

**City of Eden Prairie
Sustainable Building Standard
Documentation Package**



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Sustainable Building Standard Requirements

The Standard applies to Multi-Family Residential (5 or More Dwelling Units), Office, Commercial, Town Center, Transit Oriented Development, Mixed Use, Flex Service, and Industrial Developments that include new buildings 2000 GSF or greater and additions of 10,000 GSF or greater with new mechanical/ventilation/cooling systems.

New Construction projects to which this standard applies are required to:

1. Achieve certification at the listed level with one of the following Sustainable Building Rating Systems:
 - a. LEED Building Design and Construction (LEED BD+C) or LEED Residential BD+C Multifamily
 - i. Certified Silver, Gold, or Platinum
 - b. State of Minnesota B3 Guidelines
 - i. Certified Compliant
 - ii. Projects with <20,000 gross square feet can utilize B3 Small Buildings Method where applicable.
 - c. Enterprise Green Communities (with MN Housing Overlay where applicable)
 - i. Certification or Certification Plus
 - d. Equivalent rating system with prior approval from the Coordinator

Note: the most recent or current iteration of the rating system in existence at the time of development application must be utilized.

2. Meet the standards set forth in the Eden Prairie Overlay as follows:
 - a. Building greenhouse gas emission predictions
 - i. Calculate projected GHG emissions for the building and report using the GHG worksheet.

- b. Electric vehicle charging capability
 - i. Provide EV-charging infrastructure to achieve the percentages in the table below.

Type of Land Use	EV-Installed (Fully Operational Day 1)	EV-Ready	EV-Capable
Multi-Family Residential *^	5%	20%	20%
Commercial*	1%	2%	2%
Office/Industrial*	2%	5%	5%
* Allow substitution of 5 Level 2 Chargers with 1 direct current fast charger installation.			
*Minimum of one EV-Installed space shall be accessible.			
^Nursing homes, assisted living, memory care, or convalescent care must install 1 accessible electric vehicle charger for visitor/staff use but are otherwise exempt.			

- c. On-site renewable energy
 - i. At a minimum, project must meet Solar-Ready standard as defined by the selected rating system.
 - ii. Conduct an economic and technical evaluation of providing 5% of building energy load with on-site renewables.
 - iii. Install if cost-effective using a simple payback of 15 years. Cost calculations must be shared with Coordinator if exceeds 15-year simple payback.

Sustainable Building Standard Compliance Process

Kickoff

Development teams shall participate in an introductory meeting with the City's Sustainability Coordinator and Consultant to review SBS requirements. At a minimum, project team attendees shall include the owner, SBS compliance lead, architect, & general contractor (if known). The team shall complete the pre-kickoff screening form and submit it to the Coordinator at least 24 hours before the SBS kickoff meeting.

Submittals

Development teams shall submit all materials described in the Compliance Checklist to the Coordinator per the phases below:

- Planning Application Submittal (due with planning application documents)
- City Council Progress Submittal (due prior to 1st City Council review meeting)
- Building Permit Review Submittal (due at permit review meeting – typically 75%/80% complete)
- Close-out (prior to issuance of Certificate of Occupancy)
- Post-occupancy (within 12 months of occupancy)

Exemptions

The requirements of this Standard may be modified by the Coordinator only for reasons of hardship. Hardship includes the inability to physically achieve the standard due to circumstances unique to the property. Economic reasons alone do not constitute a hardship. Approved modifications must result in the project remaining in harmony with the intent of the Sustainable Building Standard to the maximum extent practicable.

Acceptable

- Full Exemption – Programmatic: conflict with the intended use of the project
- Full Exemption – Technological: limitation of available technologies or methodologies
- Provisional Exemptions: Pass-through to the next phase for guidelines without enough information to determine compliance

Not Acceptable

- Budgetary or project schedule constraints e.g., cost of chargers
- Requirements missed by the project team that cannot be addressed at later phases e.g., waste management
- Not included in standard design and construction processes e.g., embodied carbon
- Small or irregular sites are not an automatic reason for an exemption - B3 has alternative pathways for small buildings in GHG methodology and SB 2030

Pre-kickoff Screening Form

Question	Answer
Project Name	
Project Address	
Project Site Area (GSF)	
Project Building Area (GSF)	
Building Use Type (<i>Office, residential, restaurant, etc.</i>)	
Project type (<i>Choose one: New Construction; Major Renovation</i>)	
If housing, are any affordable units included? Is the project seeking MN Housing funding?	
Policy Trigger (<i>Choose one: PUD; Financial Assistance</i>)	
Project Owner	
Design Team	
Construction Team	

Compliance Checklist

Planning Application Submittal:

Completion of this phase is required prior to Planning Commission review.

Date completed by project team:	Requirements	Reviewed by
	Read the Sustainable Building Standard.	n/a
	Identify a SBS compliance lead for the development team: <ul style="list-style-type: none"> ▪ Name _____ ▪ Email _____ ▪ Phone _____ 	City staff - sustainability
	Participate in an introductory meeting scheduled by City's Sustainability Coordinator to review SBS requirements. At a minimum, project team attendees shall include owner, SBS compliance lead, architect, & general contractor (if known).	City staff - sustainability
	Indicate the project's intended Sustainable Building Rating System: <ul style="list-style-type: none"> <input type="checkbox"/> LEED BD+C (Certification at Silver, Gold, or Platinum) <input type="checkbox"/> State of Minnesota B3 Guidelines (Compliant) <input type="checkbox"/> Enterprise Green Communities (Certified) <input type="checkbox"/> Alternative approved by the Sustainability Coordinator 	City staff - sustainability
	Submit the completed planning application response in the Greenhouse Gas Emissions Worksheet .	Technical Advisor
	Submit the completed planning application response in the Electric Vehicle Charging Worksheet .	Technical Advisor
	Submit the completed planning application response in the Renewable Energy Worksheet .	Technical Advisor

City Council Progress Submittal:

Completion of this phase is required before first City Council review.

Date completed by project team:	Requirements	Reviewed by
	Register project with Sustainable Building Rating System and submit proof of registration (i.e., Screenshot or email confirmation).	City staff - sustainability
	Submit a checklist of the planned credits to be achieved in the selected Sustainable Building Rating System.	City staff - sustainability
	Submit a Case Study Worksheet including major strategies being designed to achieve elected certification path.	City staff - sustainability
	Submit the completed City Council progress response in the Greenhouse Gas Emissions Worksheet and LCA report with draft design.	Technical Advisor
	Submit the completed City Council progress response in the Electric Vehicle Charging Worksheet .	Technical Advisor
	Submit the completed City Council progress response in the Renewable Energy Worksheet .	Technical Advisor

Building Permit Review Submittal:

Completion of this phase is required prior to building permit review. Re-submit documentation prior to construction completion if changes impact overlay compliance.

Date completed by project team:	Requirements	Reviewed by
	Submit an updated checklist of the planned credits to be achieved in the selected Sustainable Building Rating System.	City staff - sustainability
	Submit an updated Case Study Worksheet including major strategies being designed to achieve elected certification path.	City staff - sustainability
	Submit the completed building permit review response in the Greenhouse Gas Emissions Worksheet .	Technical Advisor
	Submit the completed building permit review response in the Electric Vehicle Charging Worksheet .	Technical Advisor
	Submit the completed building permit review response in the Renewable Energy Worksheet .	Technical Advisor

Close-out Submittal:

Completion of this phase is required prior to certificate of occupancy

Date completed by project team:	Requirements	Reviewed by
	Submit documentation showing the purchase of EV charging equipment.	Technical Advisor
	Submit documentation showing the purchase of renewable energy system (if cost effective).	Technical Advisor
	Submit the Case Study Worksheet with the final narrative of the project (including key achievements, key challenges, certification anticipated, and any exemptions required).	Technical Advisor
	Schedule 12-month check-in with Sustainability Coordinator.	City staff - sustainability

Post-Occupancy Submittal:

Completion of this phase is required within 12 months of occupancy

Date completed by project team:	Requirements	Reviewed by
	Complete Sustainable Building Rating System documentation. Submit documentation reporting the certification level and credits/guidelines achieved prior to the 12-month check-in.	City staff - sustainability
	Participate in 12-month check-in with Sustainability Coordinator.	City staff - sustainability
	For B3 projects, link to B3 Benchmarking for ongoing energy and water consumption reporting.	City staff - sustainability

Case Study Worksheet

This worksheet will assist with the City's development of a project case study. At each progress submittal, update the worksheet and submit along with the completed checklist for that phase.

Question	Answer
Project Name	
Project Address	
Project Site Area (GSF)	
Project Building Area (GSF)	
Building Use Type	
Project Owner	
Design Team	
Construction Team	
Construction Completion Date	
Certification Anticipated	
Key Challenges	
Key Achievements and Strategies	
Exemptions Required	

Greenhouse Gas (GHG) Emissions Worksheet

At each phase, submit this worksheet, updated compliance checklist, and LCA report as indicated.

Predicting GHG emissions reductions requires conducting a whole building life cycle analysis (LCA) to determine the global warming potential (GWP). Either of these protocols may be used: [LEED v4.1 Building Life-Cycle Impact Reduction, Option 2 - Path 1](#) or [B3 Guidelines v3.2 M.1A, Whole-Building LCA Model](#).*

Planning Application Submittal:

Question	Answer
Which protocol will be referenced (LEED or B3)?	
Which whole building life cycle analysis tool will be used?*	

***B3 approved tools: Tally, Athena Impact Estimator, One Click LCA; see LEED for their requirements.*

City Council Progress & Building Permit Review Submittals: provide LCA report with draft design at City Council Progress Submittal and LCA report with final design at Building Permit Review Submittal

Global Warming Potential	Reference Building (B3) or Baseline Building (LEED)	Design Building
Total Global Warming Potential (kg CO ₂ e)		
Total Global Warming Potential per square foot (kg CO ₂ e /sf). <i>Note: typical range for B3 projects is 13-40.</i>		
Indicate which of the following breakdowns are included in the report:		
GWP by assembly type (required for B3 protocol)	Y / N	Y / N
GWP by lifecycle stage (required for LEED protocol)	Y / N	Y / N
Narrative of strategies included in the design:		

**Compare the GWP of the proposed building to a baseline building of comparable size, function, orientation, and operating performance as defined in EA Prerequisite Minimum Energy Performance.*

Close-out Submittal: provide updated worksheet and LCA report if changed from the 90% submittal.

Electric Vehicle Charging Worksheet

At each phase, submit this worksheet, updated compliance checklist, and site plan.

Planning Application Submittal

Question	Answer
Is on-site parking planned for this project?	

City Council Progress & Building Permit Review Submittals

Question	Answer
Number of on-site parking spots	
Number of non-ADA parking spots served by Level 2 EV chargers (minimums: multifamily – 5%*, commercial – 1%, office/industrial – 2%)	
Number of non-ADA parking spots served by direct current fast chargers**	
Number of ADA parking spots served by Level 2 chargers (minimum: all building types – 1 space)	
Number of EV-ready parking spots (minimums: multifamily – 20%, commercial – 2%, office/industrial – 5%)	
Number of EV-capable parking spots (minimums: multifamily – 20%, commercial – 2%, office/industrial – 5%)	

**Nursing homes, assisted living, memory care, or convalescent care must install 1 accessible EV charger for visitor/staff use but are otherwise exempt.*

*** 5 Level 2 chargers may be substituted with 1 direct current fast charger.*

Close-out Submittal: provide documentation showing the purchase of EV charging equipment.

Renewable Energy Worksheet

At each phase, submit this worksheet, updated compliance checklist, and energy analysis as indicated.

The types of on-site renewable energy to evaluate may include solar electric and/or solar thermal. Transpired solar may be acceptable if the design meets City guidelines. Wind is not intended to be included.

Planning Application Submittal

Question	Answer
What types of renewable energy systems will the project evaluate?	

City Council Progress & Building Permit Review Submittals:

Question	Answer
Is installing an on-site renewable energy system cost-effective for this project (simple payback of <15 years for 5% of the building energy load)?*	
If cost-effective, show location of renewable energy system in drawings.	Y / N
If not cost-effective, submit cost calculations and plans showing how the project is solar-ready.	Y / N

**Projects may use the [B3 Levelized Cost of Energy Analysis tool](#)*

Close-out Submittal: If renewable energy was shown to be cost effective, provide proof of installation.

Sustainable Building Standard



VISION AND PURPOSE

The Eden Prairie community is dedicated to building a sustainable environment where current and future generations benefit from climate and community resiliency as reflected in the City's Climate Action Plan, which includes the goal of being a carbon neutral city by 2050. Since the built environment is a significant contributor to Eden Prairie's carbon footprint, it is important that new developments minimize emissions and environmental impact during construction and operations. The Climate Action Plan has the established following goals related specifically to development:

- 5% of new construction is net zero energy by 2030, 80% by 2040, 100% by 2050.
- 5% of electricity load met with on-site solar by 2025, 10% by 2030.
- 30% of passenger vehicles are EV by 2030, 50% by 2040, 100% by 2050.

For developments that seek City financial or zoning incentives, it is reasonable that they meet set sustainability requirements in service to those goals. As such, the City of Eden Prairie adopts the following Sustainable Building Standard.

DEFINITIONS

For the purposes of this Standard, the following words and phrases shall have the following meanings:

1. "Coordinator" means the Sustainability Coordinator or their designee.
2. "Developer" means the entity, whether public or private, that undertakes New Construction projects, and to whom the provisions of this Standard apply.
3. "EV-Capable" means the presence of electrical panel capacity with dedicated branch circuit and a continuous raceway from the panel to the future electric vehicle parking spot.
4. "EV-Installed" means the presence of Level 2 electric vehicle charging stations.
5. "EV-Ready" means the presence of electrical panel capacity with dedicated branch circuit and a continuous raceway with conduit terminating a junction box or 240-volt charging outlet at the future electric vehicle parking spot.
6. "Level 2" electric vehicle charging capability is considered medium charging and means

chargers with voltage greater than 120 and includes 240.

7. “New Construction” means the planning, design, construction, and commissioning of a new building 2,000 square feet or greater (gross), or an addition of at least 10,000 square feet (gross) to an existing building if such addition requires installation of new mechanical, ventilation, or cooling systems.
8. “Solar-Ready” means designed and built to facilitate future installation of solar systems on the building’s rooftop to significantly improve the economics of the investment as defined by the selected Sustainable Building Rating System guidelines. For One-Family Residential, or Multi-Family Residential with Two to Four Dwelling Units, use the ICC International Residential Code (IRC) Solar-Ready Provisions for most recent version.

APPLICABILITY

This Standard applies to all New Construction projects as follows:

1. Public buildings owned or operated by the City of Eden Prairie or the HRA.
2. Private buildings rezoned with Planned Unit Development (PUD) District zoning.
 - a. Private buildings rezoned with PUD zoning that only request a density waiver and no additional waivers are not subject to this Standard.
3. Private buildings receiving Financial Assistance.
 - a. Financial Assistance means funds for New Construction projects provided by agreement from the City of Eden Prairie or HRA, including:
 - i. Tax Increment Financing (TIF)
 - ii. Conduit Bonds
 - iii. Met Council LCA
 - iv. Hennepin County Grants
 - v. Other funds that are available to the City of Eden Prairie and HRA
4. All other private development is not subject to the Sustainable Building Standard.

STANDARD REQUIREMENTS

For Multi-Family Residential (5 or More Dwelling Units), Office, Commercial, Town Center, Transit Oriented Development, Mixed Use, Flex Service, or Industrial Developments

New Construction projects to which this standard applies are required to 1) be certified under an eligible Sustainable Building Rating System at the listed rating level, and 2) must meet the standards set forth in the Eden Prairie Overlay.

1. Sustainable Building Rating System means any of the following:

- a. LEED Building Design and Construction (LEED BD+C) or LEED Residential BD+C Multifamily
 - i. Certified Silver, Gold, or Platinum
- b. State of Minnesota B3 Guidelines
 - i. Certified Complaint
 - ii. Projects with <20,000 gross square feet can utilize B3 Small Buildings Method where applicable.
- c. Enterprise Green Communities (with MN Housing Overlay where applicable)
 - i. Certification or Certification Plus
- d. Equivalent rating system with prior approval from the Coordinator.

The most recent or current iteration of the rating system in existence at the time of development application must be utilized.

- 2. The Eden Prairie Overlay are specific measurable standards that New Construction projects must include regardless of the Sustainable Building Rating System selected. The Eden Prairie Overlay requires:
 - a. Building greenhouse gas emission predictions
 - i. Calculated and reported, using an agreed upon methodology.
 - b. Electric vehicle charging capability
 - i. The percentage of parking spaces required at each level of capability based on the type of development are as follows:

Type of Land Use	EV-Installed (Fully Operational Day 1)	EV-Ready	EV-Capable
Multi-Family Residential *^	5%	20%	20%
Commercial*	1%	2%	2%
Office/Industrial*	2%	5%	5%
* Allow substitution of 5 Level 2 Chargers with 1 direct current fast charger installation.			
*Minimum of one EV-Installed space shall be accessible.			
^Nursing homes, assisted living, memory care, or convalescent care must install 1 accessible electric vehicle charger for visitor/staff use but are otherwise exempt.			

- c. Renewable energy
 - i. At a minimum, project must meet Solar-Ready standard as defined by the selected rating system.
 - ii. Conduct an economic and technical evaluation of providing 5% of building energy load with on-site renewables.
 - iii. Install if cost-effective using a simple payback of 15 years. Cost calculations must be shared with Coordinator if exceeds 15-year simple payback.

For One-Family Residential, or Multi-Family Residential with Two to Four Dwelling Units

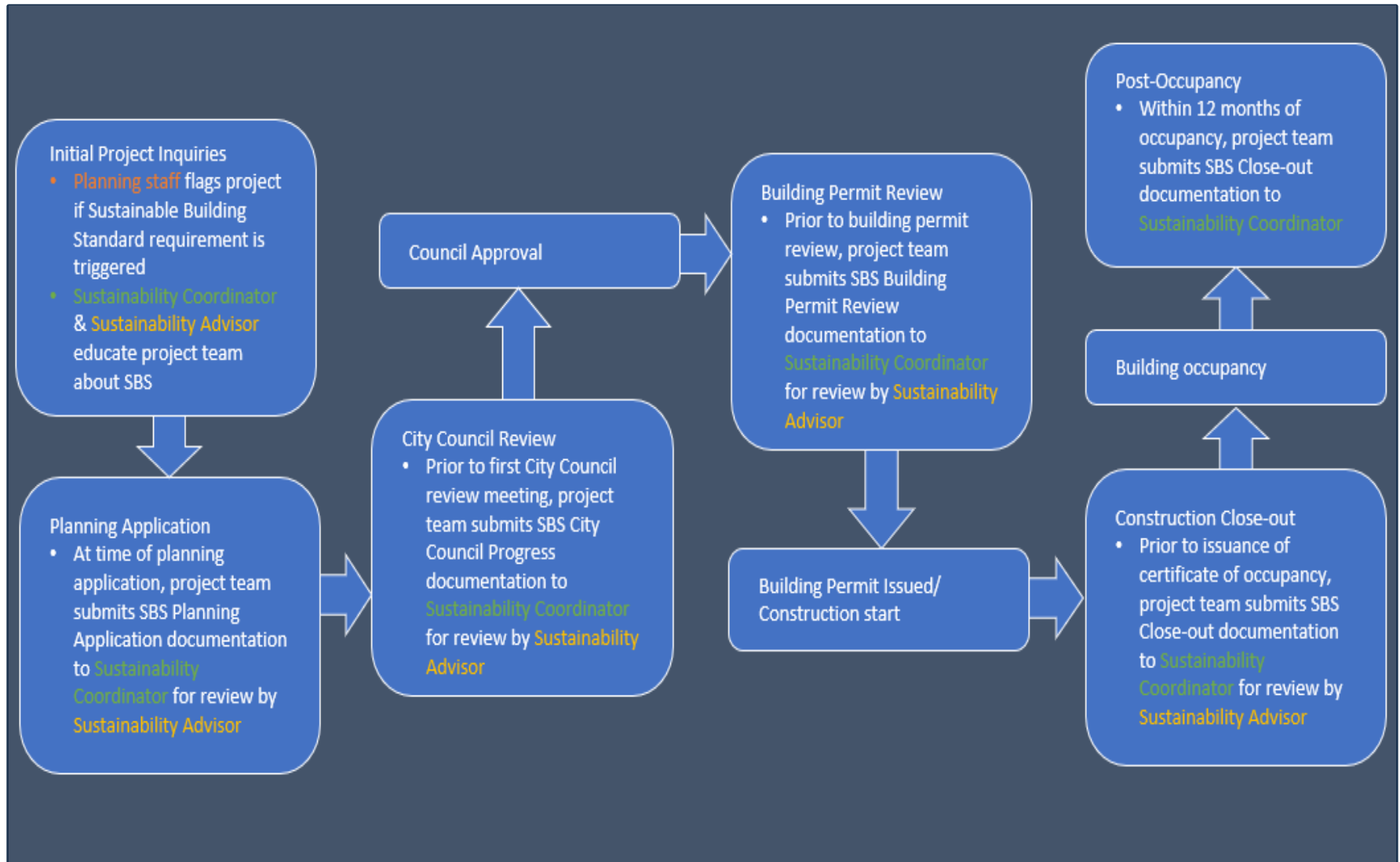
1. New Construction projects to which this standard applies are required to 1) install one EV-Ready parking space per dwelling unit, and 2) build roof to meet Solar-Ready guidelines.

COMPLIANCE

1. For any projects to which this Standard applies, compliance must be a condition of the receipt of Financial Assistance and/or Planned Unit Development approval.
2. Buildings will not advance to the next stage of construction or operation, including necessary permit issuance, without demonstrated ongoing compliance with this Standard.
3. The requirements of this Standard may be modified by the Coordinator only for reasons of hardship. Hardship includes the inability to physically achieve the standard due to circumstances unique to the property. Economic reasons alone do not constitute a hardship. Approved modifications must result in the project remaining in harmony with the intent of the Sustainable Building Standard to the maximum extent practicable. Maximum extent practicable means the highest level of efficacy that can be achieved considering the effectiveness, engineering feasibility, commercial availability, safety, and cost of the measures. Decisions on modification of the Standard by the Coordinator may be appealed to the City Council. This Standard may be amended or discontinued without prior notice.

Approved by the City Council on September 19, 2023

Compliance Process Overview



Sustainable Building Rating System Options

Please note this table reflects systems in 2023. System requirements are subject to change.

Certifying Body	Certification	Description	Approximate fees
U.S. Green Building Council	<u>LEED for Building Design and Construction or LEED Residential BD+C Multifamily:</u> Silver, Gold or Platinum certification	LEED for Building Design and Construction (LEED BD+C) provides a framework for building a holistic green building. Project teams can customize how they pursue LEED by fulfilling credits and earning points that, once added together, determine a project’s certification level of Silver, Gold or Platinum.	For the Building Design and Construction path: <ul style="list-style-type: none"> • Registration fee: \$1,350 for members / \$1,700 for organizational or non-members • Certification review fee: fee is calculated on project’s rating system and size. For buildings less than 250,000 sq ft: \$0.064 per sq ft / \$3,200 minimum for members Fees for other rating systems and options vary.
Administered by the Minnesota Departments of Commerce and Administration, managed by the Center for Sustainable Building Research, University of Minnesota	<u>B3 Guidelines compliant</u>	Buildings, Benchmarks, and Beyond (B3) tools and programs are designed to make buildings more energy efficient and sustainable. B3 is required on state-funded projects in Minnesota but is easily applied to any project. By following the guidelines, projects will automatically be applying the Minnesota Sustainable Building 2030 Energy Standard (SB 2030).	Fee schedule can be obtained here . Typically \$6,000-10,000 per project.

<p>Enterprise Green Communities</p>	<p>Enterprise Green Communities Certification or Certification Plus</p>	<p>Enterprise Green Communities Certification is available to all buildings that contain at least one affordable housing unit (at or below 60% AMI for rental projects). This certification aligns affordable housing investment strategies with sustainable building practices. Two levels are available: certification and certification plus. The “plus” level recognizes significant achievement for projects that have invested in deep levels of energy efficiency.</p>	<p>\$1,550</p> <p>*Projects with a total construction cost of \$500,000 or less or construction cost of \$20,000 per unit or less may request that certification fees be waived.</p>
<p>Minnesota Housing Finance Agency</p> <p>*For affordable housing projects that are funded or have tax credits through Minnesota Housing</p>	<p>Enterprise Green Community Criteria Certified as Enhanced Sustainability: Tier 1 or higher</p> <p>Note: For the purposes of the Green Building Policy, compliance with the MN Overlay (but not certification) is required.</p>	<p>The Enterprise Green Community Guidelines also serve as the basis for Minnesota Housing’s sustainable housing policy. MN Housing has adapted the guidelines to meet the needs of Minnesotans through the MN Overlay. All projects receiving a Housing Tax Credit or other capital improvement funding from MN Housing must meet all requirements of the 2020 criteria as amended by the MN Overlay and Guide. The criteria include water conservation, energy efficiency, materials, healthy living and more.</p>	<p>No fee.</p>