

PNCA 511 BUILDING RENOVATION: SUSTAINABILITY ACCOMPLISHMENTS

This walking tour document includes a narrative of the green and sustainable features and practices incorporated into the design, construction, and operation of PNCA's campus. It is intended to serve as talking points for members of the campus community who are leading tours for prospective students, donors, visitors, members of the media as well as the broader community.

- LEED Platinum Certification (Pending) – Administered by the U.S. Green Building Council, Leadership in Environmental and Energy Design (LEED) is an internationally recognized and respected benchmark for the design, construction and operation of high performance “green” buildings.” PNCA’s 511 building has been designed and renovated to achieve LEED Platinum, the highest certification level possible.

ARLENE AND HAROLD SCHNITZER CENTER FOR ART AND DESIGN EXTERIOR

Originally opened in 1919 as federal post office and listed on the National Register of Historic Places, the entire exterior of the building’s façade has been preserved and restored.

- Further, more than 95% of the surface areas of the structural walls, floors and roof of the building were preserved and restored for reuse. This extensive reuse minimizes the need for new materials and the generation of construction waste, honors the past and offers architectural character.
- Located in the heart of downtown Portland, the project has convenient access to TriMet buses, streetcars, and light rail MAX. Dozens of bicycle racks, connectivity to Portland’s extensive bicycle network of bike paths and bike lanes encourage bicycle commuting. Additionally, the adjacent greenway North Park Blocks and nearby Willamette River Greenway inspire walking.

ANN PAYNE EDLEN HALLWAY

The greenest approach to development is to retain and refurbish an existing building, which is exactly what occurred with PNCA's new campus anchor—the Arlene and Harold Schnitzer Center for Art and Design.

- The Federal Government decommissioned the facility with the last of the Federal Offices moving out in 2013. PNCA was able to receive the building through a collaborative effort between the College, the National Parks Service, the National Trust for Historic Places, and the Portland Development Commission.

- Original 1919 post office counter, now in Admissions, is one of the many historical features kept intact.

MAIN FLOOR ATRIUM

Acclaimed architect Brad Cloepfil of Allied Works Architecture created

the plans for adaptive reuse that preserved key historical features of the stately 100-year-old building while introducing contemporary design and dynamic flow into a light-filled core of the building.

- Key to the design was the addition of a central atrium skylight, which bumped the roof/skylight up a floor and created a natural light-filled interior.

- Original architecture took full advantage of natural light with 39 windows surrounding the first floor of the building.

NEW COMMONS

The building's original design provided "magnificent bones" with numerous skylights, expansive windows, lofty ceilings, and open spaces. Brad Cloepfil and the team at Allied Works Architecture created a stunning design that honored the building's historic heritage, while creating state of the arts facilities for a top art and

design education. Howard S. Wright Construction, with Gerding Edlen as project manager, began work on the building early in 2014.

- Along with green features in the new construction in the building's central core, many sustainable features were achieved through restoration.

- After decades of being covered original skylights were opened throughout the second floor, including these sawtooth skylights. These skylights, which were covered up in the 1960s, originally were used to flood natural light into the mail sorting facilities on the main floor.

- Restoration also included refurbishing the original hardwoods floors throughout the building.

- In addition to the skylights, the interior became filled with light as the tops of ground-floor arched windows were uncovered.



HALLIE FORD TOWER

Through out the Building's Tower, which includes studios, classrooms and offices, sustainable features were restored and executed.

- Dropped ceilings were removed and hallway transom windows were uncovered allowing additional light to pour in.
- The use of the building's original operational windows in the tower increased the green features.

SUSTAINABLE FEATURES IN THE TOWER FLOORS

- Energy Efficiency: High-performance, Energy-Efficient Design – Through an integrated combination of strategies,

the building is forecasted to provide at least 40% energy-cost savings—or \$90,000 each year—compared to minimum code-standard design. The energy savings is derived primarily from efficient LED lighting design with daylight controls and occupancy sensors; efficient HVAC systems (a dedicated outdoor air system with heat recovery and variable refrigerant flow heat pumps); several skylights which reduce the need for artificial lighting; and operable windows throughout the fourth, fifth and sixth floor spaces offering natural daylight, ventilation and cooling, as well as a connection to the outdoors.

- Real-time Energy Monitoring to Optimize Performance – A comprehensive energy monitoring system provides timely actual building energy usage of the heating, cooling, ventilation, lighting, systems to enable

the building maintenance team to fine-tune and maintain systems to ensure on-going optimal energy performance and operational cost savings.

- Renewable Energy: Roof-Top Solar-Ready -- A roof-top, on-site solar photovoltaic system is planned, pending funding, to offset the building's electricity load. The system size is to-be-determined but is forecasted to produce at least 1% of the building's annual energy load, which would equate to an annual \$5,000 operating cost savings.
- Water Efficiency: Water-Efficient Plumbing Fixtures – The installation of high-performance/low-flow plumbing fixtures in all restrooms and kitchen-break rooms is forecasted use 30% less water than if only code-minimum fixtures were used.

