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 certifcation program is administered by the Green Building Certification Institute (GBCI®).

Temple University SOM-8/9 flr fit-out

Project ID	1000006416
Rating system & version	LEED-CI v2009
Project registration date	05/14/2010

CERTIFIED SILVER GOLD PLATINUM

Certified (Certified)

CERTIFIED: 40-49, SILVER: 50-59, GOLD: 60-79, PLATINUM: 80+

LEED FOR COMMERCIAL INTERIORS (V2009)

ATTEMPTED: 52, DENIED: 15, PENDING: 0, AWARDED: 40 OF 110 POINTS

SUSTAINABLE SITES	14 OF 21
SSc1 Site Selection	0 / 5
SSc2 Development Density and Community Connectivity	6 / 6
SSc3.1 Alternative Transportation-Public Transportation Access	6 / 6
SSc3.2 Alternative Transportation-Bicycle Storage and Changing Rooms	0 / 2
SSc3.3 Alternative Transportation-Parking Availability	2 / 2

WATER EFFICIENCY	0 OF 11
WEp1 Water Use Reduction-20% Reduction	Y
WEc1 Water Use Reduction	0 / 11

ENERGY AND ATMOSPHERE	14 OF 37
EAp1 Fundamental Commissioning of the Building Energy Systems	Y
EAp2 Minimum Energy Performance	Y
EAp3 Fundamental Refrigerant Mgmt	Y
EAc1.1 Optimize Energy Performance-Lighting Power	0 / 5
EAc1.2 Optimize Energy Performance-Lighting Controls	0 / 3
EAc1.3 Optimize Energy Performance-HVAC	5 / 10
EAc1.4 Optimize Energy Performance-Equipment and Appliances	4 / 4
EAc2 Enhanced Commissioning	0 / 5
EAc3 Measurement and Verification	0 / 5
EAc4 Green Power	5 / 5

MATERIALS AND RESOURCES	3 OF 14
MRp1 Storage and Collection of Recyclables	Y
MRc1.1 Tenant Space-Long-Term Commitment	1 / 1
MRc1.2 Building Reuse	0 / 2
MRc2 Construction Waste Mgmt	2 / 2
MRc3.1 Materials Reuse	0 / 2
MRc3.2 Materials Reuse-Furniture and Furnishings	0 / 1
MRc4 Recycled Content	0 / 2
MRc5 Regional Materials	0 / 2
MRc6 Rapidly Renewable Materials	0 / 1
MRc7 Certified Wood	0 / 1

INDOOR ENVIRONMENTAL QUALITY	7 OF 17
IEQp1 Minimum IAQ Performance	Y
IEQp2 Environmental Tobacco Smoke (ETS) Control	Y
IEQc1 Outdoor Air Delivery Monitoring	0 / 1
IEQc2 Increased Ventilation	1 / 1
IEQc3.1 Construction IAQ Mgmt Plan-During Construction	1 / 1
IEQc3.2 Construction IAQ Mgmt Plan-Before Occupancy	0 / 1
IEQc4.1 Low-Emitting Materials-Adhesives and Sealants	1 / 1
IEQc4.2 Low-Emitting Materials-Paints and Coatings	1 / 1
IEQc4.3 Low-Emitting Materials-Flooring Systems	1 / 1
IEQc4.4 Low-Emitting Materials-Composite Wood and Agrifiber Products	0 / 1
IEQc4.5 Low-Emitting Materials-Systems Furniture and Seating	0 / 1
IEQc5 Indoor Chemical and Pollutant Source Control	0 / 1
IEQc6.1 Controllability of Systems-Lighting	0 / 1
IEQc6.2 Controllability of Systems-Thermal Comfort	0 / 1
IEQc7.1 Thermal Comfort-Design	1 / 1
IEQc7.2 Thermal Comfort-Verification	0 / 1
IEQc8.1 Daylight and Views-Daylight	0 / 2
IEQc8.2 Daylight and Views-Views for Seated Spaces	1 / 1

INNOVATION IN DESIGN	2 OF 6
IDc1.1 Innovation in Design	0 / 1
IDc1.2 Innovation in Design	1 / 1
IDc1.3 Innovation in Design	0 / 1
IDc1.4 Innovation in Design	0 / 1
IDc1.5 Innovation in Design	0 / 1
IDc2 LEED® Accredited Professional	1 / 1

REGIONAL PRIORITY CREDITS	OF 4
SSc1 Site Selection	0 / 1
SSc3.2 Alternative Transportation-Bicycle Storage and Changing Rooms	0 / 1
WEc1 Water Use Reduction	0 / 1
MRc3.1 Materials Reuse	0 / 1
IEQc8.1 Daylight and Views-Daylight	0 / 1

TOTAL	40 OF 110

CREDIT DETAILS

Project Information Forms

PIf1: Minimum Program Requirements — Approved

06/26/2012 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Project Information Form has been submitted stating that the project complies with all Minimum Program Requirements. The project will comply with MPR 6: Must commit to sharing tenant-level energy and water usage data via Option 2. The project is located in Philadelphia, Pennsylvania.

However, the required signatory for this form is the project Owner, but it has been signed by a project team member with an unassigned role (Thomas McCreesh of Temple University). It is unclear that this individual is a qualified Owner of this project since the Owner role has not been designated in the Team Administration Tab in LEED Online. The Registration Details Tab indicates that Thomas McCreesh is the Owner Primary Contact, is an employee of the project Owner Organization (Temple University), and therefore, this individual should complete all Owner Required Signatories for this project.

TECHNICAL ADVICE:
Please provide a revised form which has been signed by the project Owner Primary Contact (Thomas McCreesh). Ensure that the Owner has been designated the proper role in the Team Administration Tab in LEED Online and is logged in with his or her own account when signing the form.

If the project wishes to designate an Agent to complete the Owner Required Signatories on behalf of the Owner Primary Contact (Thomas McCreesh), please see the Required Signatory and Common Issues with Owner Information in LEED Online sections of the LEED Online Help Content for additional information including how to request changes to the project Owner Information. Ensure that all necessary documentation, as outlined in the Help Content and based on the chosen compliance path, is provided within the Special Circumstances section of this form for the Final Review.

09/28/2012 DESIGN AND CONSTRUCTION FINAL REVIEW

The LEED Project Information Form has been provided to address the issues outlined in the Preliminary Review comments and the Owner has signed the form, as required. The documentation demonstrates compliance.

09/25/2013 DESIGN AND CONSTRUCTION APPEAL REVIEW

This LEED Project Information Form was previously approved in the Final Review. No changes have been made.

PIf2: Project Summary Details — Approved

06/26/2012 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Project Information Form has been submitted including the following project summary details. The project space occupies two stories and 64,000 gross square feet in the twelve story building. This is 13.11% of the total gross square footage of the building. The building was originally constructed in 2008 with 64,000 square feet undergoing initial fit-out. It uses energy from electricity, district or campus heating, and district or campus cooling, as well as uses water from a municipal potable water system. The sewage is conveyed to a municipal sewer system. The total project budget is $11,400,000.

09/28/2012 DESIGN AND CONSTRUCTION FINAL REVIEW

This LEED Project Information Form was previously approved during the Preliminary Review phase. No changes have been made.

09/25/2013 DESIGN AND CONSTRUCTION APPEAL REVIEW

This LEED Project Information Form was previously approved in the Preliminary Review. No changes have been made.

PIf3: Occupant and Usage Data — Approved

06/26/2012 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Project Information Form has been submitted including the following occupant and usage data. The occupant is a state university and an occupant type that consists primarily of Core Learning Space: College/University spaces. The average users value is 165, the peak users value is 195, the FTE value is 165, and the tenant space is occupied 260 days per year. The space is intended to be Owner-occupied after project completion.

However, daily average transients have not been included in the form. Based on the scope of the LEED-CI project, it is common that the project would include transient visitors to the project space. Note that for a typical office space, transients may include individuals, such as consultants or clients, who may visit the space over the course of the day (such as for meetings, etc.). Additionally, the occupancy numbers have not been reported consistently throughout this project. WEp1: Water Use Reduction, 20% Reduction, indicates an average transient occupancy of 20 occupants, whereas this form does not include any average transient occupants. Occupancy

numbers must be reported consistently throughout all submittal documentation.

TECHNICAL ADVICE:
Please provide a clarification narrative and revise the form, as necessary, to ensure that a peak and daily average value has been provided within Table PIf3-3 for all transient occupants. Ensure that the occupancy numbers are presented consistently throughout the project.

09/28/2012 DESIGN AND CONSTRUCTION FINAL REVIEW

The LEED Project Information Form has been revised to address the issues outlined in the Preliminary Review comments. The form states that the project has 30 peak transient occupants and 15 average transients, and the occupancy has been reported consistently across all submittals. The documentation demonstrates compliance.

09/25/2013 DESIGN AND CONSTRUCTION APPEAL REVIEW

This LEED Project Information Form was previously approved in the Final Review. No changes have been made.

PIf4: Schedule and Overview Documents Approved

06/26/2012 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Project Information Form has been submitted including the design and construction schedule, and the estimated date of occupancy is noted as Aug 26, 2011. The following required documents have been uploaded: an exterior photograph, floor plans, a building section, and mechanical plans. Additionally, an online map, the building systems narrative, and the project narrative have been provided.

However, representative photographs of the interior project space have not been provided, as required.

TECHNICAL ADVICE:
Please provide interior photographs of the project space. If the project is in the design phase, provide a rendering and/or drawing.

09/28/2012 DESIGN AND CONSTRUCTION FINAL REVIEW

The interior photograph has been provided to address the issues outlined in the Preliminary Review comments. The documentation demonstrates compliance.

09/25/2013 DESIGN AND CONSTRUCTION APPEAL REVIEW

This LEED Project Information Form was previously approved in the Final Review. No changes have been made.

PIf5: Previously LEED Certified Details Approved

06/26/2012 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Project Information Form has been submitted stating that the building that the project is located in has not been LEED certified.

09/28/2012 DESIGN AND CONSTRUCTION FINAL REVIEW

This LEED Project Information Form was previously approved during the Preliminary Review phase. No changes have been made.

09/25/2013 DESIGN AND CONSTRUCTION APPEAL REVIEW

This LEED Project Information Form was previously approved in the Preliminary Review. No changes have been made.

Sustainable Sites

SSc1: Site Selection — Denied

POSSIBLE POINTS: 5
ATTEMPTED: 4, DENIED: 1, PENDING: 0, AWARDED: 0

06/29/2012 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

Option 2- Path 10: Water Use Reduction, 30% Reduction
The LEED Credit Form and water use calculations have been provided stating that the base building has reduced water use by 36.44% from a calculated baseline through the installation of low-flush water closets, low-flush urinals, and low-flow kitchen sink faucets. A minimum reduction of at least 30% is required. The documentation in Plf2: Project Summary Details confirms that the LEED-CI space occupies 13.11% of the total gross square footage of the base building therefore, is eligible for this credit. Plumbing fixture schedules have been provided.

However, five issues are pending:
1. The base building water use calculations appear to include only the occupants of the LEED-CI space. Note that SSc1: Site Selection is a whole-building credit, and therefore, documentation must be provided demonstrating credit compliance at the base building level.

2. Plf3: Occupant and Usage Data has been denied pending clarifications due to issues with the occupancy for this project.

3. The fixture usage groups have been based on fixture types, whereas fixture groups are meant to define occupant groups (i.e. office, warehouse, retail, etc.). The LEED Reference Guide for Green Interior Design and Construction, 2009 Edition, states that user groups must reflect populations within the building that use a specific subset of flow and flush fixtures. If the project occupants have similar usage patterns, one fixture usage group may be used to represent the entire building occupancy. Note that the form will automatically calculate the daily usage rates for each fixture based on the percent male/female as entered in the Fixture Group when the group is assigned to each fixture.

4.The LAV-1 lavatory has been indicated as belonging to the Private Lavatory Faucet fixture family, yet it does not appear that the private lavatory classification is appropriate for this project type. Note that private or private use applies to: plumbing fixtures in residences, apartments, and dormitories to private (non-public) bathrooms in transient lodging facilities (hotels and motels) and to private bathrooms within hospitals and nursing facilities. All other facilities are considered to be public or public use.

5. The flow rate of the kitchen sinks (SK-1) reported in the form (1.8 gpm) is inconsistent with the flow rate reported in the provided fixture schedules (2.2 gpm).

TECHNICAL ADVICE:
1. Please provide a detailed narrative and revised form which includes the average daily occupancy of the base building. The total average daily occupancy should be based on actual data for all occupied spaces and the average daily occupancy should be estimated for all unoccupied spaces. See the LEED-CS Appendix 1: Default Occupancy Counts within the LEED Reference Guide for Green Building Design and Construction, 2009 Edition, for information about how to estimate the occupancy for all unoccupied spaces. It is recommended that the clarification narrative include an outline of all spaces with their actual/assumed occupancy (including area and space use classification for all unoccupied spaces). Ensure that the revised calculations include all applicable fixtures which are installed within the base building.

2. Provide the requested clarifications for Plf3. Revise this credit, as necessary, to ensure that all occupants have been included in the water use calculations.

3. Revise the form to ensure that fixture groups have been defined to reflect the various occupant groups within the LEED-CI project which use a specific set of flow and flush fixtures and that the fixture groups are not based on fixture types.

4. Revise the form to ensure that the LAV-1 lavatories are classified as public using the appropriate baseline for the public lavatory fixtures.

5. Provide a revised form or documentation demonstrating that the flow-rate of the kitchen sinks has been reported consistently across all documentation.

One point is denied pending clarifications.

Atotal of one point is denied pending clarifications.

09/28/2012 DESIGN AND CONSTRUCTION FINAL REVIEW

Option 2 - Path 10: Water Use Reduction, 30% Reduction
The requested clarifications for Plf3: Occupant Usage Data and the revised LEED Credit Form have been provided to address the issues outlined in the Preliminary Review comments. The form includes the daily occupancy for the base building. The form states that the base building has reduced water use by 45.56% from a calculated baseline design.

However, five issues remain:
1. The fixture usage groups have been based on fixture types, whereas fixture groups are meant to define occupant groups (i.e. office, warehouse, retail, etc.), and the FTE occupancy of the water closets and urinals (1,020 FTE) is inconsistent with the FTE occupancy of the lavatories and pantry sink (990 FTE). The LEED Reference Guide for Green Interior Design and Construction, 2009 Edition, states

that user groups must reflect populations within the building that use a specific subset of flow and flush fixtures. If the project occupants have similar usage patterns, one fixture usage group may be used to represent the entire building occupancy. Note that the form will automatically calculate the daily usage rates for each fixture based on the percent male/female as entered in the Fixture Group when the group is assigned to each fixture.

2. The calculations for the water closet and urinals indicate a total daily uses that differs from the standard calculation methodology. The LEED Reference Guide for Interior Building Design and Construction, 2009 Edition, states that occupants are expected to utilize the flush fixtures three times per day.

3. The LAV-1 lavatory has been indicated as belonging to the Private Lavatory Faucet fixture family, yet it does not appear that the private lavatory classification is appropriate for this project type. Note that private or private use applies to: plumbing fixtures in residences, apartments, and dormitories to private (non-public) bathrooms in transient lodging facilities (hotels and motels) and to private bathrooms within hospitals and nursing facilities. All other facilities are considered to be public or public use.

4. The flow rate of the kitchen sinks (SK-1) reported in the form (1.8 gpm) is inconsistent with the flow rate reported in the provided fixture schedules (2.2 gpm) and the form narrative.

5. The fixture groups have not been selected for the water use calculations therefore, the form is not calculating the water savings correctly.

When recalculated for the issues noted above, the base building has reduced water use by 20.73% from a calculated baseline design. The documentation does not demonstrate credit compliance.

One point is denied.

A total of one point is denied.

SSc2: Development Density and Community Connectivity — Awarded: 6

POSSIBLE POINTS: 6

ATTEMPTED: 6, DENIED: 0, PENDING: 0, AWARDED: 6

06/26/2012 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Credit Form has been provided stating that the project site is located within one half mile of a minimum of ten basic community services and a minimum of one residential district (with a minimum density of ten units per acre) therefore, applies Option 2. A scaled area plan, showing the one half mile radius and the locations of the basic services, has been provided.

However, the residential district and development density have not been noted on the provided scaled area plans, as required. Additionally, the listing of community services counts the bank, school, and library services twice (Citizens Bank, PNC Bank, Thankful Learning Center, Bethune School, Nicetown Library, and Gustavus C. Bird Library). Please note that with the exception of restaurants, no service may be counted more than once in the calculation. Up to two restaurants may be counted toward achievement of this credit. When the non-qualifying, duplicate bank, school, and library services are removed, only seven basic services have been listed.

TECHNICAL ADVICE:
Please provide a revised scaled area plan which highlights the residential district within one half mile of the project site. Ensure that the documentation includes the existing development density of the residential neighborhood. Additionally, provide a revised form and map which highlights ten unique, qualifying basic services (restaurants may be counted twice) that are within the one half mile radius of the project site. If services located on the campus are included on the list, provide a narrative explaining whether all of the basic services are available to all occupants of the tenant space (FTE, transients, visitors, customers, etc.). Note that the intent of this credit is that basic services are available to all tenant space occupants.

09/28/2012 DESIGN AND CONSTRUCTION FINAL REVIEW

The LEED Credit Form and the revised map have been revised to address the issues outlined in the Preliminary Review comments and includes ten unique, qualifying basic services that are within the one-half-mile radius of the project site.

It is noted that the map does not highlight the residential district within one-half mile of the project site with a density of greater than ten units per acre. In this case, independent research has determined that there is at least one residential district within one-half mile of the project site with a density of greater than ten units per acre. The documentation demonstrates credit compliance.

SSc3.1: Alternative Transportation-Public Transportation Access — Awarded: 6

POSSIBLE POINTS: 6

ATTEMPTED: 6, DENIED: 0, PENDING: 0, AWARDED: 6

06/26/2012 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Credit Form has been provided stating that the project is served by four bus lines within one quarter mile walking distance of the project site. A scaled map showing the location of the transit stops and pedestrian route has been provided. Transit schedules and route maps have also been provided.

The form indicates that the project is pursuing the exemplary performance option for this credit, and that the project reserves one point within the Innovation in Design credit category for this strategy.

SSc3.2: Alternative Transportation-Bicycle Storage and Changing Rooms — **Not Attempted**
POSSIBLE POINTS: 2

SSc3.3: Alternative Transportation-Parking Availability — **Awarded: 2**
POSSIBLE POINTS: 2
ATTEMPTED: 2, DENIED: 0, PENDING: 0, AWARDED: 2

06/26/2012 **DESIGN AND CONSTRUCTION PRELIMINARY REVIEW**

The LEED Credit Form has been provided stating that the LEED-CI project occupies 13.11% (less than 75%) of the base building, and therefore, applies Case 1 - Option 2. No parking space lease exists or the lease does not verify that no parking spaces are provided or subsidized for LEED-CI project occupants. The form indicates that free or subsidized parking is not provided for LEED-CI project occupants.

Water Efficiency

WEp1: Water Use Reduction-20%Reduction **Awarded**

06/26/2012 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Prerequisite Form and water use calculations have been provided stating that the project has reduced potable water use by 34% from the calculated baseline design through the installation of low-flush water closets and low-flush urinals. Areduction of 20% is required. Aplumbing fixture schedule has been provided.

However, three issues are pending:
1. Plf3: Occupant and Usage Data has been denied pending clarifications due to issues with the occupancy for this project.

2. The fixture usage groups have been based on fixture types, whereas fixture groups are meant to define occupant groups (i.e. office, warehouse, retail, etc.). The LEED Reference Guide for Green Interior Design and Construction, 2009 Edition, states that user groups must reflect populations within the building that use a specific subset of flowand flush fixtures. If the project occupants have similar usage patterns, one fixture usage group may be used to represent the entire building occupancy. Note that the form will automatically calculate the daily usage rates for each fixture based on the percent male/female as entered in the Fixture Group when the group is assigned to each fixture.

3.The LAV-1 lavatory has been indicated as belonging to the Private Lavatory Faucet fixture family, yet it does not appear that the private lavatory classification is appropriate for this project type. Note that private or private use applies to: plumbing fixtures in residences, apartments, and dormitories to private (non-public) bathrooms in transient lodging facilities (hotels and motels) and to private bathrooms within hospitals and nursing facilities. All other facilities are considered to be public or public use.

TECHNICAL ADVICE:
1. Please provide the requested clarifications for Plf3. Revise this prerequisite, as necessary, to ensure that all occupants have been included in the water use calculations.

2. Revise the form to ensure that fixture groups have been defined to reflect the various occupant groups within the LEED-CI project which use a specific set of flow and flush fixtures and that the fixture groups are not based on fixture types.

3. Revise the form to ensure that the LAV-1 lavatories are classified as public using the appropriate baseline for the public lavatory fixtures.

09/28/2012 DESIGN AND CONSTRUCTION FINAL REVIEW

The requested clarifications for Plf3: Occupant and Usage Data and the revised LEED Prerequisite Form have been provided to address the issues outlined in the Preliminary Review comments and the daily average occupants have been reported consistently across all submittals (165 FTE and 15 transient occupants). The fixture groups have been defined to reflect the various occupant groups within the LEED-CI project and the LAV-1 lavatory has been classified as public. The form states that the project has reduced potable water use by 41% from a calculated baseline design.

It is noted that the calculations for the water closet, urinals, and lavatories indicate a total daily uses that differs from the standard calculation methodology. The LEED Reference Guide for Interior Building Design and Construction, 2009 Edition, states that occupants are expected to utilize the flush fixtures and lavatories three times per day. Additionally, the provided form does not indicate that the water savings for the flush fixtures and the water savings for the flow fixtures have not been calculated correctly. It appears that the values were not automatically calculated within the form.When recalculated for the issues noted above, the project has reduced potable water use by 22% from a calculated baseline design. The documentation demonstrates prerequisite compliance.

WEc1: Water Use Reduction **Not Attempted**
POSSIBLE POINTS: 11

Energy and Atmosphere

EAp1: Fundamental Commissioning of the Building Energy Systems — Awarded

06/26/2012 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Prerequisite Form has been provided stating that the fundamental commissioning requirements for the project energy-related systems have been completed.

However, the form is blank and does not appear to have been completed. It is unclear whether the project meets the requirements of this prerequisite.

TECHNICAL ADVICE:
Please provide a revised form which has been completed along with all of the necessary documentation it requires. Note that it is strongly recommended that a pdf copy of the completed form be uploaded to LEED Online for the Final Review in case the blank form was an error caused by LEED Online.

09/28/2012 DESIGN AND CONSTRUCTION FINAL REVIEW

The revised LEED Prerequisite Formand a copy of the Commissioning Report have been provided to address the issues outlined in the Preliminary Review comments. The required commissioning authority experience of the Commissioning Agent has been provided, and the documentation confirms that the Owner`s Project Requirements (OPR) and Basis of Design (BOD) are consistent with the final construction documentation and completed project. The project Owner and the Commissioning Agent have signed the form, as required. The Commissioning Report includes a list of the systems commissioned, a summary of issues corrected, and a list of any major outstanding/unresolved issues.

It is noted that the form indicates that the OPR does not include environmental and sustainability goals, energy efficiency goals, indoor environmental quality requirements, and building occupant O and M personnel requirements. Additionally, the Commissioning Report states that an OPR was not developed for this project. In this case, the Commissioning Report indicates that the BOD was based on the design of the existing floors. The documentation demonstrates prerequisite compliance.

EAp2: Minimum Energy Performance — Awarded

06/26/2012 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Prerequisite Form has been provided stating that the project complies with ASHRAE/IESNA Standard 90.1-2007. The form indicates a 10.87% reduction in connected lighting power density from that allowed by ASHRAE Standard 90.1-2007, using the whole building method. A reduction of at least 10% is required. The form states that ENERGY STAR-rated equipment and appliances equal to 100%, by rated power, have been installed on the project. A minimum of 50% rated power is required. The project Architect and the project Design Engineer have signed the form, as required. The ASHRAE Standard 90.1-2007 Users Manual Lighting Compliance Documentation has also been provided.

However, the ASHRAE Standard 90.1-2007 Users Manual Lighting Compliance Documentation has not been completed. Additionally, the calculation indicates that office equipment has not been included in the ENERGY STAR-rated table, as required. All eligible equipment, appliances, commercial food service equipment, and electronics installed as part of the LEED-CI project scope of work must be included in the calculations.

TECHNICAL ADVICE:
Please provide a completed copy of the ASHRAE Standard 90.1-2007 Users Manual Lighting Compliance Documentation. Additionally, revise the ENERGY STAR-rated calculations to include all installed eligible equipment and appliances.

09/28/2012 DESIGN AND CONSTRUCTION FINAL REVIEW

The revised ASHRAE Standard 90.1-2007 User`s Manual Lighting Compliance Documentation and the narrative have been provided to address the issues outlined in the Preliminary Review comments. The ASHRAE Standard 90.1-2007 Users Manual Lighting Compliance Documentation has been completed and the installed interior lighting power has been reported in the form. The narrative states that all installed eligible equipment and appliances have been included in the form. The form indicates a 10.87% reduction in connected lighting power density from that allowed by ASHRAE Standard 90.1-2007, using the whole building method, and states that ENERGY STAR-rated equipment and appliances equal to 100%, by rated power, have been installed on the project. The documentation demonstrates prerequisite compliance.

09/24/2013 DESIGN AND CONSTRUCTION APPEAL REVIEW

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EAp3: Fundamental Refrigerant Management — Awarded

06/27/2012 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Prerequisite Form has been provided stating that the LEED-CI project scope of work does not include the installation of new

HVAC systems.

However, the building HVAC narrative provided in PIf4: Schedule and Overview Documents states that one new laboratory HVAC unit has been added.

TECHNICAL ADVICE:
Please provide a revised form confirming that there are no CFC-based refrigerants in the HVAC systems which serve the LEED-CI project.

10/10/2012 DESIGN AND CONSTRUCTION FINAL REVIEW

Anarrative has been provided to address the issues outlined in the Preliminary Review comments, stating that the new laboratory HVAC unit does not contain CFC-based refrigerants. The documentation demonstrates prerequisite compliance.

EAc1.1: Optimize Energy Performance-Lighting Power — Not Attempted

POSSIBLE POINTS: 5

EAc1.2: Optimize Energy Performance-Lighting Controls — Denied

POSSIBLE POINTS: 3
ATTEMPTED: 1, DENIED: 1, PENDING: 0, AWARDED: 0

06/26/2012 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Credit Form has been provided stating that daylight responsive controls have been installed in 100% of all regularly occupied spaces within 15 feet of windows or under skylights. The lighting controls table and the floor plan of lighting control zones showing each control device and the lighting equipment controlled have been provided. Floor plans have also been provided.

However, EAp2: Minimum Energy Performance is denied pending clarifications to the claimed lighting power density reduction. Additionally, the documentation indicates that Conference Room 802, 810, 902, and 910 have not been included in the calculations as regularly occupied and do not have the required daylight responsive controls.

TECHNICAL ADVICE:
Please provide the requested clarifications for EAp2 and resubmit this credit. Additionally, provide documentation such as narrative, drawings, schedules, and cut sheets to demonstrate that the required daylight responsive controls have been installed in the areas listed above.

09/28/2012 DESIGN AND CONSTRUCTION FINAL REVIEW

The requested clarifications for EAp2: Minimum Energy Performance and the revised LEED Credit Form narrative have been provided to address the issues outlined in the Preliminary Review comments. The form narrative states that Conference Room 802, 810, 902, and 910 are not regularly occupied.

However, regularly occupied spaces are defined as areas where workers are seated or standing as they work inside a building. It is unclear how these conference rooms would not meet the definition of regularly occupied spaces. When recalculated including these spaces as regularly occupied, daylight sensors have not been installed within 100% of all regularly occupied spaces within 15 feet of windows or under skylights, as required. The documentation does not demonstrate credit compliance.

EAc1.3: Optimize Energy Performance-HVAC — Awarded: 5

POSSIBLE POINTS: 10
ATTEMPTED: 5, DENIED: 5, PENDING: 0, AWARDED: 5

06/26/2012 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

Equipment Efficiency
The LEED Credit Form has been provided stating that the project will document the Equipment Efficiency, and therefore, applies Option 1. The HVAC systems comply with the efficiency requirements outlined in the Advanced Buildings Core Performance Guide Sections 1.4, 2.9, and 3.10. The mechanical systems design load, mechanical system capacity, and the variable speed control information have been provided. The project MEP Engineer has signed the form, as required. The summary of the mechanical system design calculations has been provided and includes the load, fan-sizing, zone-by-zone load, critical path supply duct pressure loss, and the part-load conditions calculations, as applicable.

Five points are anticipated.

Appropriate Zoning and Controls
The LEED Credit Formhas been provided stating that the project has documented the Appropriate Zoning and Controls, and therefore, applies Option 1. The HVAC system have been designed so that every solar exposure has a separate control zone, interior spaces are separately zoned, and some private offices and specialty occupancies have active controls which are capable of sensing space use and modulating the HVAC system in response to space demand. The HVAC narrative in PIf4: Schedule and Overview Documents describes the HVAC system including the methodology for determining zones, the control logic, and the potential energy savings. The mechanical plans and the Basis of Design have been provided.

However, it does not appear that all private offices and specialty occupants, such as conference rooms and kitchens, have active controls which are capable of sensing space use and modulating the HVAC system in response to space demand. The Basis of Design indicates that private offices are grouped into zones.

TECHNICAL ADVICE:
Please provide additional documentation confirming that the appropriate zoning and controls have been installed for all private offices and specialty occupancies spaces. In cases where the building has no separate method for modulating the HVAC system in response to space demand, such as demand-controlled ventilation or modulation of the HVAC system tied to occupant sensor controls, demonstrate that the project meets the criteria described in the LEED Reference Guide for Green Interior Design and Construction, 2009 Edition, under Calculations section.

Five points are denied pending clarifications.

A total of five points are anticipated for Equipment Efficiency and five points are denied pending clarifications for Appropriate Zoning and Controls.

10/10/2012 DESIGN AND CONSTRUCTION FINAL REVIEW

Equipment Efficiency
This path was previously approved during the Preliminary Review phase. No changes have been made.

Five points are anticipated.

Appropriate Zoning and Controls
The zone control diagram drawing has been provided to address the issues outlined in the Preliminary Review comments.

However, the plan does not include the HVAC controls. Therefore, it is unclear whether the appropriate zoning and controls have been installed for all private offices and specialty occupancies spaces. Additionally information has not been provided demonstrating that the building has no separate method for modulating the HVAC system in response to space demand, such as demand-controlled ventilation or modulation of the HVAC system tied to occupant sensor controls, and alternatively demonstrates that the project meets the criteria described in the LEED Reference Guide for Green Interior Design and Construction, 2009 Edition, under the Calculations section. The documentation does not demonstrate credit compliance.

Five points are denied.

A total of five points are anticipated for Equipment Efficiency and five points are denied for Appropriate Zoning and Controls.

EAc1.4: Optimize Energy Performance-Equipment and Appliances — Awarded: 4

POSSIBLE POINTS: 4
ATTEMPTED: 4, DENIED: 0, PENDING: 0, AWARDED: 4

06/26/2012 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Credit Form has been provided stating that the project has installed ENERGY STAR-rated equipment and appliances equal to 100%, by rated power. A minimum of 70% rated power is required.

However, EAp2: Minimum Energy Performance has been denied pending clarifications.

TECHNICAL ADVICE:
Please provide the requested clarifications for EAp2 and resubmit this credit.

The form indicates that the project is pursuing the exemplary performance option for this credit, and that the project reserves one point within the Innovation in Design credit category for this strategy.

09/28/2012 DESIGN AND CONSTRUCTION FINAL REVIEW

The requested clarifications for EAp2: Minimum Energy Performance have been provided to address the issues outlined in the Preliminary Review comments. The LEED Credit Form states that the project has installed ENERGY STAR-rated equipment and appliances equal to 100%, by rated power. The documentation demonstrates credit compliance for four points.

The form indicates that the project is pursuing the exemplary performance option for this credit, and that the project reserves one point within the Innovation in Design credit category for this strategy.

EAc2: Enhanced Commissioning — Not Attempted

POSSIBLE POINTS: 5

EAc3: Measurement and Verification — Not Attempted

POSSIBLE POINTS: 5

EAc4: Green Power — Awarded: 5

POSSIBLE POINTS: 5

ATTEMPTED: 5, DENIED: 0, PENDING: 0, AWARDED: 5

09/24/2013 DESIGN AND CONSTRUCTION APPEAL REVIEW

This credit was submitted for initial review during the Appeal Review. The LEED Credit Form has been provided stating that the project has a two-year purchase agreement to procure 16 kWh per square foot of the electricity of this LEED-CI project spaces from sources that meet the Green-e definition for renewable power, and therefore, applies Option 2. Aminimum of 8 kWh per square foot per year must be provided by green power. The contract to purchase off-site renewable energy has been provided.

The form indicates that the project is pursuing the exemplary performance option for this credit and that the project reserves one point within the Innovation in Design credit category for this strategy.

Materials and Resources

MRp1: Storage and Collection of Recyclables — Awarded

06/26/2012 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Prerequisite Form has been provided stating that the project has provided appropriately sized dedicated areas for the collection and storage of materials for recycling, including cardboard, paper, plastic, glass, and metals. The narrative describing the size, accessibility, and dedication of recycling storage areas and floor plans showing the location of the recycling storage areas within the LEED-CI project space have been provided. The area is adequately sized and located, and the narrative confirms the expected volume and pick-up frequencies.

MRc1.1: Tenant Space-Long-Term Commitment — Awarded: 1

POSSIBLE POINTS: 1
ATTEMPTED: 1, DENIED: 0, PENDING: 0, AWARDED: 1

06/26/2012 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Credit Form has been provided stating that the LEED-CI project occupant owns the space.

It is noted that PIf1: Minimum Program Requirements has been denied pending clarifications. It is unclear whether the project Owner information has been reported appropriately within this project however, a later version of this form removes this requirement. As such, this issue does not affect credit compliance. For future submittals, please ensure that required signatories are completed by the appropriate team member who is designated the proper role in the Team Administration Tab in LEED Online.

MRc1.2: Building Reuse — Not Attempted

POSSIBLE POINTS: 2

MRc2: Construction Waste Management — Awarded: 2

POSSIBLE POINTS: 2
ATTEMPTED: 1, DENIED: 0, PENDING: 0, AWARDED: 2

06/26/2012 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Credit Form has been provided stating that the project has diverted 77.83% of the on-site generated construction waste from landfill. A minimum of 50% diverted is required. The project Contractor has signed the form, as required. Calculations and a Construction Waste Management Plan have been provided to document the waste types and receiving agencies for the diverted materials. A copy of the final recycling report has been provided.

However, the provided final recycling report does not list materials included in commingled debris separately, by type, or documents project specific diversion rates, as required.

TECHNICAL ADVICE:
Please provide a narrative and supporting documentation to confirm the breakdown of recycled materials or a project specific diversion rate. If the materials were weighed off site, include the weigh tickets or a narrative from the hauler or recycler. As stated in LEED Interpretation 3000, if the value of waste was calculated using the average annual recycling rate for a specific sorting facility, it is acceptable as long as the facility`s method of recording and calculating the recycling rate is regulated by a local or state government authority. See the entire LEED Interpretation for details. In this case, please provide either documentation from the sorting facility with the project specific diversion rates or a letter from the state-regulated sorting facility with the average rate of recycling for that sorting facility. Ensure that the documentation confirms that the sorting facility is state regulated, as required.

09/28/2012 DESIGN AND CONSTRUCTION FINAL REVIEW

The narrative and documentation from the waste hauler have been provided to address the issues outlinedin the Preliminary Review comments, demonstrating that the value of waste was calculated using the average annual recycling rate for the sorting facility. The provided documentation demonstrates that the facility`s method of recording and calculating the recycling rate is regulated by a local or state government authority. The documentation demonstrates credit compliance for two points.

MRc3.1: Materials Reuse — Not Attempted

POSSIBLE POINTS: 2

MRc3.2: Materials Reuse-Furniture and Furnishings — Not Attempted

POSSIBLE POINTS: 1

MRc4: Recycled Content — Denied

POSSIBLE POINTS: 2
ATTEMPTED: 1, DENIED: 1, PENDING: 0, AWARDED: 0

06/26/2012 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Credit Form has been provided stating that 2.52% of the total building materials, by value, have been manufactured using recycled materials. Aminimum of 10% is required. The recycled material meets the ISO 14021 definitions of post- and pre-consumer material.

However, a minimum of 10% of the total building materials, by value, must be manufactured using recycled materials. Additionally, manufacturers` documentation has not been provided for at least 20% of the compliant materials, as required.

TECHNICAL ADVICE:
Please provide a revised form and documentation demonstrating that a minimum of 10% of the total building materials, by value, have been manufactured using recycled materials. Additionally, provide manufacturers` documentation for at least 20% of the compliant materials, by cost. Note that an upgraded version of the form is available which may assist in documenting compliance. Though not required, it is strongly encouraged that the project uses the most recent version of the form. Projects may request a form upgrade through the feedback button in LEED Online v3. Please include the specific credit form, project number, project name, and rating system when requesting an upgrade. Note that any of the following credits MRc3: Materials Reuse, MRc4: Recycled Content, MRc5: Regional Materials, MRc6: Rapidly Renewable Materials, and MRc7: Certified Wood must be upgraded together, if attempted.

09/28/2012 DESIGN AND CONSTRUCTION FINAL REVIEW

The revised LEED Credit Form and manufacturers` documentation has been provided to address the issues outlined in the Preliminary Review comments. Manufacturers` documentation has been provided for at least 20% of the compliant materials, as required.

However, the form states that the 4.09% of the total building materials, by value, have been manufactured using recycled materials, which does not meet the minimum credit requirements. The documentation does not demonstrate credit compliance.

09/25/2013 DESIGN AND CONSTRUCTION APPEAL REVIEW

The revised Materials and Resources Calculator, the revised LEED Credit Form, and manufacturers' documentation have been provided to address the issues outlined in the Final Review. The form states that 17.83% of the total building materials, by value, have been manufactured using recycled materials.

However, four issues remain:

1. Several products have been marked in the Calculator as having provided cut sheets (Steel Doors and Frames, Manningham Vinyl Sheet Flooring, as well as Kempf Stud Track); although, these cut sheets have not been provided, the provided manufacturers' documentation does not specify the recycled content, or the provided contractor's submittal sheets do not include supporting manufacturers' documentation. For future projects, ensure that the form checkboxes are accurate and note that only cut sheets for materials which are compliant with the requirements of that credit can contribute towards meeting the minimum 20% threshold of that credit. When recalculated excluding these items, manufacturers' documentation has been provided for less than 20% of the compliant materials.

2. The recycled content reported in the Calculator for several materials (Kempf GRG Column Cover, Armstrong Mylar Ceiling Tiles - 1721, Armstrong Ceiling Tile #769, and USG Corner Bead) is inconsistent with the provided manufacturers' documentation.

3. It is unclear whether the recycled content for the USG Drywall has been reported correctly within the Calculator (3.4% post-consumer and 94.1% pre-consumer). The provided manufacturer's documentation includes two drywall products; although, only one product has been reported in the Calculator, and the higher recycled content value has been reported.

4. It is unclear if the pre-consumer recycled content for the Technical Glass Interior Glazing meets the LEED definition of pre-consumer content. Waste that is crushed, re-melted, and put back into the same manufacturing process may not be considered recycled content.

The documentation does not demonstrate credit compliance.

MRc5: Regional Materials — Denied

POSSIBLE POINTS: 2
ATTEMPTED: 1, DENIED: 1, PENDING: 0, AWARDED: 0

06/29/2012 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Credit Form has been provided stating that 0% of the total building materials value includes building materials and products that have been manufactured within 500 miles of the project site, and that 0% of the total building materials value includes building materials and products that have been extracted within 500 miles of the project site. Aminimum of 20% of the total building materials value must be manufactured within 500 miles of the project site for one point and additionally a minimum of 10% must also be extracted and manufactured within 500 miles of the project site for two points.

However, it appears that the form has not been completed correctly. Aminimum of 20% of the total building materials value must be manufactured within 500 miles of the project site for one point and additionally a minimum of 10% must also be extracted and manufactured within 500 miles of the project site for two points. Additionally, manufacturers` documentation has not been provided for at least 20% of the compliant materials, as required.

TECHNICAL ADVICE:
Please provide a revised form and documentation demonstrating that a minimum of 20% of the total building materials value has been manufactured within 500 miles of the project site for one point and additionally a minimum of 10% has been extracted and manufactured within 500 miles of the project site for two points. Ensure that the percentage of regional materials, the extraction distances, and the manufacturing distances have been reported correctly. Additionally, provide manufacturers` documentation for at

least 20% of the compliant materials, by cost. Note that an upgraded version of the form is available which may assist in documenting compliance. Though not required, it is strongly encouraged that the project uses the most recent version of the form. Projects may request a form upgrade through the feedback button in LEED Online v3. Please include the specific credit form, project number, project name, and rating system when requesting an upgrade. Note that any of the following credits MRc3: Materials Reuse, MRc4: Recycled Content, MRc5: Regional Materials, MRc6: Rapidly Renewable Materials, and MRc7: Certified Wood must be upgraded together, if attempted.

09/28/2012 DESIGN AND CONSTRUCTION FINAL REVIEW

The revised LEED Credit Form and manufacturers` documentation has been provided to address the issues outlined in the Preliminary Review comments. Manufacturers` documentation has been provided for at least 20% of the compliant materials, as required.

However, the form states that 0% of the total building materials value includes building materials and products that have been manufactured within 500 miles of the project site, and that 0% of the total building materials value includes building materials and products that have been extracted within 500 miles of the project site, which does not meet the minimum credit requirements. The documentation does not demonstrate credit compliance.

09/25/2013 DESIGN AND CONSTRUCTION APPEAL REVIEW

The revised LEED Credit Form, the revised Materials and Resources Calculator, and manufacturers' documentation have been provided to address the issues outlined in the Final Review. The form states that 39.41% of the total building materials value includes building materials and products that have been manufactured within 500 miles of the project site and that 0.84% of the total building materials value includes building materials and products that have been extracted and manufactured within 500 miles of the project site.

However, several products have been marked in the Calculator as having provided cut sheets (STI Fire Stopping, Steel Doors and Frames, Steven Kemph Wood Doors, Manningham VSF-1 Biospec, Manningham Vinyl Sheet Flooring, Armstrong Ceiling Tile #769, Armstrong Ceiling Grid Prelude XL, as well as Kempf Stud Track); although, these cut sheets have not been provided, the provided manufacturers' documentation does not specify the manufacture and extraction distances, or the provided contractor's submittal sheets do not include supporting manufacturers' documentation. For future projects, ensure that the form checkboxes are accurate and note that only cut sheets for materials which are compliant with the requirements of that credit can contribute towards meeting the minimum 20% threshold of that credit. When recalculated excluding these items, manufacturers' documentation has been provided for less than 20% of the compliant materials. The documentation does not demonstrate credit compliance.

MRc6: Rapidly Renewable Materials — **Not Attempted**
POSSIBLE POINTS: 1

MRc7: Certified Wood — **Not Attempted**
POSSIBLE POINTS: 1

Indoor Environmental Quality

IEQp1: Minimum Indoor Air Quality Performance — Awarded

06/26/2012 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Prerequisite Form has been provided stating that the project is mechanically ventilated and mechanically conditioned, as well as naturally conditioned, and that the project AHUs are able to meet the ASHRAE Standard 62.1-2007 outdoor air requirements therefore, the project applies Case 1. The ventilation rate procedure and designed outdoor air intake rates have been provided to confirm that the breathing zone outdoor air intake ventilation rates for all occupied spaces meet the minimum established in ASHRAE Standard 62.1-2007. The project Ventilation Systems Designer has signed the form, as required. Floor plans have been provided.

However, the provided floor plans do not show the areas served by a combination of natural and mechanical ventilation or conditioning systems, as required.

TECHNICAL ADVICE:
Please provide floor plans showing the areas served by a combination of natural and mechanical ventilation or conditioning systems in order to demonstrate prerequisite compliance.

10/10/2012 DESIGN AND CONSTRUCTION FINAL REVIEW

The revised LEED Prerequisite Form and a narrative have been provided to address the issues outlined in the Preliminary Review comments, indicating that the project is mechanically conditioned and ventilated. Therefore, the floor plans showing the areas served by natural ventilation are not required. Supplemental calculations have also been provided. The documentation demonstrates prerequisite compliance.

IEQp2: Environmental Tobacco Smoke (ETS) Control — Awarded

06/26/2012 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Prerequisite Form has been provided stating that the project is located in a base building which minimizes exposure to ETS-containing air by prohibiting smoking within 25 feet of all entries, outdoor air intakes, and operable windows. A floor plan and photographs confirming the signage system communicating the exterior smoking policy have been provided.

However, PIf1: Minimum Program Requirements has been denied pending clarifications. It is unclear whether the project Owner information has been reported appropriately within this project.

TECHNICAL ADVICE:
Please see the comments within PIf1 and provide the clarifications requested there. Additionally, ensure that this form is signed by the designated Owner or Agent, as required.

09/28/2012 DESIGN AND CONSTRUCTION FINAL REVIEW

The requested clarifications for PIf1: Minimum Program Requirements have been provided to address the issues outlined in the Preliminary Review comments. The Owner has signed the LEED Prerequisite Form, as required. The documentation demonstrates prerequisite compliance.

IEQc1: Outdoor Air Delivery Monitoring — Not Attempted

POSSIBLE POINTS: 1

IEQc2: Increased Ventilation — Awarded: 1

POSSIBLE POINTS: 1
ATTEMPTED: 1, DENIED: 0, PENDING: 0, AWARDED: 1

06/26/2012 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Credit Form has been provided stating that the project AHUs are able to meet the ASHRAE Standard 62.1-2007 outdoor air requirement, and therefore, applies Case 1. The project has increased breathing zone outdoor air ventilation rates to all occupied spaces by 30% above the minimum rates. The design outdoor air intake flow for all zones must be at least 30% greater.

However, IEQp1: Minimum Indoor Air Quality has been denied pending clarifications.

TECHNICAL ADVICE:
Please provide the requested clarifications for IEQp1 and resubmit this credit.

10/10/2012 DESIGN AND CONSTRUCTION FINAL REVIEW

The requested clarifications for IEQp1: Minimum Indoor Air Quality Performance have been provided to address the issues outlined in the Preliminary Review comments. The documentation demonstrates credit compliance.

IEQc3.1: Construction IAQ Management Plan-During Construction **Awarded: 1**

POSSIBLE POINTS: 1

ATTEMPTED: 1, DENIED: 0, PENDING: 0, AWARDED: 1

06/26/2012 **DESIGN AND CONSTRUCTION PRELIMINARY REVIEW**

The LEED Credit Form has been provided stating that the project developed and implemented a Construction IAQ Management Plan that followed the referenced SMACNA Guidelines. The form narrative describes how absorptive materials were protected from moisture damage during the construction and preoccupancy phases. The project Contractor has signed the form, as required. Permanently installed air handling units were not operated during construction. Photographs and a copy of the Construction IAQ Management Plan have been provided.

IEQc3.2: Construction IAQ Management Plan-Before Occupancy **Not Attempted**

POSSIBLE POINTS: 1

IEQc4.1: Low-Emitting Materials-Adhesives and Sealants **Awarded: 1**

POSSIBLE POINTS: 1

ATTEMPTED: 1, DENIED: 0, PENDING: 0, AWARDED: 1

06/26/2012 **DESIGN AND CONSTRUCTION PRELIMINARY REVIEW**

The LEED Credit Form has been provided stating that all adhesive and sealant products comply with the VOC limits of the referenced standards for this credit. A summary of all interior adhesive and sealant products has been provided along with VOC data for each product confirming that they comply with the referenced VOC limits. Manufacturers` documentation has been provided for at least 20% of the products, as required.

It is noted that the VOC content for ROPPE ROP-205 Adhesive and Mannington V-82 Assurance reported in the form (0 g/l and 0 g/l, respectively) is inconsistent with the VOC content reported in the provided manufacturers` documentation (27 g/l and 38 g/l, respectively). In this case, VOC content for these products is less than the maximum allowable VOC content for that product category (50 g/l). Additionally, manufacturer`s documentation for LCI Sealant has not been provided, as stated in the form. Manufacturers` documentation has still been provided for at least 20% of the products. Therefore, credit compliance is not affected.

IEQc4.2: Low-Emitting Materials-Paints and Coatings **Awarded: 1**

POSSIBLE POINTS: 1

ATTEMPTED: 1, DENIED: 0, PENDING: 0, AWARDED: 1

06/26/2012 **DESIGN AND CONSTRUCTION PRELIMINARY REVIEW**

The LEED Credit Form has been provided stating that all interior paints and coatings applied on site comply with the VOC limits of the referenced standards for this credit. A summary of all interior paints and coatings has been provided along with VOC data for each product confirming that they comply with the referenced VOC limits.

However, the product list indicates that two of the installed materials exceed the allowable VOC limits for that product category (Sherwin Williams Pro Industrial HiBild Waterbase Epoxy and Kembond Universal Primer). In order to demonstrate compliance, a VOC budget must be provided to confirm that the overall installed VOC level is equal to or below allowable VOC limits.

TECHNICAL ADVICE:
Please provide a VOC budget listing all installed interior paints and coatings products. A VOC budget is a comparison between a baseline case and design case and must demonstrate that the over-all low-VOC performance for the credit was attained when calculated in grams per liter. When the design (actual) is less than the baseline (maximum limits), the credit requirement is satisfied. The budget must include the quantity (in liters), actual VOC (g/L) and allowable VOC (g/L) for each product.

It is noted that the VOC content for Sherwin Williams DTM Bonding Primer reported in the form (100 g/l) is inconsistent with the VOC content reported in the provided manufacturers` documentation (44 g/l and). In this case, VOC content for this product is less than the maximum allowable VOC content for that product category (50 g/l). Additionally, the form states that 0% of manufacturers` documentation has been provided, whereas manufacturers` documentation was provided for 78% of the materials listed in the form. Therefore, credit compliance is not affected.

09/28/2012 **DESIGN AND CONSTRUCTION FINAL REVIEW**

The revised LEED Credit Form has been provided to address the issues outlined in the Preliminary Review comments. The Sherwin Williams Pro Industrial HiBild Waterbase Epoxy has been identified as an Anti-Corrosive/Anti-Rust Paint and meets the allowable VOC limit for that type of product. A narrative has been provided stating that the Kembond Universal Primer was not used as part of this project. The documentation demonstrates credit compliance.

IEQc4.3: Low-Emitting Materials-Flooring Systems **Awarded: 1**

POSSIBLE POINTS: 1
ATTEMPTED: 1, DENIED: 0, PENDING: 0, AWARDED: 1

06/26/2012 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Credit Form has been provided stating that all interior flooring materials and finishes meet or exceed applicable criteria for the Carpet and Rug Institute, South Coast Air Quality Management District, or FloorScore. The adhesives used have a VOC level of less than 50 g/L that complies with IEQc4.1: Low-Emitting Materials, Adhesives and Sealants. A summary of the products along with data for each product has been provided in the form. Manufacturers` documentation has been provided for at least 20% of the materials and for at least 20% of the adhesive and sealant products, as required.

It is noted that the form does not indicate that Mannington BioSpec meets FloorScore. In this case, the provided manufacturer`s documentation demonstrates that the product meets FloorScore. Additionally, the SCAQMD Rule 1113 VOC Limit has not been reported for Roppe Rubber Base Adhesives, Armstrong VCT Adhesive, and Mannington Resilient Sheet Flooring. In this case, the information provided in IEQc4.1: Low-Emitting Materials, Adhesives and Sealants, demonstrates that VOC content for these products is less than the maximum allowable VOC content for that product category (50 g/l). Therefore, credit compliance is not affected.

IEQc4.4: Low-Emitting Materials-Composite Wood and Agrifiber Products — Not Attempted
POSSIBLE POINTS: 1

IEQc4.5: Low-Emitting Materials-Systems Furniture and Seating — Not Attempted
POSSIBLE POINTS: 1

IEQc5: Indoor Chemical and Pollutant Source Control — Denied
POSSIBLE POINTS: 1
ATTEMPTED: 1, DENIED: 1, PENDING: 0, AWARDED: 0

06/26/2012 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Credit Form has been provided stating that the project does not include high-volume exterior entryways. The project includes spaces where hazardous gases or chemicals are present or used. These spaces have been designed to be sufficiently exhausted to create a negative pressure in respect to all adjacent spaces, and these spaces include self-closing doors and deck-to-deck partitions or a hard-lid ceiling. The Isolated Exhaust System Areas table has been completed and confirms that air recirculation is not present for any of the hazardous gas or chemical areas. The project Contractor has signed the form, as required. The project is mechanically ventilated and permanently installed air handling units were operated during construction. Floor plans have been provided.

However, three issues are pending:
1. The Filtration Media Table and the Occupancy Date section of the form have not been completed, as required.

2. Mechanical schedules confirming the installed filtration media have not been provided, as required.

3. Mechanical drawings highlighting the location of the chemical/hazardous gas usage areas, room separations, and associated exhaust systems have not been provided.

TECHNICAL ADVICE:
1. Please provide a revised form with all required sections of the form completed.

2. Provide the mechanical schedule which lists the MERV rating for all air handling units installed for this LEED-CI project. Ensure that these filters were replaced immediately prior to project occupancy.

3. Provide mechanical drawings highlighting the location of the chemical/hazardous gas usage areas, the room separations, and the associated exhaust systems. Provide documentation confirming that each space where hazardous gases or chemicals may be present or used is sufficiently exhausted to create a negative pressure in respect to all adjacent spaces, and that these spaces include self-closing doors and deck-to-deck partitions or a hard lid ceiling. Ensure that janitor`s closets have been included as chemical use areas.

09/28/2012 DESIGN AND CONSTRUCTION FINAL REVIEW

Mechanical schedules and mechanical plans have been provided to address the issues outlined in the Preliminary Review comments.

However, the provided mechanical drawings do not highlight the location of the chemical/hazardous gas usage areas, room separations, and associated exhaust systems have not been provided. The documentation does not demonstrate credit compliance.

IEQc6.1: Controllability of Systems-Lighting — Not Attempted
POSSIBLE POINTS: 1

IEQc6.2: Controllability of Systems-Thermal Comfort — Denied
POSSIBLE POINTS: 1

ATTEMPTED: 1, DENIED: 1, PENDING: 0, AWARDED: 0

06/26/2012 **DESIGN AND CONSTRUCTION PRELIMINARY REVIEW**

The LEED Credit Form has been provided stating that the required ventilation and temperature controls are provided to enable the occupants with the ability to make adjustments to suit individual needs and preferences. The project has selected the Licensed Professional Exemption (LPE) for this credit in lieu of details pertaining to type, location, and quantity of thermal comfort controls in the project. The project is mechanically ventilated. The project Mechanical Designer has signed the form, as required. Floor plans have been provided.

However, the Licensed Professional Exemption has not been claimed by a Professional Engineer, as required. The Team Administration Tab indicates that no individual has completed the registration requirements in order to qualify for an LPE. As noted in the LPE section of the Team Administration Tab within LEED Online, Licensed Professional Exemptions are only available to team members who are in good standing at the time of submittal. Additionally, the provided floor plans do not confirm the location of the individual thermal controls and the location of shared multi-occupant spaces thermal controls, as required. Based on the mechanical plans provided for EAc1.3: Optimize Energy Performance, HVAC, it does not appear that 50% of individual workstations have been provided with appropriate controls.

TECHNICAL ADVICE:
Please provide a clarification narrative and ensure that the LPE for this credit has been claimed by an individual with a professional license that is in good-standing as indicated within LEED Online. Alternatively, select the full documentation path and provide the additional required documentation. Additionally, provide drawings demonstrating that at least 50% of the occupants are provided at least one individual control to enable adjustments to suit individual needs and preferences. Identify the shared multi-occupant spaces and detail how the groups have access to controls providing thermal comfort within these spaces.

09/28/2012 **DESIGN AND CONSTRUCTION FINAL REVIEW**

The revised LEED Credit Form has been provided to address the issues outlined in the Preliminary Review comments.

However, the form is blank and does not appear to have been completed. It is unclear whether the project meets the requirements of this credit. The documentation does not demonstrate credit compliance.

IEQc7.1: Thermal Comfort-Design — Awarded: 1

POSSIBLE POINTS: 1
ATTEMPTED: 1, DENIED: 0, PENDING: 0, AWARDED: 1

06/26/2012 **DESIGN AND CONSTRUCTION PRELIMINARY REVIEW**

The LEED Credit Form has been provided stating that the mechanically ventilated and mechanically conditioned project space is in compliance with ASHRAE Standard 55-2004. The metabolic rate and clothing insulation, weather design conditions, and operating conditions have been provided for both the cooling and heating mode. The project Contractor has signed the form, as required. Local discomfort effects have been considered and are considered unlikely. Supporting documentation has been provided to confirm that all design conditions fall within the ASHRAE Standard 55-2004 acceptable ranges.

However, the form indicates that the design air speed (100 feet per minute for heating mode and 150 feet per minute for cooling mode) exceeds the maximum air speed recommended by the predicted mean vote comfort model (40 feet per minute), which is the basis for ASHRAE Standard 55-2004, and no explanation has been provided.

TECHNICAL ADVICE:
Please provide documentation demonstrating how the thermal comfort conditions have been established for the project and how the design of the conditioning systems addresses the thermal comfort design with air speeds greater than 40 feet per minute. PMV/PPD calculations can be provided demonstrating that the percentage of dissatisfied people is less than 10%. Alternatively, the project may choose to demonstrate that individual comfort controls are provided for each occupant within range of air speeds greater than 40 feet per minute. Please refer to section 5.2.3 of ASHRAE Standard 55-2004 for additional information.

09/28/2012 **DESIGN AND CONSTRUCTION FINAL REVIEW**

The narrative has been provided to address the issues outlined in the Preliminary Review comments, stating that the airspeeds entered in the LEED Credit Form are at the diffuser and that the airspeed will not exceed 40 feet per minute at the occupant level.

It is noted that the form no longer indicates how the project is ventilated. Therefore, it is unclear whether the project meets the requirements of this credit. In this case, based on the information provided for the Preliminary Review phase and the narrative responding to the Preliminary Review comments, it is clear that the project meets the intent of IEQc7.1: Thermal Comfort, Design. The documentation demonstrates credit compliance.

IEQc7.2: Thermal Comfort-Verification — Not Attempted

POSSIBLE POINTS: 1

IEQc8.1: Daylight and Views-Daylight — Denied

POSSIBLE POINTS: 2
ATTEMPTED: 1, DENIED: 3, PENDING: 0, AWARDED: 0

06/26/2012 **DESIGN AND CONSTRUCTION PRELIMINARY REVIEW**

The LEED Credit Form has been provided stating that the project has achieved the daylighting requirements in 91.64% of all regularly occupied spaces via Option 2. Daylighting requirements must be met in at least 75% of all regularly occupied spaces. Daylight reduction and/or glare control devices are provided to ensure daylight effectiveness. Floor plans and building elevations have been provided.

However, the Supplemental Daylight and Views Calculation Spreadsheet has not been provided, as required.

TECHNICAL ADVICE:
Please provide the Supplemental Daylight and Views Calculation Spreadsheet to verify the daylighting requirements met in all regularly occupied spaces.

09/28/2012 DESIGN AND CONSTRUCTION FINAL REVIEW

The Supplemental Daylight and Views Calculation Spreadsheet and the revised LEED Credit Form have been provided to address the issues outlined in the Preliminary Review comments. Exterior elevations and wall sections have also been provided.

However, the form states that the project has achieved the daylighting requirements in 41.66% of all regularly occupied spaces, which does not meet the minimum credit requirement. The documentation does not demonstrate credit compliance.

IEQc8.2: Daylight and Views-Views for Seated Spaces — Awarded: 1

POSSIBLE POINTS: 1
ATTEMPTED: 1, DENIED: 0, PENDING: 0, AWARDED: 1

06/26/2012 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Credit Form has been provided stating that the project has provided direct line of sight views from 92.16% of all regularly occupied seated spaces. Access to views must be provided for at least 90% of all regularly occupied gross area. Floor plans and wall section details have been provided.

However, the Supplemental Daylight and Views Calculation Spreadsheet and copies of applicable project plan drawings highlighting the direct line of sight through exterior windows from 42 inches above the floor have not been provided, as required.

TECHNICAL ADVICE:
Please provide the Supplemental Daylight and Views Calculation Spreadsheet and copies of applicable project plan drawings highlighting the direct line of sight through exterior windows from 42 inches above the floor to confirm credit compliance.

09/28/2012 DESIGN AND CONSTRUCTION FINAL REVIEW

The Supplemental Daylight and Views Calculation Spreadsheet and the revised LEED Credit Form have been provided to address the issues outlined in the Preliminary Review comments. Exterior elevations and wall sections have also been provided highlighting the direct line of sight through exterior windows from 42 inches above the finished floor.The form states that the project has provided direct line of sight views from 91.61% of all regularly occupied seated spaces. The documentation demonstrates credit compliance.

Innovation in Design

IDc1.1: Innovation in Design — Denied

POSSIBLE POINTS: 1
ATTEMPTED: 1, DENIED: 1, PENDING: 0, AWARDED: 0

06/26/2012 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Credit Form has been submitted stating that the project has developed and implemented a Design-University Policies strategy. A narrative has been provided stating that through innovative policies, the project has exhibited outstanding and marked achievement of their sustainability goals.

However, there are two basic criteria listed in the LEED Reference Guide for Green Interior Design and Construction, 2009 Edition, that need to be addressed for achieving an ID point. 1. quantitative performance improvements (comparing a baseline and design case) and 2. a comprehensive strategy (more than one product or process). Additionally, the ID strategy must be significantly better than standard sustainable design practices. The strategy is not quantified using a baseline and design case. Only those strategies that have significant environmental benefits, beyond standard sustainable design practices, are applicable to Innovation in Design credits. There are several elements to this strategy that are portions of typical LEED strategies.

TECHNICAL ADVICE:
The project may apply for an alternative Innovation in Design credit for the Final Review.

09/28/2012 DESIGN AND CONSTRUCTION FINAL REVIEW

No further information has been provided. The documentation does not demonstrate credit compliance.

IDc1.2: Innovation in Design — Awarded: 1

POSSIBLE POINTS: 1
ATTEMPTED: 1, DENIED: 0, PENDING: 0, AWARDED: 1

09/25/2013 DESIGN AND CONSTRUCTION APPEAL REVIEW

This credit was submitted for initial review during the Appeal Review. The LEED Credit Form has been submitted stating that the project achieves exemplary performance for EAc4: Green Power, as specified in the LEED Reference Guide for Green Interior Design and Construction, 2009 Edition. The requirement for exemplary performance in EAc4 is to have a two-year purchase agreement to procure 16 kWh per square foot of the electricity. The documentation demonstrates that the project has a two-year purchase agreement to procure 16 kWh per square foot of the electricity of this LEED-CI project from sources that meet the Green-e definition for renewable power, which meets the exemplary performance requirement. The documentation demonstrates credit compliance.

IDc1.3: Innovation in Design — Not Attempted

POSSIBLE POINTS: 1

IDc1.4: Innovation in Design — Not Attempted

POSSIBLE POINTS: 1

IDc1.5: Innovation in Design — Not Attempted

POSSIBLE POINTS: 1

IDc2: LEED® Accredited Professional — Awarded: 1

POSSIBLE POINTS: 1
ATTEMPTED: 1, DENIED: 0, PENDING: 0, AWARDED: 1

06/26/2012 DESIGN AND CONSTRUCTION PRELIMINARY REVIEW

The LEED Credit Form has been submitted stating that a LEED AP has been a participant on the project development team. A copy of the LEED AP award certification for Julie Levick has been included, as required.

Regional priority

SSc1: Site Selection
POSSIBLE POINTS: 1
ATTEMPTED: 1, DENIED: , PENDING: , AWARDED: 0

SSc3.2: Alternative Transportation-Bicycle Storage and Changing Rooms
POSSIBLE POINTS: 1

WEc1: Water Use Reduction
POSSIBLE POINTS: 1

MRc3.1: Materials Reuse
POSSIBLE POINTS: 1

IEQc8.1: Daylight and Views-Daylight
POSSIBLE POINTS: 1
ATTEMPTED: 1, DENIED: , PENDING: , AWARDED: 0

TOTAL	**110**	**52**	**15**	**0**	**40**

REVIEW SUMMARY

Review	SUBMITTED	RETURNED	POINTS: SUBMITTED	DENIED	PENDING	AWARDED
Design and Construction Preliminary	**06/13/2012**	**06/29/2012**	**46**	**0**	**31**	**18**

Credit	STATUS	TYPE	POINTS: ATTEMPTED	DENIED	PENDING	AWARDED
Plf1: Minimum Program Requirements	Not Approved		0	0	0	0
Plf2: Project Summary Details	Approved		0	0	0	0
Plf3: Occupant and Usage Data	Not Approved		0	0	0	0
Plf4: Schedule and Overview Documents	Not Approved		0	0	0	0
Plf5: Previously LEED Certified Details	Approved		0	0	0	0
SSc1: Site Selection-Select a LEED Certified Building	Pending	Design	5	0	1	0
SSc2: Development Density and Community Connectivity	Pending	Design	6	0	6	0
SSc3.1: Alternative Transportation-Public Transportation Access	Awarded	Design	6	0	0	6
SSc3.3: Alternative Transportation-Parking Availability	Awarded	Design	2	0	0	2
WEp1: Water Use Reduction-20% Reduction	Pending	Design	0	0	0	0
EAp1: Fundamental Commissioning of the Building Energy Systems	Pending	Construction	0	0	0	0
EAp2: Minimum Energy Performance	Pending	Design	0	0	0	0
EAp3: Fundamental Refrigerant Management	Pending	Design	0	0	0	0
EAc1.2: Optimize Energy Performance-Lighting Controls	Pending	Design	1	0	1	0
EAc1.3: Optimize Energy Performance-HVAC	Pending	Design	5	0	5	5
EAc1.4: Optimize Energy Performance-Equipment and Appliances	Pending	Design	4	0	4	0
MRp1: Storage and Collection of Recyclables	Awarded	Design	0	0	0	0
MRc1.1: Tenant Space-Long-Term Commitment	Awarded	Design	1	0	0	1
MRc2: Construction Waste Management	Pending	Construction	1	0	2	0
MRc4: Recycled Content	Pending	Construction	1	0	1	0
MRc5: Regional Materials	Pending	Construction	1	0	1	0
IEQp1: Minimum Indoor Air Quality Performance	Pending	Design	0	0	0	0
IEQp2: Environmental Tobacco Smoke (ETS) Control	Pending	Design	0	0	0	0
IEQc2: Increased Ventilation	Pending	Design	1	0	1	0
IEQc3.1: Construction IAQ Management Plan-During Construction	Awarded	Construction	1	0	0	1
IEQc4.1: Low-Emitting Materials-Adhesives and Sealants	Awarded	Construction	1	0	0	1
IEQc4.2: Low-Emitting Materials-Paints and Coatings	Pending	Construction	1	0	1	0
IEQc4.3: Low-Emitting Materials-Flooring Systems	Awarded	Construction	1	0	0	1
IEQc5: Indoor Chemical and Pollutant Source Control	Pending	Design	1	0	1	0
IEQc6.2: Controllability of Systems-Thermal Comfort	Pending	Design	1	0	1	0

IEQc7.1: Thermal Comfort-Design	**Pending**	Design	**1**	**0**	**1**	**0**
IEQc8.1: Daylight and Views-Daylight	**Pending**	Design	**2**	**0**	**3**	**0**
IEQc8.2: Daylight and Views-Views for Seated Spaces	**Pending**	Design	**1**	**0**	**1**	**0**
IDc1.1: Innovation in Design-University policies	**Pending**	Design	**1**	**0**	**1**	**0**
IDc2: LEED® Accredited Professional	**Awarded**	Construction	**1**	**0**	**0**	**1**

Design and Construction Final	09/14/2012	11/08/2012	33	15	0	21

Credit	STATUS	TYPE	POINTS: ATTEMPTED	DENIED	PENDING	AWARDED
Plf1: Minimum Program Requirements	Approved		0	0	0	0
Plf2: Project Summary Details	Approved		0	0	0	0
Plf3: Occupant and Usage Data	Approved		0	0	0	0
Plf4: Schedule and Overview Documents	Approved		0	0	0	0
Plf5: Previously LEED Certified Details	Approved		0	0	0	0
SSc1: Site Selection-Select a LEED Certified Building	Denied	Design	5	1	0	0
SSc2: Development Density and Community Connectivity	Awarded	Design	6	0	0	6
WEp1: Water Use Reduction-20% Reduction	Awarded	Design	0	0	0	0
EAp1: Fundamental Commissioning of the Building Energy Systems	Awarded	Construction	0	0	0	0
EAp2: Minimum Energy Performance	Awarded	Design	0	0	0	0
EAp3: Fundamental Refrigerant Management	Awarded	Design	0	0	0	0
EAc1.2: Optimize Energy Performance-Lighting Controls	Denied	Design	1	1	0	0
EAc1.3: Optimize Energy Performance-HVAC	Awarded	Design	5	5	0	5
EAc1.4: Optimize Energy Performance-Equipment and Appliances	Awarded	Design	4	0	0	4
MRc2: Construction Waste Management	Awarded	Construction	1	0	0	2
MRc4: Recycled Content	Denied	Construction	1	1	0	0
MRc5: Regional Materials	Denied	Construction	1	1	0	0
IEQp1: Minimum Indoor Air Quality Performance	Awarded	Design	0	0	0	0
IEQp2: Environmental Tobacco Smoke (ETS) Control	Awarded	Design	0	0	0	0
IEQc2: Increased Ventilation	Awarded	Design	1	0	0	1
IEQc4.2: Low-Emitting Materials-Paints and Coatings	Awarded	Construction	1	0	0	1
IEQc5: Indoor Chemical and Pollutant Source Control	Denied	Design	1	1	0	0
IEQc6.2: Controllability of Systems-Thermal Comfort	Denied	Design	1	1	0	0
IEQc7.1: Thermal Comfort-Design	Awarded	Design	1	0	0	1
IEQc8.1: Daylight and Views-Daylight	Denied	Design	2	3	0	0
IEQc8.2: Daylight and Views-Views for Seated Spaces	Awarded	Design	1	0	0	1
IDc1.1: Innovation in Design-University policies	Denied	Design	1	1	0	0

Design and Construction Appeal	**09/13/2013**	**10/14/2013**	**8**	**15**	**0**	**40**

Credit	STATUS	TYPE	POINTS: ATTEMPTED	DENIED	PENDING	AWARDED
EAp2: Minimum Energy Performance	**Awarded**	Design	**0**	**0**	**0**	**0**
EAc4: Green Power	**Awarded**	Construction	**5**	**0**	**0**	**5**
MRc4: Recycled Content	**Denied**	Construction	**1**	**1**	**0**	**0**
MRc5: Regional Materials	**Denied**	Construction	**1**	**1**	**0**	**0**
IDc1.2: Innovation in Design: EAc4: Green Power	**Awarded**	Construction	**1**	**0**	**0**	**1**