LEED O+M: Schools | v4 - LEED v4

Purchasing - facility maintenance and renovation

Possible 2 points

Glossary

Intent

To reduce the environmental harm from materials used in building renovations.

Requirements

Establishment

None.

Performance

Option 1. products and materials (1 point)

Purchase at least 50%, by cost, of the total maintenance and renovation materials that meet at least one of the following criteria. Include products specified in Materials and Resources prerequisite: Facility Maintenance and Renovation Policy. There is no minimum scope of renovation or new construction work required for eligibility of this credit. Each purchase can receive credit for each criterion met.

- Recycled content. Recycled content is the sum of postconsumer recycled content plus one-half the preconsumer recycled content.
- Wood products. Wood products must be certified by the Forest Stewardship Council or USGBC-approved equivalent.
- Bio-based materials. Bio-based products must meet the Sustainable Agriculture Network's Sustainable Agriculture Standard. Bio-based raw materials must be tested using ASTM Test Method D6866 and be legally harvested, as defined by the exporting and receiving country. Exclude hide products, such as leather and other animal skin material.
- Materials reuse. Reuse includes salvaged, refurbished, or reused products.
- Extended producer responsibility. Products purchased from a manufacturer (producer) that participates in an extended producer responsibility program or is directly responsible for extended producer responsibility. Products valued at 50% of their cost.
- GreenScreen v1.2 Benchmark. Products that have fully inventoried chemical ingredients to 100 ppm that have no Benchmark 1 hazards.
  - If any ingredients are assessed with the GreenScreen List Translator, value these products at 100% of cost.
  - If all ingredients are have undergone a full GreenScreen Assessment, value these products at 150% of cost.
- Cradle to Cradle Certified. End use products are certified Cradle to Cradle. Products will be valued as follows:
  - Cradle to Cradle v2 Gold: 100% of cost
  - Cradle to Cradle v2 Platinum: 150% of cost
  - Cradle to Cradle v3 Silver: 100% of cost
  - Cradle to Cradle v3 Gold or Platinum: 150% of cost
- International Alternative Compliance Path – REACH Optimization. End use products and materials that do not contain substances that meet REACH criteria for substances of very high concern. If the product contains no ingredients listed on the REACH Authorization or Candidate list, value at 100% of cost.
- Product Manufacturer Supply Chain Optimization. Use building products that:
  - Are sourced from product manufacturers who engage in validated and robust safety, health, hazard, and risk programs which at a minimum document at least 99% (by weight) of the ingredients used to make the building product or building material, and
  - Are sourced from product manufacturers with independent third party verification of their supply chain that at a minimum verifies:
    - Processes are in place to communicate and transparently prioritize chemical ingredients along the supply chain according to available hazard, exposure and use information to identify those that require more detailed evaluation
    - Processes are in place to identify, document, and communicate information on health, safety and environmental characteristics of chemical ingredients
    - Processes are in place to implement measures to manage the health, safety and environmental hazard and risk of chemical ingredients
    - Processes are in place to optimize health, safety and environmental impacts when designing and improving chemical ingredients
    - Processes are in place to communicate, receive and evaluate chemical ingredient safety and stewardship information along the supply chain
    - Safety and stewardship information about the chemical ingredients is publicly available from all points along the supply chain
- Low emissions of volatile organic compounds. The following products must either be inherently

nonemitting or be tested and determined compliant in accordance with California Department of Public Health Standard Method V1.1–2010, using the applicable exposure scenario. The default scenario is the private office scenario; classroom furniture may use the school classroom scenario. Both first-party and third-party statements of product compliance must follow the guidelines in CDPH SM V1.1–2010, Section 8. Organizations that certify manufacturers' claims must be accredited under ISO Guide 65. Laboratories that conduct the tests must be accredited under ISO/IEC 17025 for the test methods they use. Projects outside the United States may use (1) the CDPH standard method or (2) the German AgBB Testing and Evaluation Scheme (2010). Test products either with (1) ISO 16000-3: 2010, ISO 16000-6: 2011, ISO 16000-9: 2006, ISO 16000-11:2006, or (2) the DIBt testing method (2010). U.S. projects must follow the CDPH standard method.

  - thermal and acoustic insulation
  - flooring materials and finishes
  - ceiling materials and finishes
  - wall materials and finishes
- VOC content requirements for wet-applied products. In addition to meeting the general requirements for VOC emissions (above), on-site wet-applied products must not contain excessive levels of VOCs, for the health of the installers and other tradesworkers who are exposed to these products. To demonstrate compliance, a product or layer must meet the following requirements, as applicable. Disclosure of VOC content must be made by the manufacturer. Any testing must follow the test method specified in the applicable regulation.
  - All paints and coatings wet-applied on site must meet the applicable VOC limits of the California Air Resources Board (CARB) 2007, Suggested Control Measure (SCM) for Architectural Coatings, or the South Coast Air Quality Management District (SCAQMD) Rule 1113, effective June 3, 2011.
  - All adhesives and sealants wet-applied on site must meet the applicable chemical content requirements of SCAQMD Rule 1168, July 1, 2005, Adhesive and Sealant Applications, as analyzed by the methods specified in Rule 1168. The provisions of SCAQMD Rule 1168 do not apply to adhesives and sealants subject to state or federal consumer product VOC regulations.
  - For projects outside North America, all paints, coatings, adhesives, and sealants wet-applied on site must either meet the technical requirements of the above regulations, or comply with applicable national VOC control regulations, such as the European Decopaint Directive (2004/42/EC), the Canadian VOC Concentration Limits for Architectural Coatings, or the Hong Kong Air Pollution Control (VOC) Regulation.
  - If the applicable regulation requires subtraction of exempt compounds, any content of intentionally added exempt compounds larger than 1% weight by mass (total exempt compounds) must be disclosed.
  - If a product cannot reasonably be tested as specified above, testing of VOC content must comply with ASTM D2369-10; ISO 11890, part 1; ASTM D6886-03; or ISO 11890-2.
  - For projects in North America, methylene chloride and perchloroethylene may not be intentionally added in paints, coatings, adhesives, or sealants.
- Low emissions of formadehyde. Built-in cabinetry and architectural millwork containing composite woods must be constructed from materials documented to have low formaldehyde emissions that meet the California Air Resources Board requirements for ultra-low-emitting formaldehyde (ULEF) resins or no-added formaldehyde based resins. Salvaged and reused architectural millwork more than one year old at the time of occupancy is considered compliant, provided it meets the requirements for any site-applied paints, coatings, adhesives, and sealants.
- USGBC approved program. Other USGBC approved programs meeting leadership extraction criteria.

For credit achievement calculation, products sourced (extracted, manufactured, and purchased) within 100 miles (160 km) of the project site are valued at 200% of their base contributing cost.

AND/OR

Option 2. furniture (1 point)

Purchase at least 75%, by cost, of total furniture and furnishings that meet one or more of the following criteria. Each purchase can receive credit for each criterion met.

- Recycled content. Recycled content is the sum of postconsumer recycled content plus one-half the preconsumer recycled content, based on cost. The recycled content value of an assembly is determined by weight. The recycled fraction is multiplied by the cost of the assembly to determine the recycled cost value.
- Wood products. Wood products must be certified by the Forest Stewardship Council or USGBC-approved equivalent.
- Bio-based materials. Bio-based products must meet the Sustainable Agriculture Network's Sustainable Agriculture Standard. Bio-based raw materials must be tested using ASTM Test Method D6866 and be legally harvested, as defined by the exporting and receiving country. Exclude hide products, such as leather and other animal skin material.
- Materials reuse. Reuse includes salvaged, refurbished, or reused products.
- Extended producer responsibility. Products purchased from a manufacturer (producer) that participates in an extended producer responsibility program or is directly responsible for extended producer responsibility. Products valued at 50% of their cost.
- GreenScreen v1.2 Benchmark. Products that have fully inventoried chemical ingredients to 100 ppm that have no Benchmark 1 hazards.
  - If any ingredients are assessed with the GreenScreen List Translator, value these products at 100% of cost.
  - If all ingredients are have undergone a full GreenScreen Assessment, value these products at 150% of cost.
- Cradle to Cradle Certified. End use products are certified Cradle to Cradle. Products will be valued as follows:
  - Cradle to Cradle v2 Gold: 100% of cost
  - Cradle to Cradle v2 Platinum: 150% of cost
  - Cradle to Cradle v3 Silver: 100% of cost
  - Cradle to Cradle v3 Gold or Platinum: 150% of cost
- International Alternative Compliance Path – REACH Optimization. End use products and materials

that do not contain substances that meet REACH criteria for substances of very high concern. If the product contains no ingredients listed on the REACH Authorization or Candidate list, value at 100% of cost.

- Product Manufacturer Supply Chain Optimization. Use building products that:
  - Are sourced from product manufacturers who engage in validated and robust safety, health, hazard, and risk programs which at a minimum document at least 99% (by weight) of the ingredients used to make the building product or building material, and
  - Are sourced from product manufacturers with independent third party verification of their supply chain that at a minimum verifies:
    - Processes are in place to communicate and transparently prioritize chemical ingredients along the supply chain according to available hazard, exposure and use information to identify those that require more detailed evaluation
    - Processes are in place to identify, document, and communicate information on health, safety and environmental characteristics of chemical ingredients
    - Processes are in place to implement measures to manage the health, safety and environmental hazard and risk of chemical ingredients
    - Processes are in place to optimize health, safety and environmental impacts when designing and improving chemical ingredients
    - Processes are in place to communicate, receive and evaluate chemical ingredient safety and stewardship information along the supply chain
    - Safety and stewardship information about the chemical ingredients is publicly available from all points along the supply chain
- Low emissions of volatile organic compounds. Products must have been tested, following ANSI/BIFMA Standard Method M7.1–2011, and must comply with ANSI/BIFMA e3-2011 Furniture Sustainability Standard, Sections 7.6.1 (valued at 50% cost) or 7.6.2 (valued at 100% cost), using either the concentration modeling approach or the emissions factor approach. For classroom furniture, use the standard school classroom model in CDPH Standard Method v1.1. Salvaged and reused furniture more than one year old at the time of use is considered compliant, provided it meets the requirements for any site-applied paints, coatings, adhesives, and sealants.
- USGBC approved program. Other USGBC approved programs meeting leadership extraction criteria.

For credit achievement calculation, products sourced (extracted, manufactured, purchased) within 100 miles (160 km) of the project site are valued at 200% of their base contributing cost.

OR

Option 3. no alterations or furniture purchasing (1 point)

Make no alterations to the project space and do not purchase any furniture.

Address
2101 L Street NW
Suite 500
Washington, DC 20037

Within the United States:
1-800-795-1747

Outside the United States:
1-202-742-3792

© 2012-2015 U.S. Green Building Council