

The Vector Seating System is ergonomic, low maintenance and easy to disassemble. Aluminum and stainless steel components are 100% recyclable. Stainless steel and aluminum casting components have a high recycled content and FSC® 100% Cumaru hardwood slats have a natural oiled finish. The powdercoat finish is a low- or no- VOC finish, depending on color. Optional accent lighting is available with energy efficient LEDs.

Recycled Content & Certifications

Configurations	Post-Industrial Recycled Content	Post-Consumer Recycled Content	Total Recycled Content	3 rd Party Certifications
2-foot linear bench, FSC 100% Cumaru hardwood slats	Contact	Contact	Contact	FSC 100%
2-foot linear bench, aluminum slats	Contact	Contact	Contact	-
4-foot linear bench, FSC 100% Cumaru hardwood slats	Contact	Contact	Contact	FSC 100%
4-foot linear bench, aluminum slats	Contact	Contact	Contact	-
6-foot linear bench, FSC 100% Cumaru hardwood slats	Contact	Contact	Contact	FSC 100%
6-foot linear bench, aluminum slats	Contact	Contact	Contact	-
8-foot linear bench, FSC 100% Cumaru hardwood slats	Contact	Contact	Contact	FSC 100%
8-foot linear bench, aluminum slats	Contact	Contact	Contact	-
120° angle benches, FSC 100% Cumaru hardwood slats	Contact	Contact	Contact	FSC 100%
120° angle benches, aluminum slats	Contact	Contact	Contact	-
Tri-hub, FSC 100% Cumaru hardwood slats	Contact	Contact	Contact	FSC 100%
Tri-hub, aluminum slats	Contact	Contact	Contact	-
Cross, FSC 100% Cumaru hardwood slats	Contact	Contact	Contact	FSC 100%
Cross, aluminum slats	Contact	Contact	Contact	-
Oblique, FSC 100% Cumaru hardwood slats	Contact	Contact	Contact	FSC 100%
Oblique, aluminum slats	Contact	Contact	Contact	-
Planter – 14 gallon	Contact	Contact	Contact	-

FSC License Code: FSC-C004453

Green Building Standards

LEED® v3
<i>MR2: Construction Waste Management</i> – packaging is designed to be reusable or recyclable. See below for details.
<i>MR4: Recycled Content</i> – this product contains recycled material. Please contact us for additional information.
<i>MR5: Regional Materials</i> – we have manufacturing facilities in Phoenix, AZ, Pittsburgh, PA, and Pune, India. Contact for details.
<i>MR7: Certified Wood</i> - wood used in this product is certified by the Forest Stewardship Council (SCS-COC-001461).
LEED v4
<i>MRp2/MR5: Construction Waste Management</i> – packaging is designed to be reusable or recyclable. See below for details.
<i>MR3: Sourcing of Raw Materials (wood)</i> – wood used in this product is certified by the Forest Stewardship Council (SCS-COC-001461). <i>(recycled content)</i> – this product contains recycled material. Please contact us for additional information. <i>(regional materials)</i> – we have manufacturing facilities in Phoenix, AZ, Pittsburgh, PA, and Pune, India. Contact for details.
<i>EQ2: Low-emitting Materials</i> – inherently non-emitting sources. Contact for details.
Green Globes™
<i>3.5.2.2 Interior Fit-Outs</i> - wood used in this product is certified by the Forest Stewardship Council (SCS-COC-001461).
<i>3.5.4.1 Construction Waste</i> – packaging is designed to be reusable or recyclable. See below for details.
<i>3.5.6.3 Deconstruction and Disassembly</i> – this product can be disassembled to separate recyclable components
<i>3.7.2.1 Volatile Organic Compounds</i> - inherently non-emitting sources. Contact for details.

Green Building Standards continued

Estidama Pearl Rating System: Design & Construction, Version 1.0
<i>LBI-2.5: Material Emissions: Formaldehyde Reduction</i> – inherently non-emitting sources. Contact for details.
<i>SM-R1: Hazardous Material Elimination</i> – product contains no ACMs and no CCA-treated timber.
<i>SM-R2/SM-13: Construction Waste Management</i> - packaging is designed to be reusable or recyclable. See below for details.
<i>SM-4: Design for Disassembly</i> - this product can be disassembled to separate recyclable components.
<i>SM-12: Reused or Certified Timber</i> - wood used in this product is certified by the Forest Stewardship Council (SCS-COC-001461).

Product Materials

Material	Description	Maintenance (0-5)*	Inherent Value (0-5)**	Biodegradable	Corrosion/Wear Resistant	Rapidly Renewable	Recyclable	Scratch Resistant
Aluminum	Corrosion-resistant metal that is suitable for many fabrication methods.	3	3		x		x	
Glass – Safety Laminated Decorative	Polyvinyl butyral (PVB) based thermoplastic interlayer laminated between two lites of glass. *Scratch resistance is determined by finish selection.	4	0		x			x*
Polyethylene	Thermoplastic, petroleum-based polymer, used for a broad range of molded and extruded products.	4	0		x		x	
Stainless Steel	Steel that is alloyed with chromium and other metals to improve corrosion-resistance. *Scratch resistance is determined by finish selection.	3	4		x		x	x*
Wood – FSC 100% Cumaru	Tropical hardwood prized for its insect-resistance, rot-resistance, beauty, and strength. Responsibly sourced from forests certified by the Forest Stewardship Council.	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

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.
Calandring	Metalworking process in which sheet metal is rolled out at room temperature, changing the molecular structure to make it harder and more resistant to scratching.
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.
Metal Finishing	Applied using grinding/sanding wheels. Finishing produces a grained or brushed finish on the surface, and depending on the material will increase corrosion resistance.
Plastics Manufacture	Plastic is the common term for a wide range of synthetic or semi-synthetic organic solid materials used in industrial applications. Plastics are typically polymers of high molecular weight, and may contain other substances to improve performance or reduce costs.

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
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Processes continued

Process	Description
Safety Laminated Decorative Glass Making	Polyvinyl butyral (PVB) based thermoplastic interlayer laminated between two lites of glass under heat and pressure to create a safety laminated glass.
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.
Steel Making	Steel and stainless steel are made in one of two types of furnace: a Basic Oxygen Furnace (BOF) or an Electric Arc Furnace (EAF). A BOF is used to make steel from iron ore or from scrap steel; an EAF is used primarily to reprocess scrap steel.
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.

Packaging Materials

Material	Type	Description	Disposal
Cardboard	Box	Small or light products are packaged in cardboard boxes. Reused for shipping.	Reuse/Recycle
Cardboard	Spacer	Used to provide impact cushioning between a product and its package or between two products.	Reuse/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.	Recyclable
Wood	Crate	Wood crates are made to fit onsite. Wood scraps are recycled into mulch. Crates are reused when possible.	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 Mild Cleaner	Glass and metal components require a soft, clean, grit-free 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	Metal components are fully recyclable

Recyclable - Partially	Wood and glass components are not recyclable
Recycling - Scrap	Materials can be sold for scrap
Reuse	This item can be reused in the same or different function

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, please contact our Sustainability Team at green@forms-surfaces.com.