

MASSACHUSETTS STATE GOVERNMENT LEADING BY EXAMPLE

COUNTDOWN TO 100 LEED CERTIFICATIONS

Since 2007, all new construction at state-owned facilities are required to meet the Massachusetts LEED Plus standard, which requires buildings to achieve both LEED certification and be designed to meet energy performance that is 20% better than the existing Massachusetts building energy code. Since that time, 100 buildings have been constructed that prioritize green building elements such as energy and water efficiency, sustainable materials, and innovative design. This poster highlights the 97th building to be certified in the state-owned building portfolio.



#97 UMASS AMHERST SOUTH COLLEGE ACADEMIC FACILITY

This project included the retrofit and expansion of a 19th century academic building, improving mechanical systems and insulation to improve overall efficiency. The building achieved LEED Gold certification by incorporating a number of elements to reduce water and energy use, and reduce overall environmental impacts. Key design elements contributing to the certification include:



32% reduction in overall water use; 100% reduction in potable water use for landscaping



Densely built environment preserves greenfields and habitat; bike storage reduces vehicle dependence



Air ventilation rates 30% above minimum improves indoor air quality



Restoration of existing building used 22% recycled materials; 75% of construction waste recycled



Optimized energy performance by 35%; implemented sub metering and completed enhanced commissioning

PROJECT INFO

PROJECT MANAGER: UMBA

DESIGN TEAM: Kliment Halsband Architects; and DiMella Shaffer

CONTRACTOR: Daniel O'Connell's Sons, Inc.

CERTIFICATION: April 2022

SIZE: 101,159 sq ft

BUILDING FEATURES

- Energy recovery ventilators reuse waste heat to improve heating efficiency
- Advanced building metering of both energy and water consumption
- Preservation of existing 19th century building reduced costs and embodied carbon emissions

UMASS AMHERST SUSTAINABILITY

- 19 LEED buildings in portfolio
- Campus is home to Crotty Hall, one of five buildings in the state portfolio designed to be zero-net energy
- Recently committed to achieving net-zero emissions by 2032



Learn more:

Leading by Example Program: [Green Buildings](#)
U.S. Green Building Council: [UMA South College Academic Facility](#)
UMass Amherst: [UMA Green Buildings and Infrastructure](#)