

Baudot Zero - BDZ5

Design by Allermuir

Baudot is a beautiful example of where form meets function. As well as making a visual impact in any area, the range can also be used in acoustic landscaping, as a solution to noisy environments such as open plan offices, atria and hospitality.

Freestanding and wall mounted options can be specified to achieve a variety of fun

Product Summary

Scope of Assesment:

From extraction of raw materials through to production of the final Office Furniture unit (cradle to gate). See page 2 for more details.

Primary data was used wherever possible including for energy use during the core module.

All secondary data was obtained from the Ecolnvent database used in conjunction with SimaPro 7.3.2, using US, European and Global data where relevant.

Functional Unit:

A Table solution designed and manufactured to last 10 years.

Regional Market:

The primary market for our Office Furniture products is USA. The scope of this declaration reflects that.

Material Declaration

Environmental Summary

Material	Amount (kg)	Total (%)	Global Warming Potential (Kg Co2 Eq):	9.78
Fabric	0.05	1.41	Recycled Content (% By Weight):	0.50
PU foam	0.60	16.90	Total Energy Consumption (Mj):	307.21
Plywood	2.70	76.06	Recyclability (% By Weight):	99.00
Solid wood	0.20	5.63		
			Date of Production: August 2016	

Environmental Product Analysis

This Environmental Product Analysis has been created in accordance with, and following the principles of ISO14025 and ISO14044. All the Life Cycle Analysis data has been compiled, processed and verified by Oakdene Hollins Ltd.

Compilation and processing of LCA data performed by Dr. Dan Skinner (Oakdene Hollins Ltd.)

Verification of LCA and environmental data performed by Dr. Adrian Chapman (Oakdene Hollins Ltd.)

Sustain

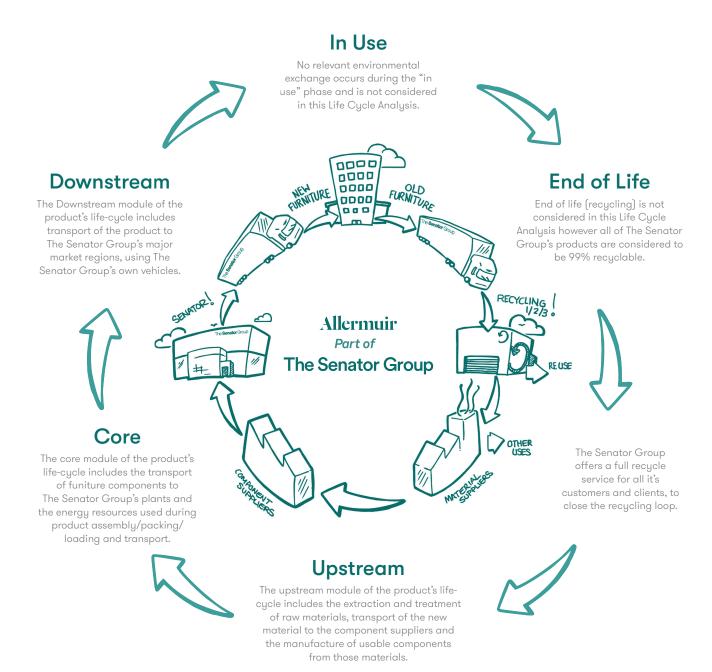
The Senator Group has for many years acknowledged that the key word upon which to focus our attention is Sustainability rather than Recyclability in pure isolation.

Our business takes a truly holistic approach to the design, manufacture, supply and reclamation of our products. We see this as a cyclical process.

From design to manufacture, use and reclamation we aspire to minimise all environmental impacts of The Senator Group's products and processes.

We harvest the resources back from the retired products then remanufacture or reintroduce the materials into our component manufacturers supply chain.

We believe in taking responsibility for our own actions ourselves, wherever possible, rather than relying on third parties, or abdicating our responsibilities by offsetting. The process of Sustainability is a cyclical one we understand this and we actively pursue this in everything that we do.



0.50



Total

System Boundaries			5	÷
Resource (Kg)	Upstream	Core	Downstream	Total
From the Air From the Ground	8.06 6.04	0.55	0.00	8.61
From The Water	0.00	6.65 0.00	0.17 0.00	12.86 0.00
Energy Consumption				
Resource (MJ)	Upstream	Core	Downstream	Tota
Biomass	89.32	6.10	0.00	95.42
Hydro	2.13	1.67	0.02	3.82
Solar	0.00	0.00	0.00	0.00
Wind	0.24	0.58	0.00	0.82
Non-Renewable Energy (MJ)	121.80	83.41	1.94	207.15
Total	213.49	91.76	1.96	307.21
Envisonmental Impact Del	tential			
Environmental Impact Pot	Circiai			
•	Upstream	Core	Downstream	Tota
Resource Global Warming (Kg CO2 Equivalents)		Core 4.60	Downstream 0.11	
Resource Global Warming (Kg CO2 Equivalents) Acidification (Kg SO2 Equivalents)	Upstream			9.78
Resource Global Warming (Kg CO2 Equivalents) Acidification (Kg SO2 Equivalents) Eutrophication (Kg PO43 Equivalents)	Upstream 5.07	4.60	0.11	9.78
Resource Global Warming (Kg CO2 Equivalents) Acidification (Kg SO2 Equivalents) Eutrophication (Kg PO43 Equivalents) Ozone Depletion (Kg CFC 11 Equivalents)	Upstream 5.07 0.03	4.60 0.02	0.11	9.78 0.05 0.00
Resource Global Warming (Kg CO2 Equivalents) Acidification (Kg SO2 Equivalents) Eutrophication (Kg PO43 Equivalents)	Upstream 5.07 0.03 0.00	4.60 0.02 0.00	0.11 0.00 0.00	9.78 0.08 0.00 0.00
Resource Global Warming (Kg CO2 Equivalents) Acidification (Kg SO2 Equivalents) Eutrophication (Kg PO43 Equivalents) Ozone Depletion (Kg CFC 11 Equivalents)	Upstream 5.07 0.03 0.00 0.00	4.60 0.02 0.00 0.00	0.11 0.00 0.00 0.00	9.78 0.08 0.00 0.00
Resource Global Warming (Kg CO2 Equivalents) Acidification (Kg SO2 Equivalents) Eutrophication (Kg PO43 Equivalents) Ozone Depletion (Kg CFC 11 Equivalents) Photochemical Smog (Kg C2H4 Equivalents)	Upstream 5.07 0.03 0.00 0.00	4.60 0.02 0.00 0.00	0.11 0.00 0.00 0.00	9.78 0.08 0.00 0.00 0.00
Resource Global Warming (Kg CO2 Equivalents) Acidification (Kg SO2 Equivalents) Eutrophication (Kg PO43 Equivalents) Ozone Depletion (Kg CFC 11 Equivalents) Photochemical Smog (Kg C2H4 Equivalents) Toxic Emissions	Upstream 5.07 0.03 0.00 0.00 0.00	4.60 0.02 0.00 0.00 0.00	0.11 0.00 0.00 0.00 0.00	9.78 0.08 0.00 0.00 0.00
Resource Global Warming (Kg CO2 Equivalents) Acidification (Kg SO2 Equivalents) Eutrophication (Kg PO43 Equivalents) Ozone Depletion (Kg CFC 11 Equivalents) Photochemical Smog (Kg C2H4 Equivalents) Toxic Emissions Resource (Kg)	Upstream	4.60 0.02 0.00 0.00 0.00	0.11 0.00 0.00 0.00 0.00	9.78 0.08 0.00 0.00 0.00
Resource Global Warming (Kg CO2 Equivalents) Acidification (Kg SO2 Equivalents) Eutrophication (Kg PO43 Equivalents) Ozone Depletion (Kg CFC 11 Equivalents) Photochemical Smog (Kg C2H4 Equivalents) Toxic Emissions Resource (Kg) From the Air	Upstream	4.60 0.02 0.00 0.00 0.00 Core 43.74	0.11 0.00 0.00 0.00 0.00 0.00	9.78 0.08 0.00 0.00 0.00 Tota 63.23
Resource Global Warming (Kg CO2 Equivalents) Acidification (Kg SO2 Equivalents) Eutrophication (Kg PO43 Equivalents) Ozone Depletion (Kg CFC 11 Equivalents) Photochemical Smog (Kg C2H4 Equivalents) Toxic Emissions Resource (Kg) From the Air From the Ground	Upstream 5.07 0.03 0.00 0.00 0.00 Upstream 8.33 0.01	4.60 0.02 0.00 0.00 0.00 0.00	0.11 0.00 0.00 0.00 0.00 0.00 Downstream 11.16 0.00	9.78 0.06 0.00 0.00 0.00 Tota 63.23
Resource Global Warming (Kg CO2 Equivalents) Acidification (Kg SO2 Equivalents) Eutrophication (Kg PO43 Equivalents) Ozone Depletion (Kg CFC 11 Equivalents) Photochemical Smog (Kg C2H4 Equivalents) Toxic Emissions Resource (Kg) From the Air From the Ground From The Water	Upstream 5.07 0.03 0.00 0.00 0.00 Upstream 8.33 0.01 0.89	4.60 0.02 0.00 0.00 0.00 0.00 Core 43.74 0.00 1.14	0.11 0.00 0.00 0.00 0.00 0.00 Downstream 11.16 0.00 0.17	9.78 0.06 0.00 0.00 0.00 Tota 63.23 0.01 2.19
Resource Global Warming (Kg CO2 Equivalents) Acidification (Kg SO2 Equivalents) Eutrophication (Kg PO43 Equivalents) Ozone Depletion (Kg CFC 11 Equivalents) Photochemical Smog (Kg C2H4 Equivalents) Toxic Emissions Resource (Kg) From the Air From the Ground From The Water Recycled Content	Upstream 5.07 0.03 0.00 0.00 0.00 Upstream 8.33 0.01 0.89	4.60 0.02 0.00 0.00 0.00 0.00	0.11 0.00 0.00 0.00 0.00 0.00 Downstream 11.16 0.00 0.17	9.78 0.06 0.00 0.00 0.00 0.00 4.23 0.01 2.19
Resource Global Warming (Kg CO2 Equivalents) Acidification (Kg SO2 Equivalents) Eutrophication (Kg PO43 Equivalents) Ozone Depletion (Kg CFC 11 Equivalents) Photochemical Smog (Kg C2H4 Equivalents) Toxic Emissions Resource (Kg) From the Air From the Ground From The Water Recycled Content	Upstream 5.07 0.03 0.00 0.00 0.00 Upstream 8.33 0.01 0.89	4.60 0.02 0.00 0.00 0.00 0.00 Core 43.74 0.00 1.14	0.11 0.00 0.00 0.00 0.00 0.00 Downstream 11.16 0.00 0.17 Recycled Product (%	Total 9.78 0.05 0.00 0.00 0.00 0.00 0.00 0.00 0.0

Allermuir Certificates

Certificates

Description

Quality Assurance

ISO 9001

Accreditation First Certified ISO 9001 Certified 1991

Envronmental Management

ISO 14001

FSC®

FISP

Chain of Custody

Certified 2003

Sustainability

Certified 20

Health & Safety Standard

Certified 2006







BS OHSAS 18001





Certified 2001

Certified 2015

All UK manufacturing Sites are accredited to ISO standards, 9001, 14001 and 18001. In addition to this the Global Headquarters is also accredited to Chain of Custody. We can provide FSC @ certified products upon request

FISP (Furniture Industry Sustainability Program)

Awarded by FIRA, this sustainability certificate is designed to monitor all sustainability aspects of a company's facilities and operations. The Senator Group achieved one of the first sustainability certifications within the furniture industry – a public declaration of our commitment to improving our performance in every possible way.

Environmental Management

From extraction of raw materials through to production of the final Office Furniture unit (cradle to gate). See page 2 for more details.

Chain of Custody

Independent certification to prove The Senator Group only purchases MFC/MDF/Chipboard from manufacturers who can prove they purchase their raw wood from sustainable sources.

The Three R's

The Senator Group is committed to continually improving the sustainability of all environmental aspects within our business.

To meet both international standards and our own environmental targets we apply the three R's principle—

Reduce, Reuse and Recycle.

While recycling is the element which receives the most exposure it is actually the last option available and should never be the prime target in anyone's battle to reduce waste.

It is our duty as individuals and as a company to initially attempt to Reduce usage. Then we should look to Reuse wherever possible and finally, only after these two processes have been exhausted, should we consider Recycling.

Assessment Considerations

The following necessary assumptions and considerations were made during the course of the Life-Cycle Analysis:

- Manufacture of the furniture components was assumed to take place in the same factory in which the raw materials were processed, due to a lack of case-specific data.
- The transport of all materials, components and finished products was assumed to be via 16-32t Euro 6 lorries.
- All LCA data was modelled using the IMPACT 2002+ (v2.06) method.



Baudot Strings – BDSR12

Design by Allermuir

10256

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Regional Market:

The primary market for our Office Furniture products is USA. The scope of this declaration reflects that.

Material Declaration

Environmental Summary Total (0/2) Global Warming Potential (Ka Co2 Fa): Material Amount (ka)

Material	Amount (kg)	10tal (%)	Global Walling Potential (kg Co2 Eq).	102.50
Fabric	0.30	1.11	Recycled Content (% By Weight):	61.56
Polystyrene (HIPS)	0.50	1.85	Total Energy Consumption (Mj):	2033.83
PU foam	2.00	7.41	Recyclability (% By Weight):	99.00
Aluminum extrusion	9.00	33.33		
Steel	15.20	56.30	Date of Production: August 2016	

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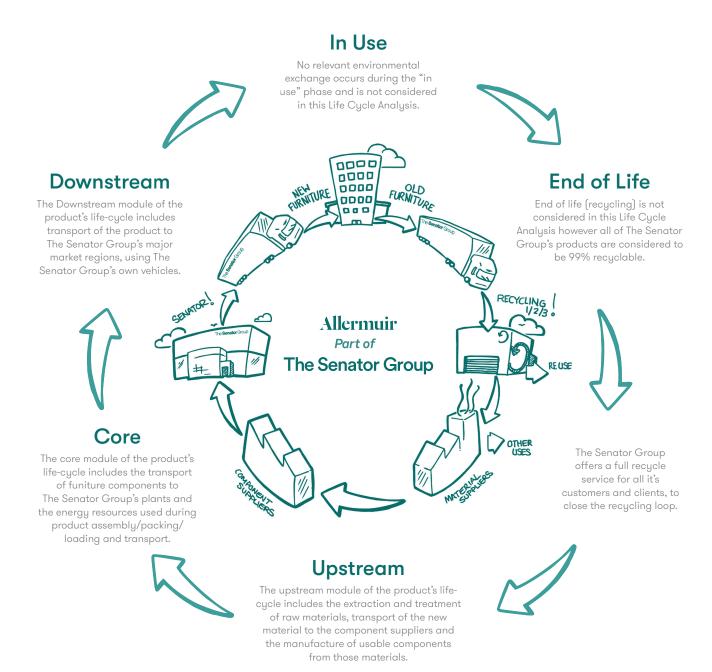
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33.00



System	Bound	aries
-		

Resource (Kg)	Upstream	Core	Downstream	Total
From the Air	5.82	0.16	0.03	6.01
From the Ground	92.12	5.08	11.76	108.96
From The Water	0.00	0.50	0.00	0.50

Energy Consumption

Resource (MJ)	Upstream	Core	Downstream	Total
Biomass	67.18	1.57	0.26	69.01
Hydro	61.19	3.55	1.45	66.19
Solar	0.07	0.01	0.00	0.08
Wind	4.96	0.21	0.06	5.23
Non-Renewable Energy (MJ)	1668.22	87.63	137.47	1893.32
Total	1801.62	92.97	139.24	2033.83

Environmental Impact Potential

Resource	Upstream	Core	Downstream	Total
Global Warming (Kg CO2 Equivalents)	89.22	5.27	8.07	102.56
Acidification (Kg SO2 Equivalents)	0.39	0.05	0.04	0.48
Eutrophication (Kg PO43 Equivalents)	0.03	0.00	0.00	0.03
Ozone Depletion (Kg CFC 11 Equivalents)	0.00	0.00	0.00	0.00
Photochemical Smog (Kg C2H4 Equivalents)	0.03	0.00	0.01	0.04

Toxic Emissions

Resource (Kg)	Upstream	Core	Downstream	Total
From the Air	93.32	352.46	789.95	1235.73
From the Ground	0.07	0.03	0.09	0.20
From The Water	13.98	5.80	11.73	31.52

Recycled Content

Total

Material	Recycled Content of Material (% by weight)	Recycled Content In Product (% by weight)
Material	Amount	Percent of Total
Fabric	50.00	0.50
Aluminium extrusion	100.00	33.00
Steel	50.00	28.00

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