TRIO™ BENCH CONFIGURATION	Total Recycled Content	Post-Industrial Recycled Content	Post-Consumer Recycled Content	3rd Party Cert
Backed, Extruded Aluminum Slats, 6 ft	79%	69%	10%	
Backed, FSC® 100% Ipé Wood Slats, 6 ft	34%	27%	7%	FSC
Backless, Extruded Aluminum Slats, 6 ft	83%	70%	13%	
Backless, FSC 100% Ipé Wood Slats, 6 ft	47%	37%	10%	FSC
Backed, Extruded Aluminum Slats, 6 ft, 1 intermediate arm	80%	69%	11%	
Backed, FSC 100% Ipé Wood Slats, 6 ft, 1 intermediate arm	35%	28%	7%	FSC
Backless, Extruded Aluminum Slats, 6 ft, 1 intermediate arm	83%	70%	13%	
Backless, FSC 100% Ipé Wood Slats, 6 ft, 1 intermediate arm	49%	39%	10%	FSC
Backed, Extruded Aluminum Slats, 6 ft, 2 intermediate arms	80%	69%	11%	
Backed, FSC 100% Ipé Wood Slats, 6 ft, 2 intermediate arms	36%	29%	8%	FSC
Backless, Extruded Aluminum Slats, 6 ft, 2 intermediate arms	83%	70%	13%	
Backless, FSC 100% Ipé Wood Slats, 6 ft, 2 intermediate arms	51%	40%	11%	FSC
Backed, Extruded Aluminum Slats, 8 ft	77%	68%	9%	
Backless, Extruded Aluminum Slats, 8 ft	80%	69%	11%	
Backed, Extruded Aluminum Slats, 8 ft, 1 intermediate arm	78%	68%	10%	
Backless, Extruded Aluminum Slats, 8 ft, 1 intermediate arm	81%	69%	12%	
Backed, Extruded Aluminum Slats, 8 ft, 2 intermediate arms	78%	68%	10%	
Backless, Extruded Aluminum Slats, 8 ft, 2 intermediate arms	82%	70%	12%	

FSC License Code: FSC-C004453

GREEN BUILDING STANDARDS

LEED®

This product can apply to the LEED credits outlined below. In order to provide knowledgeable assistance to our customers, we also have a LEED Accredited Professional on staff. If you don't see the information you need for your project on this page, you can contact our LEED AP by e-mailing green@forms-surfaces.com.

- **MR: Recycled Content** – This product contains recycled material. Recycled content information is shown above for all of our standard options. Custom product recycled content is available by advance request.
- **MR: Regional Materials** – We have manufacturing facilities in Pittsburgh, PA (15223), Carpinteria, CA (93013), Phoenix, AZ (84043), Santa Fe Springs, CA (90605) and Pune, India. Please contact us for more information.
- **MR: Certified Wood -** Wood used in this product is certified by the Forest Stewardship Council and can be counted towards the LEED® Certified Wood credit.

LEED® India

This product can apply to one or more LEED India credits, as outlined below. If you don't see the information you need for your project on this page, you can contact us by e-mailing green@forms-surfaces.com.

- **MR: Recycled Content** – This product contains recycled material. Recycled content information is shown above for all of our standard options. Custom product recycled content is available by advance request.
- **MR: Local/Regional Materials** – We have manufacturing facilities in Pune, India. Please contact us for more information.
- **MR: Certified Wood** – Wood used in this product is certified by the Forest Stewardship Council and can be counted towards the LEED India Certified Wood credit.

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Green Globes™

This product can apply to one or more Green Globes credits, as outlined below. Our sustainability team is knowledgeable about the Green Globes™ standards, so please feel free to contact us at green@forms-surfaces.com should you need more information.

- **10.2.2.1 Recycled Content** – This product contains recycled material. Recycled content information is shown above for all of our standard options. Custom product recycled content is available by advance request.
- **10.2.2.2 Bio-based Products** – Wood used in this product may qualify it as a bio-based product. Product details are available in the summary tables shown below.
- **10.2.4.1 Transportation of Manufactured Materials** – We have manufacturing facilities in Pittsburgh, PA (15223), Carpinteria, CA (93013), Phoenix, AZ (84043), Santa Fe Springs, CA (90605) and Pune, India. Please contact us for more information.
- **10.3.2.1 Certified Wood** – Wood used in this product is certified by the Forest Stewardship Council.

Estidama

This product can apply to the Estidama credits outlined below. We are familiar with the Estidama standards, so please feel free to contact us at green@forms-surfaces.com should you need additional information.

- **ADMAT1: Materials Specification - Major Building Elements – Recycled** – This product contains recycled material. Recycled content information is shown above for all of our standard options. Custom product recycled content is available by advance request.
- **ADMAT5: Sustainable Materials Sourcing** – Many of our products are manufactured with environmental sensitivity in mind. Contact us for more information.
- **ADWAS1: Reduction of Waste** – Most of our products are recyclable. Full disposal information can be found below.

PRODUCT MATERIALS

Material	Type	Description	Mainte-nance (0-5)*	Inherent Value (0-5)**	Scratch-Resistant	Corrosion/Wear Resistant	Biodegradable	Rapidly Renewable	Recyclable
Aluminum	Extruded	Simple or complex profiles created by forcing aluminum through a shaped die.	3	3		x			x
Aluminum	Cast	Solid aluminum cast in a mold to create a desired shape.	3	3		x			x
Aluminum	Plate	Metal sheets suitable for supports and other fabrication methods.	3	3		x			x
Wood	Ipé	Tropical hardwood valued for its appearance, strength, and high resistance to insects and decay. Native to Central and South America.	3	1			x		

*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;

**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.

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PROCESSES

F+S Facility Processes	Process Description	Vendor Facility Processes	Process Description
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	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.
Roll Forming	A mechanical process in which material is passed through a set of rolls in order to form a continuous curved bend in the material. Typically a set of three rolls is required to apply pressure at necessary points in the material to achieve the desired radius.	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).
Sand Blasting	The process of smoothing, shaping and cleaning a hard surface by forcing solid particles across that surface at high speeds to provides an even finish.	Extrusion	Process in which heated metal is pushed through a cross-sectional die to create a linear part with a specific shape.
Water Jet Cutting	A water jet cut utilizes water and a mixture of abrasives (garnet) at high pressure and velocity in order to carve/cut the material. Can be used to machine a large variety of materials, including heat sensitive or delicate materials. It produces no heat damage to the cutting area, and can yield a smooth edge finish when using the proper operating speed.	Vacuum Casting	A two-part mold is formed out of sand and plastic sheet held in place by vacuum. Molten metal is poured into the mold and allowed to cool. When the vacuum releases, the sand falls away and the part is left.
Wood Finishing	Wood is sanded smooth and finishes are applied to adjust the wood's color, enhance its appearance or to protect it from staining or weathering.	Wood Processing	Wood is milled from trees and turned into lumber.
		Wood Staining	Wood stain consists of three primary ingredients: pigment, solvent, and binder. Stain has much less binder than paint, which allows it to reside below the surface of the material while pigment remains near the top of the surface. Wood stain enhances the natural look of wood.

PACKAGING MATERIALS

Material	Type	Description	Disposal
Cardboard	Box	Small or light products are packaged in cardboard boxes. We often reuse boxes for shipping.	Recycle
Cardboard	Spacers	Used to provide impact cushioning between a product and its package or between two products.	Recycle
Foam	Sheets	Micro foam sheets are used to protect the finish on products.	Reuse
Foam	Soy Sheets	Soy foam sheets are used to protect the finish on products.	Biodegradable
Plastic	Shrink Wrap	Shrink wrap is used to protect the finish on products and also to hold padding to products. Clean shrink wrap is recyclable.	Recycle

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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.

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.	NA
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

Method	Description
Biodegradable	Some components of this product are biodegradable.
Disassemble	Product can be disassembled to separate recyclable components.
Recyclable – Fully	Our configuration options with aluminum slats are fully recyclable.
Recyclable – Partially	Our configuration options with wood slats are partially recyclable.
Recycling – Scrap	Materials can be sold for scrap.
Reuse	This item can be reused in the same or different function.

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SUMMARY – Extruded Aluminum (6 ft)

Category Type	Property/Component	Backed, Extruded Aluminum Slats, 6 ft	Backless Extruded Aluminum Slats, 6 ft	Backed, Extruded Aluminum Slats, 6 ft, 1 intermediate arm	Backless, Extruded Aluminum Slats, 6 ft, 1 intermediate arm	Backed, Extruded Aluminum Slats, 6 ft, 2 intermediate arms	Backless, Extruded Aluminum Slats, 6 ft, 2 intermediate arms
Basic	Total Recycled Content	79%	83%	80%	83%	80%	83%
Basic	Post-Industrial Recycled Content	69%	70%	69%	70%	69%	70%
Basic	Post-Consumer Recycled Content	10%	13%	11%	13%	11%	13%
Basic	3rd Party Cert						
LEED®	MR: Recycled Content	x	x	x	x	x	x
LEED®	MR: Regional Materials	x	x	x	x	x	x
LEED®	MR: Certified Wood						
LEED® India	MR: Recycled Content	x	x	x	x	x	x
LEED® India	MR: Local/Regional Materials	x	x	x	x	x	x
LEED® India	MR: Certified Wood						
Green Globes™	10.2.2.1 Recycled Content	x	x	x	x	x	x
Green Globes™	10.2.2.2 Bio-based Products						
Green Globes™	10.2.4.1 Transport Manufactured Matls	x	x	x	x	x	x
Green Globes™	10.3.2.1 Certified Wood						
Estidama	ADMAT1: Materials Spec - Recycled	x	x	x	x	x	x
Estidama	ADMAT5: Sustainable Matls. Sourcing	x	x	x	x	x	x
Estidama	ADWAS1: Reduction of Waste	x	x	x	x	x	x
Materials	Al – Cast	x	x	x	x	x	x
Materials	Al – Extrusion	x	x	x	x	x	x
Materials	Al – Plate	x	x	x	x	x	x
Materials	Wood – Ipé						
Processes	Aluminum Making	x	x	x	x	x	x
Processes	Anodizing	x	x	x	x	x	x
Processes	Extrusion	x	x	x	x	x	x
Processes	Powdercoating	x	x	x	x	x	x
Processes	Roll Forming						
Processes	Sand Blasting	x	x	x	x	x	x
Processes	Vacuum Casting	x	x	x	x	x	x
Processes	Water Jet Cutting						
Processes	Wood Finishing						
Processes	Wood Processing						
Processes	Wood Staining						
Packaging	Cardboard – Box	x	x	x	x	x	x
Packaging	Cardboard – Spacers	x	x	x	x	x	x
Packaging	Foam – Sheets	x	x	x	x	x	x
Packaging	Foam – Soy Sheets	x	x	x	x	x	x
Packaging	Plastic – Shrink wrap	x	x	x	x	x	x
Transport	Boat – Overseas	x	x	x	x	x	x
Transport	Ground – Truck/Rail	x	x	x	x	x	x
Maintenance & Use	Clean with Water and Mild Cleaner	x	x	x	x	x	x
Maintenance & Use	Ergonomic	x	x	x	x	x	x
Maintenance & Use	Wood Finishing						
Disposal	Biodegradable						
Disposal	Disassemble	x	x	x	x	x	x
Disposal	Recyclable – Fully	x	x	x	x	x	x
Disposal	Recyclable – Partially						
Disposal	Recycling – Scrap	x	x	x	x	x	x
Disposal	Reuse	x	x	x	x	x	x

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SUMMARY – Extruded Aluminum (8 ft)

Category Type	Property/Component	Backed, Extruded Aluminum Slats, 8 ft	Backless Extruded Aluminum Slats, 8 ft	Backed, Extruded Aluminum Slats, 8 ft, 1 intermediate arm	Backless, Extruded Aluminum Slats, 8 ft, 1 intermediate arm	Backed, Extruded Aluminum Slats, 8 ft, 2 intermediate arms	Backless, Extruded Aluminum Slats, 8 ft, 2 intermediate arms
Basic	Total Recycled Content	77%	80%	78%	81%	78%	82%
Basic	Post-Industrial Recycled Content	68%	69%	68%	69%	68%	70%
Basic	Post-Consumer Recycled Content	9%	11%	10%	12%	10%	12%
Basic	3rd Party Cert						
LEED®	MR: Recycled Content	x	x	x	x	x	x
LEED®	MR: Regional Materials	x	x	x	x	x	x
LEED®	MR: Certified Wood						
LEED® India	MR: Recycled Content	x	x	x	x	x	x
LEED® India	MR: Local/Regional Materials	x	x	x	x	x	x
LEED® India	MR: Certified Wood						
Green Globes™	10.2.2.1 Recycled Content	x	x	x	x	x	x
Green Globes™	10.2.2.2 Bio-based Products						
Green Globes™	10.2.4.1 Transport Manufactured Matls.	x	x	x	x	x	x
Green Globes™	10.3.2.1 Certified Wood						
Estidama	ADMAT1: Materials Spec – Recycled	x	x	x	x	x	x
Estidama	ADMAT5: Sustainable Matls. Sourcing	x	x	x	x	x	x
Estidama	ADWAS1: Reduction of Waste	x	x	x	x	x	x
Materials	Al – Cast	x	x	x	x	x	x
Materials	Al – Extrusion	x	x	x	x	x	x
Materials	Al – Plate	x	x	x	x	x	x
Materials	Wood – Ipé						
Processes	Aluminum Making	x	x	x	x	x	x
Processes	Anodizing	x	x	x	x	x	x
Processes	Extrusion	x	x	x	x	x	x
Processes	Powdercoating	x	x	x	x	x	x
Processes	Roll Forming						
Processes	Sand Blasting	x	x	x	x	x	x
Processes	Vacuum Casting	x	x	x	x	x	x
Processes	Water Jet Cutting						
Processes	Wood Finishing						
Processes	Wood Processing						
Processes	Wood Staining						
Packaging	Cardboard – Box	x	x	x	x	x	x
Packaging	Cardboard – Spacers	x	x	x	x	x	x
Packaging	Foam – Sheets	x	x	x	x	x	x
Packaging	Foam – Soy Sheets	x	x	x	x	x	x
Packaging	Plastic – Shrink wrap	x	x	x	x	x	x
Transport	Boat – Overseas	x	x	x	x	x	x
Transport	Ground - Truck/Rail	x	x	x	x	x	x
Maintenance & Use	Clean with Water and Mild Cleaner	x	x	x	x	x	x
Maintenance & Use	Ergonomic	x	x	x	x	x	x
Maintenance & Use	Wood Finishing						
Disposal	Biodegradable						
Disposal	Disassemble	x	x	x	x	x	x
Disposal	Recyclable – Fully	x	x	x	x	x	x
Disposal	Recyclable – Partially						
Disposal	Recycling – Scrap	x	x	x	x	x	x
Disposal	Reuse	x	x	x	x	x	x

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SUMMARY – FSC 100% Wood Slats (6 ft)

Category Type	Property/Component	Backed, FSC 100% Wood Slats, 6 ft	Backless, FSC Certified Wood Slats, 6 ft	Backed, FSC 100% Wood Slats, 6 ft, 1 intermediate arm	Backless, FSC Certified Wood Slats, 6 ft, 1 intermediate arm	Backed, FSC 100% Wood Slats, 6 ft, 2 intermediate arms	Backless, FSC Certified Wood Slats, 6 ft, 2 intermediate arms
Basic	Total Recycled Content	34%	47%	35%	49%	36%	51%
Basic	Post-Industrial Recycled Content	27%	37%	28%	39%	29%	40%
Basic	Post-Consumer Recycled Content	7%	10%	7%	10%	8%	11%
Basic	3rd Party Cert	FSC	FSC	FSC	FSC	FSC	FSC
LEED®	MR: Recycled Content	x	x	x	x	x	x
LEED®	MR: Regional Materials	x	x	x	x	x	x
LEED®	MR: Certified Wood	x	x	x	x	x	x
LEED® India	MR: Recycled Content	x	x	x	x	x	x
LEED® India	MR: Local/Regional Materials	x	x	x	x	x	x
LEED® India	MR: Certified Wood	x	x	x	x		x
Green Globes™	10.2.2.1 Recycled Content						
Green Globes™	10.2.2.2 Bio-based Products	x	x	x	x	x	x
Green Globes™	10.2.4.1 Transport Manufactured Matls.	x	x	x	x	x	x
Green Globes™	10.3.2.1 Certified Wood	x	x	x	x	x	x
Estidama	ADMAT1: Materials Spec - Recycled	x	x	x	x	x	x
Estidama	ADMAT5: Sustainable Matls. Sourcing	x	x	x	x	x	x
Estidama	ADWAS1: Reduction of Waste	x	x	x	x	x	x
Materials	Al – Cast	x	x	x	x	x	x
Materials	Al – Extrusion						
Materials	Al – Plate	x	x	x	x	x	x
Materials	Wood – Ipé	x	x	x	x	x	x
Processes	Aluminum Making	x	x	x	x	x	x
Processes	Anodizing						
Processes	Extrusion						
Processes	Powdercoating	x	x	x	x	x	x
Processes	Roll Forming	x	x	x	x	x	x
Processes	Sand Blasting	x	x	x	x	x	x
Processes	Vacuum Casting	x	x	x	x	x	x
Processes	Water Jet Cutting	x	x	x	x	x	x
Processes	Wood Finishing	x	x	x	x	x	x
Processes	Wood Processing	x	x	x	x	x	x
Processes	Wood Staining	x	x	x	x	x	x
Packaging	Cardboard – Box	x	x	x	x	x	x
Packaging	Cardboard – Spacers	x	x	x	x	x	x
Packaging	Foam – Sheets	x	x	x	x	x	x
Packaging	Foam – Soy Sheets	x	x	x	x	x	x
Packaging	Plastic – Shrink wrap	x	x	x	x	x	x
Transport	Boat – Overseas	x	x	x	x	x	x
Transport	Ground – Truck/Rail	x	x	x	x	x	x
Maintenance & Use	Clean with Water and Mild Cleaner	x	x	x	x	x	x
Maintenance & Use	Ergonomic	x	x	x	x	x	x
Maintenance & Use	Wood Finishing	x	x	x	x	x	x
Disposal	Biodegradable	x	x	x	x	x	x
Disposal	Disassemble	x	x	x	x	x	x
Disposal	Recyclable – Fully						
Disposal	Recyclable – Partially	x	x	x	x	x	x
Disposal	Recycling – Scrap	x	x	x	x	x	x
Disposal	Reuse	x	x	x	x	x	x

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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 green@forms-surfaces.com.

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