

Batik Apartments

Batik, a mixed-use development in Seattle, promotes healthy living for residents and the community.

HILLSIDE HOME

Part of Seattle's redesign of Yesler Terrace, the Batik mixed-used development features a stacked design that highlights views of the surrounding landscape.





▲ GATHERING SPOT

A multifloor community kitchen invites residents and neighbors to connect and enjoy meals together.

Seven-story mixed-use Batik was one of the first apartment buildings completed in 2018 as part of Seattle's dramatic redesign of Yesler Terrace. When the neighborhood was originally developed in the early 1940's, it marked the nation's first racially-integrated housing project. The development had clusters of two-story townhouses with balconies and private yards to take advantage of the neighborhood's

spectacular views. The goal was to develop housing that was decent, safe, and sanitary. Long, bar-like buildings were spaced out along the hillside to make the most of the sunshine, views, and air circulation to promote the notion of a healthy development.

Using health and wellness as a blueprint, Batik repurposes Yesler Terrace's original bar-like design to encourage air flow and increase

25%

High efficiency heat pump space conditioning equipment serves all amenity, corridor, and common areas and 25% of residential apartments. The use of heat pumps for space and water heating eliminates all use of fossil fuels (excluding the rooftop barbecues and decorative fireplace in the lobby).

30%

Electric air-to-water heat pump domestic hot-water system recovers heat from below-grade parking garage buffer space for year-round high performance, which uses 30% less energy than a typical gas or electric resistance water heating system.

density. Its programming reinforces an overall health-minded development: an open “irresistible” stairway cultivates social engagement and physical conditioning; a multifloor community kitchen allows residents and neighbors to bond over meals; the landscaped plaza encourages pedestrian traffic and easy access to the building’s retailers; the brick podium anchors three interlocking stepped forms that create multiple exterior gathering spaces with uninterrupted views.

But Batik’s nod to its health-focused origins doesn’t stop there: it’s also one of the most energy-efficient multifamily buildings in the region, achieving an energy-use intensity rating (EUI) of just 17 kBtu/ft²/yr—less than half the energy use of a typical new multifamily building of this type.

The award-winning project achieved LEED for Homes Platinum certification using off-the-shelf technology in creative ways, including an innovative domestic hot water system that uses high-efficiency reverse-cycle chiller (RCC) technology. This water-heating system uses about three times less energy for water heating than a typical gas or electric resistance water-heating system. In addition, Batik uses low-flow plumbing fixtures that reduce water usage by 30% and high efficiency heat pump space conditioning equipment, creating an essentially carbon-neutral multifamily building. ■

IMPACTS

01 INNOVATIVE WATER-REDUCTION STRATEGIES
Batik uses a domestic hot water system that utilizes high-efficiency reverse-cycle chiller (RCC) technology. This water-heating system uses about three times less energy for water heating than a typical gas or electric resistance water-heating system. In addition, low-flow plumbing fixtures and efficient appliances reduce water usage by about 30%.

02 APPLYING HEALTH AND WELLNESS AS A BLUEPRINT
Batik’s stacked design repurposes the historic neighborhood’s original bar-like framework to make the most of the sunshine, views, and air circulation, which encourages air flow and increases density. From its “irresistible stair” to its community kitchen, Batik’s programming reinforces an overall health-minded development for its residents and the community.

03 A PRACTICAL, REPLICABLE DESIGN SOLUTION
The award-winning, carbon neutral project uses off-the-shelf technology in creative ways—it is a replicable, affordable example of what is possible in the multifamily sector. There are ample opportunities to improve overall building health and energy performance without compromising good design or construction budgets. Acknowledging this in a tight-margin, risk-averse industry, it is possible to accomplish high performance objectives with an approach that maximizes value.

“Batik Apartments shows that you can build beautiful, healthy, and comfortable low-carbon multifamily homes on a tight budget. Thanks to the team’s creative thinking and innovative design, we delivered a LEED Platinum project that uses half the energy of buildings like it—and already meets Washington State’s ambitious 2030 climate goals.”

— JONATHAN HELLER, PE
PRINCIPAL, PRESIDENT, DIRECTOR OF
TECHNOLOGY TRANSFORMATION AT ECOTOPE

High efficiency double glazed windows and highly insulated thermal envelope



"Irresistible" stair cultivates social engagement



Heat pump conditioning in common areas and some units



30% savings through use of low-flow plumbing/appliances



Community kitchen for residents and neighbors



Innovative reverse-cycle chiller (RCC) powers domestic hot water system



Bar-like design maximizes sun, light, and air



Pedestrian pathway connects to greater Yesler Terrace community



Energy-use intensity

Energy-use intensity rating (EUI) of just 17 kBtu/ft²/yr—less than half the energy use of a typical new multifamily building of this type.

CREDITS

- **Developer:** Vulcan Real Estate
- **Architect:** Runberg Architecture Group
- **General Contractor:** Exxel Pacific
- **Mechanical Engineer:** Ecotope
- **Electrical Engineer:** Rushing
- **Energy Modeler:** Ecotope
- **Structural Engineer:** Coughlin Porter Lundeen
- **Civil Engineer:** Coughlin Porter Lundeen
- **Landscape Architect:** HEWITT
- **Building Envelope Consultant:** 4EA Building Science
- **Interior:** Two9 Design
- **Lighting Design:** Rushing
- **LEED Consultant:** O'Brien360
- **Acoustics:** A3 Acoustics

CERTIFICATIONS

Salmon-Safe

LEED Platinum