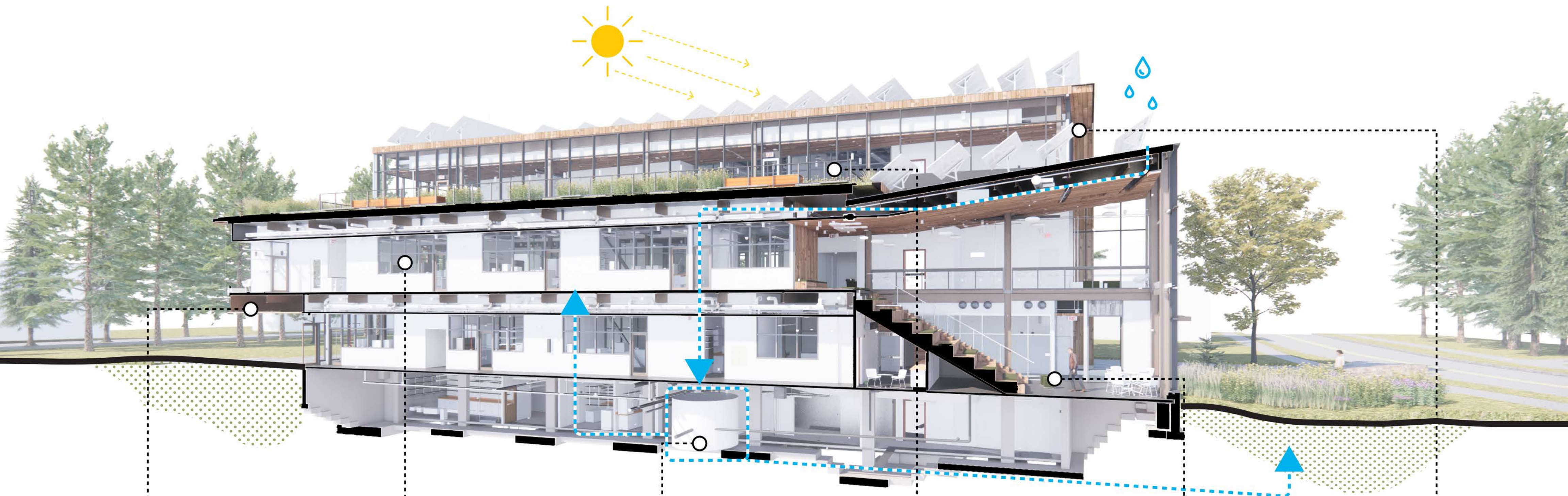


Roux Center for the Environment | Bowdoin College

Brunswick, Maine



Thermally modified poplar cladding comprises a majority of the **locally-sourced FSC-certified wood**



Energy efficient Lab with projected EUI of **48 kBTU/sf/year.**



Rainwater recovery storage system & active bioswale **2,000 gallon tank** provides integrated stormwater and graywater system



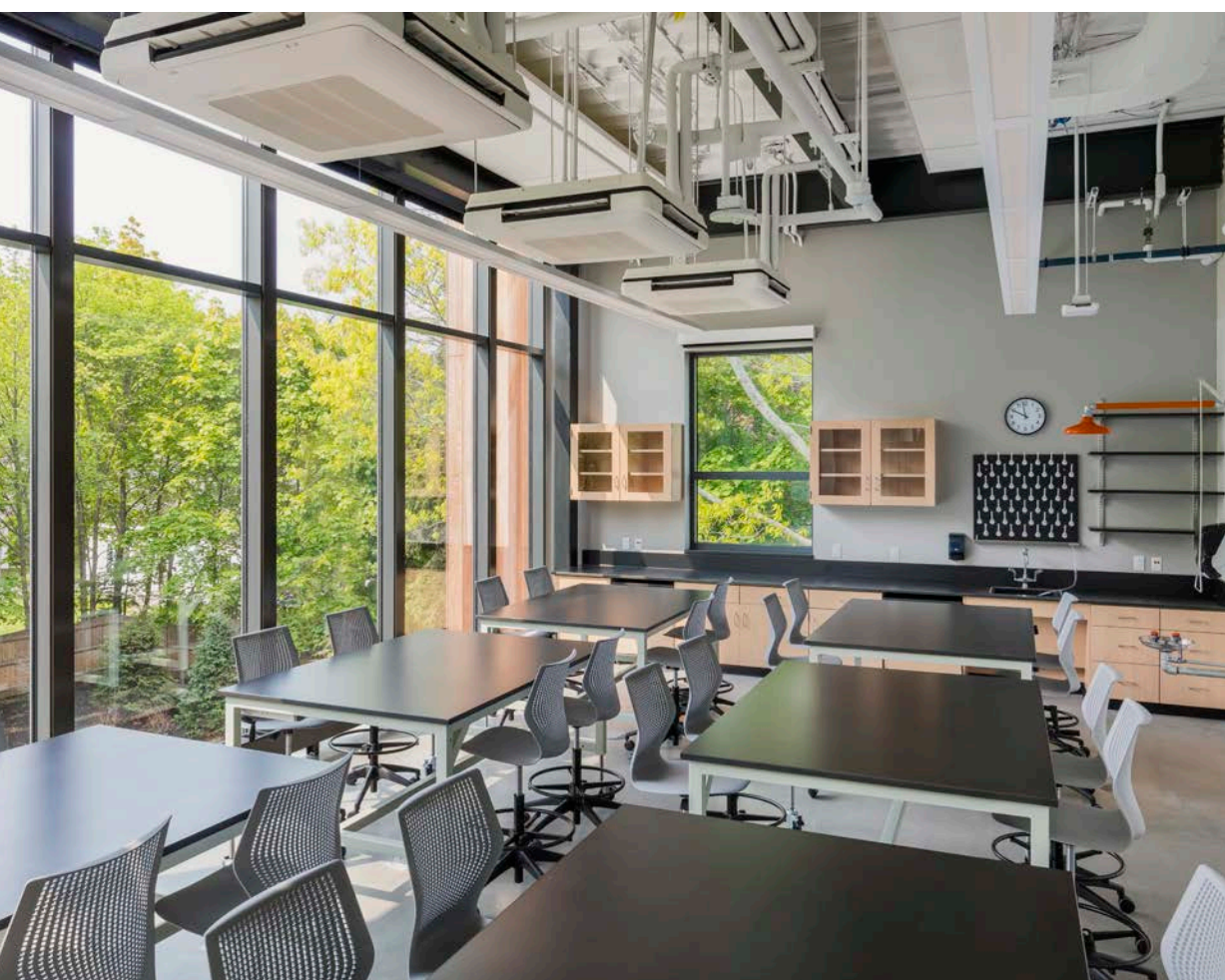
Research-based green roof collects stormwater and provides research platform for faculty & students with embedded **remote monitoring instrumentation**



Community gathering space lecture stair encourages active **circulation, community gathering and wellness**



Rooftop PV array **27kW** array offsets over **13% annual electric costs**



Project Team:
Architect: CambridgeSeven
Client: Bowdoin College
MEP & Fire Protection Engineer: Arup
Structural Engineer: Becker Structural Engineers
Landscape Architect: Stephen Stimson Associates
Civil Engineer: Sebago Technics
Building Envelope: Simpson Gumpertz Heger
Code Consultant: Jensen Hughes
Sustainability: Thornton Tomasetti
Contractor: Peter Warren Construction Group
Specifications: Kalin Associates

Project Facts:
USGBC LEED v4 Platinum Certified
Archdaily - 2020 Project of the Year Finalist
LOOP Awards – 2021 Winner – Educational Project

2,615 SF Vegetated Roof	78 Tons Waste Diverted from Landfills	88% Wood FSC-Certified	25% Building Materials from Recycled Content
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The Roux Center for the Environment provides a greatly expanded platform for environmental studies at Bowdoin College. This 29,000 SF interdisciplinary building features an ensemble of flexible classrooms, research labs, faculty offices and unstructured learning spaces. The Roux Center houses space in which to study the natural world and fully immerses its users in their subject matter within a structure that reflects and respects its own environment.

Transparency, both physical and pedagogical, enables a clearer engagement of teaching, learning and scholarship. The building's form is expressed by two offset bars housing faculty offices and research labs on the east with classrooms and teaching labs on the west. A glazed circulation link fosters connections between faculty and students. The glassy, tiered Lantern hosts lectures, informal gatherings and anchors Roux at the campus edge. Roux's form and fenestrations encourage inward views, stoking passersby curiosity, inviting them in for public presentations. This cross-pollination of knowledge among students, departments, and the Brunswick community is at the core of Roux's design.

The Roux Center is developed as an all-electric-ready and net-zero-ready building awaiting future renewables. Exterior materials reflect the woodland vernacular; the east and west facades are clad in a durable, thermally-modified, poplar siding, locally sourced from FSC-certified wood, and slotted with triple-glazed IGUs that mitigate morning and afternoon sun. The LEED Platinum building is a teaching lab of sustainable and innovative construction technologies, including a rooftop photovoltaic array that offsets 13% of annual electric costs, a gray water reclamation system that saves 50% of potable water usage, and enhanced building systems that provide 63% energy savings compared to typical labs. The site also features a research-based vegetated roof and stormwater swale/geology garden at ground level.

Various academic departments share the Roux Center, expanding research and collaboration opportunities across several disciplines. A balance of dedicated lab space and flexible group learning areas offers programmatic versatility to the entire campus.