

Section 3: LEED Sustainability

LEED Narrative

The purpose of the LEED narrative is to demonstrate the efforts put toward achieving LEED Gold. This is a credit-by-credit basis, with each subsection providing opportunities for more environmentally conscious development. The number in parentheses indicates the number of points being awarded for the credit. “Prerequisite” in parentheses means that this LEED activity is required prior to any other credits in the subsection being awarded, for the category. Included below is the LEED Checklist showing the 40 points met and LEED Responsibility Matrix.

Location & Transportation (3 Points)

Sensitive Land Protection – (1 Point)

The land being developed on does not meet the criteria of sensitive land, nor has it been previously developed.

Bicycle Facilities – (1 Point)

A bicycle storage rack with 4 storage spaces will be installed on-site for patrons to use, both short-term and long-term. There will be no time limit for storage.

Reduced Parking Footprint – (1 Point)

Only the minimum local code required parking spaces will be provided on-site. Therefore, there will be 19 total parking spaces, 18 regular and 1 in compliance with ADA van accessibility.

Sustainable Sites (4 Points)

Construction Activity Pollution Prevention – (Prerequisite)

For this requirement, we aim to create and utilize an erosion and sedimentation plan for all construction-related activities for the project.

Rainwater Management – (3 Points)

A Low Impact Development bioswale and exfiltration system will be installed on site to manage rain runoff to the 98th percentile in order to achieve 3 points.

Light Pollution Reduction – (1 Point)

Energy efficient LED lightbulbs will be installed for all exterior lighting, under a certain luminaire uplight rating. The lights will be focused downwards as to prevent significant uplight and light pollution,

Water Efficiency (8 Points)

Outdoor Water Use Reduction – (Prerequisite, 2)

While this is a prerequisite, 2 additional points will be achieved for this benchmark by reducing the landscape's water requirement by 100% during the site's peak watering month. Due to the nature of the site being a general industrial office, there isn't much vegetation that requires landscaping, especially with the existing trees on site behind and adjacent to the building. For the parking islands and storefront where irrigation of certain plants might be necessary, a drip irrigation system will be in use.

Indoor Water Use Reduction – (Prerequisite, 6)

Indoor water use will be reduced by 50%. To achieve this goal, all lavatories will have sinks with touchless sensor fixtures, waterless urinals, high-efficiency toilets that reduce the gallons per flush, and pressure reducing valves. Because water use will be reduced by 50%, 6 points will be earned for this section.

Building-Level Water Metering – (Prerequisite)

A permanent Water meter will be installed on-site that measures total potable water use for the building. The meter will be automated.

Energy and Atmosphere (14 points)

Fundamental Commissioning and Verification – (Prerequisite)

Commissioning and associated activities of all mechanical, plumbing, electrical, and renewable energy systems will be in accordance with ASHRAE 0-2005 and related guidelines. There will be a qualified commissioning authority designated for the project and necessary inspections.

Minimum Energy Performance – (Prerequisite)

Contractor will be required to ensure that all subcontractors are in compliance with ASHRAE's 50% advanced Energy Design Guide. This includes any of the contractor's self-perform work, HVAC and service water heating requirements.

Building-Level Energy Metering – (Prerequisite)

Contractor will install new building-level energy meters or submeters for the purpose of providing total building energy consumption data. The data to be tracked includes but is not limited to: electricity usage, natural gas, chilled water, and steam.

Fundamental Refrigerant Management – (Prerequisite)

In an effort to reduce ozone depletion, non-CFC-based refrigerants will be used for all HVAC and refrigeration system.

Enhanced Commissioning – (3 Points)

The designated Commissioning Authority will review contractor submittals, verify testing, include manual updates, and all enhanced commissioning tasks that are part of the Owner's Project Requirements (OPR) and Basis of Design (BOD).

Optimize Energy Performance – (8 Points)

In order to achieve 8 points out of 18 possible points, a target of 20% improvement in energy design will be reached prior to the schematic design. Efficiency will be measured for this and analyzed, with a focus on ensuring the efficiency of the HVAC system and lowering utility costs.

Advanced Energy Metering – (1 Points)

Advanced energy metering will be installed for all whole building energy sources, including domestic water and electric.

Demand Response – (1 Point)

Assuming a demand response program being available, Owner will participate in a demand response program, and develop and commit to a comprehensive plan for when a demand response event occurs.

Enhanced Refrigerant Management – (1 Point)

A low impact refrigerant will be used that has an ozone depletion potential (ODP) of 0, and a global warming potential (GWP) of 50 or less. Two refrigerants to consider for this are R-744 and R-114.

Materials & Resources (3 Points)**Storage and Collection of Recyclables – (Prerequisite)**

Contractor will provide dedicated areas on site for collecting and storing recycled materials. A third party in conjunction with the contractor will assist with waste removal.

Construction and Demolition Waste Management Planning – (Prerequisite)

A construction and demolition waste management plan will be implemented. This plan will include what materials will be separated and how they'll be processed by the recycling facility. The waste management plan will also include waste diversion goals for the project and specifications about how separation and sorting of materials.

Building Product Disclosure and Optimization: Environmental Product Declarations – (1 Point)

A minimum of 20 products from 5 different manufacturers per the specifications will meet the Environmental Product Declaration (EPD) standards. Products will be sourced and ensured they are from reputable vendors that are EPD, USGBC, and ISO 14044 and related ISO conformities.

Building Product Disclosure and Optimization: Material Ingredients – (1 Point)

Contractor will use products that have a published Health Product Declaration in order to provide information about known hazards of products in an effort to minimize risk and exposure to contamination.

Construction Demolition Waste Management – (1 Point)

In an effort to promote recycling efforts of nonhazardous construction materials, 50% of total construction and demolition material will be diverted. The diverted material must be in the form of 3 different streams or material types.

Indoor Environmental Quality (6 Points)**Minimum Indoor Air Quality Performance – (Prerequisite)**

ASHRAE Standards for ventilation and monitoring will be met. This will be done by determining the minimum outdoor air intake flow for mechanically vented space.

Environmental Tobacco Smoke Control – (Prerequisite)

Smoking is not permitted inside the building or on site. Signage will be posted to indicate this zero-tolerance policy where necessary.

Low-Emitting Materials – (2 Points)

Low emitting materials will be used, when possible, to reduce contaminants damaging air quality. In order to achieve 2 points for this category, 3 of the categories must be met because this the building will have furniture and is core shell new construction. The 3 categories that will be met are interior paints and coatings, with a threshold compliance of 90% for emissions, 100% for flooring, and 100% for ceiling, walls and thermal insulation.

Construction Indoor Air Quality Management Plan – (1 Point)

An Indoor Air Quality (IAQ) plan will be implemented during construction and during preoccupancy phase of building. The IAQ plan will address protecting materials from moisture damage, safe operation of air handling equipment, and other aspects related to promoting a contaminant free indoor air.

Indoor Air Quality Assessment – (2 Points)

After construction but prior to occupancy, a baseline IAQ test will be performed in compliance with ASTM and EPA methods. The baseline test must show that contaminants do not exceed the concentration level threshold.

Thermal Comfort – (1 Point)

The HVAC system will be designed to meet the ASHRAE standards for both thermal comfort design and thermal comfort control.

Interior Lighting – (1 Point)

All lights in the office and main service area will have and adjustable lighting control consisting of 3 positions: On, Off, and Midlevel.

Innovation (1 Point)

LEED Accredited Professional – (1 Point)

This project will contain a LEED Accredited Professional in an effort to promote sustainable development.



LEED v4 for BD+C: New Construction and Major Renovation Project Checklist

Project Name: 14975 NW 133rd Terrace Alachua, FL 32615
Date: 2/3/24

Y	?	N		
Y			1	Credit
				Integrative Process
				1
3	0	13	Location and Transportation	16
1			Credit	Sensitive Land Protection
				1
			2	Credit
				High Priority Site
				2
			5	Credit
				Surrounding Density and Diverse Uses
				5
			5	Credit
				Access to Quality Transit
				5
1			Credit	Bicycle Facilities
				1
1			Credit	Reduced Parking Footprint
				1
			1	Credit
				Green Vehicles
				1
4	0	6	Sustainable Sites	10
Y			Prereq	Construction Activity Pollution Prevention
				Required
			1	Credit
				Site Assessment
				1
			2	Credit
				Site Development - Protect or Restore Habitat
				2
			1	Credit
				Open Space
				1
3			Credit	Rainwater Management
				3
			2	Credit
				Heat Island Reduction
				2
1			Credit	Light Pollution Reduction
				1
8	0	3	Water Efficiency	11
Y			Prereq	Outdoor Water Use Reduction
				Required
Y			Prereq	Indoor Water Use Reduction
				Required
Y			Prereq	Building-Level Water Metering
				Required
			2	Credit
				Outdoor Water Use Reduction
				2
6			Credit	Indoor Water Use Reduction
				6
			2	Credit
				Cooling Tower Water Use
				2
			1	Credit
				Water Metering
				1
14	3	16	Energy and Atmosphere	33
Y			Prereq	Fundamental Commissioning and Verification
				Required
Y			Prereq	Minimum Energy Performance
				Required
Y			Prereq	Building-Level Energy Metering
				Required
Y			Prereq	Fundamental Refrigerant Management
				Required
3			Credit	Enhanced Commissioning
				6
8	2	8	Credit	Optimize Energy Performance
				18
1			Credit	Advanced Energy Metering
				1
1	1		Credit	Demand Response
				2
			3	Credit
				Renewable Energy Production
				3
1			Credit	Enhanced Refrigerant Management
				1
			2	Credit
				Green Power and Carbon Offsets
				2
3	0	10	Materials and Resources	13
Y			Prereq	Storage and Collection of Recyclables
				Required
Y			Prereq	Construction and Demolition Waste Management Planning
				Required
			5	Credit
				Building Life-Cycle Impact Reduction
				5
1			Credit	Building Product Disclosure and Optimization - Environmental Product Declarations
				2
			2	Credit
				Building Product Disclosure and Optimization - Sourcing of Raw Materials
				2
1			Credit	Building Product Disclosure and Optimization - Material Ingredients
				2
1			Credit	Construction and Demolition Waste Management
				2
7	0	9	Indoor Environmental Quality	16
Y			Prereq	Minimum Indoor Air Quality Performance
				Required
Y			Prereq	Environmental Tobacco Smoke Control
				Required
			2	Credit
				Enhanced Indoor Air Quality Strategies
				2
2			Credit	Low-Emitting Materials
				3
1			Credit	Construction Indoor Air Quality Management Plan
				1
2			Credit	Indoor Air Quality Assessment
				2
1			Credit	Thermal Comfort
				1
1			Credit	Interior Lighting
				2
			3	Credit
				Daylight
				3
			1	Credit
				Quality Views
				1
			1	Credit
				Acoustic Performance
				1
1	0	5	Innovation	6
			5	Credit
				Innovation
				5
1			Credit	LEED Accredited Professional
				1
0	0	4	Regional Priority	4
			1	Credit
				Regional Priority: Specific Credit
				1
			1	Credit
				Regional Priority: Specific Credit
				1
			1	Credit
				Regional Priority: Specific Credit
				1
40	3	67	TOTALS	Possible Points: 110
				Certified: 40 to 49 points, Silver: 50 to 59 points, Gold: 60 to 79 points, Platinum: 80 to 110

Figure 3.1: LEED Checklist