

Flight Benches are durable, ergonomic, low maintenance and easy to disassemble. The frame is comprised of 100% recyclable aluminum containing high recycled content and a low- or no-VOC powdercoat finish. The seats are available with FSC® 100% Cumaru hardwood seat slats or TENSL ultra high performance concrete (UHPC). FSC 100% means that 100% of the wood is responsibly sourced from forests certified by the Forest Stewardship Council. TENSL UHPC provides exceptional strength and durability, is composed primarily of natural materials and is recyclable.

**Recycled Content & Certifications**

Configurations	Pre-Consumer Recycled Content	Post-Consumer Recycled Content	Total Recycled Content	3 <sup>rd</sup> Party Certifications
Flight Bench, FSC® 100% Cumaru hardwood slats, 6 foot	23%	0%	23%	FSC 100%
Flight Bench, TENSL UHPC, 6 foot	8%	0%	8%	-
Flight Bench, FSC® 100% Cumaru hardwood slats, 8 foot	21%	0%	21%	FSC 100%
Flight Bench, TENSL UHPC, 8 foot	7%	0%	7%	-

FSC License Code: FSC-C004453

**Green Building Standards**

<p><b>LEED® v3</b></p> <p><i>MR2: Construction Waste Management</i> – packaging is designed to be reusable or recyclable. See below for details.</p> <p><i>MR4: Recycled Content</i> – this product contains recycled material. Recycled content is shown above for all standard options.</p> <p><i>MR5: Regional Materials</i> – this product is manufactured in Pittsburgh, PA. Contact for details.</p> <p><i>MR7: Certified Wood</i> - wood used in this product is certified by the Forest Stewardship Council (SCS-COC-001461).</p> <p><i>IEQp2: Environmental Tobacco</i> - this product may be used to help designate a smoking area away from doors, windows, and ventilation inlets.</p>
<p><b>LEED v4</b></p> <p><i>MRp2/MR5: Construction Waste Management</i> – packaging is designed to be reusable or recyclable. See below for details.</p> <p><i>MR3: Sourcing of Raw Materials (wood)</i> – wood used in this product is certified by the Forest Stewardship Council (SCS-COC-001461).</p> <p><i>(recycled content)</i> – this product contains recycled material. Recycled content is shown above for all standard options.</p> <p><i>(regional materials)</i> – this product is manufactured in Pittsburgh, PA. Contact for details.</p> <p><i>EQp2: Environmental tobacco smoke control</i> - this product may be used to help designate a smoking area away from doors, windows, &amp; ventilation inlets.</p>
<p><b>Green Globes™</b></p> <p><i>3.5.2.2 Interior Fit-Outs</i> - wood used in this product is certified by the Forest Stewardship Council (SCS-COC-001461).</p> <p><i>3.5.4.1 Construction Waste</i> – packaging is designed to be reusable or recyclable. See below for details.</p> <p><i>3.5.6.3 Deconstruction and Disassembly</i> – this product can be disassembled to separate recyclable components.</p> <p><i>3.7.2.9 Other Indoor Pollutants (Tobacco...)</i> - this product may be used to help designate a smoking area away from doors, windows, &amp; ventilation inlets.</p>
<p><b>Estidama Pearl Rating System: Design &amp; Construction, Version 1.0</b></p> <p><i>LBI-R2: Smoking Control</i> - this product may be used to help designate a smoking area away from doors, windows, and ventilation inlets.</p> <p><i>SM-R1: Hazardous Material Elimination</i> – product contains no ACMs and no CCA-treated timber.</p> <p><i>SM-R2/SM-13: Construction Waste Management</i> - packaging is designed to be reusable or recyclable. See below for details.</p> <p><i>SM-4: Design for Disassembly</i> - this product can be disassembled to separate recyclable components</p> <p><i>SM-12: Reused or Certified Timber</i> - wood used in this product is certified by the Forest Stewardship Council (SCS-COC-001461).</p>
<p><b>SITES v2 Rating System</b></p> <p><i>Materials P5.1: Wood from threatened tree species</i> - wood used in this product is certified by the Forest Stewardship Council (SCS-COC-001461).</p> <p><i>Materials C5.3: Design for adaptability and disassembly</i> - this product can be disassembled to separate recyclable components.</p> <p><i>Materials C5.5: Use recycled content materials</i> - this product contains recycled material. Recycled content is shown above for all standard options.</p> <p><i>Materials C5.6: Use regional materials</i> - this product is manufactured in Pittsburgh, PA. Contact for extraction information.</p> <p><i>Materials C5.7: Responsible extraction of raw materials</i> - wood used in this product is certified by the Forest Stewardship Council (SCS-COC-001461).</p>

**Green Building Standards continued**

<b>SITES v2 Rating System</b>
<i>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.</i>
<i>Construction C7.5: Divert construction and demolition materials from disposal - packaging is designed to be reusable or recyclable. See below for details.</i>
<b>WELL Building Standard</b>
<i>Air – 11: Fundamental material safety – please contact for details.</i>
<i>Air – 25: Toxic material reduction – please contact for details.</i>
<i>Air – 28: Cleanable Environment – product materials facilitate easy cleaning.</i>
<i>Fitness – 67: Exterior active design – this product can help support occupant activity.</i>

**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	
TENSL UHPC	Densely packed concrete matrix with strong chemical bonds and low water absorption yielding extremely high compressive, tensile and flexural strength. Exhibits a ceramic-like surface with integral pigment that stands up to water, salt and corrosive environmental contaminants.	5	1		x		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	x			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.
Concrete Casting	Process of mixing concrete, filling molds, and curing the material in ambient or moderately climate-controlled environment.
Concrete Mold Making	Process of constructing reusable molds for forming concrete from a variety of materials, including wood, metal, and composites.
Cutting	A variety of methods may be used to cut through various materials.
Forming	A mechanical process used to alter the shape of metal.
Machining	A form of subtractive or additive manufacturing often requiring specialty tooling to physically remove or add material to achieve a desired geometry.
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.
Welding	A process that joins two similar metals by causing coalescence. Usually accomplished by melting the work pieces and adding a filler material to form a pool of molten metal that cools to become a strong joint.
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	Honeycomb	Honeycomb is used to protect the product during 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 Detergent	This product requires a soft cloth or brush with warm water and a mild detergent.	Mild, water-based detergent
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**

Method	Description
Biodegradable	Wood components of this product are biodegradable.
Disassemble	Product can be disassembled to separate recyclable components.
Recyclable	Product components are recyclable. Local recycling options for hardwood may vary.
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 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](mailto:green@forms-surfaces.com).