consisted of major structural upgrades and a complete rework of the interior finishes. Work was done in three phases while the building was occupied.

Western Partitions' work included rough carpentry for minimal structural upgrades, light-gauge metal framing, drywall, smooth veneer-plaster walls throughout, wood ceilings, door frames and hardware, acoustical tile and paint.

Since the corridor wall structure remained in place, Western Partitions spent a great deal of effort patching the existing wood lath and plaster system along the corridors with USG's Imperial Veneer plaster system to bring them up to the quality level of other finishes.

Many sections of the building had been upgraded or remodeled but were not fully documented. As a result, unforeseen surprises were dealt with by Western Partitions, general contractor Hoffman Construction and Hennebery Eddy Architects.

Ultimately, the renovation improved the seismic conditions, safety, accessibility, comfort and energy efficiency of the building.

Judge's comment: "A fantastic restoration of a historic gem. The fine workmanship rekindled the beauty of classic finishes. This project is a brilliant integration of old features with new products."

INTERIOR RENOVATION COMMERCIAL OREGON

Lane Community College CLASS

Location: Eugene
Contractor: The Harver Co.
Architect: Pivot Architecture
Team: Building Specialties, GTS Interior Supply, Knez Building Materials Co., Valhalla Construction Products, BASF Wall Systems, CertainTeed Gypsum, Hilti, Rockfon, Scafco Steel Stud Co., USG Building Systems

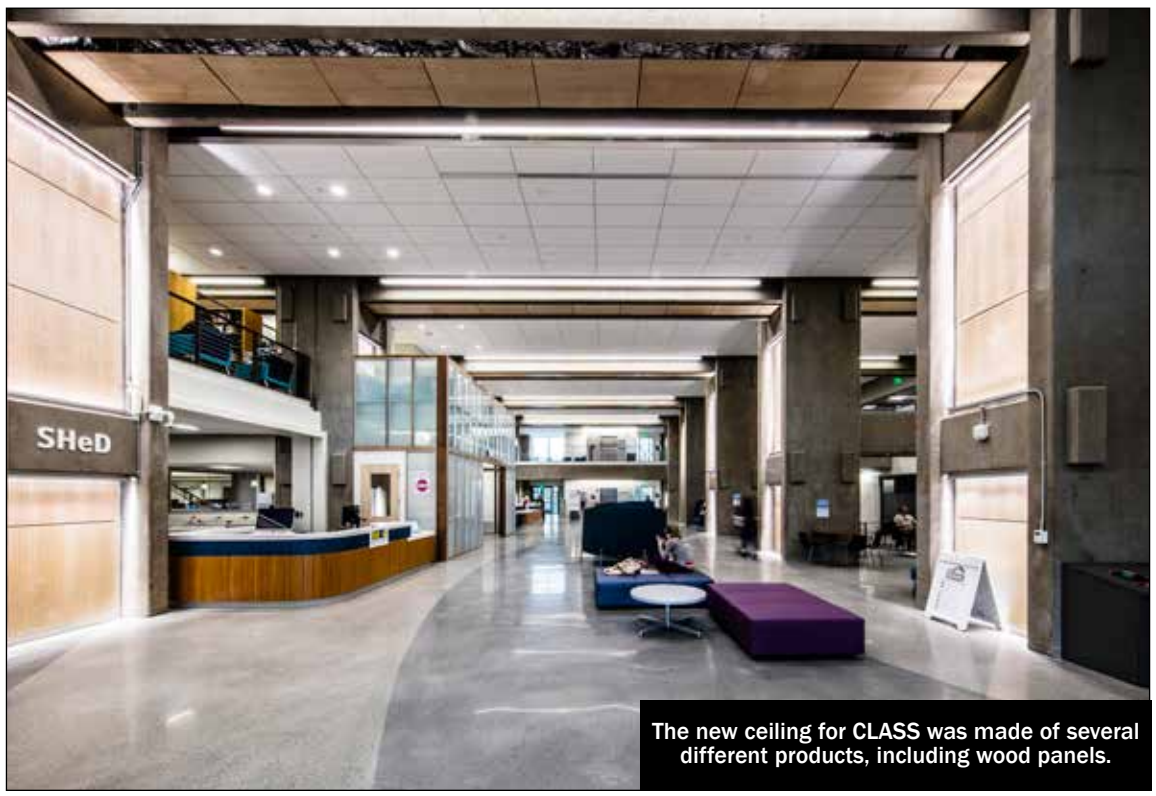
The Center for Learning and Student Success (CLASS) project is a renovation of a remarkable building that was built in 1969 as a campus gathering center. Though parts of the building were remodeled, the original design was virtually untouched but it was time to revive the building to meet the modern needs of students and staff.

This project had many challenges, starting with a three-month delay in the permitting process. The occupancy date did not change, and the team finished the building on time.

Another challenge was the multitude of different products specified: arched wood cloud ceiling, acoustical cloud ceiling, linear cloud ceiling and the USG Topo 3-D ceiling. Because of the aggressive schedule, everyone was working overtime to push this project along.

The exterior of the building remained the same except for one side where full-height windows were installed for a more open feel. The large windows bring light into the heart of the building where most of the student and staff congregate.

Judge's comment: "This project represents a renovation for a new generation. The quality of design and craftsmanship are incredible. Multiple new products were used within the structure help preserve the magnificence of this historical building."



The new ceiling for CLASS was made of several different products, including wood panels.

PHOTO BY GABE HURLEY

Award - Interior Commercial
Project - Center for Airline Excellence Customer Experience Center
Contractor - Expert Drywall, Inc.
Architect - TEAGUE
Photographer - Benjamin Benschneider Photography

Award - Light-Gauge Stee
Framing - Commercial
Project - Center for Airline
Excellence Customer
Experience Center
Contractor - Expert Drywa
Inc.
Architect - TEAGUE
Photographer - Benjamin
Benschneider Photograph

Award - Exterior Commercial
Project - Marriott Residence Inn University District
Contractor - Applied Restoration, Inc.
Architect - Johnson Braund, Inc.
Photographer - Whitney Lewis

Award - Suspended Ceiling - Commercial
Project - Auburn High School Modernization and Reconstruction
Contractor - Performance Contracting, Inc.
Architect - NAC Architecture

Award - Exterior Panelization
Project - Block 45
Contractor - Western Partitions, Inc.
Architect - NBBJ

Award - Renovation/ Restoration - Commercial
Project - Allen Institute for Brain Science
Contractor - Performance Contracting, Inc.
Architect - Perkins+Will
Photographer - Nick Merrick, Hedrich Blessing

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INTERIOR RESIDENTIAL OREGON

University of Oregon
The Hub student housing

Location: Eugene
Contractor: Western Partitions
Architect: Hartshorne Plunkard Architecture
Team: L&W Supply, Spears Construction Supply, Hamilton Drywall Products, Scafco Steel Stud Co., USG Building Systems

The Hub is a 12-story residential building for University of Oregon students that has amenities of a 5-star resort, such as multiple swimming pools, outdoor lounges and indoor game rooms.

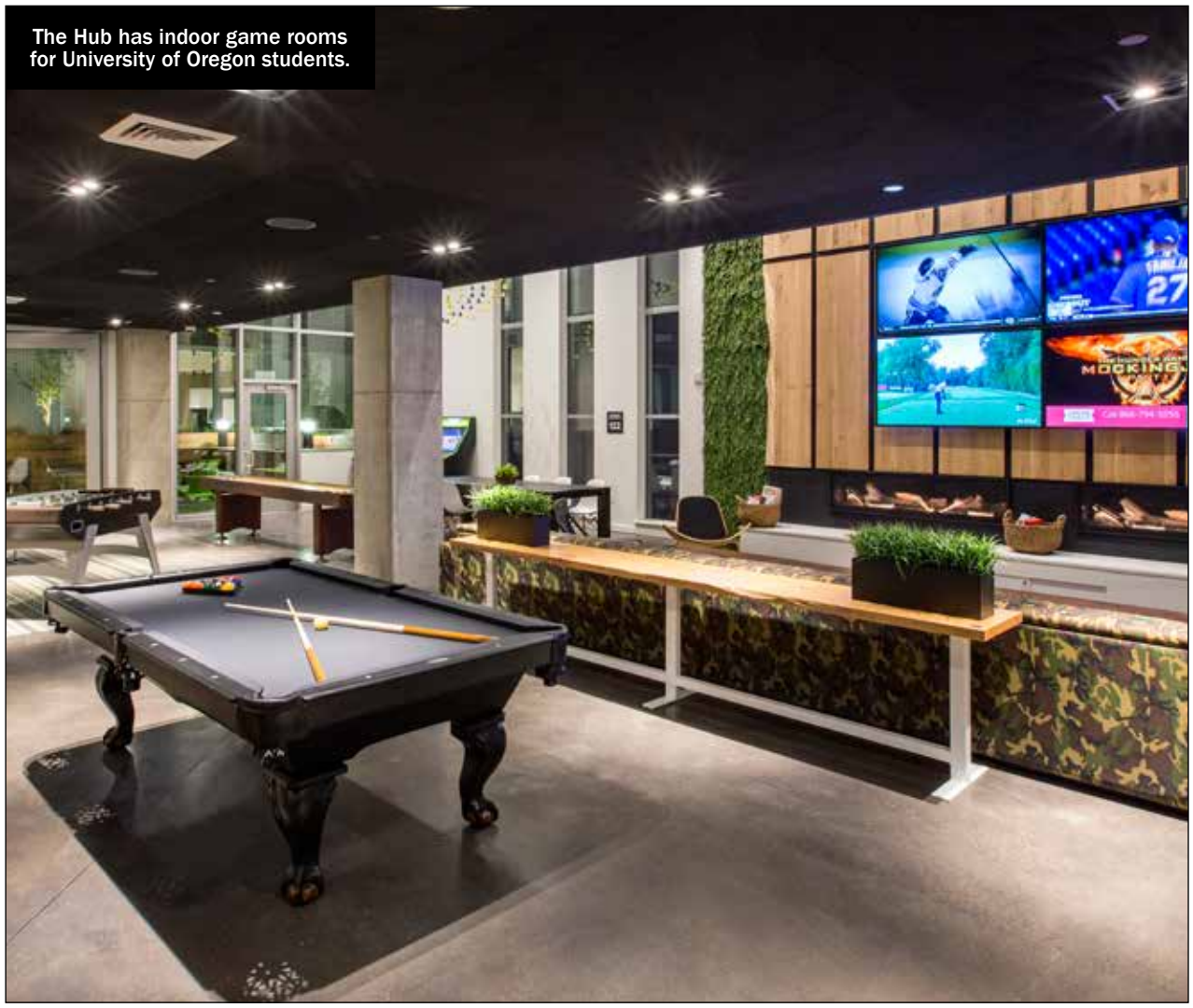
Multiple bedroom units in the 230,000-square-foot building can be found on every floor. Each unit has an open living room and kitchen arrangement that support several students living together.

The second floor houses a gym, sauna, tanning room, game room, outdoor pool, barbecue and other amenities. The roof area is designed for large groups of people who like outdoor living and has a swimming pool, hot tub, lounge chair area, barbecue, eating area and sand volleyball court.

An aggressive construction schedule allowed only 10 days per floor for framing, hanging and taping. Other challenges included construction during the wet part of the year and limited access to the project since it was next to an extremely busy street.

Western Partitions performed the framing, drywall, taping and acoustical fabric panels on the project.

Judge's comment: "This project will provide such a fantastic living environment for University of Oregon students that it left the judges wishing they could go back to college. The spectacular finishes, variety of amenities, and use of space come together to create a home where students will enjoy living."



The Hub has indoor game rooms for University of Oregon students.

PHOTO COURTESY NWCB

EXTERIOR COMMERCIAL OREGON

University of Oregon
Student Recreation Center

Location: Eugene
Contractor: Western Partitions
Architect: Robertson Sherwood Architects
Team: Service Partners, Western Materials, ClarkDietrich/ Vinyl Corp., Fry Reglet Corp., Sto Corp.

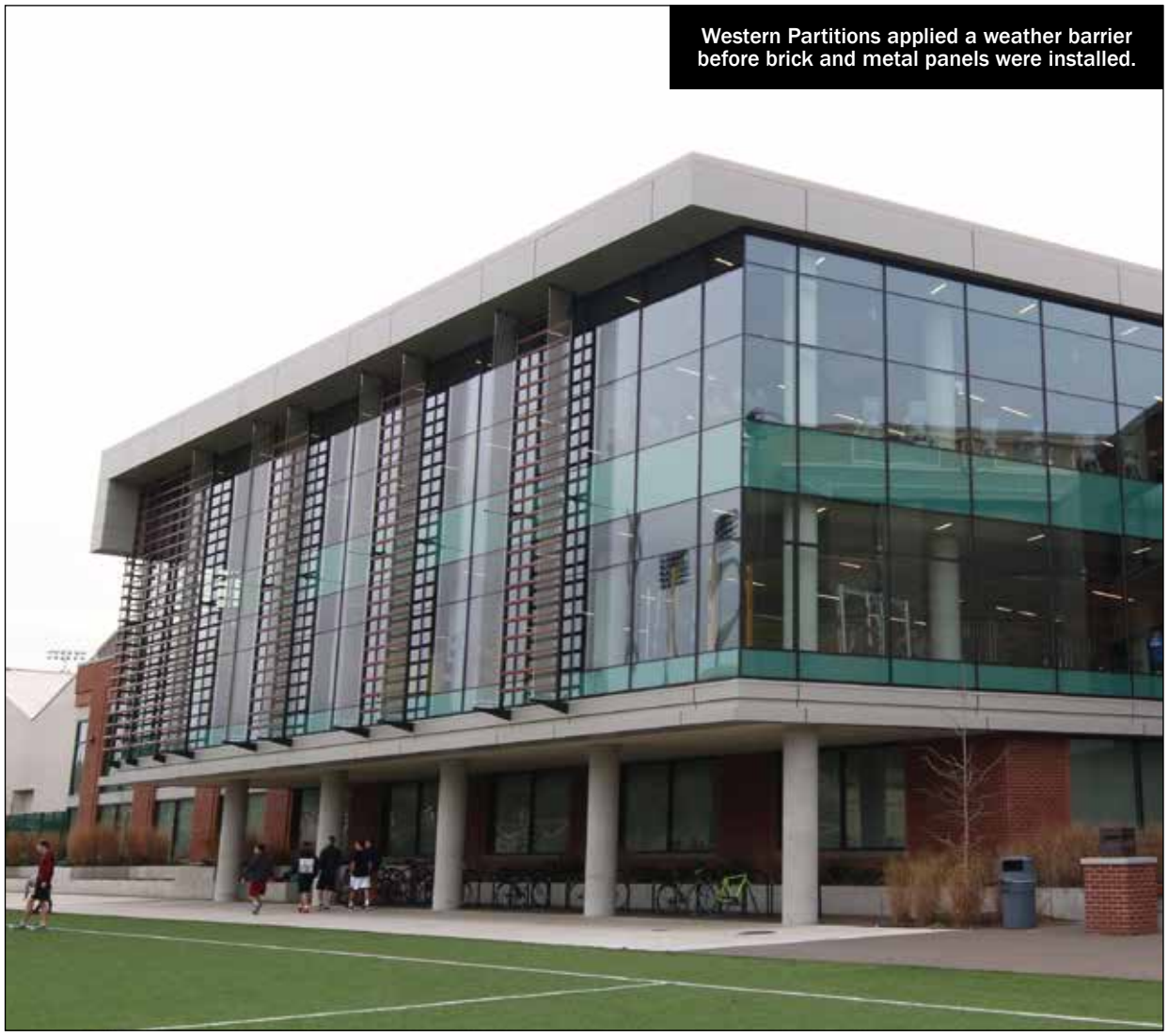
The Student Recreation Center is a 110,000-square-foot multipurpose facility. It has a natatorium with two swimming pools, a gymnasium with three basketball and three volleyball courts, a bouldering wall and over 18,000 square feet of fitness space.

The center is a multilevel complex using tilt-up concrete and metal framing with DensGlas sheathing. Western Partitions applied a complete StoGuard with VaporSeal weather barrier system over the entire exterior. A StoQuik Silver cement board stucco system was installed with Fry Reglet reveals and Sto acrylic finish. Brick and metal panels were integrated into the final cladding.

The schedule was expedited to allow for occupancy before the new school semester. This entailed working extended hours and integrating multiple crews working around the building, starting with weather barrier and followed by the cement board system.

Western Partitions' teams faced many other challenges on this project, such as the unevenness and inconsistencies of the tilt-up concrete, which required substantial skim-coat depth corrections to create a level surface before furring and cement board stucco installation. The control joint and Fry Reglet reveal patterns designed by the architect were extremely intricate and included diagonal installations.

Judge's comment: "The use of a variety of building materials has created a stimulating and inviting structure. Along with the challenge of coordinating various materials, the outstanding workmanship resulted in an exceptional facility that will be treasured by University of Oregon students and faculty."



Western Partitions applied a weather barrier before brick and metal panels were installed.

PHOTO COURTESY NWCB

EXTERIOR PANELIZATION OREGON

Cameron Apartments

Location: Portland
Contractor: Billings and Cronn Co.
Architect: SERA Architects
Team: GTS Interior Supply, Knez Building Materials Co., Spears Construction Supply, ClarkDietrich/Vinyl Corp., Georgia-Pacific, Grabber Construction Products

The Cameron Apartments is an eight-story light-gauge and structural-steel building in downtown Portland. Billings and Cronn was responsible for structural framing, nonstructural framing, exterior sheathing and spray-foam insulation.

This project was unique in that all structural framing walls (both interior and exterior) were prefabricated off-site. The construction team, including the general contractor, Bremik Construction, decided that prefabricating the roughly 20-foot-long sheathed wall panels off-site would dramatically compress the construction schedule and eliminate many variables present on the jobsite.

Since the walls were designed to be the sole supports of the concrete floor above, the installation of the previous floors, walls, and concrete had to be perfect because wall heights or orientation could not be adjusted for errors.

The Cameron is one of only two buildings in Portland that use light-gauge steel members as the only load-bearing structures. The concept could change the way buildings are constructed in the future.

When adding the benefit of panelizing the project off-site, including sheathing and weather barrier, it has the potential of cutting construction time.

Judge's comment: "Prefabricating panels off-site can bring many benefits to the right project. The preplanning, creativity and outstanding craftsmanship demonstrated by the project team showcase the many advantages of this method of constructing walls."

The Cameron's exterior is made of 20-foot-long sheathed wall panels that were built off-site.

PHOTO COURTESY OF NWCB

EXTERIOR RENOVATION COMMERCIAL OREGON

Tigard City Hall exterior wrap

Location: Tigard
Contractor: Applied Restoration
Architect: LRS Architects
Team: L&W Supply, Salmon Bay Sand & Gravel, Dryvit Systems, Georgia-Pacific

While most of the work on Tigard City Hall was restoring the existing EIFS exterior cladding, Applied Restoration also served as the general contractor, working directly with the owner and architect and coordinating subcontractors.

The project was to be completed in two phases, starting with the permit center and finishing with the courthouse the following year. Not only were these buildings occupied by city staff but had to remain accessible to the public during construction.

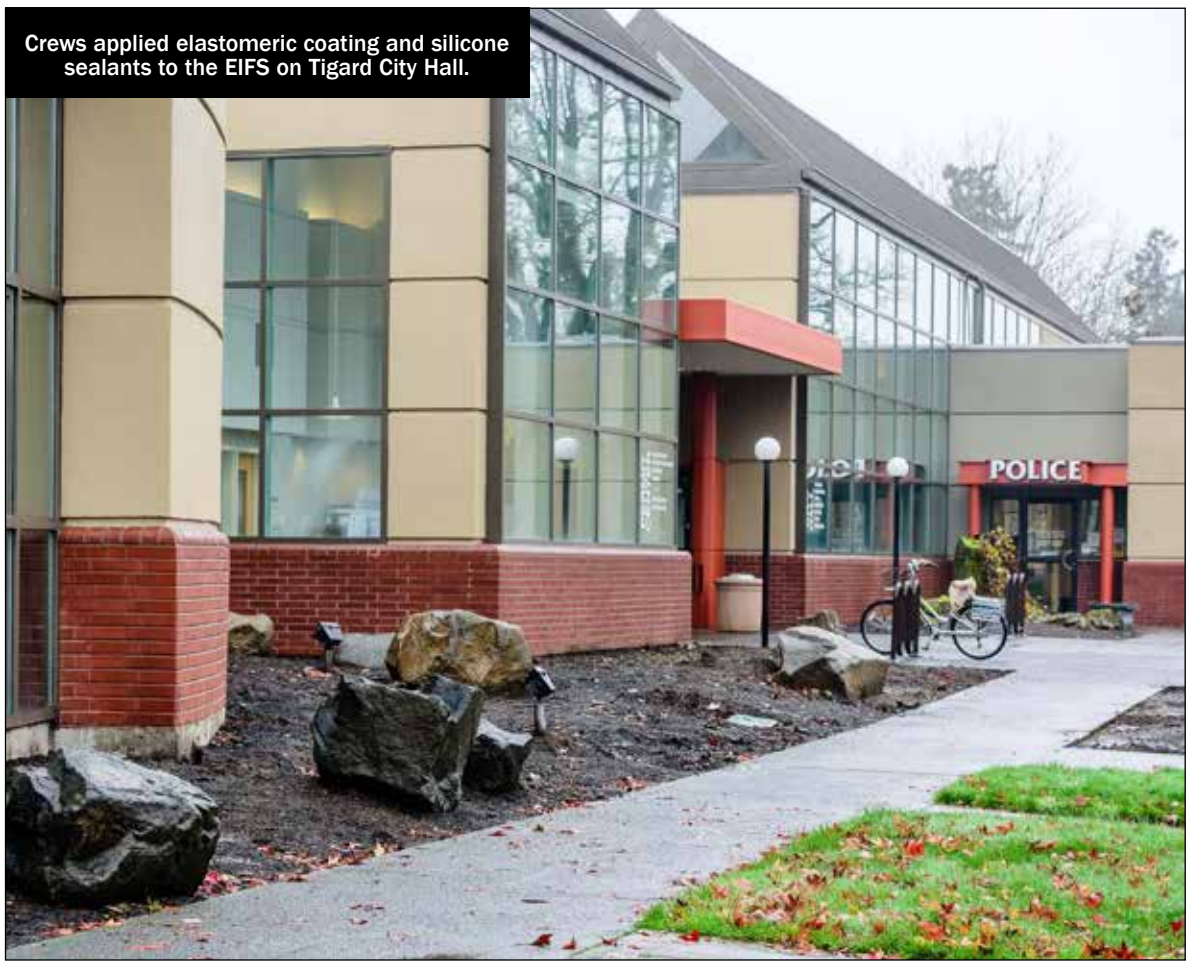
In phase one, upper sheet-metal roofs were replaced and upgraded. The EIFS was then coated in a high-performance elastomeric coating and new silicone sealants for a watertight system.

The two buildings are connected by a large steel canopy, which was stripped down to the steel structure and rebuilt with added steel to a new shape. TPO roofing, a skylight and a direct-applied finish system were added. Existing storefront windows were reframed and re-coated in a metallic finish.

Phase two was completed the following summer and was a repeat of phase one. The final finishes included a new warm color scheme that dramatically changes the look and feel of the buildings.

The project shows how a 20-year-old EIFS system can be brought back to life.

Judge's comment: "This is an excellent example of how an existing EIFS system can be renovated to rebirth an existing building. The restored system gives an inviting and contemporary appearance that will give the city of Tigard a beautiful building for many more years."



Crews applied elastomeric coating and silicone sealants to the EIFS on Tigard City Hall.

PHOTO COURTESY NWCB

EXTERIOR COMMERCIAL ALASKA

Stanton Optical

Location: Anchorage
Contractor: Bradshaw & Associates
Architect: Faulkenberry & Associates
Team: Alaska Industrial Hardware, Polar Supply Co., Safway Services, Dryvit Systems, Isulfoam

For Stanton Optical, Bradshaw & Associates partnered with Dryvit, Polar Supply and Plasterers Local #867 to create a unique and modern structure showcasing the many facets of EIFS.

Coved white panels with 3-inch-deep orange grooves and 3-inch radiuses come painstakingly together in over 250 intersections — all laid-out, meshed and finished.

Starting in September 2015, the team completed the work through the beginning of winter, which required bagging and heating the job. The result is eye-catching and impressive, with locals nicknaming it Rubik's Cube.

Judge's comment: "The outside-the-box thinking by the project team and the versatility of EIFS created a unique exterior cladding for this structure. The use of EIFS, along with exceptional workmanship, produced an energy-efficient and exciting exterior system."

Stanton Optical is finished in coved white panels with 3-inch-deep grooves.

PHOTO BY PHIL YOUNG

IT'S A RENAISSANCE: STUCCO AND TERRAZZO ARE BACK

Polymers, epoxies and acrylics have made stucco and terrazzo faster to install, more flexible, and able to handle colors that were once unimaginable.

BY MARK FOWLER
SMA

The Renaissance is a period in European history that was generally from the 14th to the 17th centuries. The time was considered the bridge between the Middle Ages and modern history. It started as a cultural movement in Italy and spread to the rest of Europe.

In architecture, this period was marked by two distinct movements: reclaiming and restoring historical practices such as the rebuilding of St. Peter's Basilica; and taking old traditional practices of the rectangular Gothic vaults and expressing new concepts to semi-circular and other artistic expressions.

The word renaissance is of French origin and means rebirth or revival. Is it possible that future historians will look back to our time and call it a renaissance?

While this may sound preposterous, there are signs of bringing back some construction practices and materials used in walls, ceilings and floors that were once considered all but dead. These materials and trades are having a kind of rebirth with a helping hand from modern science.

Similar to the Renaissance in the 14th century, we are reviving old practices and adding a few twists that have created some excitement among designers, architects, interior designers and even artists. An even greater irony lies in the fact these rejuvenated materials are traditionally very Italian in nature. These materials were once staples of construction for Italy and can even be traced back to specific regions of that country.

The two materials seem to be at the forefront of this rebirth. One is interior polished plaster, often referred to as Venetian plaster. This plaster was once made strictly of marble and slacked lime. The other is terrazzo flooring, which means "terraces" in Italian and was made only from cement and marble chips.

Both materials have a long history of wide-spread use throughout Europe and might have been considered all but forgotten as they waned in popularity over the last 50 to 75 years. While other materials and construction practices remain popular and new ones appear, it is ironic that two historic Italian materials are once again regaining market share in these modern times.

But these are not your grandfather's materials.

Polished plaster and terrazzo have a history of craftsmanship and pride. Both became too labor intensive, with strict requirements on substrate preparation and limitations on installation time. Leonardo da Vinci would have likely scoffed had the commissioners for his plaster work put time-lines on him. I doubt he would have stood for a compressed schedule and trade stacking; and value engineering may have angered him to the point of walking out of the Vatican.

In the United States, both interior plaster and cement terrazzo were popular in the 1950s. Lath and plaster was the dominant interior wall and ceiling finish, and cement terrazzo was used as the primary floor covering for hospitals, airports and office buildings. Many Florida tract homes used terrazzo, and it's not uncommon for Florida homeowners to pull up old carpet to find forgotten terrazzo floors underneath.

Over time plaster seemed to just die out. Plaster is wonderful, but it took too long to install and required special skills that were becoming more and more rare. Terrazzo flooring was similar to plaster, being labor intensive and time consuming.

As costs became an issue, both plaster and terrazzo were routinely value-engineered out of projects.

Today these Italian favorites have something new that has them both re-energized and capturing the attention of the design and construction communities. I think of it as the old world collides with the new science of polymers, epoxies and acrylics.

Plaster and terrazzo now routinely use binders, resins and polishes. This has taken both of these traditional materials and expanded the range of possibilities to heights once unimaginable.

Aggregates for both products have traditionally been marble, sand and other natural stones. While those materials are still used today, recycled glass can now be used to enhance the beauty of plaster and terrazzo, and make both finishes sustainable. However, the more notable advancement may be the polymers, epoxies and resins. These products have made the two Italian favorites faster to install and able to handle colors that were once unimaginable. No longer are designers and owners limited to pastels.

The development of high-strength polymers and epoxies also allowed plaster, and particularly terrazzo, to be applied in thinner layers with greater strength than their cement counterparts. While cement is still a great option, polymers offer designers the option to expand possibilities in color and performance.

New polymers also make for more flexible plaster and terrazzo. Cracking in both can almost be eliminated with crack suppression membranes. This allows designers more freedom on placing control joints in plaster or divider strips in terrazzo.

The more one looks into the modern advancements of each of these traditionally historic materials, the more one has to reach the conclusion we are witnessing a renaissance of materials. This creates a new learning curve for designers, but equally opens a new world of possibilities. Both systems have the lowest life-cycle costing in their respective categories, so this renaissance benefits both designers and building owners.

Mark Fowler, past architectural consultant for the NWCB, is current executive director of the Stucco Manufacturers Association and the National Terrazzo & Mosaic Association.

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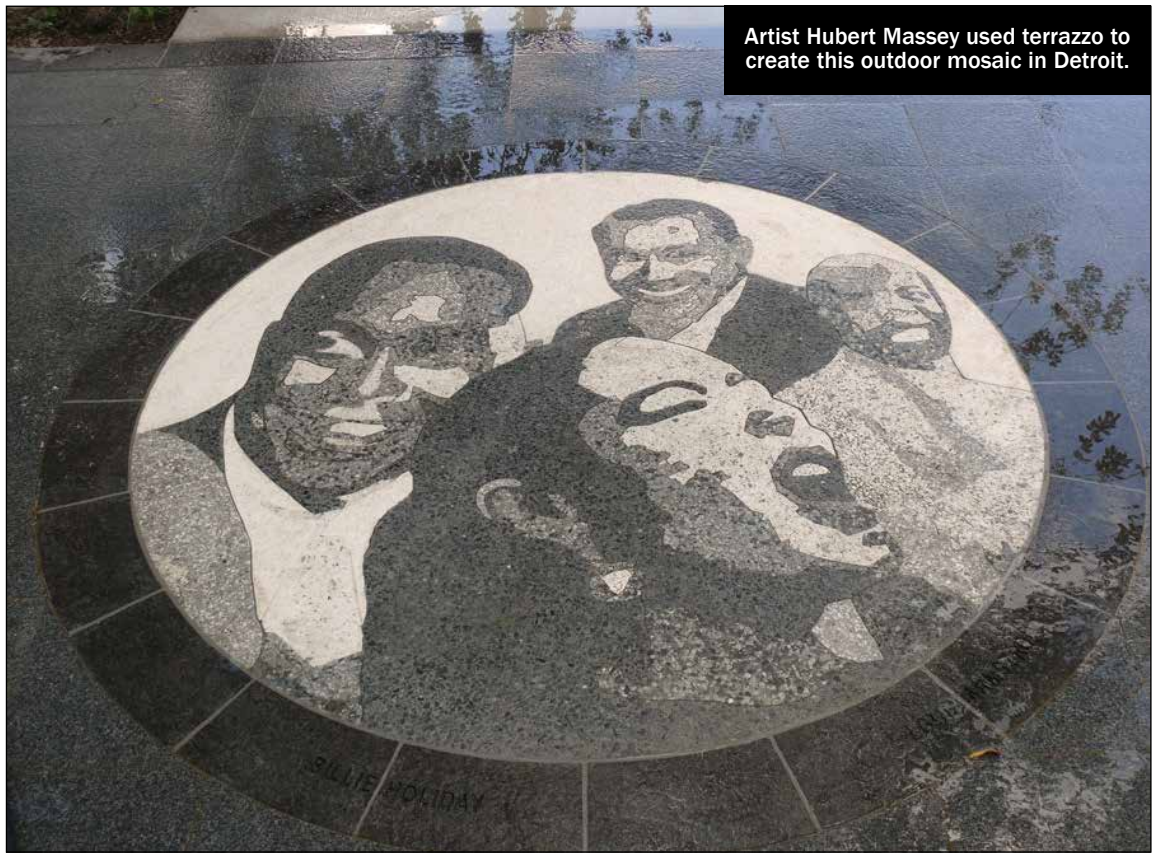


Artist Hubert Massey used terrazzo to create this outdoor mosaic in Detroit.

PHOTO COURTESY OF NATIONAL TERRAZZO & MOSAIC ASSOCIATION

Cartoon-like details of this building in Disneyland were created with plaster.

PHOTO COURTESY OF STUCCO MANUFACTURERS ASSOCIATION

NOW ARRIVING AT UW STATION: ARTISTIC WALLS

Walls in the station's three-story collection chamber represent the strata of the adjoining soil column.

BY STEVE MORK
CREATIVE DESIGN CONCEPTS

Finally, there is light at the end of the tunnel — yes, pun intended. I recently arrived back in Seattle after a week-long business trip that swung through San Francisco, Los Angeles and New Orleans. I purposely chose to leave my car at home and use the Link light rail system from Sea-Tac to the newly opened University of Washington Station for my return rather than my usual method of off-site airport parking at the Jet Motel.

Like Seattle, San Francisco traffic faces some of the same pressures — geographic confinement due to hills, waterways, bridges and unending growth in the high-tech sector — only on a more dramatic scale. Navigating the region is demanding and time consuming.

Automobile-centric LA is endlessly congested, with dozens of freeways so numerous they need to be referred to with the designation "The" before every interstate number. Years ago one could always tell when a new DJ moved to a radio station in Seattle from California because they would refer to I-5 as "The I-5."

After being exhausted by the traffic in those two cities I decided to "Uber" it in New Orleans rather than rent a car. Once back in Seattle I would use the Link to round out my progression of transportation modalities.

How refreshing it is that in Seattle we now have a glimmer of hope for the future as our north-south automobile corridors become increasing congested at all times of the day. I-5 through downtown is a bottleneck with no conceivable fix, and Highway 99 will be in a state of confusion for years as the viaduct and massive Bertha tunnel project progress at their uncertain pace.

With the opening of the new Capitol Hill Station and the farthest north station at Husky Stadium, it is possible to move from Sea-Tac Airport north all the way to the U District with ease and comfort. This at a low cost — $3.25 for the full length ride.

It took me exactly one hour from when I left the terminal and walked to the train platform to my arrival at UW Station in Montlake, all without the hassle of waiting for a shuttle to the off-site parking, and then driving through who knows what kind of traffic just to get to I-5, Interstate 405 or Highway 99. The short walk through the airport parking garage and then along a pedestrian corridor took about five to seven minutes.

Curiously, the steady stream of passengers walking to the platform consisted of people of all ages, ethnicities and types. Buying the ticket from the vending machine was simple and I noticed many people reloading their ORCA passes. All three train cars filled to near maximum capacity before departing the station and heading north.

Many more passengers boarded at Othello Station and it appeared seats were full, with many passengers standing. While I was curious about the demographics of how people used the system along the 13 stops, my main interest was to see the crown jewel of the stations: UW Station.

UW Station

The University of Washington is like a second heart in the circulatory system of Seattle. The main beat is downtown pushing and pulling vitality in and out of the central business district and newly built up South Lake Union; but the UW has a multitude of vital influences as well in its arterial flow.

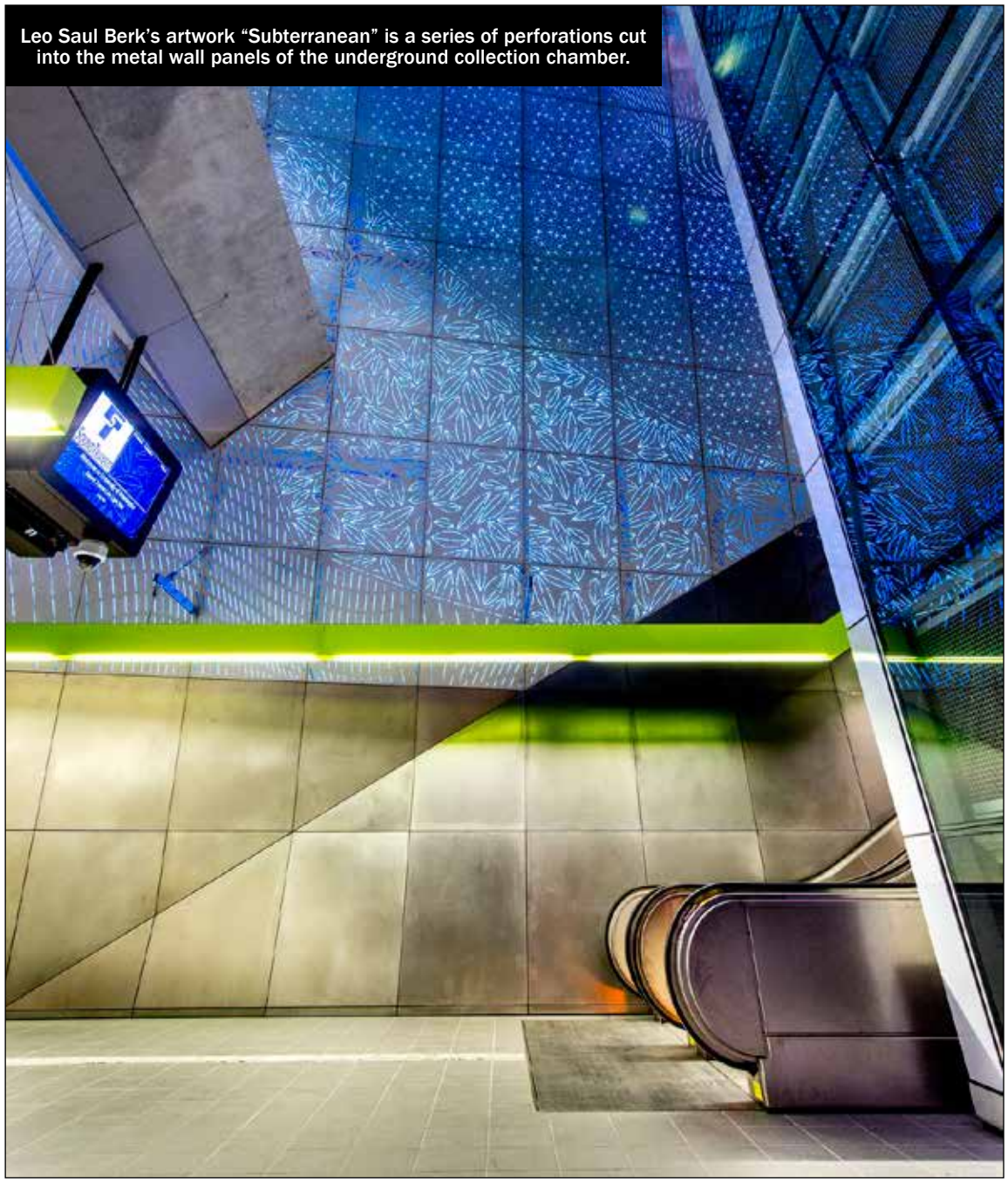
LMN Architects designed UW Station to fit into one of the most challenging sites in the city. On the southeast corner of campus sits UW Medical Center, Husky Stadium and Alaska Airlines Arena at Hec Edmundson Pavilion. The Burke-Gilman Trail cuts through the intersection of Montlake and Pacific. Auto traffic feeds to the SR 520 bridge, bus routes span in all directions, and foot and bicycle traffic related to the UW and surrounding neighborhood is ubiquitous.

It is hard to imagine how it would be possible to fit a 156,000-square-foot transit facility into this already crowded site.

LMN accomplished this by going deep underground. The three-story "collector," one of the largest interior volumes of space in the city, houses the escalators and elevators that move people from the platform level to either the street level or the overpass level, allowing pedestrians and bikes to access the UW campus without the necessity of crossing Montlake Boulevard.

The exterior the structure on the surface is a two-story glass building that provides transparent views of Husky Stadium, Lake Washington and the surrounding UW campus. The glass structure also feeds light into the upper portion of the main circulation chamber. This building connects to both the street level via an exterior stairway leading toward Husky Stadium and Montlake Boulevard, while the upper level opens to the pedestrian and bike overpass connecting to the UW campus and the Burke-Gilman Trail.

Elegance and beauty are found at every level of the project. The glass structure above ground is clean and crisp and does not impede the views of Husky Stadium, or intrude on the tight intersection, while the compound curves of the overpass are narrow and somehow enhance the intersection in a modernistic way rather than impose itself on the fabric of the already busy landscape.



Leo Saul Berk's artwork "Subterranean" is a series of perforations cut into the metal wall panels of the underground collection chamber.

PHOTO BY DON WILSON, COURTESY OF SOUND TRANSIT

Art

Without question the geometry of the collection chamber in conjunction with the artist's design representing the strata of the soil column from 100 feet below grade are the most interesting and stunning aspects of the station design.

The three-story underground collection chamber housing the escalators is not a rectangular box, nor is it shaped exactly as a parallelogram, rather it's a combination of the two shapes that lead the eye to the intriguing artwork on the walls of the chamber.

Leo Saul Berk's sculpture "Subterranean" consists of complex and stylized perforations cut into the metal wall panels of the collection chamber, suggesting the geographic make-up of the glacial till that layers the soil from the surface to the depth of the platform at 100 feet below ground. The walls are backlit, making the sculpture come alive. It is truly stunning, worth a visit to the station even if you are not planning to ride the train.

Art, form and function come together to create an experience at the station.

I left the station and walked along the Burke-Gilman Trail for a distance to where my son picked me up at an easy auto access point. As I walked the tree-lined trail on one of the first sunny spring days in Seattle, I though how idyllic and magical this place is. My second thought was that UW Station elicits that same feeling. Seattle is becoming a better place to live as this transit system matures.

Steve Mork is a local representative for a variety of custom architectural products, including LA-based Ceilings Plus, maker of custom perforated acoustical ceilings used in the UW Station and Sea-Tac Airport.

SHEETROCK CAN BE REUSED, AGAIN AND AGAIN

Banning wallboard from landfills cuts down on greenhouse gases and bacteria growth.

Sustainable purchasing is a growing global trend resulting in manufacturers creating more closed-loop products. For some, this just brings to the forefront the actions their companies made years ago.

BY CHERYL MCKITTERICK
NEW WEST GYPSUM RECYCLING

In Seattle, CertainTeed Gypsum is one of these companies. CertainTeed has been working with New West Gypsum, a gypsum wallboard recycling company, to create a closed-loop system for the infinite reuse of Sheetrock.

What is closed loop?

"Closed loop" is a production process in which post-consumer waste is collected, recycled and used to make new products.

When something gets recycled, a common misconception is that it gets easily and immediately turned right back into the same thing it was. The reality is many materials are "down-cycled," meaning they are converted into new materials that are usually of a lesser quality or reduced functionality.

For a closed-loop system to work properly, consumers, recyclers and manufacturers must work hand-in-hand to reclaim valuable resources from our waste stream and be committed to making new products with them. When in proper working order, this closed-loop recycling system becomes the backbone to manufacturers' supply chains. To keep the reclaimed material in the closed-loop system infinitely, it is paramount that manufacturers put a premium on designing products for recyclability.

What is Sheetrock?

Sheetrock is made of an inner layer of gypsum including various additives, sandwiched between two outer layers of lining paper with varying designs for weight, strength and sound proofing dependent on the product's usage. North America is one of the largest sheetrock users in the world and an average new American home contains more than 8 tons of it.

Why recycle Sheetrock?

Recycling Sheetrock reduces the need to quarry and produce virgin gypsum.

Sheetrock should be recycled because of environmental concerns that arise when it is sent to a landfill. The primary component of sheetrock is calcium sulfate dehydrate, commonly called gypsum. When gypsum is mixed with other materials in the moist, airless, carbon-containing environment often found in a landfill, the sulfates convert to toxic hydrogen sulfide gas.

Decomposing gypsum can release up to a quarter its weight in hydrogen sulfide. Moreover, bacteria that thrive in this environment will convert the paper liner in the Sheetrock to methane, which is a greenhouse gas.

Due to these environmental concerns, more than 30 years ago government in greater Vancouver, B.C., banned gypsum wallboard from landfills.

This ban prompted Tony and Gwen McCamley to create New West Gypsum Recycling. Working with a local manufacturer in British Columbia, at that time called Domtar and now Georgia-Pacific, the McCamleys found that old Sheetrock could be reused in the production of new Sheetrock without detrimental impact on the production or quality of the new product.

The ideal solution for gypsum is a closed-loop reutilization of the material. That is, recycled material is returned to the wallboard manufacturer to re-enter the manufacturing process — so ensuring gypsum is not "lost" as it is with composting or land spreading. Gypsum can essentially be recycled forever with no degradation to the material.

New West Gypsum's philosophy keeps gypsum in the supply chain, reducing the need to extract virgin material and helping to preserve valuable natural resources for generations to come.

What is sustainability?

Sustainability is defined as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs."

Sustainable construction aims to meet present day needs for housing, working environments and infrastructure without compromising the ability of future generations to meet their own needs.

Recycling Sheetrock supports the commitment of governments, companies and individuals to sustainability and the environment.

Can I make a difference?

By purchasing products containing recycled materials we are increasing demand for these products, and providing a use for the recyclable materials that companies and communities collect. The benefit of increased demand in closed-loop products is the opportunity for manufacturers to show their commitment in the management of products — from inception through design and manufacturing to service and disposal or recycling.

New West Gypsum Recycling uses trucks to pick up discarded gypsum.

PHOTO FROM NEW WEST GYPSUM RECYCLING

Cheryl McKitterick is a 26-year veteran of the construction recycling industry. She lives in British Columbia.

Photo by Benjamin Benschneider

Photo by Whitney Lewis

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