

KEILHAUER

Ponder | Seating

Product Environmental Criteria



Table Of Contents

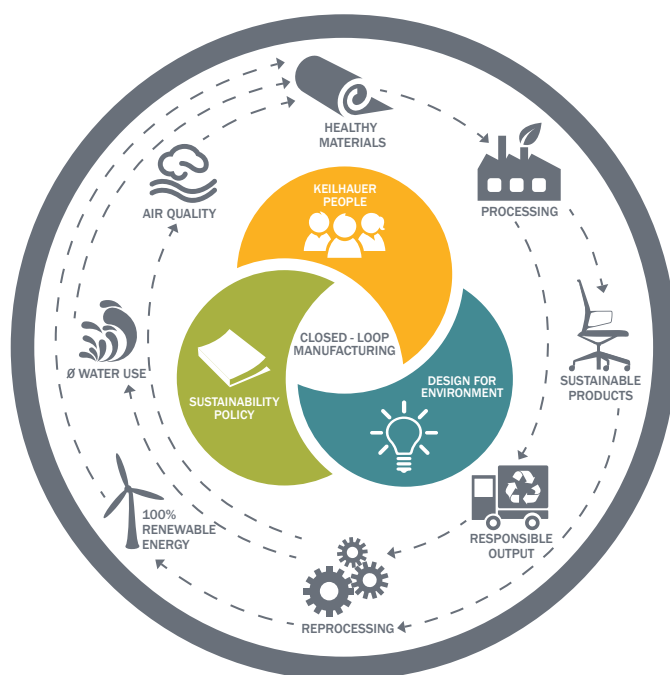
Planet Keilhauer Overview.....	2
Ponder Seating Life Cycle.....	3
Environmental Standards & Credit Applicability.....	5
Materials & Recycled Content.....	7

Planet Keilhauer Overview

As part of our commitment to transparency and disclosure, Keilhauer is proud to present our Product Environmental Criteria documents. These documents will provide information on our corporate sustainability goals as well as specific environmental information about our products. For information not found in this document please visit our website or contact your local sales representative.

Keilhauer is a design activist and a pioneer in creating sustainable solutions. We believe that good business and long term success is measured by the Triple Bottom Line, meaning we harmoniously look after our people, our environment and our economic success. We introduced a comprehensive sustainability program called Planet Keilhauer so that sustainability would be prioritized throughout our company.

Planet Keilhauer is driven by its Corporate Goal of closed loop manufacturing. We are guided by our sustainability policy, occupied by our sustainability programs, and supported by our people.



We'll know we have a closed loop system when:

- We can disassemble, reuse, recycle, or biodegrade our products.
- We use 100% recycled content or rapidly renewable materials.
- We are powered by 100% renewable energy.
- We use materials with 0 impact on humans and the environment.
- We create 0 waste in our facilities.
- We use 0 water in our processes.

Keilhauer Environmental Certifications

Keilhauer is proud to have many of our products certified under the following certifications (see Life Cycle Section for product applicability):



BIFMA LEVEL®

Many Keilhauer products have been certified by SCS Global Services under BIFMA's multi-attribute sustainability standard: LEVEL® 2.



Indoor Air Quality

Many Keilhauer products have been certified by SCS Global Services for Indoor Air Quality achieving Indoor Advantage™ Gold. This means they meet rigorous and comprehensive air quality standards.



FSC® Forest Stewardship Council®

We believe in responsible forestry and ethically sourced materials. Many Keilhauer products are made from FSC-certified wood parts.



Carbonfree® Product Certification

Keilhauer's Swurve chair is certified by Carbonfund.org to be carbon neutral.

Ponder Seating Life Cycle

1. Design for Environment

Keilhauer's interdisciplinary Design for Environment Program (DfE) ensures that we design our products in line with our sustainability goals. This includes holistic life cycle thinking, material specification and sourcing so that we create exceptionally well designed and safe products with long, useful lives that are repairable and recyclable. Members of the DfE team include managers from Manufacturing, Engineering, Operations, Sustainability, and even our President!

2. Ponder Seating Certification

Ponder seating is certified under the following industry standard certifications:



3. Environmental Standards

Keilhauer products may assist in achieving credits under the following industry standards and certifications:

WELL™ v2 Building Standard

Keilhauer products may be applied to the three WELL project typologies:

- New and Existing Buildings
- New and Existing Interiors
- Core and Shell

For more credit specific details, see WELL v2 Building Standard Credit Applicability on page 5.

LEED® v4.1

Keilhauer products may assist with the following LEED Projects. For more credit specific details, see LEED v4.1 Credit Applicability on pages 5 and 6.



Applicable credits can be found in the following sections:

- Materials and Resources Credits
- Indoor Environmental Quality
- Pilot Credits

Healthier Hospitals for Safer Chemicals Challenge - V2.0

Keilhauer products may comply with this standard. Please contact your local sales representative for more information.

4. Supply Chain

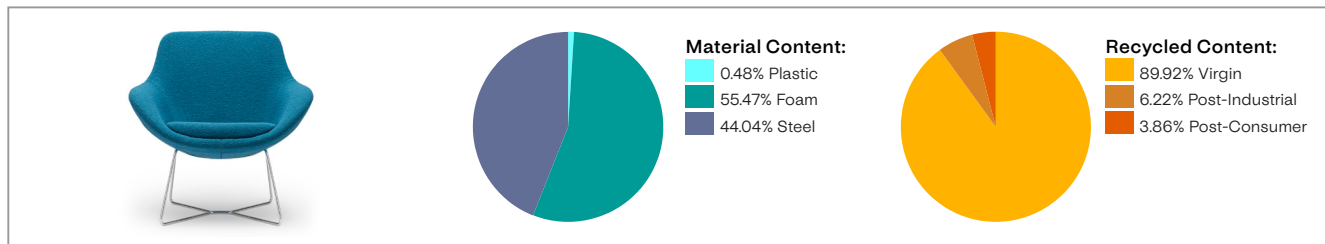
We have always believed that who you do business with is fundamental to how you do business. We work with vendors that conduct business honestly and ethically, giving priority to local vendors. We also work with vendors to include recycled materials and to source raw materials from sustainable sources.

5. Materials & Recycled Content

Our products are made from a variety of materials, some of which are made using recycled content. See below for percentages from our best seller. For other models please reference the chart at the end of the document.

Note: Recycled content is determined by weight. Products may contain both pre-consumer and post-consumer recycled content materials. Post-industrial (pre-consumer) recycled content is material diverted from the waste stream during manufacturing. Post-consumer recycled content is material generated by end users such as households, commercial, or consumers of the final product.

Best seller: Ponder 68703 Low back chair with sled base



6. Manufacturing Plant

To target efficiency, we measure our resource use and perform regular audits. Using the data generated, we can evaluate our processes such as energy and water use and shift our capital investments to align with our sustainability goals.

7. Final Manufacturing Location

Keilhauer products are manufactured in Toronto, Ontario, Canada.



8. Blanket Wrapping

When shipping seating, Keilhauer's standard is to cover products in a recyclable plastic bag (made using recycled content), and then wrap in a reusable blanket. The blanket is taken back by the shipper at delivery. Alternatively, products can be shipped in recyclable cardboard boxes. Depending on the model, some tables are packed in wooden crates.

9. End of Product Life

For information on repairability and recyclability see 'End of Product Life Document: Lounge' and 'End of Product Life Document: Task, Conference, Executive' located on our website: www.keilhauer.com.

Environmental Standards & Credit Applicability

Keilhauer products may assist with the following features and credits:

WELL v2 Building Standard Credit Applicability

Materials

FEATURE: X05 Enhanced Material Restrictions

Keilhauer restricts the use of heavy metals in all products. Any Keilhauer components that constitute a minimum of 5% by weight meet the following thresholds for material content: Less than 100 ppm of Mercury, Cadmium and Antimony. All standard Keilhauer components are free of halogenated flame retardants, meeting CAL 117-2013 without the use of chemical flame retardants and are labeled accordingly. Urea formaldehyde content of all Keilhauer composite wood and laminate components complies with TSCA Title VI. Textiles and plastic components may contain lead and polyfluoroalkyl substances (PFAS) in amounts less than 1000 ppm. Please contact sustainability@keilhauer.com for details.

FEATURE: X06 VOC Restrictions

Ponder seating is certified by SCS Global Services for Indoor Air Quality at the Indoor Advantage™ Gold level and conforms to the requirements set out in the ANSI/BIFMA Furniture Emissions Standard (M7.1/X7.1-2011 R2016) and ANSI/BIFMA e.3-2019 (Credits 7.6.1, 7.6.2, 7.6.3) for seating parameters. Also conforms to the CDPH/EHLB Standard Method (CA 01350) v1.2-2017 for seating. See registration number located in the Life Cycle section on page 3 of this document. The certificate can be found on Keilhauer's website under the sustainability section.

LEED v4.1 Credit Applicability

LEED ID+C Interior Design + Construction

Materials and Resources (MR) Credits:

CREDIT: Construction and Demolition Waste Management Planning

When shipping, Keilhauer covers seating in a recyclable plastic bag (made using recycled content) which is then wrapped with a protective reusable blanket. The blanket is taken back by the shipper at delivery. Alternatively, products can be shipped in recyclable cardboard boxes. See page 4 for End of Product Life details.

CREDIT: Interiors Life Cycle Impact Reduction

Keilhauer products are designed for durability and offer a long useful life with a ten year warranty. Some products may be refurbished and reused to contribute to this point on future projects.

CREDIT: Sourcing of Raw Materials

Materials Reuse: Keilhauer products are designed for durability and offer a long useful life with a ten year warranty. Some products may be refurbished and reused to contribute to this point on future projects.

Recycled Content: The majority of Keilhauer products contain some recycled content and may assist in contributing to this credit. Reference the chart on pages 7-9 for model specific recycled content percentages.

LEED BD+C Building Design + Construction

Materials and Resources (MR) Credits:

CREDIT: Construction and Demolition Waste Management Planning

When shipping, Keilhauer covers seating in a recyclable plastic bag (made using recycled content) which is then wrapped with a protective reusable blanket. The blanket is taken back by the shipper at delivery. Alternatively, products can be shipped in recyclable cardboard boxes. See page 4 for End of Product Life details.

CREDIT: Sourcing of Raw Materials

Materials Reuse: Keilhauer products are designed for durability and offer a long useful life with a ten year warranty. Some products may be refurbished and reused to contribute to this point on future projects.

Recycled Content: The majority of Keilhauer products contain some recycled content and may assist in contributing to this credit. Reference the chart on pages 7-9 for model specific recycled content percentages.

CREDIT: Furniture and Medical Furnishings

(Option 3. Building Product Disclosure and Optimization)

Materials Reuse: Keilhauer products are designed for durability and offer a long useful life with a ten year warranty. Some products may be refurbished and reused to contribute to this point on future projects.

Recycled Content: The majority of Keilhauer products contain some recycled content and may assist in contributing to this credit. Reference the chart on pages 7-9 for model specific recycled content percentages.

Indoor Environment Quality (EQ) Credits:

CREDIT: Low Emitting Materials

Ponder seating is certified by SCS Global Services for Indoor Air Quality at the Indoor Advantage™ Gold level and conforms to the requirements set out in the ANSI/BIFMA Furniture Emissions Standard (M7.1/X7.1-2011 R2016) and ANSI/BIFMA e.3-2019 (Credits 7.6.1, 7.6.2, 7.6.3) for seating parameters. Also conforms to the CDPH/EHLB Standard Method (CA 01350) v1.2-2017 for seating. See registration number located in the Life Cycle section on page 3 of this document. The certificate can be found on Keilhauer's website under the sustainability section.

LEED O+M Operations + Maintenance

Materials and Resources (MR) Credits:

PREREQ: Facility Maintenance and Renovations Policy

Low Emissions of VOC: Ponder seating is certified by SCS Global Services for Indoor Air Quality at the Indoor Advantage™ Gold level and conforms to the requirements set out in the ANSI/BIFMA Furniture Emissions Standard (M7.1/X7.1-2011 R2016) and ANSI/BIFMA e.3-2019 (Credits 7.6.1, 7.6.2, 7.6.3) for seating parameters. Also conforms to the CDPH/EHLB Standard Method (CA 01350) v1.2-2017 for seating. See registration number located in the Life Cycle section on page 3 of this document. The certificate can be found on Keilhauer's website under the sustainability section.

Materials Reuse: Keilhauer products are designed for durability and offer a long useful life with a ten year warranty. Some products may be refurbished and reused to contribute to this point on future projects.

Recycled Content: The majority of Keilhauer products contain some recycled content and may assist in contributing to this credit. Reference the chart on pages 7-9 for model specific recycled content percentages.

LEED Pilot Credit (PC)














BD+C: Building Design + Construction, ID+C: Interior Design + Construction






PC 112: Certified Multi-Attribute Products and Materials

Many Keilhauer products are certified by SCS Global Services for BIFMA LEVEL certification. The registration number is located in the Life Cycle section of this document. The certificate can be found on Keilhauer's website under the sustainability section.

Materials & Recycled Content

Product			Recycled Content			Material Content						
	MODEL #	DESCRIPTION	POST CONSUMER	POST INDUSTRIAL	TOTAL	WOOD	PLASTIC	FOAM	STEEL	ALUMINUM	OTHER METAL	COMBINATION
	PONDER 68702	LOW BACK CHAIR WITH 4-LEG WOOD BASE	1.08%	1.74%	2.83%	24.79%	0.05%	62.72%	12.44%	0.00%	0.00%	0.00%
	PONDER 68703	LOW BACK CHAIR WITH SLED BASE	3.86%	6.22%	10.08%	0.00%	0.48%	55.47%	44.04%	0.00%	0.00%	0.00%
	PONDER 68704	LOW BACK CHAIR WITH 4-STAR BASE	0.16%	9.78%	9.95%	0.00%	0.49%	45.12%	16.32%	38.06%	0.00%	0.00%
	PONDER 68712	HIGH BACK CHAIR WITH 4-LEG WOOD BASE	0.99%	1.59%	2.58%	22.65%	0.17%	65.81%	11.36%	0.00%	0.00%	0.00%
	PONDER 68713	HIGH BACK CHAIR WITH SLED BASE	3.56%	5.74%	9.30%	0.00%	0.56%	58.79%	40.65%	0.00%	0.00%	0.00%
	PONDER 68714	HIGH BACK CHAIR WITH 4-STAR BASE	0.15%	9.16%	9.31%	0.00%	0.55%	48.51%	15.29%	35.64%	0.00%	0.00%
	PONDER 68722	MID BACK ARMLESS LOUNGE CHAIR WITH 4-LEG WOOD BASE	0.78%	1.25%	2.03%	17.61%	0.04%	73.94%	8.41%	0.00%	0.00%	0.00%
	PONDER 68723	MID BACK ARMLESS LOUNGE CHAIR WITH SLED BASE	2.84%	4.58%	7.43%	0.00%	0.36%	67.66%	31.98%	0.00%	0.00%	0.00%
	PONDER 68724	MID BACK ARMLESS LOUNGE CHAIR WITH 4-STAR BASE	0.13%	7.57%	7.71%	0.00%	0.38%	57.90%	12.29%	29.43%	0.00%	0.00%
	PONDER 68732	SIDE CHAIR WITH ARMS AND 4-LEG WOOD BASE	0.86%	1.39%	2.26%	16.20%	0.05%	73.87%	9.69%	0.00%	0.16%	0.03%
	PONDER 68733	SIDE CHAIR WITH ARMS AND SLED BASE	3.62%	5.83%	9.45%	0.00%	0.39%	58.85%	40.61%	0.00%	0.13%	0.02%
	PONDER 68734	SIDE CHAIR WITH ARMS AND 4-STAR BASE	1.14%	5.51%	6.64%	0.00%	0.18%	50.69%	18.06%	21.46%	0.00%	9.61%
	PONDER 68735	SIDE CHAIR WITH ARMS AND 4-LEG STEEL BASE	3.05%	4.92%	7.97%	0.00%	1.92%	63.58%	34.34%	0.00%	0.14%	0.02%

Product			Recycled Content			Material Content						
	MODEL #	DESCRIPTION	POST CONSUMER	POST INDUSTRIAL	TOTAL	WOOD	PLASTIC	FOAM	STEEL	ALUMINUM	OTHER METAL	COMBINATION
	PONDER 68736	SIDE CHAIR WITH ARMS AND 5-STAR ALUMINUM BASE	12.96%	2.26%	15.22%	0.00%	0.41%	42.33%	26.12%	27.40%	0.09%	3.65%
	PONDER 68737	SIDE LOUNGE CHAIR WITH ARMS AND SLED BASE	3.57%	5.75%	9.31%	0.00%	0.39%	58.85%	40.61%	0.00%	0.13%	0.02%
	PONDER 68738	SIDE CHAIR WITH ARMS AND 5-STAR NYLON BASE	10.58%	2.94%	13.51%	0.00%	9.75%	50.97%	31.44%	3.26%	0.11%	4.47%
	PONDER 68742	ARMLESS SIDE CHAIR WITH 4-LEG WOOD BASE	0.96%	1.55%	2.51%	18.04%	0.05%	70.91%	10.78%	0.00%	0.18%	0.04%
	PONDER 68743	ARMLESS SIDE CHAIR WITH SLED BASE	3.94%	6.35%	10.29%	0.00%	0.43%	55.22%	44.19%	0.00%	0.14%	0.02%
	PONDER 68744	ARMLESS SIDE CHAIR 4-STAR BASE	1.22%	5.92%	7.14%	0.00%	0.20%	46.99%	19.42%	23.07%	0.00%	10.33%
	PONDER 68745	ARMLESS SIDE CHAIR WITH 4-LEG STEEL BASE	3.35%	5.39%	8.73%	0.00%	2.11%	60.09%	37.63%	0.00%	0.15%	0.02%
	PONDER 68746	ARMLESS SIDE CHAIR WITH 5-STAR ALUMINUM BASE	13.77%	2.40%	16.16%	0.00%	0.43%	38.76%	27.73%	29.10%	0.10%	3.87%
	PONDER 68747	ARMLESS SIDE LOUNGE CHAIR WITH SLED BASE	3.88%	6.26%	10.14%	0.00%	0.43%	55.82%	43.59%	0.00%	0.14%	0.02%
	PONDER 68748	ARMLESS SIDE CHAIR WITH 5-STAR NYLON BASE	11.37%	3.16%	14.54%	0.00%	10.49%	47.26%	33.82%	3.51%	0.12%	4.81%
	PONDER 68752	COUNTER STOOL WITH 4-LEG WOOD BASE	0.31%	3.46%	3.77%	31.32%	0.08%	49.06%	19.26%	0.00%	0.24%	0.05%
	PONDER 68753	COUNTER STOOL WITH SLED BASE	0.60%	11.10%	11.71%	0.00%	0.59%	38.26%	60.34%	0.00%	0.78%	0.03%
	PONDER 68762	BAR STOOL WITH 4-LEG WOOD BASE	0.29%	3.26%	3.55%	35.32%	0.07%	46.20%	18.14%	0.00%	0.23%	0.05%

Product			Recycled Content			Material Content						
	MODEL #	DESCRIPTION	POST CONSUMER	POST INDUSTRIAL	TOTAL	WOOD	PLASTIC	FOAM	STEEL	ALUMINUM	OTHER METAL	COMBINATION
	PONDER 68763	BAR STOOL WITH SLED BASE	0.61%	11.21%	11.82%	0.00%	0.58%	37.71%	60.91%	0.00%	0.77%	0.03%
	PONDER 68773	OTTOMAN (SLED BASE)	3.19%	5.14%	8.34%	12.02%	0.80%	51.12%	36.03%	0.00%	0.00%	0.03%
	PONDER 68792	MID BACK CHAIR WITH ARMS, 4-LEG WOOD BASE	0.64%	1.04%	1.68%	15.33%	0.03%	77.27%	7.35%	0.00%	0.00%	0.02%
	PONDER 68793	MID BACK CHAIR WITH ARMS, SLED BASE	2.50%	4.03%	6.53%	0.00%	0.31%	71.46%	28.22%	0.00%	0.00%	0.02%
	PONDER 68794	MID BACK CHAIR WITH ARMS, 4-STAR BASE	0.12%	6.78%	6.90%	0.00%	0.34%	62.22%	11.07%	26.35%	0.00%	0.01%

Document Disclaimer:

This document will be reviewed and updated periodically and is subject to change without notice. Keilhauer is not responsible for slight deviations in the data and information contained in this document.

Recycled content data is calculated using data from suppliers, manufacturers and industry averages. Keilhauer makes conservative assumptions to ensure disclosure of the most accurate recycled content as possible. Variability of manufacturing processes may result in higher or lower content. Textiles and associated weights are not accounted for in the analysis. Recycled content and material content data is calculated using base models only.