



# ADDITIONAL INFORMATION FOR FURNITURE SPECIFICATION

*The District of Columbia is committed to procuring quality goods and services in a timely manner and reasonable cost that support the District in meeting its sustainability goals. Compliance with specification guidance is sufficient to meet PPRA Section 1101(a) environmentally preferable procurement requirements. Additional contextual information is provided here to assist in the implementation of the specification. To access solicitation documents with full contract language, [click here](#).*



## BENEFITS

Many furniture products off-gas chemicals linked to allergies, asthma, reproductive disorders, and cancer. Sustainable furniture can **protect the health of building occupants** by limiting emissions of these harmful chemicals

Work performance may improve by up to **10%** by improving indoor environmental air quality.

## SOURCES

Lawrence Berkeley National Laboratory: [Indoor Air Quality Scientific Findings Resource Bank](#)

## Scope

The environmental specification addresses furniture used in schools and offices, including:

1. Chairs
2. Cubicles
3. Desks
4. Modules
5. Shelves
6. Sofas
7. Storage cabinets
8. Tables
9. Workstations



## Additional Information

Many furniture manufacturers offer products certified to one or more of the standards included in this specification. Use of these standards is typically shown on the webpage of the furniture manufacturer with additional detail available in product environmental fact sheets available online.

This specification includes multi-attribute standards. **Multi-attribute** standards, including BIFMA Level and Cradle to Cradle, cover multiple dimensions of performance. Products earn certification through a point system with prerequisites and optional points. Therefore, a certified product may not have a particular attribute (e.g., low emissions) unless it is a prerequisite for certification, or if the product's certification scorecard shows that optional points were achieved for that specific attribute.

Different levels of certification are available for multi-attribute labels; multiple levels qualify under this specification. All options to meeting furniture environmental requirements facilitate earning one or more credits through the LEED green building rating systems. Please see the Significance to the District section for additional details.



**Cradle to Cradle (C2C)** is a multi-attribute standard that covers a range of products, including furniture, across five categories: material health, material reutilization, renewable energy and carbon management, water stewardship, and social fairness. Product certification is awarded at four levels (Bronze to Platinum). The Bronze standard generally includes an inventory and a commitment to ongoing assessment, while higher levels require products to meet desired achievement levels within each category. To achieve a higher level, requirements at all lower levels need to be met as well. C2C certified products can be found in the Certified Products Registry on the [Cradle to Cradle website](#).



**BIFMA Level** certification is based on the ANSI/BIFMA e3-2019 standard, which was developed through a multi-stakeholder consensus process with manufacturers, government representatives, and other parties. Level certification means that an independent third party has certified that the product meets the criteria of the e3 standard. The standard includes prerequisites and optional credits in the following categories: materials, energy and atmosphere, human and ecosystem health, and social responsibility. The number of optional credits achieved determines the "level" of certification. Because products can earn credits in different categories, even products that are certified to the same level can have different environmental attributes. For example, even Level 3 (the highest level) products are not required to meet the industry standard for chemical emissions. Therefore, this specification requires a scorecard to be provided showing the product meets the emissions requirements of BIFMA e3 criterion 7.6.2. Certified products can be found in the [BIFMA Level database](#).



**Environmental Hotspots** The most important environmental benefits associated with this specification

<b>POLLUTANTS/TOXICITY/ HEAVY METALS</b>	<p>Many furniture products contain and emit volatile organic compounds (VOCs) which can impact indoor air quality. Many types of VOCs have been linked to a variety of adverse health effects ranging from headaches to cancer. <b>Level</b> furniture with Credit 7.6.2 satisfies California EPA’s OEHHA’s reference exposure VOC limits in the CA Section 01350 specification, California Department of Public Health, Standard Practice for the Testing of Volatile Organic Emissions from Various Sources using Small-Scale Environmental Chambers. <b>C2C</b> requires assessments of potentially harmful materials (assessed as “X”); C2C Bronze certification requires a phase-out strategy for “X” substances; Silver certification dictates strict limits on “X” substances; and Gold and Platinum products may not contain any “X” substances.</p>
<b>RECYCLED CONTENT</b>	<p>Depending on the optional credits achieved, <b>Level</b> furniture may use recycled content (Credits 5.7.1 - 5.7.2), which reduces the demand for virgin wood and other natural resources. <b>C2C</b> certification requires that intended cycling pathways for products be defined and that products contain different percentages of recyclable, compostable, or biodegradable materials for each level.</p>
<b>MATERIALS USE/SUSTAINABLE SOURCING</b>	<p>Depending on the credits achieved, <b>Level</b> furniture may use sustainable wood that supports responsible forest management (Credits 5.6.1 and 5.6.2). As noted above, <b>C2C</b> certification emphasizes the use of cycled and/or renewable content, and explicitly references responsibly sourced materials for levels Silver and above.</p>
<b>END-OF-LIFE DISPOSAL</b>	<p>Recycling furniture means that less of it is sent to landfills. <b>Level</b> awards points for buy-back/take-back or leasing programs (Credit 5.9.4.2). <b>C2C</b> certification includes the use of recyclable or compostable materials. In addition, District employees may donate used products to the Surplus Property Division (SPD). For more information about how to utilize the SPD please call the OCP Customer Contact Center at 202-724-4477.</p>
<b>ENERGY CONSUMPTION</b>	<p>Depending on the optional credits achieved, <b>Level</b> furniture may use less energy in the manufacturing process (Credit 6.5), and during use if the product includes lighting (Credit 6.6). <b>C2C</b> requires that some amount of electricity used in the manufacturing process be renewable, with amount varying for each level of certification.</p>
<b>WATER CONSUMPTION</b>	<p>Depending on the credits achieved, <b>Level</b> furniture may use less water in the manufacturing process (Credit 5.11.2) and may have reduced wastewater discharges (Credit 5.11.3). <b>C2C</b> sets different requirements for water stewardship for each level of certification.</p>
<b>PACKAGING</b>	<p>Depending on the credits achieved, <b>Level</b> furniture may use recovered materials in packaging, which conserves natural resources and reduces waste (Level Credit 5.7.3).</p>



## Significance to the District

**LEGISLATION** This specification supports compliance with [DC's Green Building Act](#) which requires LEED Gold certification for New Construction [See LEED New Construction row below for details].

**LEED FOR COMMERCIAL INTERIORS** BIFMA products with Level Credit 7.6, **SCS Indoor Air Advantage**, and **GREENGUARD** qualify for the [LEED v4 Indoor Environmental Quality: Low-Emitting Materials credit](#). The [Materials and Resources: Building Product Disclosure and Optimization — Material Ingredients credit](#) awards points for reporting and/or optimizing material ingredients. **C2C v2 Basic** level or higher, or **C2C v3 Bronze** level or higher, qualify for material ingredient reporting; **C2C v2 Gold** and higher, and **C2C v3 Silver** and higher, qualify for material ingredient optimization.

**LEED FOR EXISTING BUILDINGS: O&M** BIFMA products with Level Credit 7.6, **SCS Indoor Air Advantage**, and **GREENGUARD**, **C2C v2 Gold** and above, and **C2C v3 Silver** and above, are eligible for the [LEED v4 Materials and Resources: Purchasing — Facility Maintenance and Renovation credit](#). Furniture is also mentioned in LEED's Facility Maintenance and Renovation Policy prerequisite.

**LEED FOR NEW CONSTRUCTION** BIFMA products with Level Credit 7.6, **SCS Indoor Air Advantage**, and **GREENGUARD** qualify for the [LEED v4 Indoor Environmental Quality: Low-Emitting Materials credit](#). The [Materials and Resources: Building Product Disclosure and Optimization — Material Ingredients credit](#) awards points for reporting and/or optimizing material ingredients. **C2C v2 Basic** level or higher, or **C2C v3 Bronze** level or higher, qualify for material ingredient reporting; **C2C v2 Gold** and higher, and **C2C v3 Silver** and higher, qualify for material ingredient optimization.

For more information about sustainable specification guidance or the District's Sustainable Purchasing Program, please visit: <https://ocp.dc.gov/page/sustainable-purchasing-program> or call the OCP Procurement Center of Excellence at: [202.724.4477](tel:202.724.4477) or email [sppdc@dc.gov](mailto:sppdc@dc.gov).