



LEED-NC

How to Interpret this Report

Purpose The Leadership in Energy and Environmental Design (LEED) Rating System was designed by the US Green Building Council to encourage and facilitate the development of more sustainable buildings.

Environmental Categories The report is organized into five environmental categories as defined by LEED including:
Sustainable Sites, Water Efficiency, Energy & Atmosphere, Materials & Resources, Indoor Enviro

LEED Prerequisites Prerequisites must be achieved. Non-compliant prerequisites must be resolved before a certification can be awarded.

LEED Credits The environmental categories are subdivided into the established LEED credits, which are based on desired performance goals within each category. An assessment of whether the credit is earned or denied is made and a narrative describes the basis for the assessment.

Achieved The applicant has provided the mandatory documentation which supports the achievements of the credit requirements, achieving the associated points. Currently the project has scored the adjacent points in this category.

Denied The applicant has applied for a point in a particular credit, but has misinterpreted the credit intent or cannot substantiate meeting the requirements. Currently the project has the adjacent points in this category.

Rating This Project has achieved enough points for Platinum Rating.

Official Scores Official LEED v2 Scores: Certified: 26-32 Silver Rating: 33-38 Gold Rating: 39-51 Platinum Rating: 52+

Earned	Denied	Sustainable Sites		Possible Points	14
12	0	Construction Activity Pollution Prevention		Prerequisite 1-Version 2.2	

Design Application 10/2/2009
 The LEED Submittal Template has been provided stating that the project has followed local erosion and sedimentation control standards and codes, which are more stringent than the NPDES program requirements. The following supporting documents have also been provided:
 1) A narrative describing the implemented erosion and sedimentation control measures, and;
 2) A copy of the project's erosion and sedimentation control plan.

1	0	Site Selection	Credit 1-Version 2.2
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Design Application 10/2/2009
 The LEED Submittal Template has been provided stating that the project site does not meet any of the prohibited criteria.

		Development Density & Community Connectivity	Credit 2-Version 2.2
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1	0	Brownfield Redevelopment	Credit 3-Version 2.2
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Design Application 10/2/2009
 The LEED Submittal Template has been provided stating that the project has been defined as a brownfield by a local government agency. The narrative provided describes the site contamination; however the narrative does not describe the remediation efforts undertaken by the project.

TECHNICAL ADVICE:
 Please provide a detailed narrative describing the site remediation efforts undertaken by the project.

Construction Application 1/6/2010
 The project team has provided a narrative and part of a close-out report. The documentation demonstrates credit compliance.

		Alternative Transportation: Public Transportation Access	Credit 4.1-Version 2.2
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1 0 **Alternative Transportation: Bicycle Storage & Changing Rooms** Credit 4.2-Version 2.2

Design Application 10/2/2009

The LEED Submittal Template has been provided stating that the project is non-residential. The Template states that bicycle storage facilities have been provided to serve 5% of FTE and Transient building occupants, measured at peak occupancy. Shower facilities in the Existing Retreat Center serve 0.5% of FTEs.

Plans have been provided showing the location of the shower/changing facilities and the bike storage facilities.

1 0 **Alternative Transportation: Low-Emitting & Fuel Efficient Vehicles** Credit 4.3-Version 2.2

Design Application 10/2/2009

The LEED Submittal Template and project drawings have been provided stating that 4 preferred parking spaces for low-emitting and fuel efficient vehicles have been provided on site which represents 5% of the total onsite parking.

1 0 **Alternative Transportation: Parking Capacity** Credit 4.4-Version 2.2

Design Application 10/2/2009

The LEED Submittal Template has been provided stating that the on-site provided parking does not exceed the minimum local zoning requirements and that car/van pool parking has been provided for a minimum of 5% of the total provided parking spaces.

1 0 **Site Development: Protect or Restore Habitat** Credit 5.1-Version 2.2

Design Application 10/2/2009

The LEED Submittal Template has been provided stating that the site has been previously developed and that 57% of the site area that does not fall within the building footprint has been restored with native planting. Calculations have been provided claiming that 110,074 sq.ft. of the site area (approx. 57% of the non-building area) has been planted with native or adaptive species as required by this credit. Required site drawings have been provided showing this restored area. A narrative describing the project's approach to this credit was provided as well.

1 0 **Site Development: Maximize Open Space** Credit 5.2-Version 2.2

Design Application 10/2/2009

The LEED Submittal Template has been provided stating that the project has been developed in an area with zoning requirements, but with no requirement for open space, and has provided vegetated open space equal to 68.5% of the project's site area. Site drawings have been provided in support of this credit.

1

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Stormwater Management: Quantity Control

Credit 6.1-Version 2.2

Design Application

10/2/2009

The LEED Submittal Template declares that the site's existing imperviousness is less than 50% and the post-development runoff rates and quantities are less than the pre-development runoff rates and quantities for the 1- and 2-year, 24-hour rainfall events. The narrative describes the use of infiltration basins and bioswales to achieve the stated runoff rate and quantity reductions. Supporting documentation includes a narrative which explains the stormwater management strategies and the calculation method.

1

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Stormwater Management: Quality Control

Credit 6.2-Version 2.2

Design Application

10/2/2009

The LEED Submittal Template declares that stormwater runoff from at least 90% of the average annual rainfall is captured and treated such that at least 80% of the average annual post-development Total Suspended Solids (TSS) are removed using acceptable BMPs which include infiltration basins and bioswales. Supporting documents include a narrative describing the water quality management strategies and the calculations for the TSS removal efficiency from the average annual rainfall event.

1

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Heat Island Effect: Non-Roof

Credit 7.1-Version 2.2

Design Application

10/2/2009

The LEED Submittal Template has been provided stating that 50.2 % of the non-roof impervious surfaces on-site a) have been paved with highly reflective materials, b) will be shaded within 5 years, and c) have been paved with open grid pavement. Calculations provided in the submittal claim that of the 45,653 sq.ft. of total non-roof impervious surfaces, a) 19,766 sq.ft. (43.3%) have been paved with non-colored concrete, b) 864 sq.ft. (1.9%) will be shaded within 5 years, and c) 2267 sq.ft. (5.0%) have been paved with a combination of open grid pavement and pervious concrete. A site plan showing the extents of the a) paved, b) shaded, and c) open grid pavement areas has been provided. However, it is not clear that the 1,347 sf of permeable site concrete meets the LEED definition of an open-grid pavement system. Per pg. 93 of the LEED-NC v.2.2 Reference Guide, open-grid pavement is defined as pavement which is less than 50% impervious and contains vegetation in the open cells.

TECHNICAL ADVICE:

Please submit documentation regarding the proposed permeable concrete and its compliance with the LEED definition of open-grid pavement, or submit revised calculations showing a combination of other compliant strategies.

Construction Application

1/6/2010

The project team has provided a revised LEED Submittal Template with the permeable concrete as part of the Total Area of all Hardscape Features Having an SRI of at Least 29. The revised Template states that 50.154% of the hardscape qualifies for heat island reduction strategies. The documentation demonstrates credit compliance.

1

0

Heat Island Effect: Roof

Credit 7.2-Version 2.2

Design Application

10/2/2009

The LEED Submittal Template has been provided stating that 50.2 % of the non-roof impervious surfaces on-site a) have been paved with highly reflective materials, b) will be shaded within 5 years, and c) have been paved with open grid pavement. Calculations provided in the submittal claim that of the 45,653 sq.ft. of total non-roof impervious surfaces, a) 19,766 sq.ft. (43.3%) have been paved with non-colored concrete, b) 864 sq.ft. (1.9%) will be shaded within 5 years, and c) 2267 sq.ft. (5.0%) have been paved with open grid pavement. A site plan showing the extents of the a) paved, b) shaded, and C) open grid pavement areas, has been provided.

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Light Pollution Reduction

Credit 8-Version 2.2

Design Application

10/2/2009

The LEED Submittal Template has been provided stating that the project's interior and exterior lighting has been designed in accordance with the requirements of this credit.

Interior Lighting: The Template indicates that interior lighting fixtures were located to maintain the maximum candela output, from fixtures near exterior glazing, within the building. Interior lighting plans have been uploaded to support this claim.

Exterior Lighting Power: The Template indicates that the lighting power densities for exterior area fixtures do not exceed 80% of the ASHRAE recommendations and that the LPD of exterior facade/landscape lighting does not exceed 50% of the referenced ASHRAE Standard recommendations. Exterior lighting plans have been uploaded to support this claim.

Light Trespass: The Template indicates that the project is located in LZ-1 and has provided a Site Lumen calculation along with a narrative explaining the light trespass analysis undertaken for the project, as well as a photometric plan illustrating footcandle values. However, the footcandle values surrounding Pole 3 are zero. Based on the OC Fixture information uploaded, it is reasonable to assume that light trespass in excess of 0.01 fc can be expected at the nearby LEED Boundary.

TECHNICAL ADVICE:

Please submit a revised photometric plan showing illuminance due to fixture OC at Pole 3. Light trespass must be limited to 0.01 fc at the LEED Boundary. Please show the project's LEED Boundary on the photometric plan as well.

Construction Application

1/6/2010

The project team has provided a revised LEED Submittal Template, a supplemental narrative, revised drawings, and a revised photometric plan. The documentation demonstrates credit compliance.

Earned

Denied

5

0

Water Efficiency	Possible Points: 5
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2	0
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Water Efficient Landscaping

Credit 1.1-1.2-Version 2.2

Design Application

10/2/2009

The LEED Submittal Template has been provided stating that no irrigation system has been installed. A narrative has also been included describing the landscaping design strategies installed on the site. The narrative states that the planting will only be watered with collected rainwater during the initial plant establishment period.

1	0
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Innovative Wastewater Technologies

Credit 2-Version 2.2

Design Application

10/2/2009

The LEED Submittal Template and water use calculations have been provided stating that the project has reduced potable water use for sewage conveyance by 50.5% from a calculated baseline design through the installation of low flow water closets and waterless urinals. The special male/female occupancy breakdown was explained in the project narrative. It is noted that the Student/Visitor total differs from the Transient value of 255 as stated in credit SSc4.2. However, even if this change were to be made to the Template, the project is still in compliance with WEc2. For future LEED submittals, please provide a consistent FTE and Transient occupant value for all credits.

2	0
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Water Use Reduction

Credit 3.1-3.2-Version 2.2

Design Application

10/2/2009

The LEED Submittal Template has been provided stating that the project has reduced potable water use by 43.7% from a calculated baseline design through the installation of low flow water closets, lavatories, and kitchen sink fixtures and waterless urinals. It is noted that the Student/Visitor total differs from the Transient value of 255 as stated in credit SSc4.2. However, even if this change were to be made to the Template, the project is still in compliance with WEc3. For future LEED submittals, please provide a consistent FTE and Transient occupant value for all credits.

Earned	Denied
17	0
0	0

Energy & Atmosphere	Possible Points	By
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Fundamental Commissioning of the Building Energy Systems Prerequisite 1-Version 2.2

Design Application

10/2/2009

The LEED Submittal Template has been provided stating that the fundamental commissioning requirements have been completed. In addition, a narrative was provided describing the commissioned systems, as well as the results of the commissioning process.

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Minimum Energy Performance

Prerequisite 2-Version 2.2

Design Application

10/2/2009

The LEED Submittal Template has been provided stating that the project complies with the mandatory provisions (Sections 5.4, 6.4, 7.4, 8.4, 9.4 and 10.4) of ASHRAE 90.1-2004. The Template denotes that the project is pursuing computer simulation model to document improved building energy performance under EAc1 to confirm satisfaction of this prerequisite. However, the current review of the EAc1 energy model has revealed a few issues that need to be addressed for the final review.

TECHNICAL ADVICE:

Approval of this prerequisite is pending the approval of EAc1.

Construction Application

1/6/2010

The project team has provided additional documentation, which consists of a revised LEED Submittal Template that states the project complies with the mandatory provisions (Sections 5.4, 6.4, 7.4, 8.4, 9.4 and 10.4) of ASHRAE 90.1-2004. The Template also denotes that the project pursued EAc1 and used a simulation model to confirm satisfaction of this prerequisite. Technical advice comments in EAc1 were satisfactorily addressed. The documentation demonstrates prerequisite compliance.

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Fundamental Refrigerant Management

Prerequisite 3-Version 2.2

Design Application

10/2/2009

The LEED Submittal Template has been provided stating that base building HVAC&R systems use no CFC-based refrigerants.

10

0

Optimize Energy Performance

Credit 1-Version 2.2

Design Application

10/2/2009

The signed LEED Submittal Template declares the project has 60.2% cost savings between the proposed design and the baseline design for this new project, based on ASHRAE 90.1-2004 using Appendix G. Energy efficiency measures include day lighting controls for spaces, high performance glazing constructions, and high-efficiency unitary cooling and heating equipment. However, few issues should be addressed for the final review.

Please note that as this project was registered after June 26th, 2007; there is a requirement to earn minimum of (2) points in this credit as a pre-requisite for certification.

TECHNICAL ADVICE:

1. Table 1.4 lists the components of the wall construction. The Template indicates the proposed design wall construction of R12. However, it does not indicate the U-value of the wall construction assembly. As per ASHRAE 90.1-2004 Table G3.1.5 the proposed wall input should be based on the construction assembly. Please revise the Template to indicate the proposed design U-Value for the conditioned spaces.
2. Table 1.4 lists the components of the roof construction. The Template indicates the proposed design roof construction of R30. However, it does not indicate the U-value of the roof construction assembly. As per ASHRAE 90.1-2004 Table G3.1.5 the proposed wall input should be based on the construction assembly. Please revise the Template to indicate the proposed design U-Value for the roof construction assembly.
3. Table 1.4 lists the components of the fenestration. As per ASHRAE 90.1-2004 Table G3.1.5 (c) the U-value of the baseline fenestration assembly should be based on fixed type of window assembly, 0.57 for the conditioned spaces as per Table 5.5-6 of the Standard. However, the supporting document "Baseline_SIM" indicates the U-factor of 0.54. Please update the model as appropriate.
4. Table 1.4 lists the components of the fenestration. As per ASHRAE 90.1-2004 Table G3.1.5 (c) the SHGC-value of the baseline fenestration assembly should be based on SHGCall for the conditioned space. Please revise the baseline SHGC value to 0.39 of all the fenestrations in the north and non-north faces of the building as per Table 5.5-6 of the Standard.
5. Table 1.4 omits the Interior Power Density of the lobby and library areas in the proposed and the baseline design. Please revise the Template as appropriate.
6. Table 1.4 lists the Interior Power Density for the proposed and the baseline design. However, the causes for reduced power density in the proposed design for the spaces like offices, kitchen, Dining, Mechanical/ storages is unclear. Please provide a narrative indicating the energy efficiency measures in the proposed design causing the reduced lighting power density.
7. Table 1.4 does not indicate Lighting controls in the baseline design. As per ASHRAE 90.1-2004, section 9.4, Mandatory provisions for lighting control are required to be met for compliance with the standard. Please revise the Lighting control input in the model and update the Template as appropriate.
8. Table 1.4 lists that day lighting controls have been included in the design of the proposed building's Chapel. As per the guidance of ASHRAE 90.1-2004 Table G3.1.6, please confirm that the operation of the day lighting controls is either modeled directly in the building simulation or is modeled in the building simulation through schedule adjustments determined by a separate daylighting analysis approved by the rating authority. Table 1.8.2 reports the energy savings of 60.4%. Please provide a narrative justifying the savings that are reported.
9. Table 1.4 lists the Fan system type for baseline design and the proposed design. However, it does not indicate the supply air volume for the both the proposed and baseline design. Please be advised, the baseline fan supply volumes should be calculated based on system capacity and a temperature differential of 20°F as per the guidance of ASHRAE 90.1-2004 Section G3.1.2.8. Please note that only the ventilation rates (in CFM) shall be identical between the two design cases. Please revise the energy model and Template as appropriate.
10. Table 1.4 omits the description of elevators for both the proposed and baseline design case. However, the supporting documents, floor plans indicate the elevators. Please revise the model and the Template as appropriate. Table 1.8.1 indicates the baseline process energy of 8%. Please be advised that the process energy must account for at least 25% of the total building energy cost for the project OR a narrative must be provided justifying the low process energy consumption for this building. Please include all building loads including elevators, unregulated lighting, receptacles, kitchen equipment, dishwasher etc., and confirm that the process energy accounts for at least 25% of the standard building energy costs OR include a narrative at the end of the LEED template justifying the building's limited process energy usage. Please revise the Template and the energy

3/17/2010

Construction Application Review

3

0

On-Site Renewable Energy

Credit 2-Version 2.2

Design Application

10/2/2009

The LEED submittal Template has been provided stating that the model results from EAc1 are used to project the annual building energy costs for the proposed building design. The supporting documentation with the calculations of renewable energy cost is provided. The Template incorrectly indicates the percentage of the project's energy cost that is offset by renewable site generated energy, and the current review of the EAc1 energy model has revealed a few issues that need to be addressed for the final review. Approval of this credit is pending the approval of EAc1.

TECHNICAL ADVICE:

1. Total energy use reported in Table 1.8.2(b) is 636 MBtu/year and the cost of \$19,790. However, the Template indicates 559MBtu/year of energy consumption with an associated cost of \$17,310. Please revise the Template as appropriate.
2. Please confirm that all issues identified in the Technical Advice for EAc1 have been addressed and revise the Template as appropriate.

Construction Application

1/6/2010

The Project team has provided additional documentation, which consists of a revised LEED Submittal Template, supporting document and revised modeling results confirming that 12.58% of the project's energy cost is being offset by renewable site-generated solar thermal system. Technical Advice comments given to the design team during the preliminary design review were satisfactorily addressed. The documentation demonstrates credit compliance.

1

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Enhanced Commissioning

Credit 3-Version 2.2

Design Application

10/2/2009

The LEED Submittal Template has been provided stating that the enhanced commissioning requirements have been completed. In addition, a narrative was provided describing the enhanced commissioning processes that were employed on the project.

1

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Enhanced Refrigerant Management

Credit 4-Version 2.2

Design Application

10/2/2009

The LEED Submittal Template has been provided stating that the project selected refrigerants and HVAC&R equipment that minimize or eliminate the emission of compounds that contribute to ozone depletion and global warming. The completed Refrigerant Impact Calculation indicates that the project's total refrigerant impact is 43.7 per ton, which is less than the maximum allowable.

3/17/2010

Construction Application Review

1

0

Measurement & Verification

Credit 5-Version 2.2

Design Application

10/2/2009

The LEED submittal Template has been provided stating that the measurement and verification plan based on IPMVP option B, Energy Conservation measure has been chosen to comply with this credit. However, the supporting document does not clearly indicate if the goals of measurement and verification can be met with the chosen option.

TECHNICAL ADVICE:

1. Please verify and provide the narrative on how Option B can be implemented for this Project. The supporting document, "HWM M&V Plan" does not indicate the procedure of isolation of energy conservation measures. It appears Option D, to be more suitable for the proposed design because of the interactions between various energy efficiency measures. Please revise the M&V plan and the Template as appropriate.
2. The HWM M&V plan (M&V plan) does not provide narrative on methodology by which the simulation model can be calibrated with sufficient accuracy to the actual energy consumption of the building. Please revise the M&V plan and the Template as appropriate.
3. M&V plan does not provide narrative on measurement of natural gas consumption. Please revise the M&V plan as appropriate.
4. The M&V plan does not indicate the responsible party and its qualifications to execute the M&V plan. Please revise the M&V plan as appropriate.
5. The M&V plan does not indicate the duration for which the energy data will be analyzed to measure the performance of the various energy consuming systems. Please be advised LEED requires monitoring and processing of 12 months of after the building gets occupied.
6. The M&V plan does not provide the information on corrective action plan including the corrective action policies, reporting format, documentation actions and the responsible parties for corrective action.

Please provide the revised M&V plan.

Construction Application

1/6/2010

The Project team has provided additional documentation, which consists of a revised LEED Submittal Template and a revised supporting document, HWM M&V Plan Revised. Technical Advice comments given to the design team during the preliminary design review were satisfactorily addressed. The documentation demonstrates credit compliance.

1

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Green Power

Credit 6-Version 2.2

Design Application

10/2/2009

The LEED Submittal Template has been provided stating that the model results from EAc1 are used to project the annual building energy usage and that 100% of the building's electricity usage is being provided by renewable sources from a 2-year renewable energy contract. The submitted documentation states that Madison Gas and Electric Company will provide green power equal to 100% of the building's total annual electric energy usage, the term of the contract, and a narrative. It is noted that the project will be enrolled in a MGE local utility program, which requires the applicant to install solar capacity but allows the utility to retain title to the Renewable Energy Certificates generated by the system. In such a case, the project would, per CIR Ruling 8/21/2009, have to purchase 100% of the system's annual rated output in the form of RECs to qualify for recognition of EAc2, Onsite Renewable Energy. It appears that the project is purchasing far more than 100% of output under the MGE program, based on the uploaded documentation, allowing credit under EAc2. However, it is not clear that the MGE program is Green-e certified or meets the Green-e technical requirements per pg. 228 of the LEED-NC v.2.2 reference guide. Also, the current review of the EAc1 energy model has revealed a few issues that need to be addressed for the final review.

TECHNICAL ADVICE:

1. Please provide confirmation that the MGE Green Power program is Green-e certified, or that the RECs purchased meet the technical requirements of the Green-e program.
2. Please clarify the pending issues surrounding EAc1 and revise the template as necessary.

Construction Application

1/6/2010

The project team has provided a letter from the green power provider, an analysis of the green power, and a copy of Midwest Renewable Energy Tracking System Bylaws. The project team has also addressed the issues in EAc1. The documentation demonstrates credit compliance.

Earned
10
0

Denied
0
0

Materials & Resources	Possible Points	13
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Storage & Collection of Recyclables

Prerequisite 1-Version 2.2

Design Application

10/2/2009

The LEED Submittal Template has been provided stating that the project has provided appropriately sized dedicated areas for the collection and storage of recycling materials, including cardboard, paper, plastic, glass, and metals.

Building Reuse

Credit 1.1-1.2-Version 2.2

Building Reuse, Non-Structural

Credit 1.3-Version 2.2

3/17/2010

Construction Application Review

2	0	Construction Waste Management	Credit 2-Version 2.2
		Design Application	10/2/2009
		The LEED Submittal Template has been provided stating that the project has diverted 8,783.68 tons (99.5%) of on-site generated construction waste from landfill. Calculations have been provided to document the waste types and receiving agencies for recycled materials. A narrative has been provided describing the project's Construction Waste Management Plan.	
2	0	Resource Reuse	Credit 3-Version 2.2
		Design Application	10/2/2009
		The LEED Submittal Template has been provided stating that the project has used salvaged, refurbished or reused materials equal to 12.5% of the total materials value. Calculations have been provided to document the materials used and values for each tracked item.	
2	0	Recycled Content	Credit 4-Version 2.2
		Design Application	10/2/2009
		The LEED Submittal Template has been provided stating that 21% of the total building materials content, by value, have been manufactured using recycled materials.	
2	0	Regional Materials	Credit 5-Version 2.2
		Design Application	10/2/2009
		The LEED Submittal Template has been provided stating that 28% of the total building materials value is comprised of building materials and/or products that have been extracted, harvested or recovered, as well as manufactured within 500 miles of the project site.	
1	0	Rapidly Renewable Materials	Credit 6-Version 2.2
		Design Application	10/2/2009
		The LEED Submittal Template has been provided stating that 10% of the total materials used on the project were from rapidly renewable sources.	

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Certified Wood

Credit 7-Version 2.2

Design Application

10/2/2009

The LEED Submittal Template has been provided stating that 59.7% of the total wood based building materials are harvested from FSC certified forests. However, the Polyvision Airflow Architectural product noted as part of the EQc4.4 credit submittal has not been included on this credit's Submittal Template.

TECHNICAL ADVICE:

Please include the Polyvision Airflow Architectural product on the MRc7 Submittal Template or include a narrative explaining the exclusion.

Construction Application

1/6/2010

The project team provided a revised LEED Submittal Template stating the 59.048% of the total wood based materials are harvested from FSC certified forests. The documentation demonstrates credit compliance.

Earned

Denied

14

0

Indoor Environmental Quality	Possible Points 15
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3/17/2010

Construction Application Review

Prerequisite 1-Version 2.2

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Minimum IAQ Performance

10/2/2009

Design Application

The LEED Submittal Template has been provided stating that the project complies with the minimum requirements of ASHRAE Standard 62.1-2004. However, an inadequate narrative has been provided describing the project's ventilation system design and specific information regarding ventilation efficiencies has not been provided.

TECHNICAL ADVICE:

1. Please provide a spreadsheet, similar to the one in the Reference Guide (downloadable on LEED Online), that outlines the fresh air intake volumes and includes factors such as zone air distribution effectiveness and system ventilation efficiency. Please be advised all the conditioned spaces with human occupancy as indicated in Table 1.2 should be accounted for in the indoor air quality calculations. For instance, the total floor area indicated in the supporting document "EQp1- ASHRAE- Code Table" is 20,567 sq.ft. However, the total conditioned area based on the occupancy as indicated in Table 1.4 is 34,380 sq.ft. Please revise the Template and provide the revised document with ventilation calculations.
2. Please provide an updated mechanical schedule confirming that all air-handling units are sized to meet the ventilation rates calculated. Additionally, please be sure that the naming convention used for the schedule matched the naming convention used in the ventilation calculations.

Construction Application

1/6/2010

The Project team has provided additional documentation, which consists of a revised LEED Submittal Template and supporting documents providing calculations on outside air analysis, the review of which, confirms that the project complies with the minimum ventilation requirements of ASHRAE Standard 62.1-2004, Ventilation for Acceptable Indoor Air Quality, using the Ventilation Rate Procedure. Technical Advice comments given to the design team during the preliminary design review were satisfactorily addressed. The documentation demonstrates prerequisite compliance.

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Environmental Tobacco Smoke (ETS) Control

Prerequisite 2-Version 2.2

Design Application

10/2/2009

The LEED Submittal Template has been provided stating that smoking is prohibited inside buildings within the project and that there are no on-site designated smoking areas.

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Outdoor Air Delivery Monitoring

Credit 1-Version 2.2

Design Application

10/2/2009

The LEED Submittal Template has been provided stating that each HVAC unit has been installed with a filter pressure differential sensor and air flow sensors on the supply and exhaust fans to verify outdoor airflow. However the document does not provide narrative on the capability of the air flow measuring station and the accuracy of airflow measuring capability of outside airflow measurement device.

TECHNICAL ADVICE:

1. Please provide the narrative describing the accuracy of airflow measuring capability of the airflow measuring station.
2. Confirm that all issues identified in the Technical Advice for EQp1 have been addressed and update the Template as appropriate. Please identify the additional densely occupied areas based on the revisions in EQp1 that have occupancy of 25 people per 1000 sq.ft. Please be advised for densely occupied spaces, provide a detailed narrative describing the project's ventilation design and CO2 monitoring strategy. Please include specific information regarding the location of installed CO2 sensors and quantity of installed monitors, their operational parameters and set points.

Construction Application

1/6/2010

The Project team has provided additional documentation which consists of a revised LEED Submittal Template that declare, carbon dioxide concentrations are monitored within all densely occupied spaces and that direct airflow measurement devices have been provided for each mechanical ventilation system serving non-densely occupied spaces. The Template further indicates that monitoring equipment has been configured to generate an alarm when conditions vary by 10% or more from the set point. A narrative describing the project's ventilation design and CO2 monitoring system has been included, as required. Drawings have been provided documenting the location and type of installed sensors. Technical Advice comments given to the design team during the preliminary design review were satisfactorily addressed. The documentation demonstrates credit compliance.

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Increased Ventilation

Credit 2-Version 2.2

1

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Construction IAQ Management Plan: During Construction

Credit 3.1-Version 2.2

Design Application

10/2/2009

The LEED Submittal Template has been provided stating that the project developed and implemented a construction IAQ Management Plan that followed the referenced SMACNA Guidelines, and that MERV 8 filtration media was used during construction and prior to occupancy when Air Handling Units were used. A copy of the project's IAQ Management Plan and photos highlighting the implemented IAQ measures has been provided.

3/17/2010

Construction Application Review

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|---|---|---|------------------------|
| 1 | 0 | Construction IAQ Management Plan: Before Occupancy | Credit 3.2-Version 2.2 |
| | | Design Application | 10/2/2009 |
| The LEED Submittal Template has been provided stating that, prior to initial occupancy, baseline IAQ testing was conducted. A copy of the project's IAQ testing report was provided to confirm that test results for some of the sampling points exceeded the allowable concentration limits. These non-compliant areas were flushed with outside air and retested to confirm compliance with the concentration limits. | | | |
| | | | |
| 1 | 0 | Low-Emitting Materials: Adhesives & Sealants | Credit 4.1-Version 2.2 |
| | | Design Application | 10/2/2009 |
| The LEED Submittal Template has been provided stating that all indoor adhesive and sealant products comply with the VOC limits of the referenced standards for this credit. The Template includes a list of the required product details. | | | |
| | | | |
| 1 | 0 | Low-Emitting Materials: Paints & Coatings | Credit 4.2-Version 2.2 |
| | | Design Application | 10/2/2009 |
| The LEED Submittal Template has been provided stating that all indoor paint and coating products comply with the VOC limits of the referenced Green Seal and SCAQMD standards. The Template includes a list of the required product details. | | | |
| | | | |
| 1 | 0 | Low-Emitting Materials: Carpet Systems | Credit 4.3-Version 2.2 |
| | | Design Application | 10/2/2009 |
| The LEED Submittal Template has been provided stating that the installed carpet complies with the testing and product requirements of the CRI Green Label Plus Program, installed carpet cushions comply with the testing and product requirements of the CRI Green Label Program and all carpet adhesives comply with the requirements of EQc4.1. The Template includes a list of the required product details. | | | |
| | | | |
| 1 | 0 | Low-Emitting Materials: Composite Wood & Agrifiber | Credit 4.4-Version 2.2 |
| | | Design Application | 10/2/2009 |
| The LEED Submittal Template has been provided stating that all indoor composite wood and agrifiber materials used on the project contain no added urea-formaldehyde. The Template includes a list of the required product details. | | | |

3/17/2010

Construction Application Review

1

0

Indoor Chemical & Pollutant Source Control

Credit 5-Version 2.2

Design Application

10/2/2009

The LEED Submittal Template has been provided stating that the project has installed the required indoor chemical and pollutant source control measures required by this credit. Copies of the project's construction drawings have been provided to show the installed entryway systems, room separations, and required ventilation systems. The Submittal Template also confirms that MERV 13 filtration media has been installed in all HVAC systems prior to occupancy. A listing of the entryway products installed has been provided; however, for doors 133A, 112B, 039 or 041c at the garage entrance, there is no listing of any entryway products installed, or explanation of why no entryway products were installed. Please note that LEED-NC v 2.1 EQc5 CIR Rulings 4/4/2005 and 12/21/2004 state that "In evaluating the requirements of this credit, you should focus on the frequency of each use of each building entry point rather than the percentage of building occupants served. Hence, any door that is intended to be used regularly and frequently by building occupants should be considered high volume for the purposes of this credit."

TECHNICAL ADVICE: Please provide a list detailing the System Manufacturer, System Model/ID, System Description (Type of material, Installation method etc), as well as a confirmation that Roll Up or Carpet Systems will be maintained on a weekly basis by a contracted service organization for all exterior entrances, or a detailed narrative concerning why these building entrances were not considered high traffic entryways.

Construction Application

1/6/2010

The project team has provided a revised LEED Submittal Template and RFPs for additional walk off mats. The documentation demonstrates credit compliance.

1

0

Controllability of Systems: Lighting

Credit 6.1-Version 2.2

Design Application

10/2/2009

The LEED Submittal Template has been provided stating that a sufficient quantity of lighting controls are provided for individual workstations, and states appropriate lighting controls are available for shared multi-occupant spaces. A narrative has also been provided describing the project's lighting control strategy with a description of the type and location of the lighting controls.

1

0

Controllability of Systems: Thermal Comfort

Credit 6.2-Version 2.2

Design Application

10/2/2009

The LEED Submittal Template has been provided stating that a sufficient quantity of thermal controls are provided for individual workstations, and states appropriate thermal controls are available for all shared multi-occupant spaces. A narrative has also been provided describing the project's thermal control strategy with a description of the type and location of the thermal controls.

1

0

Thermal Comfort: Design

Credit 7.1-Version 2.2

Design Application

10/2/2009

The LEED Submittal Template provided does not verify that the HVAC systems and building envelope have been designed to meet the requirements of the ASHRAE Standard 55-2004. The project team has included data regarding the specific seasonal temperature and humidity design criteria. However, the narrative omits information regarding the design strategies used to minimize discomfort from radiant temperature.

TECHNICAL ADVICE:

Please provide the narrative to describe the design strategies used to deal with discomfort from radiant temperature.

Construction Application

1/6/2010

The Project team has provided additional documentation which consists of a revised LEED Submittal Template that declares, HVAC systems and building envelope have been designed to meet the requirements of the ASHRAE Standard 55-2004. The project team has provided a supporting documentation and narrative describing the method used to establish thermal comfort criteria for the project and how the systems address the design criteria. Data has also been provided regarding the specific seasonal temperature and humidity design criteria. Technical Advice comments given to the design team during the preliminary design review were satisfactorily addressed. The documentation demonstrates credit compliance.

1

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Thermal Comfort: Verification

Credit 7.2-Version 2.2

Design Application

10/2/2009

The project team has addressed the issues in EQc7.1. The documentation demonstrates credit compliance.

1

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Daylighting & Views: Daylight 75% of Spaces

Credit 8.1-Version 2.2

Design Application

10/2/2009

The LEED Submittal Template has been provided stating that a daylight simulation model has been prepared for the project to demonstrate that a minimum daylight illumination level of 25 footcandles has been achieved in a minimum of 85.3% of all regularly occupied areas. A copy of the project's simulation model output and project drawings has also been provided, as required. A detailed narrative describing any excluded areas has been provided.

1

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Daylighting & Views: Views for 90% of Spaces

Credit 8.2-Version 2.2

Design Application

10/2/2009

The LEED Submittal Template has been provided stating that the project has provided direct line of sight views for 99.5% of all regularly occupied areas. Copies of applicable project drawings highlighting the direct line of sight through exterior windows have been provided as required. The project team has also provided a narrative describing special occupancy areas that have been excluded from compliance. The narrative confirms that these spaces have been appropriately excluded.

Earned	Denied		
5	0	Innovation &amp; Design Process	Possible Points 5
1	0	Innovation in Design	Credit 1.1-Version 2.2
		Design Application	10/2/2009
		The LEED Submittal Template has been provided stating that an education program has been developed to present the project's sustainable design practices to occupants and visitors to the facility. As required per IDc1.1 CIR ruling dated 9/24/2001, the program includes at least two educational components, including an educational display highlighting the building's sustainable design features and public tours.	
1	0	Innovation in Design	Credit 1.2-Version 2.2
		Design Application	10/2/2009
		The project team has provided an ID credit proposal for development and implementation of a green housekeeping program. The proposal and supporting documentation (policy statement, list of cleaning chemicals, worker training abstract) meet the requirements set forth in IDc1.1 CIR ruling 4/8/2004 for achievement of an ID point for a Green Housekeeping program.	
1	0	Innovation in Design	Credit 1.3-Version 2.2
		Design Application	10/2/2009
		The LEED Submittal Template has been provided demonstrating that the project achieves exemplary performance for WE credit 3 as specified in the LEED Reference Guide.	
1	0	Innovation in Design	Credit 1.4-Version 2.2
		Design Application	10/2/2009
		The LEED Submittal Template has been provided demonstrating that the project achieves exemplary performance for MR credit 6 as specified in the LEED Reference Guide.	
1	0	LEED Accredited Professional	Credit 2-Version 2.2
		Design Application	10/2/2009
		The LEED Submittal Template has been provided stating that a LEED AP has been a participant on the project development team. A copy of the LEED AP award certification for Tara Fridhandler has been included as required.	

Earned	Denied	Administrative Inquiries	Possible Points
0	0		0