



X Series

Minimize impact. Maximize investment. X Series® files and pedestals are all about making a statement in aesthetics and in environmentally responsible design—from the 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. **X Series helps achieve LEED credits.** X Series 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.

X Series® Contributions to LEED™

OVERVIEW SECTIONS:

1. LEED-CIpages 3-5
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Air Quality. The materials in X Series contribute to better indoor air quality. For example: X Series is GREENGUARD™ certified as low-emitting for formaldehyde, volatile organic compounds (VOCs) and aldehydes.

Recycled Content. X Series products have an average of 30% (by weight) recycled content with 25% post-consumer recycled content. Plastic trim components are recyclable. Where applicable, X Series is available with high-recycled content and renewable content fabrics. Packaging has a minimum of 35% recycled content and is 100% recyclable. File and pedestals are up to 99% recyclable.

Design for the Environment (DfE). X Series is designed for durability and covered by a limited lifetime warranty. Parts, such as pulls and casters, may be replaced in the field to extend the life of the product. 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 X Series 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

X Series® Contribution

MATERIALS AND RESOURCES

Construction Waste Management Credit 2.1 (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: Recycle and/or salvage at least 50% (1 pt) or 75% (2 pts) of construction, demolition and packaging debris.

- X Series packaging is 100% recyclable. Packing 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.

- X Series file and pedestal products are extremely durable and can be counted on for many years of use. These products can easily be reused and/or refurbished for a new interior space.

Recycled Content Furniture and Furnishings 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.

- X Series average recycled content information is listed in the chart below.
- Veneer door and drawer fronts can be ordered with wheatboard cores. Wheatboard is a 100% recycled (post-industrial) content material and its use can increase the total recycled content of a storage unit.
- Where applicable, X Series products can be ordered with 100% recycled content fabrics.

X Series Files and Pedestals 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
X Series Files (w/ no counterweight).....	30%	25%	5%	28%
X Series Mobile Pedestal.....	43%	33%	10%	38%

LEED™ for Commercial Interiors (CI)

LEED-CI Credit

Intent/Requirement

X Series® Contribution

MATERIALS AND RESOURCES

**Regional Materials –
20% Manufactured Regionally**
Credit 5.1 and 5.2 (1 pt)

Intent: Increase demand for building materials and products that are 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.

- X Series storage products are manufactured in Holland and Big Rapids, Michigan, within a 500-mile radius of approximately 50% of the U.S. population. 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 for the project.

- X Series can be ordered with wheatboard core material on veneer door and drawer fronts. Wheatboard, an agriboard product, qualifies as a rapidly renewable material.
- X Series product, where applicable, is available with fabrics made from wool and cotton which are considered renewable materials. These fabrics include Bute, Vogue, Intaglio, Novial, Andalusia, Arborea and Fantasia.

Certified Wood
Credit 7 (1 pt)

Intent: Encourage environmentally responsible forest management.

Requirement: When using new wood-based product and materials, use a minimum of 50% that are certified in accordance with the Forest Stewardship Council's (FSC) Principles and Criteria. Division 12 (furniture and furnishings) material value is included in the determination of the certified-wood content.

- Veneer fronts on X Series storage are available with FSC certified wood veneer. FSC certificates are available upon request.
- Substitution of wheatboard in veneer door and drawer fronts reduces total project wood content (wheatboard is a non-wood agrifiber byproduct), increasing the impact of FSC woods specified and making it easier to achieve 50% FSC wood use. Wheatboard is available as a special for X Series drawer fronts.

LEED™ for Commercial Interiors (CI)

LEED-CI Credit

Intent/Requirement

X Series® Contribution

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.

- X Series is GREENGUARD™ certified.

LEED™ for New Construction (NC)

LEED-CI Credit

Intent/Requirement

X Series® Contribution

MATERIALS AND RESOURCES

Construction Waste Management Divert from Landfill

Credit 2.1 (50%) or 2.2 (75%) (1-2 pts)

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

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

- X Series packaging is 100% recyclable. Packing 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 3.1 (5%), 3.2 (10%) (1-2 pts)

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 5% or 10% of building materials. (1-2 pts)

- X Series file and pedestal products are extremely durable and can be counted on for many years of use. These products can easily be reused and/or refurbished for a new interior space.

Recycled Content 5% to 10% (post consumer + 1/ post-industrial)

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 new 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.

- X Series average recycled content information is listed in the chart below.
- Veneer door and drawer fronts can be ordered with wheatboard cores. Wheat board is a 100% recycled (post-industrial) content material and its use can increase the total recycled content of a storage unit.
- Where applicable, X Series products can be ordered with 100% recycled content fabrics.

X Series Files and Pedestals 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
X Series Files and Pedestals.....	30%	25%	5%	28%
X Series Mobile Pedestal.....	43%	33%	10%	38%

LEED™ for New Construction (NC)

LEED-CI Credit

Intent/Requirement

X Series® 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 building materials and products that are manufactured regionally within a 500-mile radius.

- X Series storage products are manufactured in Holland and Big Rapids, Michigan, within a 500-mile radius of approximately 50% of the U.S. population. Credit contribution depends on the project location.

**Regional Materials –
50% Extracted Regionally**
Credit 5.2 (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: In addition to the requirements of MR 5.1, use a minimum of 50% of the building materials and products that are extracted, harvested or recovered (as well as manufactured) within 500 miles of the project.

- X Series storage products are manufactured in Holland and Big Rapids, Michigan, within a 500-mile radius of approximately 50% of the U.S. population. Credit contribution depends on the project location.

Rapidly Renewable Materials
Credit 6 (1 pt)

Intent: Reduce the use and depletion of finite raw materials 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 used in the project.

- X Series can be ordered with wheatboard core material on veneer door and drawer fronts. Wheatboard, an agriboard product, qualifies as a rapidly renewable material.
- X Series product, where applicable, is available with fabrics made from wool and cotton which are considered renewable materials. These fabrics include Bute, Vogue, Intaglio, Novial, Andalusia, Arborea and Fantasia.

Certified Wood
Credit 7 (1 pt)

Intent: Encourage environmentally responsible forest management.

Requirement: Use a minimum of 50% of wood-based materials and products, certified in accordance with the Forest Stewardship Council's (FSC) Principles and Criteria, for wood building components including, but not limited to, structural framing and general dimensional framing, flooring, finishes, furnishings and non-rented temporary construction applications such as bracing, concrete form work and pedestrian barriers.

- Veneer fronts on X Series file and pedestal products are available with FSC certified wood veneer.

LEED™ for New Construction (NC)

LEED-CI Credit

Intent/Requirement

X Series® Contribution

INDOOR ENVIRONMENTAL QUALITY

**Low-Emitting Materials –
Composite Wood**
Credit 4.4 (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 installers and occupants.

Requirement: Composite wood and agri-fiber products must contain no added urea-formaldehyde resins.

- Wheatboard with no added urea-formaldehyde is available as an optional core material for veneer storage doors and drawer fronts.

LEED™ for Existing Buildings (EB)

LEED-CI Credit

Intent/Requirement

X Series® Contribution

MATERIALS AND RESOURCES

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)

- X Series packaging is 100% recyclable. Packaging consists of corrugated fiberboard, high-density polyethylene bags and polypropylene banding, all of which are 100% recyclable.

Optimize Use of Alternative Materials
Credit 2.1 – 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 furniture for use in the building and on the site. One point (up to a maximum of five) will be awarded for each 10% of total purchases over the performance period (on a dollar basis) that achieve at least one of the following sustainability criteria:

- Contains at least 10% post-consumer or 20% post-industrial material
- Contains at least 50% rapidly renewable materials
- Is FSC-certified wood
- Contains at least 50% materials harvested and processed or extracted within 500 miles of the project

Note each purchase can only receive credit against a single requirement.

- X Series average recycled content information is listed in the chart on the next page.
- Veneer door and drawer fronts can be ordered with wheatboard cores. Wheatboard is a 100% recycled (post-industrial) content material and its use can increase the total recycled content of a storage unit. Wheatboard is also made from rapidly renewable materials and can qualify for either the rapidly renewable requirement or the recycled content requirement, but not both.
- Where applicable, X Series products can be ordered with 100% recycled content fabrics.
- FSC certified veneer is available on X Series products.
- X Series storage products are manufactured in Holland and Big Rapids, Michigan, within a 500-mile radius of approximately 50% of the U.S. Credit contribution depends on the project location.

LEED™ for Existing Buildings (EB)

LEED-CI Credit

Intent/Requirement

X Series® Contribution

MATERIALS AND RESOURCES

Optimize Use of Alternative Materials	X Series Files and Pedestals Recycled Content Examples	Total Recycled Content	Post- Consumer Content	Post- Industrial Content	LEED RC (PC+1/2PI)
		% BY WEIGHT	% BY WEIGHT	% BY WEIGHT	% BY VALUE
	X Series Files & Pedestals	30%	25%	5%	28%
	X Series Mobile Pedestal.....	43%	33%	10%	38%

Intent and Requirement information is paraphrased from the U.S. Green Building Council (USGBC) publication "Green Building Rating System for Existing Buildings, Version 2". For exact wording consult the USGBC Web site at www.usgbc.org