

Trio Bench is ergonomic, low maintenance, recyclable and easy to disassemble. The frame is comprised of 100% recyclable solid aluminum containing high recycled content and a low- or no-VOC powdercoat finish. The seat slats are made of FSC® 100% Cumaru hardwood or corrosion-resistant aluminum. FSC 100% means that 100% of the wood is responsibly sourced from forests certified by the Forest Stewardship Council, which is recognized as the gold standard of forest management.

**Recycled Content & Certifications** 

Configurations	Post- Industrial Recycled Content	Post- Consumer Recycled Content	Total Recycled Content	3 <sup>rd</sup> Party Certifications
Trio Bench, 6 foot, backed, extruded aluminum slats, with or without intermediate arms	35%	0%	35%	-
Trio Bench, 6 foot, backed, FSC 100% Cumaru hardwood slats, with or without intermediate arms	35%	0%	35%	FSC 100%
Trio Bench, 6 foot, backless, extruded aluminum slats, with or without intermediate arms	35%	7%	42%	-
Trio Bench, 6 foot, backless, FSC 100% Cumaru hardwood slats, with or without intermediate arms	35%	7%	42%	FSC 100%
Trio Bench, 8 foot, backed, extruded aluminum slats, with or without intermediate arms	29%	0%	29%	-
Trio Bench, 8 foot, backless, extruded aluminum slats, with or without intermediate arms	30%	6%	36%	-

FSC License Code: FSC-C004453

## **Green Building Standards**

#### LEED® v3

- MR2: Construction Waste Management packaging is designed to be reusable or recyclable. See below for details.
- MR4: Recycled Content this product contains recycled material. Recycled content is shown above for all standard options.
- MR5: Regional Materials this product is manufactured in Pittsburgh, PA. Contact for details.
- MR7: Certified Wood hardwood used in this product is certified FSC 100% by the Forest Stewardship Council (SCS-COC-001461).
- IEQp2: Environmental Tobacco this product may be used to help designate a smoking area away from doors, windows, and ventilation inlets.

#### LEED v4

- MRp2/MR5: Construction Waste Management packaging is designed to be reusable or recyclable. See below for details.
- MR3: Sourcing of Raw Matls. (wood) hardwood used in this product is certified FSC 100% by the Forest Stewardship Council (SCS-COC-001461). (recycled content) this product contains recycled material. Recycled content is shown above for all standard options.

(regional materials) – this product is manufactured in Pittsburgh, PA. Contact for details.

EQp2: Environmental tobacco smoke control - this product may be used to help designate a smoking area away from doors, windows, & ventilation inlets.

EQ2: Low-emitting Materials - inherently non-emitting sources. Contact for details.

## Green Globes™

- 3.5.2.2 Interior Fit-Outs hardwood used in this product is certified FSC 100% by the Forest Stewardship Council (SCS-COC-001461).
- 3.5.4.1 Construction Waste packaging is designed to be reusable or recyclable. See below for details.
- 3.5.6.3 Deconstruction and Disassembly this product can be disassembled to separate recyclable components.
- 3.7.2.1 Volatile Organic Compounds inherently non-emitting sources. Contact for details.
- 3.7.2.9 Other Indoor Pollutants (Tobacco...) this product may be used to help designate a smoking area away from doors, windows, & ventilation inlets.

### Estidama Pearl Rating System: Design & Construction, Version 1.0

- LBi-R2: Smoking Control this product may be used to help designate a smoking area away from doors, windows, and ventilation inlets.
- LBi-2.5: Material Emissions: Formaldehyde Reduction inherently non-emitting sources. Contact for details.
- SM-R1: Hazardous Material Elimination product contains no ACMs and no CCA-treated timber.
- SM-R2/SM-13: Construction Waste Management packaging is designed to be reusable or recyclable. See below for details.
- SM-12: Reused or Certified Timber hardwood used in this product is certified FSC 100% by the Forest Stewardship Council (SCS-COC-001461).

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## **Green Building Standards continued**

### SITES v2 Rating System

Materials P5.1: Threatened tree species - hardwood used in this product is certified FSC 100% by the Forest Stewardship Council (SCS-COC-001461).

Materials C5.3: Design for adaptability and disassembly - this product can be disassembled to separate recyclable components.

Materials C5.5: Use recycled content materials - this product contains recycled material. Recycled content is shown above for all standard options.

Materials C5.6: Use regional materials - this product is manufactured in Pittsburgh, PA. Contact for extraction information.

Materials C5.7: Responsible extraction of raw materials - hardwood used in this product is certified FSC 100% by the Forest Stewardship Council (SCS-COC-001461).

HHWB C6.10: Minimize exposure to environmental tobacco smoke (ETS) - this product may be used to help designate a smoking area away from doors, windows, and ventilation inlets.

Construction C7.5: Divert construction and demolition materials from disposal - packaging is designed to be reusable or recyclable. See below for details.

#### **Product Materials**

Material	Description	Mainte- nance (0-5)*	Inherent Value (0-5)**	Biodegrad- able	Corrosion/ Wear Resistant	Rapidly Renewable	Recyclable	Scratch Resistant
Aluminum	Corrosion-resistant metal that is suitable for many fabrication methods.	3	3		x		x	
Wood – Cumaru	Tropical hardwood valued for its appearance, strength, and high resistance to insects and decay. Native to Central and South America.	3	1	х			х	

<sup>\*</sup>Maintenance ratings are assigned as follows: 0 – High level of maintenance required to keep up product performance and aesthetics; 5 – Absolutely no maintenance required to keep up product's visual appearance and performance characteristics;

## **Processes**

Process	Description
Aluminum Making	A two-step process by which the aluminum is first dissolved in a caustic bath and then precipitated out in crystals. This two-step process can be circumvented by using recycled scrap that is melted down to form new parts.
Aluminum Treatment	Aluminum receives a treatment to improve corrosion resistance and coating adhesion.
Anodizing	An electrolytic passivation process used to increase the thickness of the natural oxide layer on aluminum. Produces a protective surface that inhibits further oxidation (corrosion).
Casting	The process of creating a solid object by pouring molten metal into a mold and allowing it to cool.
Cutting	A variety of methods may be used to cut through various materials.
Extruding	Process in which heated metal is pushed through a cross-sectional die to create a linear part with a specific shape.
Forming	A mechanical process used to alter the shape of metal.
Powdercoating	A solvent-free finishing method in which electrically charged particles of pigmented resins are sprayed onto a product. Electrical grounding of the coated object causes the charged powder to adhere to the surface. When baked in a curing oven the deposited powder melts and fuses together to form a durable, cross-linked coating.
Sand Blasting	The process of smoothing, shaping and cleaning a hard surface by forcing solid particles across that surface at high speeds to provide an even finish.
Wood Finishing	Wood is cut and sanded smooth. Finishes are applied to adjust the wood's color, enhance its appearance or to protect it from staining or weathering.
Wood Processing	Wood milled from trees and turned into lumber.



<sup>\*\*</sup>Inherent value ratings are assigned based on the material's scrap value: 0 – No scrap value, or negative scrap value, and/or no scrap market; 5 – High scrap value, accompanied by robust scrap market



**Packaging Materials** 

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Material	Туре	Description	Disposal
Cardboard	Box	Small or light products are packaged in cardboard boxes. Reused for shipping.	Reuse/Recycle
Foam	Sheets	Micro foam sheets are used to protect the finish on products.	Reuse
Plastic	Band	Banding is used to keep products secured to a pallet during transport.	Recycle
Plastic	Shrink wrap	Shrink wrap is used to protect the finish on products and also to hold padding to products.	Recycle
Steel	Band	Banding is used to keep products secured to a pallet during transport.	Recycle
Wood	Crate	Wood crates are made to fit onsite and are reused when possible. Wood scraps are recycled into mulch.	Reuse/Recycle
Wood	Pallet	Used in shipping. Reused onsite until no longer serviceable, then recycled.	Reuse/Recycle

**Transport** 

Method	Type Description					
Boat	Overseas	Some product components are shipped by cargo ship from overseas.				
Ground	Truck/Rail	Some incoming shipments and almost all outgoing shipments to customers are sent via ground transportation. This can include truck and often rail transport depending on the final destination. We are an EPA SmartWay® Transport Partner.				

# Maintenance & Use

Maintenance or Use	Description	Chemicals Required
Clean with Water and Mild Cleaner	This product requires a damp cloth and a mild, nontoxic cleaner for maintenance.	Mild, water-based cleaner
Ergonomic	Product is designed for ergonomic use, which will contribute to service life.	N/A
Tobacco Smoke Control	This product may be used to help designate a smoking area away from doors, windows, and ventilation inlets.	N/A
Wood Finishing	Wood in this product can be allowed to weather, but must be refinished with wood oil to retain the original look.	Wood oil

Disposal

Disposai				
Method	Description			
Biodegradable	Wood components of this product are biodegradable.			
Disassemble	Product can be disassembled to separate recyclable components.			
Recyclable - Fully	Product is fully recyclable.			
Recycling - Scrap	Materials can be sold for scrap.			
Reuse	This item can be reused in the same or different function.			

# **SUMMARY**

Category Type	Property/Component	6 foot, backed, extruded aluminum slats	6 foot, backed, FSC 100% Cumaru hardwood slats	6 foot, backless, extruded aluminum slats	6 foot, backless, FSC 100% Cumaru hardwood slats	8 foot, backed, extruded aluminum slats	8 foot, backless, extruded aluminum slats
Basic	Post-Industrial Recycled Content	35%	35%	35%	35%	29%	30%
Basic	Post-Consumer Recycled Content	0%	0%	7%	7%	0%	6%
Basic	Total Recycled Content	35%	35%	42%	42%	29%	36%
Basic	3rd Party Cert	-	FSC 100%	-	FSC 100%	-	-
LEED v3	MR: Construction Waste Management	х	х	х	х	х	х
LEED v3	MR: Recycled Content	х	х	х	х	х	х
LEED v3	MR: Regional Materials	Contact	Contact	Contact	Contact	Contact	Contact
LEED v3	MR: Certified Wood		х		х		
LEED v3	IEQ: Environmental Tobacco	х	х	х	х	Х	Х
LEED v4	MR: Construction Waste Management	х	х	х	х	Х	х

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# **SUMMARY** continued

Category Type	Property/Component	6 foot, backed, extruded aluminum slats	6 foot, backed, FSC 100% Ipé hardwood slats	6 foot, backless, extruded aluminum slats	6 foot, backless, FSC 100% lpé hardwood slats	8 foot, backed, extruded aluminum slats	8 foot, backless, extruded aluminum slats
LEED v4	MR: Sourcing of Raw Matlswood		x		x		
LEED v4	MR: Sourcingrecycled content	х	х	х	х	х	Х
LEED v4	MR: Sourcingregional materials	Contact	Contact	Contact	Contact	Contact	Contact
LEED v4	EQ: Environmental tobacco smoke control	х	х	х	х	х	Х
LEED v4	EQ: Low-emitting Materials	Contact	Contact	Contact	Contact	Contact	Contact
Green Globes	3.5.2.2 Interior Fit-Outs		х		х		
Green Globes	3.5.4.1 Construction Waste	х	х	х	х	х	Х
Green Globes	3.5.6.3 Deconstruction & Disassembly	х	х	х	х	х	Х
Green Globes	3.7.2.1 Volatile Organic Compounds	Contact	Contact	Contact	Contact	Contact	Contact
Green Globes	3.7.2.9 Indoor Pollutants (Tobacco)	х	х	х	х	х	х
ESTIDAMA	LBi: Smoking Control	х	х	х	х	х	х
ESTIDAMA	LBi: Material Emissions	Contact	Contact	Contact	Contact	Contact	Contact
ESTIDAMA	SM: Hazardous Material Elimination	х	х	х	х	х	Х
ESTIDAMA	SM: Construction Waste Management	Х	х	х	х	Х	Х
ESTIDAMA	SM: Reused or Certified Timber		х		x		
SITES	Materials: Threatened tree species		х		х		
SITES	Materials: Design for disassembly	х	х	х	х	х	Х
SITES	Materials: Recycled content materials	х	х	х	х	х	Х
SITES	Materials: Regional materials	Contact	Contact	Contact	Contact	Contact	Contact
SITES	Materials: Responsible extraction of matls		х		х		
SITES	HHWB: Minimize exposure to ETS	Х	х	х	х	Х	Х
SITES	Construction: Divert construction materials	х	х	х	х	х	Х
Materials	Aluminum	х	х	х	х	х	Х
Materials	Wood – Cumaru		х		х		
Processes	Aluminum Making	Х	х	х	х	х	Х
Processes	Aluminum Treatment	Х	х	х	х	Х	Х
Processes	Anodizing	х		х		х	Х
Processes	Casting	Х	х	х	х	Х	Х
Processes	Cutting	Х	х	х	х	Х	Х
Processes	Extruding	Х		х		Х	Х
Processes	Forming	Х	х	х	х	Х	Х
Processes	Powdercoating	X	x	х	x	Х	X
Processes	Sandblasting	Х	х	х	х	Х	Х
Processes	Wood Finishing		х		х		
Processes	Wood Processing		x		x		
Packaging	Cardboard - Box	Х	x	х	x	Х	Х
Packaging	Foam Sheets	X	x	X	x	X	X
Packaging	Plastic - Band	X	x	X	x	X	X
Packaging	Plastic – Shrink wrap	X	×	X	x	X	X
Packaging	Steel – Band	X	×	X	x	X	X
Packaging	Wood - Crate	X	×	x	×	X	X
Packaging	Wood - Pallet	X	×	X	x	X	X
Transport	Boat - Overseas	X	×	X	×	X	X
Transport	Ground – Truck/Rail	X	×	X	×	X	X
Maint. & Use	Clean with Water and Mild Cleaner	X	X	X	×	X	X
Maint. & Use	Ergonomic	X	X	X	×	X	X
Maint. & Use	Tobacco Smoke Control	X	X	X	X	X	X
Maint. & USE	Wood Finishing		X		X		^





### **SUMMARY** continued

Category Type	Property/Component	6 foot, backed, extruded aluminum slats	6 foot, backed, FSC 100% Ipé hardwood slats	6 foot, backless, extruded aluminum slats	6 foot, backless, FSC 100% lpé hardwood slats	8 foot, backed, extruded aluminum slats	8 foot, backless, extruded aluminum slats
Disposal	Biodegradable		х		х		
Disposal	Disassemble	х	х	х	х	х	х
Disposal	Recyclable - Fully	х	х	х	х	х	х
Disposal	Recycling - Scrap	х	х	Х	х	Х	х
Disposal	Reuse	х	х	х	х	х	х

Forms+Surfaces is dedicated to environmental responsibility. We maintain an Environmental Management System and are continually working to improve our impact through efficiency, material selection, vendor education, employee involvement, and an unwavering commitment to being exemplary corporate citizens. If you would like additional information on our Environmental Management System or our company environmental initiatives and policies, please feel free to contact our Sustainability Team at <a href="mailto:green@forms-surfaces.com">green@forms-surfaces.com</a>.