Tanner Point

Sustainability Summary

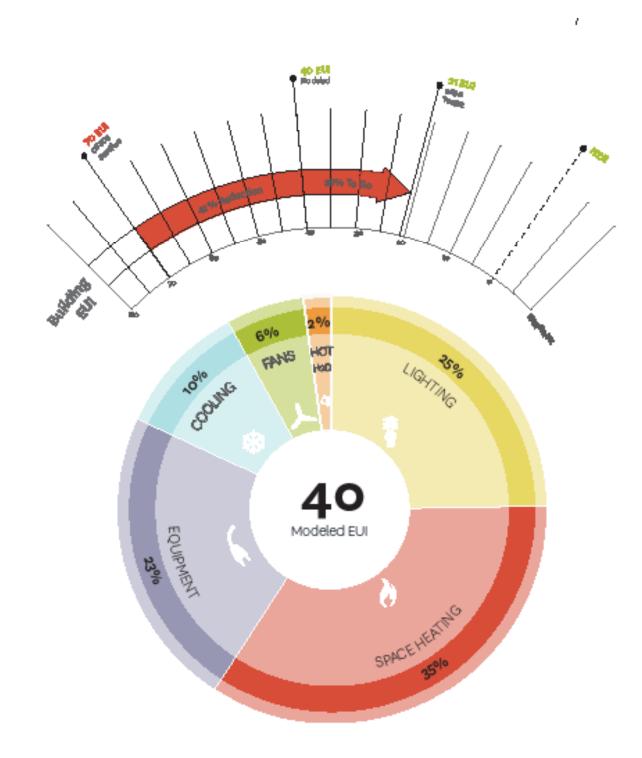
Project Type: Commercial Office Location: Portland, Oregon Built Area: 220,000 SF

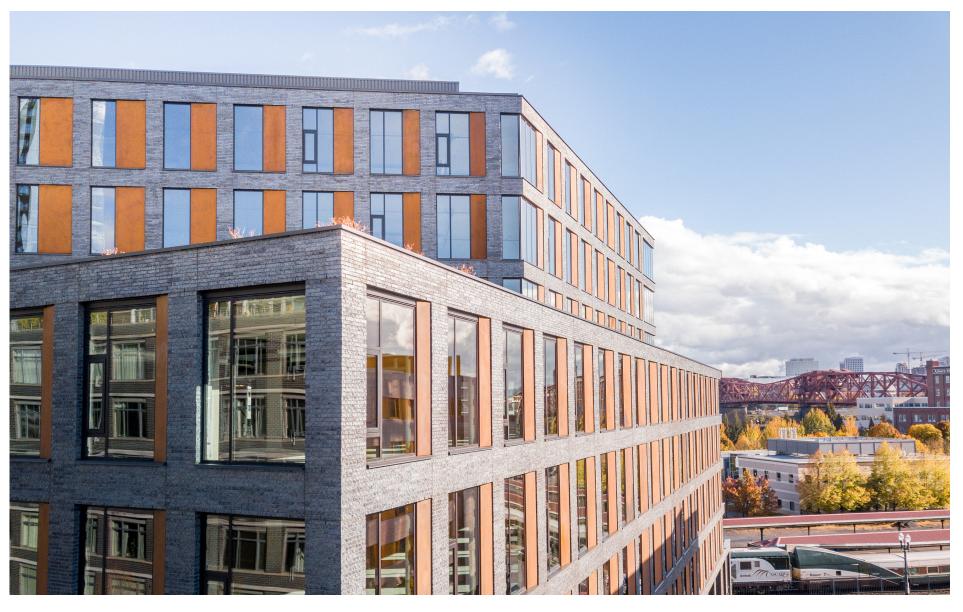
Scope: Core & Shell, expected completion 2018

Certification: LEED Silver

Architect: Hacker with GBD Energy Consultant: Glumac

Sustainability Consultant: Lensa Consulting





Design Summary

Located at the gateway to the River District, this eightstory office building's triangular shape is created by the city grid meeting the river and railroad, giving the site a special relationship to the district's historic remnants.

The layering of forms reflects the motion of the river while the material palette is inspired by the industrial architecture of the neighborhood. Window openings are strategically placed to capture iconic views of the Fremont Bridge, Broadway Bridge, Centennial Mills, and Union Station.

With seven floors of office space and double-height retail spaces on the ground floor, Tanner Point bridges the divide between the industrial waterfront and commercial Pearl District, with welcoming entrances, storefronts, and seating.

Key Sustainability Concepts

Sustainable design strategies implemented on this project are driven by the targeted LEED Silver certification rating system, utilizing LEED 2009 for Core and Shell Development. Energy modeling done by Glumac during design development evaluated a number of envelope

assemblies and HVAC systems to ensure the building's overall performance meets this criteria.

Maximizing windows for natural light and views while also factoring in the building envelope's energy performance was a key concept in the design. Carefully placed windows and skylights allow the office spaces to receive ample daylight throughout the day, minimizing the need for electric lighting. Natural ventilation and passive cooling are accomplished by incorporating operable windows throughout the building.

The building's envelope is a standard brick masonry assembly with an R-value of 23.4. A high performing fiberglass window assembly exceeds the thermal performance required by code.

The HVAC system includes a semi-custom Variable-Air-Volume (VAV) with integrated Direct Expansion Air Conditioner (DX) for cooling. Initially the team investigated a chilled water system which would have greatly reduced the building's energy consumption, but the system proved to be too expensive for the given budget.

LED light fixtures are used throughout the building. As a core and shell project, the main lighting loads will be in the tenant spaces. A tenant design manual stipulates

the maximum lighting energy that can be used in tenant improvements. This requirement will reduce tenants' Lighting Power Density (LPD) and improve the building's overall lighting loads.

A majority of the roof area is green roof with Levels 2, 6, and 8 having occupiable outdoor patios and plazas. Furthermore, an extensive rainwater runoff system collects water from the roof and filters it down into three weathered-steel runnels located on the ground level. This exposed interactive water display allows passersby to view the runoff system at work.