

LEED Residential Campus Guidance

For Projects on a Shared Site

Applicable to LEED v4.1 Residential: Multifamily and Multifamily Core & Shell

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Introduction

This LEED Campus Guidance is for projects that are on a shared site under the control of a single entity; for example, a corporate or educational campus, government installation or commercial development.

This guidance seeks to:

- encourage a holistic approach to project management
- define campus-appropriate documentation requirements and capture economies of scale in the certification process
- address the unique challenges and opportunities inherent in *campus projects*
- maintain the technical integrity and rigor of the LEED rating systems

If projects are expected to have credit submittal documentation that is the same because they are on a campus, this guidance can help streamline the documentation submitted for review under the standard LEED certification process. LEED v4.1 Residential: Multifamily and Multifamily Core & Shell project teams that wish to utilize the group and *campus (master site) approaches* outlined in this guidance must meet all requirements outlined in the guidance.

This guidance does NOT constitute a new rating system. The credit and prerequisite requirements are unchanged and remain consistent with the published LEED Rating Systems, Reference Guides, Addenda, and applicable forms and calculators.

Definitions

Campus program: an optional offering for select LEED rating systems intended to streamline the certification process for multiple buildings located on a shared site and under the control of a single entity.

Campus approach: (a.k.a. Master Site approach) allows eligible credits to be submitted and reviewed within a master site. Credits approved within the master site (campus credits) may be applied to LEED campus projects (both individual and group) associated with the same master site.

Master site: a tool for streamlining the documentation and review process associated with campus credits. The master site is where the campus boundary (a.k.a. master site boundary) is defined, and the campus credits are submitted and reviewed. Master sites do not receive certification.

Campus boundary: (a.k.a. master site boundary) functions as the LEED project boundary for all campus credits. The campus boundary may be the legal limits of the site, or an alternative boundary defined for LEED purposes.

Campus credit: (a.k.a. master site credit) eligible credits documented within a master site that, once approved, may be credited toward other projects associated with the same master site (campus projects).

Campus project: group or individual projects registered under a master site. Campus projects may claim campus credits.

Group approach: allows multiple buildings or spaces to submitted together. The group approach includes both campus group projects which are associated with a master site, and individual group projects which are not associated with a master site.

Group project: multiple buildings submitting for certification together.

Applicability

This Campus Guidance may be used for LEED v4.1 Residential: Multifamily and Multifamily Core & Shell precertification and certification. This guidance does not apply to v4 BD+C: Homes and Multifamily Lowrise, v4 BD+C: Multifamily Midrise, and v4.1 Residential BD+C: Single Family.

The LEED *Campus program* is not a mandatory program. It is an optional path offered in select rating systems to streamline the certification of multiple buildings on a shared site. Additionally, LEED does not require certification of all buildings on a shared property or site.

LEED projects that elect to use this guidance must meet **all** of the following criteria:

- Precertification or certification is being pursued under a LEED v4.1 Residential: Multifamily or Multifamily Core & Shell rating system.
- All buildings or spaces are under control of the same owner, developer, or property management.
- All buildings or spaces are located on a single site, as defined in the LEED Minimum Program Requirements (MPR) for the applicable rating system.
- Each building or space independently meets the LEED MPRs for the applicable rating system. For projects pursuing Group Certification, the following requirement for MPR #2 may be achieved on an aggregate basis: "The gross floor area of the LEED project should be no less than 2% of the gross land area within the LEED project boundary."
- Each building or space independently meets all prerequisites of the LEED rating system being used. Exceptions are noted in the prerequisite and credit specific guidance included in the appendix of this document.

Campus Guidance Basics

The Campus Guidance outlines two approaches for credit documentation:

- 1) Campus Approach (a.k.a. the master site approach) Eligible LEED credits and prerequisites are reviewed and pre-approved as campus credits within a master site. A campus credit is a LEED prerequisite or credit that can be attempted for most or all projects within a LEED campus boundary due to shared site features and uniformity in project or management traits. Campus credit compliance is documented for the entire area and development within a LEED campus boundary. Campus credits reviewed and earned in the master site may then be claimed by all LEED projects associated with that master site. Neither the campus nor master site receives certification. Only projects pursuing certification may use a campus approach, it is not available for projects pursuing precertification.
- 2) Group Approach Credit compliance is documented for a group of buildings or spaces located within a single LEED project boundary. The entire group receives the same LEED rating, but each building will receive its own certificate. Each building will be required to register separately, and each building must submit an individual Dropbox documentation folder. The group approach is available to projects pursuing certification and precertification.

Project teams may use one or both (for certification) of these approaches, as applicable. To use the *campus (master site) approach*, project teams must register a master site and each individual projects/buildings. Or, project teams can register a *group project* outside of a campus, but each building must be registered separately. Name each project with the same project name then a designation for each building. For example, Main Street Campus Building A, Main Street Campus Building B, etc. If this project were to have a master site, register Main Street Campus Master Site.

Using the Campus (Master Site) Approach

The *campus (master site) approach* allows eligible LEED credits and prerequisites to be documented once for the entire area and development within a LEED campus (master site) boundary. These *campus credits* are documented and submitted for review in the master site. Once reviewed and earned in the master site, *campus credits* are available to LEED projects (both individual and *group projects*) associated with the same master site and located within that same LEED *campus boundary*.

All *campus credit* information is documented within a master site. Projects on the campus that submit for certification review and reference the master site, can utilize the *campus credits* earned in the master site review. When registering a master site, please use the words master site in the title (for example, State University Master Site).

Required Documentation in the Master Site

Provide the following general information with the master site submission:

- a general narrative of the overall campus project
- a schematic site plan showing the location of the LEED *campus boundary*, the location of each building or space pursuing LEED certification, the location of any existing buildings within the LEED *campus boundary* that are not pursuing LEED certification (where applicable), and the location of any future development (if known)
- a list of the individually registered projects to which the *campus credits* will apply, including the associated LEED project numbers and names

The schematic site plan must identify each of the individual and group LEED project boundaries within the LEED *campus boundary*. If special circumstances prohibit the identification of any of the individual or group LEED project boundaries when the master site is submitted, a narrative must be provided to explain those circumstances. In this case, the master site schematic plan showing the location of the LEED *campus boundary* and individual LEED project boundaries must be updated and submitted in Project Information Forms for each of the individual and group LEED projects associated with a master site.

Documenting Campus (Master Site) Credit Compliance

A campus (master site) credit includes documentation on the entire area and development within the LEED campus boundary. Campus credits are documented in a master site. Project teams can choose to submit the master site for a standard (combined) or split (design and construction) review. Master sites cannot be submitted for precertification review. The master site must be submitted for review prior to the first LEED campus project submitting for certification review. The outcome of a master site review is that campus credits are earned for use by LEED projects included within the LEED campus boundary. At no time will the master site receive a LEED Certification.

Claiming Campus (Master Site) Credits on Individual or Group Projects

Projects, either individual or group, associated with the master site may use *campus credits* earned in that master site to submit for certification. To claim earned *campus credits*, register individual or *group projects* under a master site. A separate registration is required for each individual project or each

individual building in a *group project*. Projects should be registered using a similar naming convention as the master site. Each *campus project* goes through the typical review process for individual projects.

Campus projects and *campus group projects* can claim a *campus credit* only if the infrastructure/capacity documented in the master site will be complete by the time each LEED project claiming that capacity has accepted LEED Certification.

Determining the LEED Campus (Master Site) Boundary

A key step in creating the master site is defining a LEED *campus (master site) boundary* in addition to each registered project's individual LEED project boundaries. Both the LEED *campus boundary* and LEED project boundaries must comply with the Minimum Program Requirements (MPRs) and MPRs Additional Guidance for the applicable rating system.

Project teams should use reasonable judgment in drawing a boundary following these general guidelines:

- Projects may elect to use the legal limits of the campus (e.g. property boundary) or define an alternative boundary for LEED purposes that is wholly contained within the legal ownership rights of the site. The entire area contained within this boundary is required to be under the same ownership or property manager or developer.
- When drawing the LEED project boundaries apply the typical requirements, per Minimum Program Requirement 2 Must use reasonable LEED boundaries, accounting for all disturbed land that primarily serves the building(s) in each specific LEED project. Then, draw the LEED *campus (master site) boundary* to wholly contain all those LEED project boundaries, and any additional areas that belong to the campus (master site) at large, but not necessarily to any one project.
- The LEED *campus (master site) boundary* may include real property for which LEED certification will not be pursued and it is not necessary that the sum of all individual LEED project boundaries make up the entire LEED *campus boundary* area. However, all site features and amenities (existing development, new development, and future known development) within the LEED *campus boundary* will be considered during the review of **all** *campus credits*. For example, when calculating the open space requirements, the footprints of all real property within the LEED *campus boundary* must be included in the calculations regardless of whether the building or space is seeking LEED certification.
- The LEED *campus (master site) boundary* must be a single unbroken site, unless the noncontiguous parcels meet the conditions stated in the Minimum Program Requirements and MPRs Additional Guidance.

- To comply with the minimum project area to site area ratio requirement, the gross floor area used for the calculation should include all real property within the LEED *campus (master site) boundary*, regardless of whether it is pursuing LEED certification.
- If the LEED *campus (master site) boundary* changes, the development within the LEED campus (master site) boundary changes, or if any subsequent projects change the *campus credit* performance, all affected *campus credits* must be re-reviewed at the expense of the project team.

Key Considerations for Campuses: Project Phasing and Project Teams

Project phasing and project teams are two important factors to consider when deciding how to structure a LEED campus.

Campus credits reviewed and approved in a master site cannot be awarded to a *campus project* until construction of the relevant site/building features are complete. For instance, in a case where all the bike racks for the master site are designed to be located by one building (Building 3) whose construction is included in a later phase than the other certifying buildings (Building 1, 2), Building 1 and 2 cannot claim the approved LT Bicycle Facilities credit until Building 3 (with the bike racks) is built. As noted previously in this guidance, "individual and *group projects* can claim a *campus credit* only if the infrastructure/capacity documented in the master site will be complete by the time each LEED *campus project* claiming that capacity accepts LEED Certification."

When a campus includes projects with varying project team members, it is important that the coordination of project documentation be well-planned. Project team members are defined at the campus level.

Using the Group Approach

Requirements for Using the Group Approach

Multiple buildings or spaces may be precertified or certified as a group, where the entire group, with a single LEED project boundary, receives the same rating, and each building or group receives its own certificate. The *group project* documentation must demonstrate that the group of buildings or spaces collectively meet the credit requirements of eligible credits using the *group approach*. The *group project* certification may be used independently or in combination *campus approach*. *Group projects* registered under a master site may be referred to as *campus group projects* and my use *campus credits* earned in the master site. In addition to the eligibility criteria listed in this guidance, a *group project* precertification or certification must meet **all** of the following criteria:

- The buildings or spaces that comprise the group must be under the same construction contract and substantially completed within two years of each other.
- All buildings or spaces within a *group project* certification must use the same rating system and must use the same compliance paths for all credits and prerequisites pursued.
- Calculations and documentation for all credits and prerequisites pursued must represent all real property and site features within the *group project's* LEED project boundary for the *group project*, unless specifically exempted by the LEED Minimum Program Requirements or Reference Guide credit language. No selective exemptions, exclusions, or omissions are permitted.
- Each building or space in the *group project* must independently qualify for the chosen LEED rating system. For more information, see the LEED Rating System Selection Guidance available on the USGBC website.

Documenting Group Credit Compliance

A *group project* pursues one rating for the entire group and must use the credit specific documentation paths included in this guidance. Where credit documentation is site-wide or aggregated for multiple buildings or spaces, points are awarded to the group based on the performance of the whole project. For credits that must be documented on an individual building or space basis (i.e., not eligible for the *group approach*), points are awarded to the group based on the lowest performing building, except where noted in the credit specific information in the appendix. The definition of the *group project* must be consistent across all credits and prerequisites.

Completing Forms for Group Projects

In *group projects*, for the credits and prerequisites that are NOT eligible for the *group approach*, project teams must submit a separate copy of the credit form for each individual building included in the group. Each individual building in a group will have its own documentation Dropbox folder to distinguish documentation for each building. For precertification, *group projects* may use a single precertification worksheet with applicable group information completed.

Additional Guidelines

Credit-level guidance

The tables included in the appendix list the prerequisites and credits and show their eligibility for the *campus and group approaches*.

Campus or group strategies for credits not included in Appendix

If the project team believes that they can demonstrate compliance with a credit not listed in this guidance as a *campus credit* or a group credit, they may either submit the approach during the project review, or submit an inquiry via the formal inquiry process, if feedback is required prior to submitting a project for certification review. The team must describe why the approach will produce the same end result, as an individual compliance approach.

FTE or Occupant Calculations

If *campus credits* involve full time equivalents (FTE) or occupants, FTE or occupant calculations must be provided for all buildings and spaces contained within the LEED *campus boundary*, regardless of whether those buildings or spaces are pursuing LEED Certification.

<u>Including real property within the LEED campus boundary that is not pursuing LEED certification</u> The LEED *campus boundary* may include real property for which LEED certification has not or will not be pursued.

The use of campus credits is optional

Any of the credits or prerequisites listed as campus eligible may be pursued as individual project credits or as *campus credits*. If a credit or prerequisite is achieved as a *campus credit*, LEED projects that are associated with the same master site may still attempt the credit on an individual basis.

Documenting individual credit compliance with campus-wide data

There are times when LEED credits allow projects to use land or infrastructure outside of the LEED project boundary to show compliance with credit requirements without using the campus guidance. More information about these strategies can be found in resources published by USGBC, such as the minimum program requirements, the reference guide, the addenda database, and the USGBC online Help Center.

Campus credit cross-checks

Campus credits earned in the master site will be cross-checked for consistency with the submittal documentation for every new *campus project*. If an inconsistency is found, or if other information provided in subsequent project reviews calls into question the potential achievement of any LEED requirement, GBCI reserves the right to request additional information and/or deny the associated credits or prerequisites. If any of the circumstances listed above occur, the *campus credit* must be resubmitted for review at an additional cost.

Alternative Compliance Paths

There are no pre-approved rating system alternative compliance paths available for campus and multiple building projects. If a project team wishes to gain approval for an alternative compliance path,

they may either submit the approach during the regular certification review, or submit an inquiry via the formal inquiry process (i.e., credit interpretation request) if feedback is required prior to submitting a project for certification review.

New Versions of LEED

If the version of LEED in use changes, for example from LEED v4.1 to future versions of LEED, all *campus credits* must either be re-submitted for review at the expense of the project team before the *campus credits* may be used on projects registered under the new version of the rating system, or a new master site containing *campus credits* for the new version of the rating system must be created.

<u>Addenda</u>

LEED projects are held to addenda published at the time the project is registered. Accordingly, project teams are encouraged to coordinate registration of the master site with those LEED projects that will be taking advantage of the *campus credits* contained within the master site so that all projects are held to the same addenda.

Adding credits to the master site

After the master site has gone through the review process, new *campus credits* may be added to the master site registration at any time. Review of these credits is facilitated through the appeals process. New *campus credits* will be available only to projects associated with the master site that have not submitted for review when the new credits are added.

Frequently Asked Questions

Visit the <u>USGBC Help Center</u> for more answers to frequently asked questions such as:

- How to draw LEED project boundaries for projects with shared spaces is addressed under <u>MPR</u> <u>guidance</u> in the Help Center.
- Additional details for certifying <u>multiple buildings</u>.

Appendix A: Campus/Group Eligibility for Prerequisites and Credits in the LEED v4.1 Residential: Multifamily and Multifamily Core & Shell

How to read this table: This table summarizes the prerequisites and credits in the LEED v4.1 Residential: Multifamily and Multifamily Core & Shell rating systems for which this guidance is applicable and corresponds with the eligibility contained in the applicable v4.1 Guide.

The Campus column indicates 'YES' for credits and prerequisites that are eligible to be included as *campus credits* in a master site for certification. A 'no' indicates credits and prerequisites that are not eligible for the *campus approach*. Each LEED project may individually document compliance for credits and prerequisites not eligible for the *campus approach*.

The Group column contains a 'YES' for credits and prerequisites that are eligible to use the *group approach* where all buildings or spaces may be documented as one within a precertification or certification project. A 'no' indicates credits and prerequisites that are not eligible for the *group approach* and all buildings or spaces must document compliance individually.

Refer to the LEED v4.1 Residential: Multifamily and Multifamily Core & Shell Guide for additional information on credit requirements. Under the PREREQUISITE or CREDIT column, 'MF' indicates applicability to Multifamily only, 'MF & CS' indicates applicability to both Multifamily and Multifamily Core & Shell, and 'CS' indicates applicability to only Core & Shell.

Campus/Group Eligibility for Prerequisites and Credits in the LEED v4.1 Residential: Multifamily and Multifamily Core & Shell rating systems

			ELIGIBILITY		
CREDIT CATEGORY	PREREQUISITE or CREDIT	NAME	CAMPUS	GROUP	NOTES
INTEGRATIVE P	ROCESS				
IP	MF & CS: C	Integrative Process	no	YES	
LOCATION AND	TRANSPORTATION				
LT	MF & CS: C	LEED for Neighborhood Development Location	YES	YES	Campus: The entire <i>campus boundary</i> must be within the LEED ND project boundary to use the <i>campus approach</i> . Group: The entire group boundary must be within the LEED ND project boundary to earn credit.
LT	MF & CS: C	Sensitive Land Protection	YES	YES	Campus: All areas within the campus (master site) boundary must show compliance. If the campus includes a mix of developed and undeveloped land, a combination of Option 1 and Option 2 may be used to show compliance.
LT	MF & CS: C	High Priority Site	YES	YES	
LT	MF & CS: C	Surrounding Density and Diverse Uses	no	YES	For Diverse Uses option, distances are measured from the farthest building main entrance.
LT	MF & CS: C	Access to Quality Transit	no	no	
LT	MF & CS: C	Bicycle Facilities	YES	YES	Distances measured from furthest building
LT	MF & CS: C	Reduced Parking Footprint	YES	YES	Campus: All the parking located within the LEED campus boundary must be included in the calculations (including parking associated with projects that are not pursuing LEED certification). Submit a site plan that illustrates a reasonable distribution of preferred parking spaces for the projects seeking LEED certification. Group: All the parking located within the LEED project boundary must be included in the calculations. Submit a site plan that illustrates a reasonable distribution of preferred parking spaces for the buildings or spaces seeking LEED

			ELIGIBILITY		
CREDIT CATEGORY	PREREQUISITE or CREDIT	ΝΑΜΕ	CAMPUS	GROUP	NOTES
					Campus: Submit a site plan that illustrates a reasonable distribution of preferred parking spaces for the projects seeking LEED certification.
LT	MF & CS: C	Electric Vehicles	YES	YES	Group: All the parking located within the LEED project boundary must be included in the calculations. Submit a site plan that illustrates a reasonable distribution of preferred parking spaces for the buildings or spaces seeking LEED certification.
SUSTAINABLE S	ITES		1	1	
SS	MF & CS: Prereq	Construction Activity Pollution Prevention	no	YES	
SS	MF & CS: C	Site Assessment	YES	YES	
SS	MF & CS: C	Protect or Restore Habitat	YES	YES	
SS	MF & CS: C	Open Space	YES	YES	Campus and Group: The open space does not have to be adjacent to the individual buildings, but it must be contained within the LEED <i>campus</i> <i>boundary</i> or LEED project boundary, respectively.
SS	MF & CS: C	Rainwater Management	YES	YES	
SS	MF & CS: C	Heat Island Reduction	no	YES	
SS	MF & CS: C	Light Pollution Reduction	no	YES	
SS	CS: C	Tenant Design and Construction Guidelines	no	no	
WATER EFFICIENCY					
WE	MF & CS: Prereq	Water Use Reduction	no	no	
WE	MF & CS: Prereq	Building Level-Water Metering	no	no	Group: Potable water used for landscape irrigation must be tracked in any of three ways: by including it with a single building, by installing a dedicated meter, or by installing multiple meters.

			ELIGIBILITY			
CREDIT CATEGORY	PREREQUISITE or CREDIT	NAME	CAMPUS	GROUP	NOTES	
WE	MF & CS: C	Water Use Reduction	OPT 1 - no OPT 2, Path 1 - YES OPT 2, Path 2 - no	OPT 1 - YES OPT 2, Path 1 - YES OPT 2, Path 2 - no	Group: Use the total landscaped area within the LEED Project Boundary. The results of the Water Budget Tool/Outdoor Water Use Calculator apply to all buildings within the group. The percentage reduction can be based on the total combined water use reduction in all LEED project buildings. If nonpotable water systems will be shared by multiple projects, ensure adequate supply to meet the demands of all projects using nonpotable water. The nonpotable water may not be double counted among projects. Submit separate documentation for each building, as required for WE Prerequisite Water Use Reduction.	
WE	MF & CS: C	Water Metering	no	YES		
ENERGY AND A	TMOSPHERE		1			
EA	MF & CS: Prereq	Fundamental Systems Testing and Verification	no	YES	Group: Project teams may complete one set of documentation representing the entire project if there is a single contract for the commissioning (Cx) of all project buildings or spaces including a single lead commissioning agent (CxA) responsible for the entire LEED project. The Cx plan must address each project building or space individually. If buildings or spaces are not owner- operated or a single entity is not providing operations and maintenance for all buildings, then required documents and activities related to the ongoing operation of the building (e.g. Current Facilities Requirements, Operation and Maintenance Plan, systems manual, occupant/operator training, on-going Cx plan) must be specific to each building.	
EA	MF & CS: Prereq	Minimum Energy Performance	no	no		
EA	MF & CS: Prereq	Energy Metering	no	no	Group: Each building in the group must comply with the metering requirements individually for all energy sources. Site- related energy uses such as parking garages and site lighting must be tracked in any of three ways: by including it with a single building, by installing a dedicated meter, or by installing multiple meters. Proration of the site energy-using features to individual buildings in the group for prerequisite compliance should be consistent with the metering configuration.	

	ELIGIBILITY		BILITY		
CREDIT CATEGORY	PREREQUISITE or CREDIT	NAME	CAMPUS	GROUP	NOTES
EA	MF & CS: Prereq	Fundamental Refrigerant Management	YES	no	Eligible as a campus and group prerequisite only when the refrigerants in each HVAC&R system (new and existing) serving the project buildings or spaces contain no chlorofluorocarbons (CFCs). To demonstrate compliance, submit a list of all HVAC&R refrigerants used in equipment serving the projects or, if applicable, an explanation of the no-refrigerants strategy. If existing systems contain CFCs, each LEED project within the master site and each building in a group must pursue the prerequisite individually.
EA	MF & CS: C	Enhanced Commissioning	no	no	
EA	MF & CS: C	Optimize Energy Performance	no	no	
EA	MF & CS: C	Whole Building Energy Monitoring and Reporting	no	no	
EA	MF & CS: C	Grid Harmonization	no	YES	
EA	MF & CS: C	Renewable Energy	no	YES	
EA	MF: C	Enhanced Refrigerant Management	Opt 1 - YES Opt 2 - no	no	
EA	MF: C	Domestic Hot Water Pipe Insulation	no	no	
MATERIALS AN	D RESOURCES				
MR	MF & CS: Prereq	Storage and Collection of Recyclables	YES	YES	A shared central recycling facility for haulers is acceptable, provided the space accommodates recycling produced by all buildings or spaces served.
MR	MF & CS: Prereq	Construction and Demolition Waste Management Planning	no	YES	Group: Buildings/Projects may develop one comprehensive plan for construction waste.
MR	MF & CS: C	Building Life-Cycle Impact Reduction	no	OPT 1 - no OPT 2 - no OPT 3 - YES OPT 4 - YES	Group: Option 4. Each building or space must be modeled separately, each with a baseline and proposed building. The end results may be aggregated across multiple buildings.
MR	MF & CS: C	Environmentally Preferable Products	no	YES	
MR	MF & CS: C	Construction and Demolition Waste Management	no	YES	Group: Multiple buildings on a project may share waste hauling contracts and on-site collection equipment. Data aggregation is allowed, provided that each building included is pursuing the same option.
INDOOR ENVIR	ONMENTAL QUALITY				
EQ	MF & CS: Prereq	Minimum Indoor Air Quality Performance	no	no	
EQ	MF & CS: Prereq	Combustion Venting	no	YES	
EQ	MF & CS: Prereq	Garage Pollutant Protection	no	YES	

			ELIGI	BILITY	
CREDIT CATEGORY	PREREQUISITE or CREDIT	NAME	CAMPUS	GROUP	NOTES
EQ	MF & CS: Prereq	Radon-Resistant Construction	no	Case 1 - YES Case 2 - no	
EQ	MF & CS: Prereq	Interior Moisture Management	no	YES	
EQ	MF & CS: Prereq	Environmental Tobacco Smoke Control	YES	YES	Campus: Projects can demonstrate compliance with a campus-wide no- smoking policy in lieu of building signage. The policy must be widely communicated to all occupants including transients and visitors through ongoing methods such as site signage and other media (e.g., brochures, websites, etc.)
EQ	MF & CS: Prereq	Compartmentalization	no	YES	
EQ	MF & CS: C	Enhanced Compartmentalization	no	YES	
EQ	MF & CS: C	No Environmental Tobacco Smoke	YES	YES	
EQ	MF & CS: C	Enhanced Indoor Air Quality Strategies	no	no	
EQ	MF & CS: C	Low Emitting Materials	no	YES	
EQ	MF: C	Indoor Air Quality Assessment	no	no	
EQ	MF & CS: C	Thermal Comfort	no	no	
EQ	MF & CS: C	Daylight and Quality Views	no	no	
EQ	MF & CS: C	Acoustic Performance	no	YES	
INNOVATION					
IN	С	Innovation	YES	YES	Campus: Documentation for campus- wide strategies must represent the total combined performance for all master site buildings and site areas, but strategies that apply to individual buildings must be documented for every building. Group: Documentation for campus-wide strategies must represent the total combined performance for all buildings
IN	С	LEED Accredited Professional	no	YES	anu site dieds.

EAp Minimum Energy Performance

Campus

The prerequisite cannot be pursued as a master site prerequisite. Each LEED project must pursue the prerequisite individually.

The following guidance can be used by individual projects referencing a master site. For shared siterelated energy using features such as parking garages and site lighting (but not including thermal energy

systems), the site-related energy-using features may be prorated to the individual buildings using any of the following options; however, this method of proration must be used consistently for all buildings sharing these site-related features:

- 1. Prorated to each building based on the enclosed, conditioned area of each building versus the total *group project* enclosed conditioned area.
- 2. Prorated to each building based on the daily average occupancy of each building versus the total daily average occupancy.
- 3. Prorated to each building based on the portion of the shared site-resource used by the building. A narrative should be provided describing how this portion of the shared site-resource used by each building was determined.

Group Projects

Each LEED project building or LEED project space must demonstrate individual compliance. The same compliance approach must be selected for all project buildings or project spaces in the group. The District Energy Systems (DES) modeling guidance may be applied, as applicable.

For shared site-related energy-using features such as parking garages and site lighting (but not including thermal energy systems), prerequisite compliance may be documented separately for the site-features (treating these as a separate "building" for the purposes of this prerequisite). Alternatively, the site-related energy-using features may be prorated to the individual buildings using any of the options noted in the master site guidance.

<u>Option 1: Whole Building Energy Simulation:</u> If the energy simulation software has the capability to submeter building loads, a single energy model may be created for all project buildings, and the buildings may be submetered in the energy model to show individual compliance for each building. The project team must provide simulation outputs from the energy simulation model that show the energy consumption per end use for each building in the project.

District energy serving the project buildings – If a central plant located within the project boundary provides thermal energy only to the buildings within the project boundary, the project team does not have to follow the DES guidance in order to credit the central plant efficiency towards the buildings in the project and may use the modeling procedures outlined in Contribution of Base Building HVAC and Service Water-Heating Systems in the LEED v4 ID+C Reference Guide for the Proposed Case. The Baseline Case HVAC system types for each building. A separate hot water and/or chilled water plant shall be modeled for each baseline building where the Baseline HVAC system includes hot water and/or chilled water.

Energy costs: The energy costs may be calculated using average EIA rates or based on actual utility tariffs If actual utility tariffs are used, the tariffs should be consistent with the anticipated project utility rate structure. If the project will be billed based on the energy consumption tracked at a central utility meter serving the entire project, then the virtual energy rates (\$/kWh, \$/therm, etc.) shall be determined based on the total project demand and consumption, and then the energy costs for each building individually shall be determined using these virtual energy rates. If each building in the project will be billed based on building utility meters, then the utility tariffs shall be applied individually to

each building (meaning that there may be variation in the virtual energy rates between buildings). The project team should provide a narrative indicating how the energy costs are determined for the project and describing all utility tariffs used for the project.