



# X99

**Minimize impact. Maximize investment.** X99® is the design-with-performance seating solution for minimizing impact on the environment—from its manufacturing process that preserves the quality of air to inclusion of recycled content. And because it's made to last, your investment is designed with the environment in mind. • **X99 helps achieve LEED credits.** X99 may contribute to the individual prerequisites and credits of the LEED Rating Systems. Because LEED is a holistic building rating system and sustainable design guideline, there is no such thing as LEED-certified products—only ways of using and applying products to support the criteria.

## OVERVIEW SECTIONS:

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**Air Quality.** The materials in X99® contribute to better indoor air quality. For example: X99 is GREENGUARD™ certified as low-emitting for formaldehyde, volatile organic compounds (VOCs) and aldehydes. Also, the water-based foam in the cushions is free from CFC and HCFC.

**Recycled Content.** X99 task seating products have varying levels of recycled content that range from 48% to 52%. Standard fabrics that include 100% recycled content and renewable materials content are available. Packaging has 35% recycled content and is 100% recyclable. Blanket wrapping is also available upon request. At end of its useful life, seating can be disassembled and recycled. Plastic component materials are identified to encourage recycling. Fabric is removable for recycling because there's no glue used on the upholstery.

**Design for the Environment (DfE).** X99 is designed for durability and covered by a limited lifetime warranty. Parts, such as seat and back cushions and casters, may be replaced in the field to extend the life of the chair. Designing product that maximizes the years of useful life is one of many strategies related to Design for Environment (DfE).

**Contributing to LEED.** In some cases X99 contributes directly to individual LEED points, but in other cases can only help meet the overall intent. There are relatively few instances where selection of any one manufacturer's product will lead directly to acquisition of a LEED point(s). The following product information highlights direct impacts as well as application tips and strategies to help you maximize the contribution of points toward your project's LEED certification.

# LEED™ for Commercial Interiors (CI)

LEED-CI Credit

Intent/Requirement

X99® Seating Contribution

## MATERIALS AND RESOURCES

### Construction Waste Management Credit 2.1 and 2.2 (1-2 pts)

**Intent:** Divert construction, demolition and packaging debris from landfill disposal. Redirect recyclable recovered resources back to the manufacturing process. Redirect reusable materials to appropriate sites.

**Requirement:** Develop and implement a construction waste management plan, quantifying material diversion goals. Recycle and/or salvage at least 50% (75% credit 2.2) of construction, demolition and packaging debris.

- Packaging is 100% recyclable. Packaging consists of corrugated fiberboard, (35% recycled content) high-density polyethylene bags and polypropylene banding, all of which are 100% recyclable.

### Resource Reuse – Furniture and Furnishings Credit 3.3 (1 pt)

**Intent:** Reuse building materials and products in order to reduce demand for virgin materials and reduce waste, thereby reducing impacts associated with the extraction and processing of virgin resources.

**Requirement:** Use salvaged, refurbished, or used furniture and furnishings for 30% of the total F&F budget.

- X99 task chairs are designed to be refurbished. Seat cushions and other components are easily replaceable.

### Recycled Content Credit 4.1 and 4.2 (1-2 pts)

**Intent:** Increase demand for building products that incorporate recycled content material, thereby reducing impacts resulting from extraction and processing of virgin materials.

**Requirement:** Use materials, including Division 12 (furniture and furnishings), with recycled content such that the sum of post-consumer recycled content plus one-half of the post-industrial content constitutes at least 10% (1 pt) or 20% (2 pts) of the total value of the materials in the project.

- X99 chairs have various recycled content values as listed in the chart below:

X99 Seating Recycled Content Examples	Total Recycled Content % BY WEIGHT	Post- Consumer Content % BY WEIGHT	Post- Industrial Content % BY WEIGHT	LEED RC (PC+1/2PI) % BY VALUE
X99 Task Chair.....	48%	21%	27%	35%
X99 Seminar .....	52%	29%	23%	41%

# LEED™ for Commercial Interiors (CI)

LEED-CI Credit

Intent/Requirement

X99® Seating Contribution

## MATERIALS AND RESOURCES

**Regional Materials –  
20% Manufactured Regionally**  
Credit 5.1 (1 pt)

**Intent:** Increase demand for building materials and products that are extracted and manufactured within the region, thereby supporting the regional economy and reducing the environmental impacts resulting from transportation.

**Requirement:** Use a minimum of 20% of the combined value of construction and Division 12 (furniture and furnishings) materials and products that are manufactured regionally within a radius of 500 miles.

- X99 seating is manufactured in Allegan, Michigan. Credit contribution depends on the project location.

**Rapidly Renewable Materials**  
Credit 6 (1 pt)

**Intent:** Reduce the use and depletion of finite raw and long-cycle renewable materials by replacing them with rapidly renewable materials.

**Requirement:** Use rapidly renewable construction and Division 12 (furniture and furnishing) materials and products, made from plants that are typically harvested within a ten-year or shorter cycle, for 5% of the total value of all materials and products used in the project.

- Several fabrics available for X99 task chairs are made with rapidly renewable materials, such as cotton and wool. Fabrics that include these materials are Bute, Vogue, Intaglio, Novial, Andalusia, Arborea and Fantasia.

## INDOOR ENVIRONMENTAL QUALITY

**Low Emitting Materials –  
Systems Furniture and Seating**  
Credit 4.5 (1 pt)

**Intent:** Reduce the quantity of indoor air contaminants that are odorous, potentially irritating and/or harmful to the comfort and well-being of installer and occupants.

**Requirement:** All systems furniture and seating introduced into the project space that has been manufactured, refurbished or refinished within one year prior to occupancy must meet one of the requirements below:

**OPTION A**

- GREENGUARD™ Indoor Air Quality Certified

**OPTION B**

- Indoor air calculations meet the criteria as stated in the LEED-CI Credit 4.5.

- The X99 family of seating is GREENGUARD™ certified.

# LEED™ for New Construction (NC)

LEED-NC Credit

Intent/Requirement

X99® Seating Contribution

## MATERIALS AND RESOURCES

**Resource Reuse**  
Credit 3.2 (1 pt)

**Intent:** Reuse building materials and products in order to reduce demand for virgin materials and reduce waste, thereby reducing impacts associated with the extraction and processing of virgin resources.

**Requirement:** Use salvaged, refurbished, or reused materials, products and furnishings for at least 10% of building materials.

- X99 is designed to be refurbished and reused to extend the useful life cycle of the product. Seat cushions and other components are easily replaceable.

**Recycled Content – 5% or 10%**  
Credit 4.1 and 4.2 (1-2 pts)

**Intent:** Increase demand for building products that incorporate recycled content material, therefore reducing impacts resulting from extraction and processing of virgin materials.

**Requirement:** Use materials with recycled content such that the sum of post-consumer recycled content plus one-half of the post-industrial content constitutes at least 5% (1 pt) or 10% (2 pts) of the total value of the materials in the project.

- X99 chairs have various recycled content values as listed in the chart below:

X99 Seating Recycled Content Examples	Total Recycled Content % BY WEIGHT	Post-Consumer Content % BY WEIGHT	Post-Industrial Content % BY WEIGHT	LEED RC (PC+1/2PI) % BY VALUE
X99® Task Chair .....	48%	21%	27%	35%
X99® Seminar .....	52%	29%	23%	41%

**Regional Materials – 20% Manufactured Regionally**  
Credit 5.1 (1 pt)

**Intent:** Increase demand for building materials and products that are extracted and manufactured within the region, thereby supporting the regional economy and reducing the environmental impacts resulting from transportation.

**Requirement:** Use a minimum of 20% of building materials and products that are manufactured regionally within a radius of 500 miles.

- X99 is manufactured in Allegan, Michigan. Credit contribution depends on the project location.

**Rapidly Renewable Materials**  
Credit 6 (1 pt)

**Intent:** Reduce the use and depletion of finite raw and long-cycle renewable materials by replacing them with rapidly renewable materials.

**Requirement:** Use rapidly renewable building materials and products (made from plants that are typically harvested within a ten-year or shorter cycle) for 5% of the total value of all building materials and products used in the project.

- Several fabrics available for X99 task chairs are made with rapidly renewable materials, such as cotton and wool. Fabrics that include these materials are Bute, Vogue, Intaglio, Novial, Andalusia, Arborea and Fantasia.

# LEED™ for Existing Buildings (EB)

LEED-EB Credit

Intent/Requirement

X99® Seating Contribution

## MATERIALS AND RESOURCES

**Resource Reuse – Construction, Demolition and Renovation Waste Management**  
Credit 1.1 and 1.2 (1-2 pts)

**Intent:** Divert construction, demolition and land-clearing debris from landfill and incineration disposal. Redirect recyclable recovered resources back to the manufacturing process. Redirect reusable materials to appropriate sites.

**Requirement:** Develop and implement a Waste Management Policy covering any future building retrofit, renovation or modification of the site. Quantify diversions of construction, demolition and land-clearing debris from landfill and incineration disposal by weight or volume.

- MR Credit 1.1: Divert at least 50% of construction, demolition and land-clearing waste from landfill and incineration disposal. (1 pt)
- MR Credit 1.2: Divert at least 75% of construction, demolition and land-clearing waste from landfill and incineration disposal. (1 additional pt)

- X99 task chair packaging is 100% recyclable. Packaging consists of corrugated fiberboard, (35% recycled content) high-density polyethylene bags and polypropylene banding, all of which are 100% recyclable.

**Optimize Use of Alternative Materials**  
Credit 2.1 and 2.5 (1-5 pts)

**Intent:** Reduce the environmental impacts of the materials acquired for use in the operations and maintenance of buildings and in the upgrading of building services.

**Requirement:** Maintain a sustainable purchasing program covering at least office paper, office equipment, furniture, furnishings and building materials for use in the building and on the site. A template calculator will be provided for LEED-EB MR Credit 2.1-2.5. One point will be awarded for each 10% of total purchases over the performance period (on a dollar basis) that achieves at least one of the following sustainability criteria:

- Contains at least 70% salvaged material from off site or outside the organization.
- Contains at least 70% salvaged from on site through an internal organization materials & equipment reuse program.
- Contains at least 10% post-consumer or 20% post-consumer material.
- Contains at least 50% rapidly renewable materials.
- Is FSC-certified wood.
- Contains at least 50% materials harvested and processed or extracted and processed within 500 miles of the project.

- X99 chairs have various recycled content values as listed in the chart on the next page.
- Several fabrics available for X99 task chairs are made with rapidly renewable materials, such as cotton and wool. Fabrics that include these materials are Bute, Vogue, Intaglio, Novial, Andalusia, Arborea and Fantasia.
- X99 seating is designed to be refurbished and reused to extend the useful life cycle of the product. Seat and back cushions, and other components are easily replaceable. X99 seating is manufactured in Allegan, Michigan. Credit contribution depends on the project location.

# LEED™ for Existing Buildings (EB)

LEED-EB Credit

Intent/Requirement

X99° Seating Contribution

## MATERIALS AND RESOURCES

### Optimize Use of Alternative Materials

X99 Seating  
Recycled Content  
Examples

Total  
Recycled  
Content  
% BY WEIGHT

Post-  
Consumer  
Content  
% BY WEIGHT

Post-  
Industrial  
Content  
% BY WEIGHT

LEED  
RC  
(PC+1/2PI)  
% BY VALUE

X99° Task Chair .....	48%	.....21%	.....27%	.....35%	.....
X99° Seminar .....	52%	.....29%	.....23%	.....41%	.....

### Sustainable Cleaning Products and Materials Credit 4.1 – 4.3 (1-3 pts)

**Intent:** Reduce the environmental impacts of cleaning products, disposable janitorial paper products and trash bags.

**Requirement:** Implement sustainable purchasing for cleaning materials and products, disposable janitorial paper products and trash bags. Cleaning product and material purchases include building purchases for use by in house staff or used by outsourced service providers. Calculate the percentage of the total sustainable material and product purchases that meet at least one of the specified sustainability criteria. The percentage of the total sustainable cleaning product and material purchases determine the number of points earned up to a total of 3 points. One point will be awarded for each 30% of the total annual purchases of these products (on a cost basis) that meet one of the following sustainability criteria:

- Cleaning products that meet the Green Seal GS-37 standard if applicable, OR if GS-37 is not applicable (e.g. for products such as carpet cleaners, floor finishes or strippers), use products that comply with the California Code of Regulations maximum allowable VOC levels.
- Disposable janitorial paper products and trash bags that meet the minimum requirements of U.S. EPA's Comprehensive Procurement Guidelines.

- X99 seating is designed to be cleaned with low environmental impact cleaning products.