LEED certification review report

This report contains the results of the technical review of an application for LEED® certification submitted for the specified project. LEED certification is an official recognition that a project complies with the requirements prescribed within the LEED rating systems as created and maintained by the U.S. Green Building Council® (USGBC®). The LEED certification program is administered by Green Business Certification Inc. (GBCI®).

UTSA SDS NSCC

Project ID	1000139490
Rating system & version	LEED V4 BD+C: NC
Project registration date	12/30/2020

Gold Certified

Certified: 40-49, Silver: 50-59, Gold: 60-79, Platinum: 80+

LEED v4 BD+C: New Construction

Attempted: 60, Denied: 0, Pending: 0, Awarded: 60 of 110 points

INTEGRATIVE PROCESS	0 OF 1
Integrative Process	0 / 1

LOCATION AND TRANSPORTATION	14 OF 16
LEED for Neighborhood Development Location	0 / 16
Sensitive Land Protection	1 / 1
High Priority Site	2 / 2
Surrounding Density and Diverse Uses	5 / 5
Access to Quality Transit	5 / 5
Bicycle Facilities	1 / 1
Reduced Parking Footprint	0 / 1
Green Vehicles	0 / 1

SUSTAINABLE SITES	10 OF 10
Construction Activity Pollution Prevention	Y
Site Assessment	1 / 1
Site Development - Protect or Restore Habitat	2 / 2
Open Space	1 / 1
Rainwater Mgmt	3 / 3
Heat Island Reduction	2 / 2
Light Pollution Reduction	1 / 1

WATER EFFICIENCY	8 OF 11
Outdoor Water Use Reduction	Y
Outdoor Water Use Reduction	1 / 2
Indoor Water Use Reduction	Y
Indoor Water Use Reduction	4 / 6
Building-Level Water Metering	Y
Cooling Tower Water Use	2 / 2
Water Metering	1 / 1

ENERGY AND ATMOSPHERE	6 OF 33
Fundamental Commissioning and Verification	Y
Minimum Energy Performance	Y
Optimize Energy Performance	4 / 18
Building-Level Energy Metering	Y
Fundamental Refrigerant Mgmt	Y
Enhanced Commissioning	0 / 6
Advanced Energy Metering	1 / 1
Demand Response	0 / 2
Renewable Energy Production	0 / 3
Enhanced Refrigerant Mgmt	1 / 1
Green Power and Carbon Offsets	0 / 2

MATERIALS AND RESOURCES	5 OF 13
Storage and Collection of Recyclables	Y
Construction and Demolition Waste Mgmt Planning	Y
Building Life-Cycle Impact Reduction	0 / 5
Product disclosure & optimization - Environmental Product Declarations	2 / 2
Product disclosure & optimization - Sourcing of Raw Materials	0 / 2
Product disclosure & optimization - Material Ingredients	2 / 2
Construction and Demolition Waste Mgmt	1 / 2

INDOOR ENVIRONMENTAL QUALITY	9 OF 16
Minimum IAQ Performance	Y
Environmental Tobacco Smoke Control	Y
Enhanced IAQ Strategies	2 / 2
Low-Emitting Materials	3 / 3
Construction IAQ Mgmt Plan	1 / 1
IAQ Assessment	2 / 2
Thermal Comfort	0 / 1
Interior Lighting	1 / 2
Daylight	0 / 3
Quality Views	0 / 1
Acoustic Performance	0 / 1

INNOVATION	5 OF 6
Innovation	4 / 5
LEED Accredited Professional	1 / 1

REGIONAL PRIORITY CREDITS	3 OF 4
Rainwater Mgmt	1 / 1
Indoor Water Use Reduction	1 / 1
Cooling Tower Water Use	1 / 1

TOTAL	60 OF 110

Credit details

PROJECT INFORMATION

Project Information **Awarded**

Design Preliminary Review

Thank you for submitting your project for review. We hope you find the following review comments helpful. If you have questions about this review or if you would like to request a call to discuss your project, please contact us at http://www.gbci.org/contact. If requesting a call, please provide your availability and your detailed question(s) so that GBCI may prepare for the call.

The Project Information form has been completed and the supporting documentation has been provided.

INTEGRATIVE PROCESS

Integrative Process
Possible points: 1

Withdrawn

LOCATION AND TRANSPORTATION

LEED for Neighborhood Development Location — **Withdrawn**
Possible points: 16

Sensitive Land Protection — Awarded : 1
Possible points: 1
Attempted: 1, Denied: 0, Pending: 0, Awarded: 1

Design Preliminary Review

Option 1: Previously Developed

Awarded.

High Priority Site — Awarded : 2
Possible points: 2
Attempted: 2, Denied: 0, Pending: 0, Awarded: 2

Design Preliminary Review

Option 1: Historic District

Awarded.

Option 2: Priority Designation

Awarded.

Surrounding Density and Diverse Uses — Awarded : 5
Possible points: 5
Attempted: 5, Denied: 0, Pending: 0, Awarded: 5

Design Preliminary Review

Option 1: Surrounding Density

Awarded.

Option 2: Diverse Uses

Awarded.

Access to Quality Transit — Awarded : 5
Possible points: 5
Attempted: 5, Denied: 0, Pending: 0, Awarded: 5

Design Preliminary Review

Awarded.

Bicycle Facilities — Awarded : 1
Possible points: 1
Attempted: 1, Denied: 0, Pending: 0, Awarded: 1

Design Preliminary Review

The project meets the requirements using the LEED v4.1 substitution path (October 2021 Addenda) for this credit.

Case 1: Commercial or Institutional Projects

Awarded.

Reduced Parking Footprint — **Not attempted**
Possible points: 1

Green Vehicles — **Not attempted**
Possible points: 1

SUSTAINABLE SITES

Construction Activity Pollution Prevention — Awarded

Construction Preliminary Review

Local Standards and Codes

Awarded.

Site Assessment — Awarded : 1

Possible points: 1
Attempted: 1, Denied: 0, Pending: 0, Awarded: 1

Design Preliminary Review

Awarded.

Site Development - Protect or Restore Habitat — Awarded : 2

Possible points: 2
Attempted: 2, Denied: 0, Pending: 0, Awarded: 2

Construction Preliminary Review

The project is pursuing the LEED v4.1 substitution path for this credit.

Option 1: On-Site Restoration, 35.27%

Awarded.

Design Final Review

The project is pursuing the LEED v4.1 substitution path (July 2022 Addenda) for this credit.

Option 1: On-Site Restoration

1. The documentation and project timeline indicate that the vegetation and/or soil restoration has not yet been completed. This credit should be resubmitted during the Construction phase if the required information is unavailable during the Design phase.

Design Preliminary Review

Option 1: On-Site Restoration

1. The documentation and project timeline indicate that the vegetation and/or soil restoration has not yet been completed. This credit should be resubmitted during the Construction phase if the required information is unavailable during the Design phase.

The LEED v4.1 credit substitution path may provide an alternative to demonstrating compliance. Visit the v4.1 Credit Catalog to view the updated version of this credit. The LEED v4.1 Beta Guide is available here: http://www.usgbc.org/leed/v41. All v4 credits are available for substitution. If resubmitting following the v4.1 compliance path, complete the v4.1 LEED Form and provide the required documentation as described in the LEED v4.1 Beta Guide for this credit.

Open Space — Awarded : 1

Possible points: 1
Attempted: 1, Denied: 0, Pending: 0, Awarded: 1

Design Preliminary Review

Open Space, 53.09%

Awarded.

Rainwater Management **Awarded : 3**

Possible points: 3

Attempted: 3, Denied: 0, Pending: 0, Awarded: 3

Design Preliminary Review

The project meets the requirements using the LEED v4.1 substitution path for (October 2021 Addenda) this credit.

Option 1: Percentile Rain Events, 90th percentile

Awarded.

Heat Island Reduction **Awarded : 2**

Possible points: 2

Attempted: 2, Denied: 0, Pending: 0, Awarded: 2

Design Final Review

Option 1. Nonroof and Roof

Awarded.

Design Preliminary Review

Option 1. Nonroof and Roof

1. The drawings do not correctly show the areas shaded by plant canopy. Further, it appears that areas of hardscape have been counted in multiple strategies (i.e. shade coverage). Note shade area is for non-compliant hardscape areas that are shaded, and that each surface may only be counted once, even if it is addressed through multiple strategies.

Provide a site plan(s), project drawings, or photographs that show the non-compliant shaded areas. Ensure that each hardscape surface is only counted once.

2. The documentation for the concrete hardscape areas does not meet LEED requirements.

Provide documentation showing the SR for paving materials. Refer to LEED Interpretation 10411 for a listing of standard nonroof materials in lieu of project-specific testing data. Manufacturer documentation or an independent testing report showing the tested SR value must be provided if not listed in LEED Interpretation 10411.

Light Pollution Reduction **Awarded : 1**

Possible points: 1

Attempted: 1, Denied: 0, Pending: 0, Awarded: 1

Design Appeal Review 1

The project meets the requirements using the LEED v4.1 substitution path (November 2020 Addendum) for this credit.

Uplight: Option 1, BUG Rating Method

Awarded.

Light Trespass: Option 1, BUG Rating Method

Awarded.

WATER EFFICIENCY

Outdoor Water Use Reduction **Awarded**

Design Final Review

Option 2: Reduced Irrigation, 72%

Awarded.

Design Preliminary Review

1. The LEED Form is blank.

Provide a completed LEED Form as required.

2. The irrigated areas reported in the calculations, baseline case (34,681 square feet) and design case (42,276 square feet), are not equal as required.

Revise the calculations so the baseline case and design case areas are equal as required.

Outdoor Water Use Reduction **Awarded : 1**

Possible points: 2

Attempted: 1, Denied: 0, Pending: 0, Awarded: 1

Design Final Review

Option 2: Reduced Irrigation, 72%

Awarded.

Design Preliminary Review

1. WEp Outdoor Water Use Reduction is pending clarifications.

Refer to the comments within the prerequisite and resubmit this credit.

Indoor Water Use Reduction **Awarded**

Design Final Review

Usage-based Calculation, 42.37%

Awarded.

Design Preliminary Review

Usage-based Calculation, 42.37%

1. The required documentation has not been provided for showerheads.

Provide manufacturer documentation/cut sheets to confirm the fixture model, flow rate, and WaterSense label for the eligible fixtures.

Indoor Water Use Reduction **Awarded : 4**

Possible points: 6

Attempted: 4, Denied: 0, Pending: 0, Awarded: 4

Design Final Review

Usage-based Calculation, 42.37%

Awarded.

Design Preliminary Review

Usage-based Calculation, 42.37%

1. WEp Indoor Water Use Reduction is pending clarifications.

Refer to the comments within the prerequisite and resubmit this credit.

Building-Level Water Metering **Awarded**

Design Preliminary Review

Awarded.

Cooling Tower Water Use **Awarded : 2**

Possible points: 2

Attempted: 2, Denied: 0, Pending: 0, Awarded: 2

Design Preliminary Review

WEpc94 - No Cooling Tower

Awarded.

Water Metering **Awarded : 1**

Possible points: 1

Attempted: 1, Denied: 0, Pending: 0, Awarded: 1

Design Preliminary Review

Awarded.

ENERGY AND ATMOSPHERE

Fundamental Commissioning and Verification **Awarded**

Construction Final Review

Awarded.

Construction Preliminary Review

1. The documentation of the commissioning authority (CxA) experience has not been provided to confirm the minimum qualifications are met.

Provide documentation demonstrating the commissioning authority's appropriate project experience for at least two similar projects of comparable size. Include the individual's name, certifications, company, and any other relevant information.

2. The CFR and OMP table of contents does not contain all of the required information.

Update the table of contents to include the building occupancy schedule; equipment run-time schedules; setpoints for all HVAC equipment; set lighting levels throughout the building; minimum outside air requirements; any changes in schedules or setpoints for different seasons, days of the week, and times of day; a preventive maintenance plan for building equipment described in the systems narrative; and a commissioning program that includes periodic commissioning requirements, ongoing commissioning tasks, and continuous tasks for critical facilities.

3. The Functional performance test uploaded does not identify the individuals present for the testing or identify that the CxA was present to witness the testing. Therefore, it is unclear if the CxA was present to verify and witness at least a portion of the testing for each system category within the Commissioning Scope. Step 3 in the step-by-step guidance section of the LEED v4 BD+C Reference Guide indicates the tasks that must be performance by the lead CxA.

Provide a log showing who was present at the testing, to confirm that the CxA witnessed at least a portion of the mechanical, electrical, and plumbing functional testing; or provide an updated executive summary identifying the systems functional testing witnessed by the CxA.

Minimum Energy Performance **Awarded**

Design Final Review

Option 1: Whole-Building Energy Simulation, 12.14% ASHRAE 90.1-2010 Appendix G energy cost savings.

Awarded.

The total predicted annual energy consumption for the project is 7,283,711 kWh/year of electricity and 4,603 therms/year of natural gas.

Design Preliminary Review

Option 1: Whole-Building Energy Simulation, 13.0% ASHRAE 90.1-2010 Appendix G energy cost savings.

1. Provide the following:

a. A narrative response to each Preliminary Review comment.

b. A narrative describing any additional changes made to the energy models, or any significant changes to energy performance as a result of these changes (e.g., Baseline or Proposed energy consumption per end-use, Baseline or Proposed cost, etc.)

c. LEED Minimum Energy Performance Calculator (MEPC) updated to address the comments below.

d. Simulation input/output summary reports for the Baseline and Proposed models updated to address the comments below.

2. The LEED Summary report indicates several erroneous assemblies. It is unclear which assemblies have

been included in the model. For example, three different exterior wall assemblies with different U-values are listed for the Baseline Case. Additionally, the Proposed Case lists two separate glazing assemblies, with only one of them appearing to include the effect of framing.

Revise the model to remove all unused assemblies and provide a revised LEED Summary. Alternatively, provide additional supporting documentation (e.g. envelope summary by direction or room by room inputs) to confirm the envelope U-values modeled are consistent with the design and the requirements of ASHRAE 90.1 – 2010 Appendix G.

3. The Performance Output tab indicates that savings are being claimed for the elevator end use. However, no documentation has been provided confirming that this is due to an energy conservation measure. Energy efficiency measures for process loads like elevator use should be modeled using the Exceptional Calculation methodology.

A narrative should describe all Baseline and Proposed case assumptions included for this measure as well as the calculation methodology used to determine the projected savings. The narrative and energy savings should be reported separately from the other efficiency measures in the Minimum Energy Performance Calculator Performance Outputs tab. The Baseline case description should verify that the efficiency measure is not standard practice for a similar newly constructed facility by providing a recently published document (published within five years of the project registration date), referencing a utility program that incentivizes the equipment installed, or by documenting systems used to perform the same function in other newly constructed facilities (three facilities built within the past five years of the project registration date).

4. The energy savings reported for Cooling and Heat Rejection do not appear to be substantiated because the chilled water end use as reported in the Performance Output tab of the MEPC indicates a larger consumption savings than peak demand savings, which is unexpected as there is no indication in the supporting documentation that the Proposed Case chilled water plant is more efficient at partial load than the Baseline Case chiller plant. Additionally, no energy conservation measure is noted in the airside HVAC tab that would affect the partial load savings disproportionately from the design savings (e.g. demand control ventilation or economizer).

Review the Baseline and Proposed inputs for the model to confirm that they conform to ASHRAE 90.1-2010 and LEED modeling protocol. Provide sufficient information regarding the energy inputs in the Minimum Energy Performance Calculator and an accompanying narrative to justify the reported energy savings. Additionally, provide output summary reports confirming all outdoor air controls modeled for the Baseline and Proposed Case to justify that the energy inputs correctly reflect ASHRAE 90.1-2010 and LEED modeling protocol.

5. The Minimum Energy Performance Calculator and the provided LEED Summary Report indicates that no service water heating system was included within the building. This is unexpected for [describe building type] facility. Pursuant to Table G3.1.11, service hot water systems should be modeled if utilized within the building, or if these systems are expected for the future [indicate specific tenants space - e.g., food service] tenants.

Revise the Baseline and Proposed Case models to include service water heating as applicable. Note that typical schedules for this end use may be found in the ASHRAE 90.1-2010 User’s Manual. Revise the Baseline and Proposed Case models, the form, and the supporting documentation as needed. Additionally, ensure that the Minimum Energy Performance Calculator includes complete information regarding the service water heating assumptions in the model.

Items that do not require a response for this project, but should be considered for future projects:

1. It is noted that the process loads requirements of this project exceed 50% of the total building energy use and these process loads are primarily due to servers and other data center equipment. There are several alternative compliance paths that may apply. LEED Interpretation #10493 allows facilities with high process loads to utilize the Core & Shell point scale for claiming credit under EAc Optimized Energy Performance if a minimum threshold of improvement can be demonstrated. Savings for data center equipment may be claimed utilizing the exceptional calculation method in non-data center submissions. Such savings should be documented in the Minimum Energy Performance Data Center Calculator which can be found on the USGBC website under resources. Ensure that all required documentation for using the exceptional calculation method is provided in the submission and the calculator is completed in its entirety.

Optimize Energy Performance **Awarded : 4**

Possible points: 18

Attempted: 4, Denied: 0, Pending: 0, Awarded: 4

Design Final Review

Option 1: Whole Building Energy Simulation, 12.14%

Awarded.

Design Preliminary Review

Option 1: Whole Building Energy Simulation, 13.0%

1. EAp Minimum Energy Performance is pending clarifications.

Refer to the comments within the prerequisite and resubmit this credit.

Building-Level Energy Metering **Awarded**

Design Preliminary Review

Awarded.

Fundamental Refrigerant Management **Awarded**

Design Preliminary Review

Awarded.

Enhanced Commissioning **Not attempted**
Possible points: 6

Advanced Energy Metering **Awarded : 1**
Possible points: 1
Attempted: 1, Denied: 0, Pending: 0, Awarded: 1

Design Final Review

Awarded.

Design Preliminary Review

Option 2: Advanced Metering

1. The submitted meter cut sheet for gas meter does not provide adequate information confirming that meters meet all requirements of this credit.

Provide the following details regarding the meters:

a. Recording interval

b. Data Transmission capability

c. Data collection system description and storage capability

d. Remote data retrieval capability

Demand Response **Not attempted**
Possible points: 2

Renewable Energy Production **Not attempted**
Possible points: 3

Enhanced Refrigerant Management **Awarded : 1**

Possible points: 1
Attempted: 1, Denied: 0, Pending: 0, Awarded: 1

Design Preliminary Review

Option 2: Calculation of Refrigerant Impact

Awarded.

Green Power and Carbon Offsets **Not attempted**
Possible points: 2

MATERIALS AND RESOURCES

Storage and Collection of Recyclables **Awarded**

Design Preliminary Review

Awarded.

Construction and Demolition Waste Management Planning **Awarded**

Construction Preliminary Review

Awarded.

Building Life-Cycle Impact Reduction **Not attempted**
Possible points: 5

Building Product Disclosure and Optimization - Environmental Product Declarations **Awarded : 2**
Possible points: 2
Attempted: 2, Denied: 0, Pending: 0, Awarded: 2

Construction Preliminary Review

The project is pursuing the LEED v4.1 substitution path for this credit.

Option 1. Environmental Product Declaration

The documentation provided demonstrates that at least 40 weighted products, sourced from at least five different manufacturers, meet the requirements for environmental product declarations. Documentation has been reviewed for the materials listed in the Building Products Calculator on rows 10, 11, 15 – 19, 21 – 23, 25 – 28, 33, 35, 38, 41 – 48, 52, 54.

Awarded.

Items that do not require a response for this project, but should be considered for future projects:

1. The following products are listed as multiple products, although they are considered one product because they have the same material, formulation, manufacturer, and function. Unless the documentation describes different functional/declared units or includes different impacts from different product lines, the LCA analysis is conducted for that functional unit and cannot be considered as more than one product.

- VT Industries Heritage Wood Doors on lines 10 & 76

- Sika Sarnafil G410 on lines 12, 13, & 31

- Pac Clad Petersen Aluminum Corp Flush Wall Panels on lines 35 & 36

For future projects, confirm and adjust the MR Building Product Calculator as necessary.

2. The EPDs for Sika Sarnafil G410 on lines 12, 13, & 31 and Vitro Architectural Glass on line 53 do not include the information for which standard (either EN 15804 or ISO 21930) was used for the Product Category Rule (PCR).

For future projects, provide an updated EPD or other documentation demonstrating which standard was used for the PCR.

3. Armstrong SDT Excelon has been entered into the BPDO Calculator as Product-specific LCA; however, the provided documentation does not appear to support this claim (Product-specific Type III External worth 1.5 products).

Option 2: Embodied Carbon/LCA Optimization, 12 Products

The documentation provided demonstrates that at least five weighted products, sourced from at least three

different manufacturers, meet the requirements for embodied carbon. Documentation has been reviewed for the materials listed in the Building Products Calculator on rows 15, 21, 23, 26, 43 - 45.

Awarded.

Building Product Disclosure and Optimization - Sourcing of Raw Materials — **Withdrawn**
Possible points: 2

Building Product Disclosure and Optimization - Material Ingredients — **Awarded : 2**
Possible points: 2
Attempted: 2, Denied: 0, Pending: 0, Awarded: 2

Construction Preliminary Review

The project is pursuing the LEED v4.1 substitution path for this credit.

Option 1: Material Ingredient Reporting, 50 Products

Awarded.

Items that do not require a response for this project, but should be considered for future projects:

1. The HPD for Ives/Allegion ARCHITECTURAL HINGES cannot be verified that the product was Characterized/Screened. The checkbox at the top of the HPD has not been checked.

For future projects, if applicable, provide an updated HPD with this information completed.

2. A Declare label has not been provided for Owens Corning Spandrel Insulation.

For future projects, provide compliant documentation for the product(s) based on the programs listed in the Credit Requirements that correspond with the project's construction period.

3. The HPDs provided for the following products are not third-party verified as indicated in the calculator:

- Wilsonart Solid Surface Counter Top

- Armstrong SDT Excelon

- ICD High Performance Coatings OPACI-COAT-300® Water Based Silicone Coating

When recalculated to address the contributions from the products above, the documentation demonstrates compliance with 46 weighted products.

Option 2: Material Ingredient Optimization, 10 Products

The documentation provided demonstrates that at least five weighted products, sourced from at least three different manufacturers, meet the requirements for material ingredient optimization. Documentation has been reviewed for the materials listed in the Building Products Calculator on rows 41, 43 – 45, 50, 53, 55.

Awarded.

Construction and Demolition Waste Management — **Awarded : 1**
Possible points: 2
Attempted: 1, Denied: 0, Pending: 0, Awarded: 1

Construction Preliminary Review

The project is pursuing the LEED v4.1 substitution path for this credit.

Option 2: Waste Prevention, 14.33 lb/sq ft

Awarded.

INDOOR ENVIRONMENTAL QUALITY

Minimum Indoor Air Quality Performance — Awarded

Design Appeal Review

Option 1: ASHRAE Standard 62.1-2010

Awarded.

Design Final Review

Option 1: ASHRAE Standard 62.1-2010

Additional documentation has been provided; however, it does not demonstrate compliance because the system populations have been modified to be less than the peak occupancy reported across the rest of the project submittal. Specifically, the narrative states that the occupancy has been adjusted to be consistent with the building FTE; however, this building has a large visitor (student) load as a university building. Further, the system AHU - 1 has a reported population of 100, but the room multipurpose 110 has seats for 94. It is unexpected that the system would only have 100 people.

If appealing, provide revised VRP calculations where worst case conditions are clearly explained and calculated, and the population reported in the VRP calculations are consistent with the peak occupancy numbers reported in the rest of the submittal. The documentation does not demonstrate compliance.

All prerequisites must be earned prior to achieving LEED certification. Because this prerequisite has been denied after receiving two full rounds of review, an appeal will be necessary.

Design Preliminary Review

Option 1: ASHRAE Standard 62.1-2010

1. It appears that the calculations are not consistent with the design and it is unclear if they have been performed for the worst-case conditions. The Vdz and Vpz values used in the calculations for AHU-1 and AHU-2 are not consistent with the mechanical schedule values for the corresponding terminal unit name. For example, SD-VAV 1-2-05 has a Vdz of 1,236 cfm and a Vpz of 123 cfm; however, the single duct VAV schedule provided in PI: Project Information indicates that the design parameters are maximum airflow of 500 cfm and minimum airflow of 165 cfm for SD-VAV 1-2-05a. Additionally, as SD-VAV 1-2-05 is a single duct VAV box it is expected that the Vdz will match the Vpz in the calculations. There also appear to be several instances where the fan powered units have been modeled with the Vdz and Vpz as being equal which is unexpected. The calculations must reflect the lowest supply airflow rate that can reasonably be expected to occur when each space is fully occupied. This lowest supply flow condition when occupied is anticipated to be the worst case ventilation condition. For interior zones in cooling mode, this flowrate is expected to be somewhere in between the minimum flow setting and the design cooling flowrate. For the heating condition, this flowrate is generally expected to be the heating minimum flowrate. Refer to ASHRAE 62.1-2010 Appendix A for schematic figures that confirm the airflow value that each variable used in the calculation represent.

Provide revised calculations that address the worst case condition or provide information to justify the parameters used.

Environmental Tobacco Smoke Control — Awarded

Design Preliminary Review

Awarded.

Enhanced Indoor Air Quality Strategies — Awarded : 2

Possible points: 2
Attempted: 2, Denied: 0, Pending: 0, Awarded: 2

Design Preliminary Review

Option 1: Enhanced IAQ Strategies

Awarded.

Option 2: Additional Enhanced IAQ Strategies

C. Carbon Dioxide Monitoring

Awarded.

Low-Emitting Materials **Awarded : 3**

Possible points: 3

Attempted: 3, Denied: 0, Pending: 0, Awarded: 3

Construction Final Review

The project is pursuing the LEED v4.1 substitution path for this credit.

The following product categories have been attempted: Paints and Coatings (100%), Flooring (100%), Insulation (93.71%).

Awarded. A third point has been awarded for reaching the 90% threshold in three product categories.

Construction Preliminary Review

The project is pursuing the LEED v4.1 substitution path for this credit.

The following product categories have been attempted: Paints and Coatings (94.56%), Adhesives and Sealants (100%), Flooring (100%), Ceilings (100%), Wall Panels (100%), Insulation (100%).

Product documentation has been reviewed to determine that at least the required threshold has been met for one product category (Insulation).

1. The actual volume or cost has not been entered in the calculator for every product. Note that omitting this data is only acceptable when 100% of the products meet the allowable VOC content and VOC emissions evaluation requirements. However, at least one of the products listed may not be compliant.

Provide a revised calculation that includes the actual volume used for every Paints and Coatings & Adhesives and Sealants and cost for every Wall Panels and Ceilings product. Even if documenting 100% compliance in a category, it is strongly suggested that the actual units of measure are provided to enable recalculations by the Reviewer, if necessary, to determine compliance in the Final Review.

2. It does not appear that all adhesive and sealant products installed within the waterproofing membrane have been entered in the calculator, including but not limited to the following: flooring adhesives, subfloor adhesives, drywall and panel adhesives, wall-base adhesives, structural glazing and wood adhesives, tile adhesives, contact adhesives, architectural sealants (including grouts, and polyurethane or plastic foams), duct sealants, and plumbing adhesives and sealants, wall-covering adhesives, fiberglass panel adhesives, and welding adhesives.

Provide the following:

a. A revised Low-Emitting Materials Calculator that includes all interior adhesive and sealant products installed within the waterproofing membrane.

b. The VOC emissions evaluation certificates and VOC content documentation for each listed product, as available.

3. It does not appear that the product types have been correctly reported in the calculator for all Adhesives and Sealants products. Note that the product type definitions can be found in the applicable regulations and manufacturers should be contacted when the product type is unclear.

Provide a revised calculation that reflects the appropriate product type and allowable VOC content for each product. If necessary, revise the calculator to reflect the VOC Budget Approach.

4. It does not appear that all products installed within the waterproofing membrane have been entered in the calculator, including but not limited to the following products:

- interior doors (HM and Wood)

- interior glazing

- folding partition

- acoustic wall panel

Provide the following:

a. A revised Low-Emitting Materials Calculator that includes all products, in the attempted categories, installed within the waterproofing membrane.

b. The VOC emissions evaluations, as available.

5. The Johnsonite/Tarkett Traditional Duracove Thermoplastic Rubber 1/8" (TYPE TP) has been included in the Wall Panels category, although it belongs in the Flooring category.

Provide the following:

a. A revised calculation in which the above noted product is included in the appropriate category.

b. The VOC emissions evaluations, as available.

6. VOC content documentation has not been provided for Sherwin Williams Pro Industrial High Performance Acrylic Semi-Gloss and Laticrete L&M DRESS & SEAL WB30.

Provide the third-party certificate, or the manufacturer disclosure, verifying the VOC content.

7. Documentation has not been provided or the documentation provided for the following products does not satisfy the criteria for a qualifying VOC emissions evaluation:

- Isolatek CAFCO Blaze Shield (not provided)

- Laticrete L&M DRESS & SEAL WB30

- Hilti CP 648-E (Endless) Firestop wrap strip

- Hilti CFS-SP Fire Stop Joint Spray (evaluation appears outdated compared to the project's construction period)

- National Gypsum Gold Bond Brand 5/8" Fire-Shield Gypsum Board (certificate demonstrates UL Greenguard rather than UL Greenguard Gold)

- Armstrong Optima (tested using Classroom Environment rather than Private Office)

- Rockfon Cinema Black (not provided)

Note that third-party certifications and programs that test to CDPH Standard Method v1.2-2017 are listed here: http://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/CDPH%20Document%20Library/List%20of%203rd%20party%20certifications%20for%20CDPH%20v1.2-Oct-10-2019%20ADA.pdf. The certification period must cover the date the installed product was manufactured. The modeling scenario used must be private office (unless the product is installed in a classroom). The TVOC results must be stated.

Additionally, note that any manufacturer claims provided must include all of the following criteria:

- Declaration that the product has been tested according to CDPH SM v1.2-2017 and complies with the VOC limits in Table 4-1 of the method;

- TVOC results at 14 days (measured as specified in CDPH SM v1.2);

- Test date (must cover the time the installed product was manufactured for the project and cannot begin after the product was manufactured);

- The modeling scenario used (must be private office unless the product is installed in a classroom);

- For wet-applied products, the amount of wet-applied product in mass per surface area (during testing);

- The name of the laboratory that performed the evaluation and documentation (such as accreditation number or certificate with scope of accreditation) demonstrating the accreditation under ISO/IEC 17025 for the test method they used (CDPH v1.2);

Provide the following:

a. A qualifying third-party certificate or a manufacturer claim of VOC emissions evaluation for each product listed above.

b. A revised calculation, as necessary.

Construction Indoor Air Quality Management Plan **Awarded : 1**
Possible points: 1
Attempted: 1, Denied: 0, Pending: 0, Awarded: 1

Construction Preliminary Review

Awarded.

Indoor Air Quality Assessment **Awarded : 2**
Possible points: 2
Attempted: 2, Denied: 0, Pending: 0, Awarded: 2

Construction Preliminary Review

The project is pursuing the LEED v4.1 substitution path for this credit.

Option 2: Air Testing, Paths 1 and 2

Awarded.

Thermal Comfort **Withdrawn**
Possible points: 1

Interior Lighting **Awarded : 1**
Possible points: 2
Attempted: 1, Denied: 0, Pending: 0, Awarded: 1

Design Preliminary Review

Option 1: Lighting Control

Required lighting controls are provided for 100% of individual occupant spaces and in 100% of shared multi-occupant spaces.

Awarded.

Daylight **Withdrawn**
Possible points: 3

Quality Views **Not attempted**
Possible points: 1

Acoustic Performance **Withdrawn**
Possible points: 1

INNOVATION

Innovation **Awarded : 4**

Possible points: 5

Attempted: 4, Denied: 0, Pending: 0, Awarded: 4

Construction Preliminary Review

Strategy 2: Pilot Credit 116: Daylight in Nonregularly Occupied Spaces

The project has documented at least 100 lux for 15% of the nonregularly occupied floor area for buildings 5 floors and above. The following have been provided:

a. List of nonregularly occupied spaces and their annual summary values for sDA

b. Geometric plots from simulations, and narrative or output file describing daylight simulation program, simulation inputs, and weather file.

c. Calculations demonstrating percentage of compliant nonregularly occupied floor area.

Additionally, the registration and survey information have been provided.

Awarded.

Strategy 3: Exemplary Performance – MRc Environmental Product Declarations

The project is pursuing the LEED v4.1 substitution path for this credit.

The requirement for exemplary performance is 40 products and the project has documented 40 products.

Awarded.

Strategy 4: Exemplary Performance – MRc Material Ingredients

The project is pursuing the LEED v4.1 substitution path for this credit.

The requirement for exemplary performance is 40 products and the project has documented 40 products.

Awarded.

Design Final Review

This strategy was submitted for initial review during the Design Final Review.

Innovation 4: WELL feature 87 Beauty and Design I

The project team has developed and implemented WELL feature 87 Beauty and Design I. The project contains features intended for all of the following:

a. Human delight.

b. Celebration of culture.

c. Celebration of spirit.

d. Celebration of place.

e. Meaningful integration of public art.

Awarded.

Strategy 2: Pilot Credit 116: Daylight in Nonregularly Occupied Spaces

This strategy was submitted for initial review during the Design Final Review.

The project has documented at least 100 lux for 15% of the nonregularly occupied floor area for buildings 5

floors and above. The following have been provided:

a. List of nonregularly occupied spaces and their annual summary values for sDA

b. Geometric plots from simulations, and narrative or output file describing daylight simulation program, simulation inputs, and weather file.

c. Calculations demonstrating percentage of compliant nonregularly occupied floor area.

Additionally, the registration information has been provided.

1. It is not clear if the project has completed the survey for Pilot Credit 116: Daylight in Nonregularly Occupied Spaces.

Provide documentation verifying that the project has completed the USGBC Pilot Credit Feedback Survey. The survey may be found at the following link: http://www.usgbc.org/help/where-can-i-find-pilot-credit-survey-link-documenting-my-pilot-credit. Note that it also is highly encouraged that the project participate in an online Pilot Credit Forum via LEEDuser.

Because this strategy was submitted for initial review during the Design Final Review, it will receive the second round of review during the Construction Review phase. Note that the strategy is marked as Denied at this stage although it still may be resubmitted for review. Re-attempt the credit so it is open for review.

Alternatively, the project may pursue a different Innovation strategy for the Construction Phase of Review.

One point pending.

Strategy 3: Exemplary Performance – MRc Environmental Product Declarations

1. The base credit is Construction Phase credit, which has not been submitted; therefore, this strategy cannot be reviewed at this time. This strategy has been marked as denied. Resubmit this credit when submitting for the Construction Phase of review.

Alternatively, the project may pursue a different Innovation strategy for the Construction Phase of Review.

Strategy 4: Exemplary Performance – MRc Material Ingredients

1. The base credit is Construction Phase credit, which has not been submitted; therefore, this strategy cannot be reviewed at this time. This strategy has been marked as denied. Resubmit this credit when submitting for the Construction Phase of review.

Alternatively, the project may pursue a different Innovation strategy for the Construction Phase of Review.

It is noted that five points have been attempted for this credit within LEED Online, whereas the v4 LEED Form and documentation indicates that four points have been pursued.

LEED Accredited Professional **Awarded : 1**

Possible points: 1

Attempted: 1, Denied: 0, Pending: 0, Awarded: 1

Construction Preliminary Review

Awarded.

REGIONAL PRIORITY CREDITS

Rainwater Management
Possible points: 1
Attempted: 1, Denied: 0, Pending: 0, Awarded: 1

Outdoor Water Use Reduction
Possible points: 1

Indoor Water Use Reduction
Possible points: 1
Attempted: 1, Denied: 0, Pending: 0, Awarded: 1

Cooling Tower Water Use
Possible points: 1
Attempted: 1, Denied: 0, Pending: 0, Awarded: 1

Optimize Energy Performance
Possible points: 1

Renewable Energy Production
Possible points: 1

TOTAL	**110**	**60**	**0**	**0**	**60**

Review summary

Review	Submitted	Returned	Points: Submitted	Denied	Pending	Awarded
Design Preliminary	**06/29/2022**	**07/26/2022**	**43**	**0**	**15**	**28**

Credit	Status	Type	POINTS: Attempted	Denied	Pending	Awarded
Project Information	Anticipated		0	0	0	0
Sensitive Land Protection	Anticipated	Design	1	0	0	1
High Priority Site	Anticipated	Design	2	0	0	2
Surrounding Density and Diverse Uses	Anticipated	Design	5	0	0	5
Access to Quality Transit	Anticipated	Design	5	0	0	5
Bicycle Facilities	Anticipated	Design	1	0	0	1
Site Assessment	Anticipated	Design	1	0	0	1
Site Development - Protect or Restore Habitat	Pending	Design	2	0	2	0
Open Space	Anticipated	Design	1	0	0	1
Rainwater Management	Anticipated	Design	4	0	0	4
Heat Island Reduction	Pending	Design	2	0	2	0
Outdoor Water Use Reduction	Pending	Design	0	0	0	0
Outdoor Water Use Reduction	Pending	Design	1	0	1	0
Indoor Water Use Reduction	Pending	Design	0	0	0	0
Indoor Water Use Reduction	Pending	Design	5	0	5	0
Building-Level Water Metering	Anticipated	Design	0	0	0	0
Cooling Tower Water Use	Anticipated	Design	3	0	0	3
Water Metering	Anticipated	Design	1	0	0	1
Minimum Energy Performance	Pending	Design	0	0	0	0
Optimize Energy Performance	Pending	Design	4	0	4	0
Building-Level Energy Metering	Anticipated	Design	0	0	0	0
Fundamental Refrigerant Management	Anticipated	Design	0	0	0	0
Advanced Energy Metering	Pending	Design	1	0	1	0
Enhanced Refrigerant Management	Anticipated	Design	1	0	0	1
Storage and Collection of Recyclables	Anticipated	Design	0	0	0	0
Minimum Indoor Air Quality Performance	Pending	Design	0	0	0	0
Environmental Tobacco Smoke Control	Anticipated	Design	0	0	0	0
Enhanced Indoor Air Quality Strategies	Anticipated	Design	2	0	0	2
Interior Lighting	Anticipated	Design	1	0	0	1

Design Final	**10/21/2022**	**12/13/2022**	**20**	**6**	**0**	**14**

Credit	Status	Type	POINTS: Attempted	Denied	Pending	Awarded
Site Development - Protect or Restore Habitat	Denied	Design	2	2	0	0
Heat Island Reduction	Anticipated	Design	2	0	0	2
Outdoor Water Use Reduction	Anticipated	Design	0	0	0	0
Outdoor Water Use Reduction	Anticipated	Design	1	0	0	1
Indoor Water Use Reduction	Anticipated	Design	0	0	0	0
Indoor Water Use Reduction	Anticipated	Design	5	0	0	5
Minimum Energy Performance	Anticipated	Design	0	0	0	0
Optimize Energy Performance	Anticipated	Design	4	0	0	4
Advanced Energy Metering	Anticipated	Design	1	0	0	1
Minimum Indoor Air Quality Performance	Denied	Design	0	0	0	0
Innovation	Anticipated	Design	5	4	0	1

Design Appeal	**01/09/2023**	**02/21/2023**	**0**	**0**	**0**	**0**

Credit	**Status**	**Type**	**POINTS: Attempted**	**Denied**	**Pending**	**Awarded**
Minimum Indoor Air Quality Performance	Anticipated	Design	0	0	0	0

Design Appeal 1	**03/03/2023**	**03/18/2023**	**1**	**0**	**0**	**1**

Credit	Status	Type	POINTS: Attempted	Denied	Pending	Awarded
Light Pollution Reduction	Anticipated	Design	1	0	0	1

Construction Preliminary	06/02/2023	06/26/2023	18	0	3	15

Credit	Status	Type	POINTS: Attempted	Denied	Pending	Awarded
Construction Activity Pollution Prevention	Awarded	Construction	0	0	0	0
Site Development - Protect or Restore Habitat	Awarded	Design	2	0	0	2
Fundamental Commissioning and Verification	Pending	Construction	0	0	0	0
Construction and Demolition Waste Management Planning	Awarded	Construction	0	0	0	0
Building Product Disclosure and Optimization - Environmental Product Declarations	Awarded	Construction	2	0	0	2
Building Product Disclosure and Optimization - Material Ingredients	Awarded	Construction	2	0	0	2
Construction and Demolition Waste Management	Awarded	Construction	1	0	0	1
Low-Emitting Materials	Pending	Construction	3	0	3	0
Construction Indoor Air Quality Management Plan	Awarded	Construction	1	0	0	1
Indoor Air Quality Assessment	Awarded	Construction	2	0	0	2
Innovation	Awarded	Design	4	0	0	4
LEED Accredited Professional	Awarded	Construction	1	0	0	1

Construction Final	**07/10/2023**	**08/01/2023**	**3**	**0**	**0**	**3**

Credit	Status	Type	POINTS: Attempted	Denied	Pending	Awarded
Fundamental Commissioning and Verification	Awarded	Construction	0	0	0	0
Low-Emitting Materials	Awarded	Construction	3	0	0	3