

OVERVIEW



The Life Science Laboratories (LSL) was developed to provide state-of-the-art laboratory space for interdisciplinary research clusters. Existing science space was comprised of 2.8 million gross square feet in 54 buildings of varying condition and configuration. Today's scientific research requires modern facilities with properly sized floor plates, adequate floor-to-floor heights, and energy-efficient building systems and envelopes. With ever-changing research priorities, it is critical that new facilities provide large, flexible and adaptable spaces that can easily accommodate growth and changing paradigms. This project is LEED Gold Certified.

SUSTAINABLE SITES



Site selection is an important step in the building process because it impacts transportation and energy use, green spaces and important habitats and farmland, as well as overall campus functionality. The site chosen for the Life Science Laboratories is sustainable in several ways, including:

- Site is not prime farmland, wetlands, priority habitat, or green space
- Serviced by the campus bus systems and within 1/4 mile of ten basic services
- Placement of facility does not increase the quantity and improves the quality of stormwater runoff from the site
- On-site bicycle storage and dedicated alternative fuel vehicle parking reduce fossil fuel travel to the site

WATER EFFICIENCY, MATERIALS & RESOURCES



Utilizing natural resources and building materials to their fullest potential is a priority for all UMA projects. Consideration was made during the design and construction phases to ensure the responsible use, reuse, and recycling of materials and resources, including:

- Landscaped areas designed with native and adaptive plants selected for drought resistance.
- Through the use of ultra low-flow fixtures, project reduces potable water usage by at least 49%.
- Using between 10-20% recycled content materials, 10-20% regional materials, and 50% FSC certified wood.
- Project will recycle or salvage at least 75% of all construction waste.

ENERGY, ATMOSPHERE & INDOOR ENVIRONMENTAL QUALITY



UMass Amherst strives to maintain healthy indoor environments and reduce energy use in campus facilities through sustainable building design. The team employed many strategies, including:

- Using 'Enhanced Commissioning' to ensure proper O&M documentation, staff and occupant training, and review 10 months after completion
- The building is projected to use 33% less energy than comparable building by employing daylight shelves, demand control ventilation, heat recovery, and exterior shading and glazing
- Utilizing low-VOC emitting carpeting and paints, pollutant collecting floor matts and HVAC filters, and easily accessible thermal and lighting controls for occupants



LIFE SCIENCE LABORATORIES

<http://www.umass.edu/sustainability/green-campus/life-science-laboratories-i-ii>

FACILITIES PLANNING DIVISION

www.umass.edu/fp

CAMPUS PLANNING DIVISION

www.umass.edu/cp

For additional information please
email gbc@facil.umass.edu or
call (413) 577-1787

LIFE SCIENCE LABORATORIES UNIVERSITY OF MASSACHUSETTS AMHERST



SUSTAINABILITY FEATURES