PART 1 GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes general requirements and procedures for compliance with USGBC's LEED prerequisites and credits needed for Project to obtain LEED Platinum certification based on USGBC's "LEED Version 4 for Building Design and Construction" (hereafter, LEED v4 BD+C).
 - 1. Specific requirements for LEED are also included in other Sections.
 - Other LEED prerequisites and credits needed to obtain LEED certification depend on product selections
 and may not be specifically identified as LEED requirements. Compliance with requirements needed to
 obtain LEED prerequisites and credits may be used as one criterion to evaluate substitution requests
 and comparable product requests.

B. Related Sections:

- 1. Section 01 81 13 Sustainable Design Requirements WELL v2 Pilot.
- 2. Section 01 81 19 Indoor Air Quality Requirements.
- 3. Section 01 91 00 General Commissioning Requirements.

1.3 DEFINITIONS

- A. BUG Rating: Classification system for luminaires defined in terms of backlight (B), uplight (U), and glare (G).
- B. Chain-of-Custody Certificates: Certificates signed by manufacturers certifying that wood used to make products was obtained from forests certified by an FSC-accredited certification body to comply with FSC STD-01-001. Certificates shall include evidence that manufacturer is certified for chain of custody by an FSCaccredited certification body.
- C. Cradle-to-Gate Assessment: Analysis of a product's partial life-cycle from extraction (cradle) to gate (factory completion prior to distribution).
- D. Embodied Carbon: Sum of all greenhouse gas emissions resulting from the construction lifecycle of a building. This includes emissions from material extraction and transportation, product development, transportation to the site and install, refurbishment (if applicable) and end of life though demolition and material disposal.
- E. LEED: USGBC's "LEED Version 4 for Building Design and Construction." Definitions that are part of this document apply to this Section.
- F. Life-Cycle Assessment: Evaluation of environmental impacts of a product from cradle to gate, defined by ISO 14040 and ISO 14044.
- G. Life-Cycle Inventory: Database that defines environmental input and output for each step in a material or assembly's life cycle.

- H. Recycled Content: The recycled content value of a material assembly shall be determined by weight. The recycled fraction of the assembly is then multiplied by the cost of assembly to determine the recycled content value.
 - "Postconsumer" material is defined as waste material generated by households or by commercial, industrial, and institutional facilities in their role as end users of the product, which can no longer be used for its intended purpose.
 - 2. "Preconsumer" material is defined as material diverted from the waste stream during the manufacturing process. Reutilization of materials (such as rework, regrind, or scrap generated in a process and capable of being reclaimed within the same process that generated it) is excluded.
- I. Regional Materials: Materials that have been extracted, harvested, or recovered, as well as manufactured, within 100 miles (160 km) of Project site. If only a fraction of a product or material is extracted/harvested/recovered and manufactured locally, then only that percentage (by weight) shall contribute to the regional value.
- J. Environmental Product Declaration (EPD): An independently verified report based on life-cycle assessment studies that have been conducted according to a set of common rules for each product category and peerreview.
 - Product-Specific Declaration: A product with a publicly available, critically reviewed life-cycle assessment conforming to ISO 14044 that has at least a cradle to gate scope.
 - Industry-Wide (Generic) EPD: Provide products with third-party certification (Type III), including external
 verification, in which the manufacturer is explicitly recognized as a participant by the program operator.
 EPD must conform to ISO 14025, 14040, 14044, and EN 15804 or ISO 21930 and have at least a
 cradle to gate scope.
 - 3. Product-Specific Type III EPD: A product with a third-party certification, including external verification, in which the manufacturer is explicitly recognized by the program operator. EPD must conform to ISO 14025, 14040, 14044, and EN 15804 or ISO 21930 and have at least a cradle to gate scope.
- K. Solar Reflectance Index (SRI): The measure of a constructed surface's ability to stay cool in the sun by reflecting solar radiation and emitting thermal radiation. SRI values range from zero (solid black surface) to 100 (solid white surface). SRI value of a material is calculated according to ASTM E1980 and based on the aged tested values of solar reflectance and thermal emittance.
- L. Vertical Illuminance: Illuminance levels calculated at a point on a vertical service or plane.
- M. Health Product Declarations (HPD): A product with a publicly available, critically reviewed disclosure of the potential chemicals of concern in products by comparing product ingredients to a set of priority "hazard" lists based on the GreenScreen for Safer Chemicals and additional lists from other government agencies.

1.4 QUALITY ASSURANCE

A. Sustainability Consultant: Engage an experienced LEED Accredited Professional to coordinate LEED requirements. Sustainability Consultant may also serve as waste management coordinator.

1.5 ACTION SUBMITTALS

A. General: Submit sustainable design submittals required by other Sections.

- B. Sustainable design submittals are in addition to other submittals.
 - If submitted item is identical to that proposed to comply with other requirements, include additional copy with other submittal as a record of compliance with indicated LEED requirements instead of separate sustainable design submittal. Mark additional copy "Sustainable design submittal".
- C. Sustainable Design Documentation Submittals:
 - 1. Documentation for luminaires indicating BUG ratings, lumens emitted, and vertical illuminance values.
 - 2. Documentation for compliant paving materials indicating the SRI, SR, and permeability.
 - 3. Documentation for compliant roofing materials indicating the SRI.
 - 4. Product Data and certification for WaterSense-labeled water fixtures.
 - 5. Product Data for plumbing fixtures indicating flush or flow rate.
 - Documentation complying with Division 1 Section "General Commissioning Requirements," Division 1
 Section "Exterior Enclosure Commissioning," Division 21 Section "Commissioning of Fire Suppression,"
 Division 22 Section "Commissioning of Plumbing," Division 23 Section "Commissioning of HVAC," and
 Division 26 Section "Commissioning of Electrical Systems".
 - 7. Environmental Product Declarations (EPDs) complying with LEED requirements.
 - a. EPDs for Embodied Carbon Tracking Collect product-specific type III EPDs and provide a Bill of Materials, including project quantities itemized by application and type, and Global Warming Potential for Divisions 3-12 including, but not limited to:
 - 1) Concrete.
 - 2) Steel.
 - 3) Timber/Wood.
 - 4) Metal Framing.
 - 5) Glazing.
 - 6) Gypsum Board.
 - 7) Insulation.

Contractor shall be responsible for providing a Bill of Materials and Embodied Carbon Tracking sheet, including a comparative bid analysis among product selections.

- 8. Documentation for products that comply with LEED requirements for multi-attribute optimization.
 - a. Include documentation for regional materials, indicating location and distance from Project of material manufacturer and point of extraction, harvest, or recovery for each raw material and costs of regional materials.
 - b. Include documentation for any applicable third-party certifications.
- 9. Documentation for products that comply with LEED requirements for leadership extraction practices. Include the following:
 - a. Product Data and certification letter from product manufacturers, indicating participation in an extended producer responsibility program and statement of costs.
 - b. Product Data and certification for bio-based materials, indicating that they comply with requirements. Include statement of costs.
 - c. Product Data and chain-of-custody certificates for products containing certified wood. Include invoices.
 - d. Receipts for salvaged and refurbished materials used for Project, indicating sources and costs.
 - e. Product Data and certification letter from product manufacturers, indicating percentages by weight of postconsumer and preconsumer recycled content for products having recycled content. Include statement of costs.
 - f. Documentation for regional materials, indicating location and distance from Project of material manufacturer and point of extraction, harvest, or recovery for each raw material and costs of regional materials.

- Material ingredient reports for products that comply with LEED requirements for material ingredient reporting.
- 11. Documentation for products that comply with LEED requirements for material ingredient optimization.
- 12. Documentation complying with Division 1 Section "Construction Waste Management and Disposal".
- 13. Product Data for adhesives and sealants used inside weatherproofing system, indicating VOC content and laboratory test reports showing compliance with requirements for low-emitting materials.
- 14. Product Data for paints and coatings used inside weatherproofing system, indicating VOC content and laboratory test reports showing compliance with requirements for low-emitting materials.
- 15. Laboratory test reports for flooring, indicating compliance with requirements for low-emitting materials.
- 16. Laboratory test reports for products containing composite wood or agrifiber products or wood glues, indicating compliance with requirements for low-emitting materials.
- 17. Laboratory test reports for ceilings, walls, and thermal insulation, indicating compliance with requirements for low-emitting materials.
- 18. Construction Indoor-Air-Quality (IAQ) Management:
 - a. Construction IAQ management plan.
 - b. Product Data for temporary filtration media.
 - c. Product Data for filtration media used during occupancy.
 - d. Construction Documentation: Six photographs at three different times during construction period, along with brief description of SMACNA approach employed, documenting implementation of IAQ management measures, including protection of ducts and on-site stored or installed absorptive materials.

1.6 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For Sustainability Consultant.
- B. Project Materials Cost Data: Provide statement indicating total cost for materials used for Project. Costs exclude labor, overhead, and profit. Include breakout of costs for the following categories of items:
 - 1. Plumbing.
 - 2. Mechanical.
 - 3. Electrical.
 - 4. Specialty items such as elevators and equipment.
- C. Sustainable Design Action Plans: Provide preliminary submittals within 30 days of date established for the Notice to Proceed, indicating how the following requirements will be met:
 - 1. List of proposed products with EPDs. For Embodied Carbon tracking, list the proposed products with Product-Specific Type III EPDs and provide Bill of Materials.
 - 2. List of proposed products complying with requirements for multi-attribute optimization.
 - 3. List of proposed products complying with requirements for raw material and source extraction reporting.
 - 4. List of proposed products complying with requirements for material ingredient reporting.
 - 5. List of proposed products complying with requirements for leadership extraction practices.
 - 6. List of proposed products complying with requirements for material ingredient optimization.
 - 7. Waste management plan complying with Section 017419 "Construction Waste Management and Disposal."
 - 8. Construction IAQ management plan.
 - 9 List of proposed products complying with requirements for product manufacturer supply chain optimization.
- D. Sustainable Design Progress Reports: Concurrent with each Application for Payment, submit reports comparing actual construction and purchasing activities with sustainable design action plans.

1.7 PREINSTALLATION MEETINGS

A. Preinstallation Conference: Conduct conference at Project site. Review LEED requirements and action plans for compliance with requirements.

1.8 ADMINISTRATIVE REQUIREMENTS

- A. Submit documentation to USGBC and respond to questions and requests from USGBC about its LEED prerequisites and credits that are Contractor's responsibility, that depend on product selection or product qualities, or that depend on Contractor's procedures, until USGBC has made its determination on Project's LEED certification application.
 - 1. Document correspondence with USGBC as informational submittals.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Provide products and procedures necessary to obtain LEED credits indicated as Contractor's responsibility. Although other Sections may specify some requirements that contribute to these LEED credits, Contractor shall provide additional materials and procedures necessary to obtain LEED credits indicated.
- B. At least 10 different products from at least three different manufacturers shall have EPDs that comply with LEED requirements. Industrywide (generic) EPDs shall be valued as one-half of a product. Structural products shall comply with requirements for Embodied Carbon/LCA Optimization.
- C. At least 10 percent, by cost, OR 10 different products from three different manufacturers of permanently installed products for Project shall comply with LEED requirements for multi-attribute optimization.
- D. At least 40 percent, by cost, from at least five different manufacturers shall meet one of the responsible sourcing and extraction criteria.
- E. At least 10 different products from at least three different manufacturers shall comply with LEED requirements for material ingredient reporting.
- F. At least 10 percent, by cost, or 10 products from at least three different manufacturers of permanently installed products for Project shall comply with LEED requirements for material ingredient optimization.

2.2 LOW-EMITTING MATERIALS

- A. Paints and Coatings: For field applications that are inside the weatherproofing system, paints and coatings shall comply with VOC content limits of authorities having jurisdiction and the following VOC content limits:
 - 1. Flat Paints and Coatings: 50 g/L.
 - 2. Nonflat Paints and Coatings: 50 g/L.
 - 3. Dry-Fog Coatings: 150 g/L.
 - 4. Primers, Sealers, and Undercoaters: 100 g/L.
 - 5. Rust-Preventive Coatings: 100 g/L.
 - 6. Zinc-Rich Industrial Maintenance Primers: 100 g/L.
 - 7. Pretreatment Wash Primers: 420 g/L.
 - 8. Clear Wood Finishes, Varnishes: 275 g/L.
 - 9. Clear Wood Finishes, Lacquers: 275 g/L.
 - 10. Floor Coatings: 50 g/L.

- 11. Shellacs, Clear: 730 g/L.
- 12. Shellacs, Pigmented: 550 g/L.
- 13. Stains: 100 g/L.
- B. Paints and Coatings: For field applications that are inside the weatherproofing system, 90 percent of paints and coatings shall comply with requirements of California Department of Public Health's "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers".
- C. Adhesives and Sealants: For field applications that are inside the weatherproofing system, adhesives and sealants shall comply with VOC content limits of authorities having jurisdiction and the following VOC content limits:
 - 1. Wood Glues: 30 g/L.
 - 2. Metal-to-Metal Adhesives: 30 g/L.
 - 3. Adhesives for Porous Materials (except Wood): 50 g/L.
 - 4. Subfloor Adhesives: 50 g/L.
 - 5. Plastic Foam Adhesives: 50 g/L.
 - 6. Carpet Adhesives: 50 g/L.
 - 7. Carpet Pad Adhesives: 50 g/L.
 - 8. VCT and Asphalt Tile Adhesives: 50 g/L.
 - 9. Cove Base Adhesives: 50 g/L.
 - 10. Gypsum Board and Panel Adhesives: 50 g/L.
 - 11. Rubber Floor Adhesives: 60 g/L.
 - 12. Ceramic Tile Adhesives: 65 g/L.
 - 13. Multipurpose Construction Adhesives: 70 g/L.
 - 14. Fiberglass Adhesives: 80 g/L.
 - 15. Contact Adhesives: 80 g/L.
 - 16. Structural Glazing Adhesives: 100 g/L.
 - 17. Wood Flooring Adhesives: 100 g/L.
 - 18. Structural Wood Member Adhesives: 140 g/L.
 - 19. Single-Ply Roof Membrane Adhesives: 250 g/L.
 - Special-Purpose Contact Adhesives (That Are Used to Bond Melamine-Covered Board, Metal, Unsupported Vinyl, Rubber, or Wood Veneer 1/16 Inch (1.6 mm) or Less in Thickness to Any Surface): 250 g/L.
 - 21. Top and Trim Adhesives: 250 g/L.
 - 22. Plastic Cement Welding Compounds: 250 g/L.
 - 23. ABS Welding Compounds: 325 g/L.
 - 24. CPVC Welding Compounds: 490 g/L.
 - 25. PVC Welding Compounds: 510 g/L.
 - 26. Adhesive Primer for Plastic: 550 g/L.
 - 27. Sheet-Applied Rubber Lining Adhesives: 850 g/L.
 - 28. Aerosol Adhesive, General-Purpose Mist Spray: 65 percent by weight.
 - 29. Aerosol Adhesive, General-Purpose Web Spray: 55 percent by weight.
 - 30. Special-Purpose Aerosol Adhesives (All Types): 70 percent by weight.
 - 31. Other Adhesives: 250 g/L.
 - 32. Architectural Sealants: 250 g/L.
 - 33. Non-membrane Roof Sealants: 300 g/L.
 - 34. Single-Ply Roof Membrane Sealants: 450 g/L.
 - 35. Other Sealants: 420 g/L.

- 36. Sealant Primers for Nonporous Substrates: 250 g/L.
- 37. Sealant Primers for Porous Substrates: 775 g/L.
- 38. Modified Bituminous Sealant Primers: 500 g/L.
- 39. Other Sealant Primers: 750 g/L.
- D. Adhesives and Sealants: For field applications that are inside the weatherproofing system, 90 percent of adhesives and sealants shall comply with requirements of California Department of Public Health's "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers".
- E. Flooring: Shall comply with requirements of California Department of Public Health's "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers".
- F. Composite Wood, Agrifiber Products, and Adhesives: Shall be made using ultra-low-emitting formaldehyde resins as defined in California Air Resources Board's "Airborne Toxic Control Measure to Reduce Formaldehyde Emissions from Composite Wood Products" or shall be made with no added formaldehyde.
- G. Ceilings, Walls, and Thermal Insulation: Shall comply with requirements of California Department of Public Health's "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers".
- H. Roofing: Roofing materials shall have a three year aged solar reflectance index (SRI) of at least 64. If three year aged value information is not available, use materials with an initial SRI of at least 82 at installation
- I. Hardscape: Paving materials shall have a three-year aged solar reflectance (SR) value of at least 0.28. If three-year aged value information is not available, use materials with an initial SR of at least 0.33 at installation

PART 3 EXECUTION

3.1 NONSMOKING BUILDING

A. Smoking is not permitted within the building or within 25 ft. (8 m) of entrances, operable windows, or outdoor-air intakes.

3.2 CONSTRUCTION WASTE MANAGEMENT

A. Comply with Division 1 Section "Construction Waste Management and Disposal".

3.3 CONSTRUCTION INDOOR-AIR-QUALITY (IAQ) MANAGEMENT

- A. Comply with SMACNA's "SMACNA IAQ Guideline for Occupied Buildings under Construction".
 - If Owner authorizes use of permanent heating, cooling, and ventilating systems during construction period as specified in Division 1 Section "Temporary Facilities and Controls," install MERV 8 filter media at each return-air inlet for the air-handling system used during construction.
 - Replace air filters immediately prior to occupancy with new filters specified in Division 23 Section "Particulate Air Filtration".

END OF SECTION

Block 250 LEED v4 for BD+C: Core & Shell Platinum

1500 Lamar St. Houston, TX 77010

Date: 5/24/2021

Υ	M	M	N			
82	7	5	16	TOTALS		110
Certified: 40	to 49 points,	Silver: 50 t	o 59 points,	Gold: 60 to 7	79 points, Platinum: 80 to 110	
				l	P	Max Points
Υ	M	M	N		ve Process	1
1	0		0	Credit 1	Integrative Process	1
Υ	M	M	N	Location	and Transportation	20
0	0	0	20	Credit 1	LEED for Neighborhood Development Location	20
2	0	0	0	Credit 2	Sensitive Land Protection	2
3	0	0	0	Credit 3	High Priority Site	3
6	0	0	0	Credit 4	Surrounding Density and Diverse Uses	6
6	0	0	0	Credit 5	Access to Quality Transit	6
0	0	0	1	Credit 6V4.1	Bicycle Facilities	1
1	0	0	0	Credit 7V4.1	Reduced Parking Footprint	1
1	0	0	0	Credit 8V4.1	Green Vehicles	1
19	0	0	1	Orcal ova.i	Creen venices	'
13	U	U	4			
Υ	M	M	N	Suetaina	able Sites	11
Y	171	141	0	Prereq 1	Construction Activity Pollution Prevention	Y
1	0	0	0	Credit 1	Site Assessment	1
				Credit 2V4.1		2
0	0	0	2	Credit 3	Site Development - Protect or Restore Habitat	
0	0	0	1	+	Open Space	1
3	0	0	0	Credit 4V4.1	Rainwater Management	3
2	0	0	0	Credit 5	Heat Island Reduction	2
1	0	0	0	Credit 6	Light Pollution Reduction	1
1	0	0	0	Credit 7	Tenant Design and Construction Guidelines	1
8	0	0	3			
v		2.0		M-1 5	W-1	44
Υ	M	M	N	Water Et		11
Y			0	Prereq 1	Outdoor Water Use Reduction	Y
Υ			0	Prereq 2	Indoor Water Use Reduction	Y
Υ			0	Prereq 3	Building Level Water Metering	Υ
2	0	0	0	Credit 1	Outdoor Water Use Reduction	2
6	0	0	0	Credit 2	Indoor Water Use Reduction	6
1	0	0	1	Credit 3	Cooling Tower Water Use	2
1	0	0	0	Credit 4	Water Metering	1
10	0	0	1			
				l-	1.4.	22
Υ	M	M	N		and Atmosphere	33
Υ			0	Prereq 1	Fundamental Commissioning & Verification	Y
Υ			0	Prereq 2	Minimum Energy Performance	Y
Υ			0	Prereq 3	Building Level Energy Metering	Y
Υ			0	Prereq 4	Fundamental Refrigerant Management	Y
6	0	0	0	Credit 1	Enhanced Commissioning	6
13	1	1	3	Credit 2	Optimize Energy Performance	18
1	0	0	0	Credit 3	Advanced Energy Metering	1
0	2	0	0	Credit 4	V4 Demand ResponseV4.1 Grid Harmonization	2
0	0	0	3	Credit 5	Renewable Energy Production	3
0	0	0	1	Credit 6	Enhanced Refrigerant Management	1
0	0	2	0	Credit 7	Green Power & Carbon Offsets	2
				-		



					Max Points
Υ	M	M	N	Materials and Resources	13
Υ			0	Prereq 1 Storage and Collection of Recyclables	Υ
Υ			0	Prereq 2 Construction & Demolition Waste Management Planning	Υ
1	1	1	3	Credit 1V4.1 Life-Cycle Impact Reduction	6
1	1	0	0	Credit 2V4.1 BPDO Environmental Product Declaration	2
0	0	1	1	Credit 3V4.1 BPDO Sourcing of Raw Materials	2
1	1	0	0	Credit 4V4.1 BPDO Material Ingredients	2
2	0	0	0	Credit 5 Construction & Demolition Waste Management	2
5	3	2	4		
				_	
Υ	M	M	N	Indoor Environmental Quality	16
Υ			0	Prereq 1 Minimum Indoor Air Quality Performance	Υ
<u> </u>					•

Υ	M	IVI	N	Indoor Environmental Quality	16
Υ			0	Prereq 1 Minimum Indoor Air Quality Performance	e Y
Υ			0	Prereq 2 Environmental Tobacco Smoke Control	Υ
2	0	0	0	Credit 1 Enhanced Indoor Air Quality Strategies	2
3	0	0	0	Credit 2V4.1 Low Emitting Materials	3
1	0	0	0	Credit 3 Construction Indoor Air Quality Manager	ment Plan 1
2	1	0	0	Credit 7V4.1 Daylight	3
1	0	0	0	Credit 8 Quality Views	1
9	1	0	0		

Υ	M	M	N	Innovation	6
1	0	0	0	Credit 1.1 IN: O&M Starter Kit/Green Building Ed, Lamp Purchasing	1
1	0	0	0	Credit 1.2 Pilot: EC3	1
1	0	0	0	Credit 1.3 EP: Reduced Parking Footprint	1
1	0	0	0	Credit 1.4 EP: Heat Island Reduction or enhanced IAQ	1
1	0	0	0	Credit 1.5 Pilot: Safety First: Re-Enter Your Workspace	1
1	0	0	0	Credit 2 LEED Accredited Professional	1
6	0	0	0		

Υ	M	IVI	N	Regional Priority	4
1	0	0	0	Credit 1.1 Energy Performance (10)	1
1	0	0	0	Credit 1.2 Rainwater Management (2)	1
1	0	0	0	Credit 1.3 Access to Quality Transit (3)	1
1	0	0	0	Credit 1.4 Outdoor Water Reuse Reduction (2)/ High Priority Site (2)/BPD	1
4	0	0	0		

LEEDv4.1 LOW EMITTING MATERIALS Submittal Form

- 1. Complete 1 LEED EQ Submittal Form for ALL Divisions for Interior materials (from the weather barrier in). Include Exterior materials only for Healthcare and Schools Projects.
- 2. Attach the required manufacturer's documentation to support VOC and General Emissions claims listed on this submittal form.
- 3. Note if material is inherently non-emitting: stone, ceramic, powder-coated metals, plated or anodized metal, glass, concrete, clay brick, unfinished or untreated solid wood flooring
- 4. Adhesives, Sealants, Paints, Coatings requirements for products wet applied on site.

Project Name	
Subcontractor Name:	
Contact email:	
Specification Number:	
Scope of Work:	
Manufacturer:	

Adhesives	Table 1:	
All adhesives must meet General Emissions & VOC requirements	Interior Adhesives - must not exceed the following VOC limits	
Product Name:	Architectural Applications	Specialty Applications
Select corresponding category on Table 1	□ 50 g/L VOC Indoor carpet adhesives	□ 510 g/L VOC PVC welding
2. Product VOC g/L	□ 50 g/L VOC Indoor carpet adhesives	☐ 510 g/L VOC PVC welding
3. Volume Used Liters	□ 50 g/L VOC Carpet pad adhesives	☐ 490 g/L VOC CPVC welding
4. Documentation shows this product meets SCAQMD Rule 1168?	☐ 150 g/L VOC Outdoor carpet adhesives	☐ 325 g/L VOC ABS welding
Yes □ No □	□ 100 g/L VOC Wood flooring adhesive	□ 250 g/L VOC Plastic cement welding
5. Select General Emissions Compliance Certification	☐ 60 g/L VOC Rubber floor adhesives	☐ 550 g/L VOC Adhesive primer for plastic
6. General Emissions documentation shows this product	□ 50 g/L VOC Subfloor adhesives	☐ 350 g/L VOC Computer diskette manufacturing
compliant with CDPH v1.2-2017? Yes □ No □	☐ 65 g/L VOC Ceramic tile adhesives	□ 80 g/L VOC Contact adhesive
□ 0.5 mg/m3 or less;	☐ 50 g/L VOC VCT and asphalt tile adhesives	☐ 250 g/L VOC Special purpose contact adhesive
□ between 0.5 and 5.0 mg/m3; or	☐ 50 g/L VOC Dry wall and panel adhesives	□ 100 g/L VOC Tire retread
□ 5.0 mg/m3 or more.	□ 50 g/L VOC Cove base adhesives	☐ 150 g/L VOC Adhesive primer for traffic marking tape
	□ 70 g/L VOC Multipurpose construction adhesives	☐ 140 g/L VOC Structural wood member adhesive
	☐ 100 g/L VOC Structural glazing adhesives	☐ 850 g/L VOC Sheet applied rubber lining operations specialty
	□ 250 g/L VOC Single ply roof membrane adhesives	□ 250 g/L VOC Top and trim adhesive
	Substra	ate Specific Applications
	□ 30 g/L VOC Metal to metal substrate-specific adhesives	☐ 30 g/L VOC Wood substrate-specific adhesives
	☐ 50 g/L VOC Plastic foam substrate-specific adhesives	☐ 80 g/L VOC Fiberglass substrate-specific adhesives
	☐ 50 g/L VOC Porous material (except wood) substrate-specific adhesives	
	General Emissions Compliance Certification	
	□ FloorScore	□ UL Greenguard Gold
	□ Green Label Plus	□ Intertek Environmental VOC+
Application: Interior Exterior	□ SCS Indoor Advantage Gold-Building Materials	□ Other
Sealants	Table 2:	
All sealants must meet General Emissions & VOC requirements	Interior Sealants - must not exceed the following VOC limits	
Product Name:	Sealants Sealants	Sealant Primers
Select corresponding category on Table 2	□ 250 g/L VOC Architectural sealant	☐ 250 g/L VOC Architectural non-porous sealant primer
2. Product VOC g/L	□ 760 g/L VOC Marine deck sealant	□ 775 g/L VOC Architectural non-porous sealant primer
3. Volume Used Liters	□ 300 g/L VOC Nonmembrane roof sealant	□ 500 g/L VOC Modified bituminous sealant primer
4. Documentation shows this product meets SCAQMD Rule 1168?	□ 250 g/L VOC Roadway sealant	□ 760 g/L VOC Marine deck sealant primer
Yes No	□ 450 g/L VOC Single-ply roof membrane sealant	□ 750 g/L VOC Other sealant primer
res 🗆 NO 🗆		
5. Salact Ganaral Emissions Compliance Cartification		
Select General Emissions Compliance Certification General Emissions documentation shows this product	□ 420 g/L VOC Other sealant	
5. Select General Emissions Compliance Certification 6. General Emissions documentation shows this product compliant with CDPH v1.2-2017? Yes No	□ 420 g/L VOC Other sealant Other	
6. General Emissions documentation shows this product compliant with CDPH v1.2-2017? Yes □ No □	□ 420 g/L VOC Other sealant	
6. General Emissions documentation shows this product	□ 420 g/L VOC Other sealant Other	
6. General Emissions documentation shows this product compliant with CDPH v1.2-2017? Yes □ No □ □ 0.5 mg/m3 or less;	□ 420 g/L VOC Other sealant Other	
6. General Emissions documentation shows this product compliant with CDPH v1.2-2017? Yes □ No □ □ 0.5 mg/m3 or less; □ between 0.5 and 5.0 mg/m3; or	□ 420 g/L VOC Other sealant Other □ 250 g/L VOC Other adhesives, adhesive bonding primers, adhesive primers	

Paints and Coatings	Table 3:	
All paints & coatings must meet General Emissions & VOC requirements	Interior Paints and Coatings - must not exceed the following VOC limits	
	□ 350 g/L VOC Bond breakers	□ 100 g/L VOC Mastic coatings
Product Name:	□ 275 g/L VOC Clear wood finishes - Varnish	☐ 150 g/L VOC Metallic pigmented coatings
Select corresponding category on Table 3	□ 275 g/L VOC Clear wood finishes - Sanding sealers	□ 250 g/L VOC Multi-Color coatings
2. Product VOC g/L	□ 275 g/L VOC Clear wood finishes - Lacquer	□ 50 g/L VOC Nonflat coatings
3. Volume Used Liters	☐ 50 g/L VOC Colorant - Architectural coatings, excluding IM coatings	☐ 420 g/L VOC Pre-treatment wash primers
4. Documentation shows this product meets CARB 2007 SCM	□ 600 g/L VOC Colorant - Solvent-based IM	☐ 100 g/L VOC Primers, sealers, and undercoaters
or SCAQMD Rule 1113 2016? Yes □ No □	□ 50 g/L VOC Colorant - Waterborne IM	□ 350 g/L VOC Reactive penetrating sealers
5. Select General Emissions Compliance Certification	□ 100 g/L VOC Concrete - Curing compounds	□ 250 g/L VOC Recycled coatings
6. General Emissions documentation shows this product	☐ 350 g/L VOC Concrete - Curing compounds for roadways and bridges	□ 50 g/L VOC Roof coatings
compliant with CDPH v1.2-2017? Yes□ No□	□ 50 g/L VOC Concrete surface retarder	□ 100 g/L VOC Roof coatings, aluminum
□ 0.5 mg/m3 or less;	□ 50 g/L VOC Driveway sealer	□ 350 g/L VOC Roof primers, bituminous
□ between 0.5 and 5.0 mg/m3; or	□ 50 g/L VOC Dry-fog coatings	□ 100 g/L VOC Rust preventative coatings
□ 5.0 mg/m3 or more.	□ 100 g/L VOC Faux finishing coatings - Clear topcoat	☐ 450 g/L VOC Stone consolidant
	□ 350 g/L VOC Faux finishing coatings - Decorative coatings	□ 50 g/L VOC Sacrificial anti-graffiti coatings
	□ 350 g/L VOC Faux finishing coatings - Glazes	□ 730 g/L VOC Shellac - Clear
	□ 350 g/L VOC Faux finishing coatings - Japan	□ 550 g/L VOC Shellac - Pigmented
	□ 50 g/L VOC Faux finishing coatings - Trowel applied coatings	□ 100 g/L VOC Specialty primers
	□ 150 g/L VOC Fire-proofing coatings	□ 100 g/L VOC Stains
	□ 50 g/L VOC Flats	□ 250 g/L VOC Stains, interior
	□ 50 g/L VOC Floor coatings	□ 340 g/L VOC Swimming pool coatings - Repair
	□ 100 g/L VOC Form release compound	□ 340 g/L VOC Swimming pool coatings - Other
	□ 150 g/L VOC Graphic arts (sign) coatings	□ 100 g/L VOC Traffic coatings
	□ 100 g/L VOC Industrial maintenance coatings	□ 100 g/L VOC Waterproofing sealers
	☐ 420 g/L VOC Industrial maintenance coatings - High temperature IM coatings	□ 100 g/L VOC Waterproofing concrete/masonry sealers
	☐ 100 g/L VOC Industrial maint. coatings - Non-sacrificial anti-graffiti coatings	☐ 350 g/L VOC Wood preservatives
	☐ 100 g/L VOC Industrial maintenance coatings - Zinc-rich IM primers	□ 120 g/L VOC Low solids coatings
	□ 450 g/L VOC Magnesite cement coatings	
	General Emissions Compliance Certification	
	□ UL Greenguard Gold	□ Intertek Environmental VOC+
Application: Interior Exterior	□ SCS Indoor Advantage Gold-Building Materials	□ Other

Flooring Systems-carpet, tile, resilient, engineered, LVT, wall	Table 4:					
base, rubber, solid wood, underlayments	Flooring					
1. Product Cost 2. Product Surface Area 3. Enter Product Name in Table 4 4. Select Compliance Certification 5. General Emissions Documentation shows this product compliant with CDPH v1.2-2017? Yes □ No □ □ 0.5 mg/m3 or less;	Product Name/Model/Description		Compliance Certification FloorScore (hard surface flooring) NSF/ANSI 332 [resilient flooring] SCS Indoor Advantage Gold - Building Materials UL Greenguard Gold Intertek Environmental VOC+			
 □ between 0.5 and 5.0 mg/m3; or □ 5.0 mg/m3 or more. 	-		Other			
Composite Wood	Table 5:	П	Inherently non-emitting			
particleboard, MDF, veneer	Composite Wood					
2. Product Surface Area 3. Enter Product Name in Table 5 4. Select Compliance Certification in Table 5	Product Name/Description		Compliance Certification CARB ATCM ULEF CARB ATCM NAF Salvaged or Reused			
Ceilings, Walls, Insulation	Table 6: Ceilings, Walls, Insulation					
1. Product Cost 2. Product Surface Area 3. Enter the Component in Table 6 4. General Emissions Documentation shows this product compliant with CDPH v1.1-2017? Yes □ No □ □ 0.5 mg/m3 or less; □ between 0.5 and 5.0 mg/m3; or □ 5.0 mg/m3 or more.	Product Name/Description		Compliance Certification FloorScore [hard surface flooring] NSF/ANSI 332 [resilient flooring] SCS Indoor Advantage Gold - Building Materials UL Greenguard Gold Intertek Environmental VOC+ Other			
Systems Furniture & Seating	Table 7:					
1. Product Cost 2. Enter Product Name in Table 7 3. Select Compliance Certification in Table 7 4. Select Compliance Method □ ANSI/BFMA e3-2014e Section 7.6.1=50% □ ANSI/BFMA e3-2014e1 Section 7.6.2 = 100% □ CDPH Standard v1.1 (Classroom Furniture Only) □ Salvaged or Reused	Product Name/Description	Cost	Compliance Certification UL Greenguard Gold SCS Indoor Advantage Gold-Furniture Intertek ETL Environmental VOC+ MAS Certified Green Intertek ETL Environmental VOC contributes @50% SCS Indoor Advantage -Furniture contributes @50% UL Greenguard Certified contributes @50%			

NOTES

WALLS = Generally vertical structural elements, All finish wall treatments, Interior columns, Exterior and interior wall glazing, Doors, Partial-height vertical surfaces (e.g., transoms, bulkheads, pony walls, knee walls, and similar structures normally Constructed and finished on-site), Architectural woodwork applied to walls, Built-in cabinetry, Floor-to-ceiling moveable demountable wall systems and partitions, cabinets/furniture built on site

CEILINGS = Overhead structural elements (exposed, finished, unfinished), Direct-applied ceiling systems, Suspended systems, Glazed skylights. Examples include painted drywall and plaster, acoustical suspension systems, specialty systems (plastic, metal, wood), and painted or otherwise finished structural elements

INSULATION = Thermal & Acoustic batt, loose fill, spray. Does not include HVAC insulation.

FURNITURE = Examples: individual and group seating; open-plan and private office workstations; desks and tables of all types; storage units, credenzas, bookshelves, filing cabinets, and other case goods; wall-mounted, visual display products (e.g., markerboards and tackboards, excluding electronic display products); and miscellaneous items (e.g., easels, mobile carts, freestanding screens, and movable partitions)





V4.1 LEED MR Submittal Form Building Product Disclosure & Optimization

Project:		
Subcontractor	Product Description	
Contact email	Product Name	
Specification #	Manufacturer	
Scope of work	Product Cost \$	

- 1. Complete 1 form for each product [applicable specification section typically CSI 2012 MasterFormat Divisions 3-10, 31, and 32]
- 2. Attach product specific documentation with criteria highlighted.
- 3. List total [not unit] material cost including all costs to deliver to the site. Exclude cost of equipment and labor to install.

MRc Environmental Product Declarations

Criteria	Material	Review	Review Standards	
LCA	Product Specific	Publicly available, Critically		
		reviewed	ISO 14044	□yes
Type III EPD	Industry Wide	External Verification	ISO 14025, EN15804 or ISO 21930,	
			Specific Manufacturer	□yes
Type III EPD	Product Specific	Internally reviewed	ISO 14071 cradle to gate, ISO 14025,	
			EN15804 or ISO 21930	□yes
Type III EPD *	Product Specific	3rd party external verification	ISO 14025, EN15804 or ISO 21930,	
			Specific Manufacturer	□yes

^{*}Product specific Type III EPDs with **3rd party external** verification for specific manufacturer valued at 1.5 product.

MRc Sourcing of Raw Materials

	Documentation	Docum	entation	100 mi of
Criteria	Requirement	Complete this section Attache	ed	jobsite?
Recycled Content	% post consumer =		lyes	□yes
	% pre consumer =		lyes	□yes
	Invoice with FSC COC on			
	a line item basis &			
	delivery to job site, COC			
FSC	certificate		lyes	□yes
Extended Producer	Take Back or Closed			
Responsibility	Loop Program		lyes	□yes
Bio Based	% content by weight =		lyes	□yes
Reuse			lyes	□yes

Only include local/regional backup if manufactured & extracted & purchased within 100 miles of site.

MRc4 Material Ingredients

Criteria	Requirement	Documentation Attached
Health Product		
Declaration	HPD Open Standard	□yes
Cradle to Cradle	Bronze level	□yes
	Red List Free/Declared	
Declare	LBC to 0.1% inventory	□yes
Manufacturer	CASRN #	
Inventory	Greenscreen List	□yes

 $Manufacturing\ refers\ to\ the\ assembly\ as\ a\ finished\ product.\ Assembly\ does\ not\ include\ on-site\ assembly,\ or\ installation.$

Harvesting refers to the location where raw material is recovered or extracted.