

CELS

 usgbc.org/projects/cels





Project Info

Size 107,500 sq ft

University Architect: Frank Cunha III, AIA

The Center for Environmental and Life Sciences (CELS) is a 107,500 square foot, LEED® Gold–certified science facility devoted to environmental and pharmaceutical life sciences research. The Center allows Montclair State's College of Science and Mathematics to build on its collaborative culture combining strengths across disciplines and building research programs of exceptional power. In the process, Montclair State University demonstrates that it can make a large impact on the advancement of science and technology, especially in the sustainable use of natural resources and improved human health. The building comprises of a comprehensive array of laboratories, seminar rooms, classrooms, and other facilities that enable collaborative transdisciplinary research in the pharmaceutical life sciences and environmental sciences. It joins three existing science buildings around a "learning and discovery landscape" to give science research a high-visibility position on the campus. Project Team: Montclair State Project Manager: Frank Cunha Architect: The

S/L/A/M Collaborative, Inc. Construction: Terminal Construction Corporation LEED Consultant: Green Building Center – New Jersey Some of the LEED-specific features include:

- Both bus and rail transportation options within a half-mile walking distance.
- The building is situated on an area that was previously developed.
- The site is near to basic services such as places of worship, a convenience store, day care center, library, park, police department, school, restaurants, theaters, community center, fitness center, and museums.
- A green roof with sedum mats is located above the second floor. This absorbs stormwater, restores habitat, adds insulation to the building roof, and provides a scenic study site and retreat for building occupants.
- Exterior landscaping includes water efficient plantings and two rain gardens in front of the building.
- A 35 percent reduction of water use in flush & flow fixtures.
- Separate collection of refuse and recyclables with color-coded storage containers to avoid contamination of the waste stream.
- Smoking is prohibited in the building and within 25 feet of entries, outdoor intakes and operable windows.
- The building is mechanically ventilated with CO2 sensors programmed to generate an alarm when the conditions vary by 10 percent or more from the design value.
- The design outdoor air intake flow for all zones is 30 percent greater than the minimum outdoor air ventilation rate required by ASHRAE Standard 62.1-2007, Ventilation Rate Procedure.
- Lighting controls include scene controllers and occupancy sensors for classrooms, conference rooms and open plan workstations, with task lighting provided.

Certification type	Level	Points	Certification date
LEED 2009 New Construction	gold	61	March 29, 2017



SUSTAINABLE SITES

AWARDED: 18 / 26

SSp1	Construction activity pollution prevention	REQUIRED
SSc1	Site selection	1 / 1
SSc2	Development density and community connectivity	5 / 5
SSc3	Brownfield redevelopment	0 / 1
SSc4.1	Alternative transportation - public transportation access	6 / 6
SSc4.2	Alternative transportation - bicycle storage and changing rooms	0 / 1
SSc4.3	Alternative transportation - low-emitting and fuel-efficient vehicles	3 / 3
SSc4.4	Alternative transportation - parking capacity	2 / 2
SSc5.1	Site development - protect or restore habitat	0 / 1
SSc5.2	Site development - maximize open space	1 / 1
SSc6.1	Stormwater design - quantity control	0 / 1
SSc6.2	Stormwater design - quality control	0 / 1
SSc7.1	Heat island effect - nonroof	0 / 1
SSc7.2	Heat island effect - roof	0 / 1
SSc8	Light pollution reduction	0 / 1



WATER EFFICIENCY

AWARDED: 8 / 10

WEp1	Water use reduction	REQUIRED
WEc1	Water efficient landscaping	4 / 4
WEc2	Innovative wastewater technologies	0 / 2
WEc3	Water use reduction	4 / 4



ENERGY & ATMOSPHERE

AWARDED: 10 / 35

EAp1	Fundamental commissioning of building energy systems	REQUIRED
EAp2	Minimum energy performance	REQUIRED
EAp3	Fundamental refrigerant Mgmt	REQUIRED
EAc1	Optimize energy performance	3 / 19
EAc2	On-site renewable energy	0 / 7
EAc3	Enhanced commissioning	2 / 2
EAc4	Enhanced refrigerant Mgmt	2 / 2
EAc5	Measurement and verification	1 / 3
EAc6	Green power	2 / 2



MATERIAL & RESOURCES

AWARDED: 7 / 14

MRp1	Storage and collection of recyclables	REQUIRED
MRc1.1	Building reuse - maintain existing walls, floors and roof	0 / 3
MRc1.2	Building reuse - maintain interior nonstructural elements	0 / 1
MRc2	Construction waste Mgmt	2 / 2
MRc3	Materials reuse	0 / 2
MRc4	Recycled content	2 / 2



MATERIAL & RESOURCES

CONTINUED

MRc5	Regional materials	2 / 2
MRc6	Rapidly renewable materials	0 / 1
MRc7	Certified wood	1 / 1



INDOOR ENVIRONMENTAL QUALITY

AWARDED: 12 / 15

EQp1	Minimum IAQ performance	REQUIRED
EQp2	Environmental Tobacco Smoke (ETS) control	REQUIRED
EQc1	Outdoor air delivery monitoring	1 / 1
EQc2	Increased ventilation	1 / 1
EQc3.1	Construction IAQ Mgmt plan - during construction	1 / 1
EQc3.2	Construction IAQ Mgmt plan - before occupancy	1 / 1
EQc4.1	Low-emitting materials - adhesives and sealants	1 / 1
EQc4.2	Low-emitting materials - paints and coatings	1 / 1
EQc4.3	Low-emitting materials - flooring systems	1 / 1
EQc4.4	Low-emitting materials - composite wood and agrifiber products	1 / 1
EQc5	Indoor chemical and pollutant source control	1 / 1
EQc6.1	Controllability of systems - lighting	1 / 1
EQc6.2	Controllability of systems - thermal comfort	0 / 1
EQc7.1	Thermal comfort - design	1 / 1
EQc7.2	Thermal comfort - verification	1 / 1
EQc8.1	Daylight and views - daylight	0 / 1
EQc8.2	Daylight and views - views	0 / 1



INNOVATION

AWARDED: 5 / 6

IDc1	Innovation in design	0 / 1
IDc2	LEED Accredited Professional	0 / 1



REGIONAL PRIORITY CREDITS

AWARDED: 1 / 4

EAc1	Optimize energy performance	0 / 1
EAc2	On-site renewable energy	0 / 1
SSc4.1	Alternative transportation - public transportation access	1 / 1
WEc2	Innovative wastewater technologies	0 / 1

TOTAL

61 / 110

40-49 Points CERTIFIED	50-59 Points SILVER	60-79 Points GOLD	80+ Points PLATINUM
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