



Statement of Verification

BREG EN EPD No: 00819

Issue: 01

This is to verify that the Environmental Product Declaration provided by:

Teknion Furniture Systems (M) Sdn Bhd

are in accordance with the requirements of:

EN 15804:2012+A2:2019

and

BRE Global Scheme Document SD207

This declaration is for:

Tek Work monoleg version with solid/glass back with dimension D1220 x W17800 x H2290mm. Service life 10 years.

Company Address

Teknion Furniture Systems (M) Sdn Bhd
Lot 761, Jalan Haji Sirat,
Off Jalan Meru,
42100 Klang,
Selangor

teknion



Signed for BRE Global Limited

Hayley Thomson

Operator

29 June 2026

Date of this Issue

29 June 2026

Date of First Issue

28 June 2031

Expiry Date



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Environmental Product Declaration

EPD Number: 00819

General Information

EPD Programme Operator	Applicable Product Category Rules
BRE Global Watford, Herts WD25 9XX United Kingdom	BRE Environmental Profiles 2025 Product Category Rules for Type III environmental product declaration of construction products to EN 15804+A2 PN 514 Rev 3.2
Commissioner of LCA study	LCA consultant/Tool
Teknion Furniture Systems (M) Sdn Bhd Lot 761, Jalan Haji Sirat, Off Jalan Meru, 42100 Klang, Selangor	LCA consultant: Grace Ong LCA Tool: BRE LINA A2
Functional Unit	Applicability/Coverage
Tek Work monoleg version with solid back with dimension D1220 x W17800 x H2290mm and a weight of 584kg. Service life 10 years. Tek Work monoleg version with glass back with dimension D1220 x W17800 x H2290mm and a weight of 658kg. Service life 10 years.	Product Average.
EPD Type	Background database
Cradle to Grave	Ecoinvent 3.8
Demonstration of Verification	
CEN standard EN 15804 serves as the core PCR ^a	
Independent verification of the declaration and data according to EN ISO 14025:2010 ☒ Internal ☐ External	
(Where appropriate ^b) Third party verifier: Kim Allbury	
a: Product category rules b: Optional for business-to-business communication; mandatory for business-to-consumer communication (see EN ISO 14025:2010, 9.4)	
Comparability	
Environmental product declarations from different programmes may not be comparable if not compliant with EN 15804:2012+A2:2019. Comparability is further dependent on the specific product category rules, system boundaries and allocations, and background data sources. See Clause 5.3 of EN 15804:2012+A2:2019 for further guidance	



Information modules covered

Product			Construction		Use stage							End-of-life				Benefits and loads beyond the system boundary
					Related to the building fabric					Related to the building						
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Raw materials supply	Transport	Manufacturing	Transport to site	Construction – Installation	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	Deconstruction demolition	Transport	Waste processing	Disposal	Reuse, Recovery and/or Recycling potential
☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒

Note: Ticks indicate the Information Modules declared.

Manufacturing site(s)

Teknion Malaysia
Teknion Furniture Systems (M) Sdn Bhd
Lot 761, Jalan Haji Sirat, Off Jalan Meru,
42100 Klang,
Selangor



Construction Product:

Product Description

Part of the POD (Privacy on Demand) family, Tek Work is designed to support an instant individual's private and quiet space in busy office environments.

Tek Work's height-adjustable worksurface option improves user ergonomics allowing for longer more enjoyable working sessions with an overall improved comfort. It also offers multiple lighting options for effective video calls, including the facelight for high-quality on-screen appearance, the task light for focused work illumination, and the ceiling light for ambient lighting.

Tek Work is available with a glass back and a solid back option, which gives a flexibility in how to integrate it into the office space. Exterior finishes include Source Laminate, Foundation Laminate, and Flintwood.

For this study, Tek Work monoleg version with foundation laminated exterior, interior fabric fascia and monoleg worksurface is selected. The dimension of both the Tek Work monoleg with solid back and glass back is D1220 x W17800 x H2290mm. Service life 10 years.

This product configuration is determined to be a representative product based on sales of the variations. Although specific customer configurations may differ, we anticipate that the actual impact of any variation will not deviate by more than 10% from the analysed representative model. Below is the specific product code information:

	Solid Back	Glass Back
Product Code	• MFTWS x1 (Structure for Solid Back) • MFTWE L x1 (Exterior Left) • MFTWE R x1 (Exterior Right) • MFTWE B x1 (Exterior Back) • MFTWIM x1 (Interior - Monoleg Worksurface) • MFTWMA x1 (Monoleg Worksurface Assembly) • MFTWEPM x1 (Electrical Kit Monoleg)	• MFTWG x1 (Structure for Glass Back) • MFTWE L x1 (Exterior Left) • MFTWE R x1 (Exterior Right) • MFTWIM x1 (Interior - Monoleg Worksurface) • MFTWMA x1 (Monoleg Worksurface Assembly) • MFTWEPM x1 (Electrical Kit Monoleg)
Weight	584kg	658kg
Packaging Weight (Cardboard & plastic)	47.36kg	47.31kg

* Product code can be found in brochure and price guide, please reach out to Teknion technical team for more information.

More information about [Privacy on Demand \(POD\)](#)



Technical Information

Key technical properties and certifications are shown in the table below. The Reference Service Life (RSL) for the two products included in the EPD is 10 years.

Technical Properties (Tests)	All Configuration Value
Qualification of Seismic Anchorage 2021 International Building Code 2022 California Building Code 2020 National Building Code of Canada	Complies
Acoustics ASTM E336 "Measurement of Airborne Sound Insulation in Buildings" ASTM E413 "Determination of Sound Transmission Class Report No.# EXT -TFS-TBH-2502-R1	Solid NIC-32 NIC-34 Glass NIC-32 NIC-34
Electrics UL 183 CSA C22.2 NO.203.1-14 UL 962A, CSA C22.2 No. 308-18	Approved
Flammability AS 5637.1:2015 Determination of Fire Hazard Properties AS ISO 9705-2003(R2016) Fire Test –Full Scale room test for surface products EN13501-2018: Fire Classification of construction products and building elements – Part 1: Classification using data from reaction to fire tests	Complies
ANSI/BIFMA Furniture Emissions Standard (M7.1/X7.1-2011 R2021) Indoor Advantage™ Gold - Registration # SCS-IAQ-05320	Pass

Notes: The above listed technical properties are from the Certificate of Compliance (CoC), and it's an internal document which will be available upon request. Please contact the technical team for more information.



Note: The modelled configuration is Tek Work monoleg version with solid back.
This modelling does not include Work chair, monitor, monitor arm, keyboard and mouse on the worktop



Note: The modelled configuration is Tek Work monoleg version with glass back.
This modelling does not include the work chair, monitor, monitor arm and keyboard on the worktop.



Main Product Contents

Like many commercial furniture products, Tek Work is available in a few ranges of configurations. For the purposes of this study, a representative configuration was selected. The composition of this configuration is detailed in the table below.

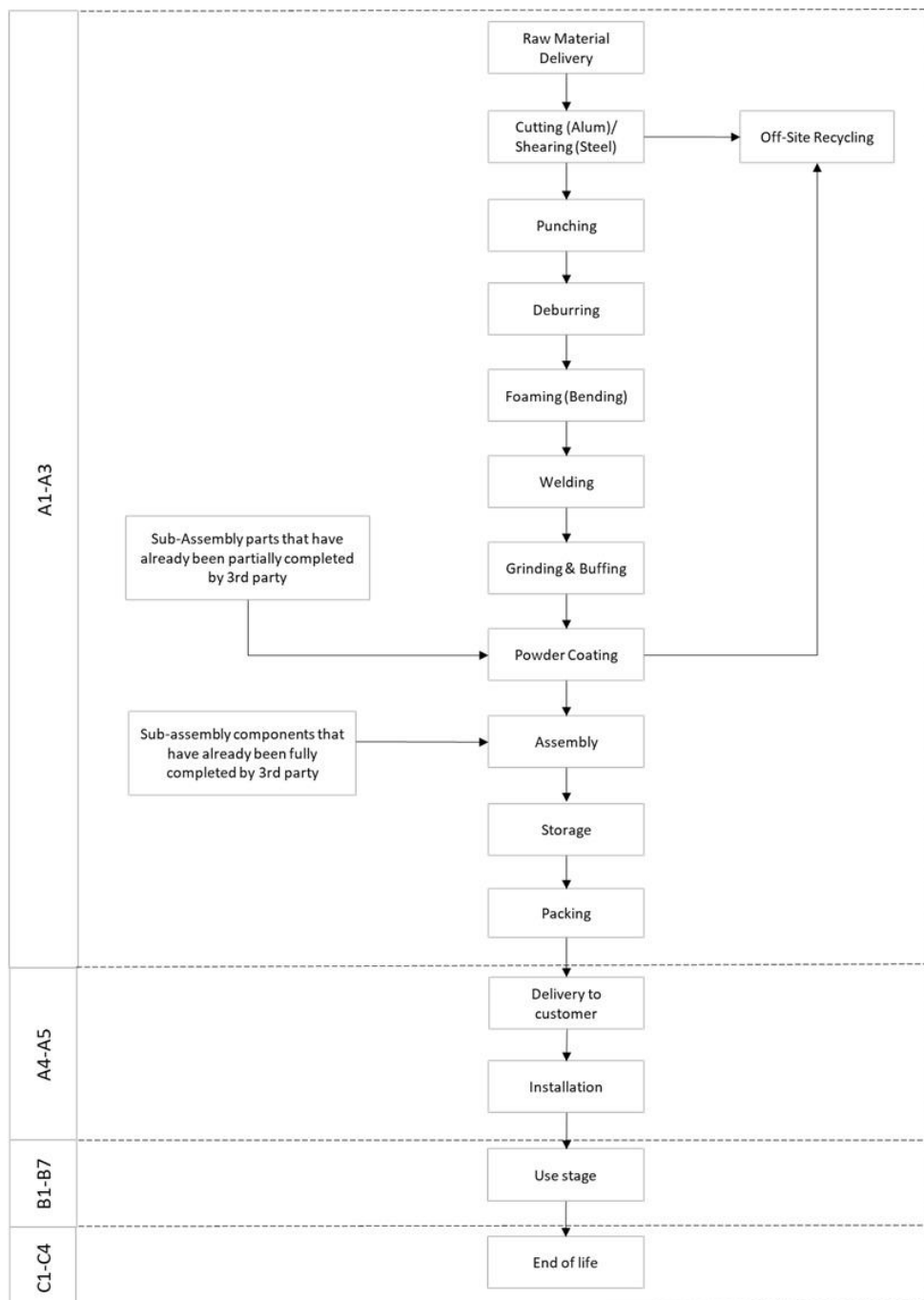
	Solid Back	Glass Back
Weight	584kg	658kg
Overall Dimension	D1220 x W17800 x H2290mm	
Material/Chemical Input	%	%
Steel	32.04%	28.92%
Plastic	24.81%	13.96%
Particle Board	15.79%	10.13%
Aluminium	13.11%	20.53%
Glass	12.78%	25.00%
Electronics component	0.32%	0.28%
Zinc	0.28%	0.23%
Others	0.87%	0.95%

Manufacturing Process

Metal parts undergo several processes, including cutting, punching, deburring, bending, welding, grinding, and buffing, followed by powder coating. Worksurfaces, sub assembly components and metal components are assembled and packed ready for delivery.

Notes: The manufacturing process is the same for all the products in the EPD.

Process flow diagram





Construction Installation

The product is installed manually using basic hand tools, requiring minimal energy input.

Use Information

Once installed, the product is ready for use. Tek Work is expected to outlast their intended lifespan. Throughout its 10-years reference service life, this product requires no maintenance, repair, replacement, refurbishment. The products feature a height adjustable monoleg worksurface, lighting and fan ventilation which are consuming power during product operation. Therefore, there is operational energy involved but no operational water required.

End of Life

At the end of the product's life, the Tek Work is dismantled, and materials are separated. Energy consumption is minimal due to manual dismantling with no involvement of machinery or power. It is assumed that 100% of the product is recovered at the demolition and sent to the waste processing facility for waste treatment.



Life Cycle Assessment Calculation Rules

Functional unit description

Tek Work monoleg version with solid back with dimension D1220 x W17800 x H2290mm and a weight of 584kg. Service life 10 years.

Tek Work monoleg version with glass back with dimension D1220 x W17800 x H2290mm and a weight of 658kg. Service life 10 years.

System boundary

This is a Cradle-to-Grave EPD, reporting the upstream processing stages A1 to A3, construction and Installation (A4-A5), use stages (B1 to B7), end-of-life stages (C1 to C4) and Module D in accordance with EN15804:2012+A2:2019 and BRE 2025 Product Category Rules (PN 514 Rev 3.2). Study period use for the LCA analysis is 10 years.

Data sources, quality and allocation

For the Life Cycle Assessment (LCA) and Environmental Product Declaration (EPD), Teknion utilised specific primary data extracted from its production operations at Teknion Malaysia's factory, modelled using the LINA A2 LCA and the Ecoinvent 3.8 database. In accordance with the requirements of EN15804:2012 + A2:2019, the most current available data has been used. Manufacturer-specific data has been used for the LCA analysis. The data represents one unit of the Tek Work, based on production period between 01/12/2023 and 30/11/2024 from Teknion Malaysia's factory. A production quantity of one unit was used, as the data was sourced directly from the ERP system.

The primary production figures are taken from the manufacturers ERP system, and the secondary datasets are derived from Ecoinvent v3.8, and the LCA tool used was BRE LINA A2. The LCA analysis is conducted for the Tek Work monoleg version with solid back with dimension D1220 x W17800 x H2290mm and a weight of 584kg, and Tek Work monoleg version with glass back with dimension D1220 x W17800 x H2290mm and a weight of 658kg. For the production process, the facility uses the national grid consumption mix for the production.

In addition to the Tek Work monoleg version, other products are manufactured in the factory. Therefore, the allocation of electricity, fuel, water consumption, and discharge are required. There are multiple configurations and combinations of products produced on the production line (in terms of accessories, finishes etc.). Therefore, allocating energy consumption, water, other waste, and wastewater based on mass would assign higher values to certain products. Instead, using the sales revenue of the product line relative to the total revenue is more accurate. Therefore, energy, water, other waste, and wastewater leaving the factory has been allocated based on the % revenue of the product line over the total revenue. Actual usage figures were employed for raw materials, packaging, and production waste are taken from ERP system.

Upon data review, it was noted that the mass balance is within the acceptable range, and no data uplift has been performed. In addition, no proxy dataset was used for the LCA modelling.

Secondary data has been obtained for all other upstream and downstream processes that are beyond the control of the manufacturer (i.e. raw material production) from the Ecoinvent 3.8 database. All ecoinvent datasets are complete within the context used and conform to the system boundary and the criteria for the exclusion of inputs and outputs, according to the requirements specified in EN15804+A2:2019. BRE LINA+A2 uses the characterisation factors that are specified in annex C of the 15804 A2 standard.

ISO14044 guidance. Quality Level	Geographical representativeness	Technical representativeness	Time representativeness
Very Good	Data from area under study.	Data from processes and products under study. Same state of technology applied as defined in goal and scope (i.e., identical technology).	There is approximately less than 3 years between the Ecoinvent LCI reference year, and the time period for which the LCA was undertaken.

The data quality assessment presented above has been carried out in accordance with Table E.1 in the Annex section of the BRE PCR EN 15804+A2 V3.2. Manufacturer country specific datasets have been selected from the Ecoinvent LCI for this LCA, utilizing the allocation, cut-off, EN15804 system model to maintain methodological consistency across all generic upstream and downstream processes. Teknion Malaysia uses national grid electricity and natural gas for production, therefore, location-based modelling has been followed the LCA analysis following the BRE PCR. The GWP carbon footprint for using 1 kWh of electricity, Malaysia is 0.840 kgCO₂e/kWh. The GWP carbon footprint for using 1 kWh of Natural gas (RoW) is 0.256 kgCO₂e/kWh.

The quality level of time representativeness is also Very Good as the background LCI datasets are based on Ecoinvent v3.8 which was compiled in 2021. Therefore, there is less than 5 years between the Ecoinvent LCI reference year and the time period for which the LCA was undertaken.

Cut-off criteria

In the manufacturing site, all raw materials and energy inputs to the manufacturing process have been included, except for direct emissions to air, water, and soil, which are not measured at either manufacturing facility. In Teknion Malaysia LCA inventory process, all data related to raw materials, packaging materials, and consumable items are included in the modelling.



LCA Results – Tek Work with solid back. Weight of 584kg

(MND = module not declared; MNR = module not relevant; INA = indicator not assessed; AGG = aggregated)

Parameters describing environmental impacts			GWP-total	GWP-fossil	GWP-biogenic	GWP-luluc	ODP	AP	EP-freshwater
			kg CO ₂ eq	kg CO ₂ eq	kg CO ₂ eq	kg CO ₂ eq	kg CFC11 eq	mol H ⁺ eq	kg (PO ₄) ³⁻ eq
Product stage	Raw material supply	A1	1.36E+03	1.61E+03	-2.59E+02	2.46E+00	3.07E-04	9.30E+00	6.20E-01
	Transport	A2	4.25E+01	4.25E+01	1.30E-02	2.77E-02	8.59E-06	5.51E-01	3.36E-03
	Manufacturing	A3	4.55E+02	4.64E+02	-1.24E+01	1.99E+00	2.67E-05	1.79E+00	1.53E-01
	Total (Consumption grid)	A1-3	1.85E+03	2.12E+03	-2.72E+02	4.48E+00	3.43E-04	1.17E+01	7.76E-01
Construction process stage	Transport	A4	1.02E+01	1.01E+01	5.38E-03	4.14E-03	2.24E-06	4.20E-02	7.62E-04
	Construction	A5	8.96E+00	8.96E+00	1.13E-03	2.27E-04	3.40E-07	1.12E-02	4.89E-05
Use stage	Use stage	B1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Maintenance	B2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Repair	B3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Replacement	B4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Refurbishment	B5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Operational energy use	B6	4.74E+02	4.67E+02	3.29E+00	2.87E+00	1.35E-05	2.29E+00	2.10E-01
End of life	Operational water use	B7	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Deconstruction, demolition	C1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Transport	C2	3.18E+01	3.17E+01	1.57E-02	1.96E-02	6.46E-06	1.27E-01	3.20E-03
	Waste processing	C3	5.22E+02	3.74E+02	1.48E+02	3.78E-02	6.09E-06	3.24E-01	9.15E-03
Potential benefits and loads beyond the system boundaries	Disposal	C4	6.94E-02	7.05E-02	-9.80E-04	-2.21E-05	-5.14E-08	-8.51E-04	6.53E-05
	Reuse, recovery, recycling potential	D	-1.78E+03	-1.78E+03	1.50E+00	-2.12E+00	-6.72E-05	-1.09E+01	-6.25E-01

GWP-total = Global warming potential, total;
 GWP-fossil = Global warming potential, fossil;
 GWP-biogenic = Global warming potential, biogenic;
 GWP-luluc = Global warming potential, land use and land use change;

ODP = Depletion potential of the stratospheric ozone layer;
 AP = Acidification potential, accumulated exceedance; and
 EP-freshwater = Eutrophication potential, fraction of nutrients reaching freshwater end compartment

LCA Results (continued)

(MND = module not declared; MNR = module not relevant; INA = indicator not assessed; AGG = aggregated)

Parameters describing environmental impacts			EP-marine	EP-terrestrial	POCP	ADP-mineral&metals	ADP-fossil	WDP	PM
			kg N eq	mol N eq	kg NMVOC eq	kg Sb eq	MJ, net calorific value	m ³ world eq deprived	disease incidence
Product stage	Raw material supply	A1	1.78E+00	1.84E+01	6.11E+00	4.04E-02	1.91E+04	5.79E+02	1.73E-04
	Transport	A2	1.38E-01	1.53E+00	4.13E-01	1.90E-04	5.87E+02	2.74E+00	2.28E-06
	Manufacturing	A3	3.98E-01	3.07E+00	8.90E-01	7.04E-04	6.06E+03	1.41E+02	8.67E-06
	Total (Consumption grid)	A1-3	2.31E+00	2.29E+01	7.42E+00	4.13E-02	2.57E+04	7.23E+02	1.84E-04
Construction process stage	Transport	A4	1.24E-02	1.35E-01	4.11E-02	3.46E-05	1.49E+02	6.79E-01	8.63E-07
	Construction	A5	4.76E-03	4.99E-02	1.67E-02	1.83E-06	2.17E+01	5.04E-01	2.19E-07
Use stage	Use stage	B1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Maintenance	B2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Repair	B3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Replacement	B4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Refurbishment	B5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Operational energy use	B6	3.34E-01	3.22E+00	9.28E-01	4.95E-04	5.23E+03	1.57E+02	5.63E-06
End of life	Operational water use	B7	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Deconstruction, demolition	C1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Transport	C2	3.40E-02	3.70E-01	1.15E-01	1.88E-04	4.54E+02	2.55E+00	2.03E-06
	Waste processing	C3	1.25E-01	1.28E+00	3.44E-01	9.80E-04	3.95E+02	1.35E+01	5.25E-06
Potential benefits and loads beyond the system boundaries	Disposal	C4	4.17E-03	-4.54E-03	-1.25E-03	-3.89E-07	-2.90E+00	-1.69E-01	-2.45E-08
	Reuse, recovery, recycling potential	D	-1.89E+00	-1.97E+01	-6.12E+00	-1.28E-02	-1.80E+04	-2.82E+02	-1.36E-04

EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment;
 EP-terrestrial = Eutrophication potential, accumulated exceedance;
 POCP = Formation potential of tropospheric ozone;
 ADP-mineral&metals = Abiotic depletion potential for non-fossil resources;

ADP-fossil = Depletion potential of the stratospheric ozone layer;
 WDP = Water (user) deprivation potential, deprivation-weighted water consumption; and
 PM = Particulate matter.

LCA Results (continued)

(MND = module not declared; MNR = module not relevant; INA = indicator not assessed; AGG = aggregated)

Parameters describing environmental impacts			IRP	ETP-fw	HTP-c	HTP-nc	SQP
			kBq U ²³⁵ eq	CTUe	CTUh	CTUh	dimensionless
Product stage	Raw material supply	A1	8.08E+01	4.67E+04	6.16E-06	3.82E-05	7.70E+03
	Transport	A2	2.68E+00	5.22E+02	2.34E-08	4.39E-07	2.25E+02
	Manufacturing	A3	7.60E+00	5.63E+03	1.34E-07	3.73E-06	2.39E+03
	Total (Consumption grid)	A1-3	9.10E+01	5.29E+04	6.32E-06	4.23E-05	1.03E+04
Construction process stage	Transport	A4	6.82E-01	1.30E+02	3.82E-09	1.25E-07	1.02E+02
	Construction	A5	9.52E-02	2.70E+01	8.73E-10	3.31E-08	4.01E+00
Use Stage	Use stage	B1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Maintenance	B2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Repair	B3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Replacement	B4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Refurbishment	B5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Operational energy use	B6	1.42E+00	4.65E+03	8.01E-08	3.81E-06	7.25E+02
End of life	Operational water use	B7	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Deconstruction, demolition	C1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Transport	C2	2.07E+00	4.56E+02	1.68E-08	4.05E-07	2.20E+02
	Waste processing	C3	3.03E+00	1.50E+03	1.16E-07	1.39E-06	1.96E+02
Potential benefits and loads beyond the system boundaries	Disposal	C4	-9.04E-03	2.42E+03	-1.97E-11	2.07E-09	-1.08E+01
	Reuse, recovery, recycling potential	D	-8.02E+01	-4.55E+04	-2.64E-06	-4.18E-05	-5.71E+03

IRP = Potential human exposure efficiency relative to U235;
ETP-fw = Potential comparative toxic unit for ecosystems;
HTP-c = Potential comparative toxic unit for humans;

HTP-nc = Potential comparative toxic unit for humans; and
SQP = Potential soil quality index.

LCA Results (continued)

(MND = module not declared; MNR = module not relevant; INA = indicator not assessed; AGG = aggregated)

Parameters describing resource use, primary energy			PERE	PERM	PERT	PENRE	PENRM	PENRT
			MJ	MJ	MJ	MJ	MJ	MJ
Product stage	Raw material supply	A1	5.93E+03	1.14E+03	7.07E+03	1.48E+04	3.54E+03	1.83E+04
	Transport	A2	1.15E+00	0.00E+00	1.15E+00	1.68E+02	0.00E+00	1.68E+02
	Manufacturing	A3	1.00E+02	5.70E+02	6.70E+02	4.35E+03	1.95E+02	4.55E+03
	Total (Consumption grid)	A1-3	6.03E+03	1.71E+03	7.74E+03	1.93E+04	3.74E+03	2.30E+04
Construction process stage	Transport	A4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Construction	A5	-6.23E+02	6.24E+02	1.08E+00	-6.78E+01	9.66E+01	2.87E+01
Use stage	Use stage	B1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Maintenance	B2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Repair	B3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Replacement	B4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Refurbishment	B5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Operational energy use	B6	4.32E+02	0.00E+00	4.32E+02	5.19E+03	0.00E+00	5.19E+03
End of life	Operational water use	B7	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Deconstruction, demolition	C1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Transport	C2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Waste processing	C3	-1.27E+03	1.29E+03	1.52E+01	2.53E+02	0.00E+00	2.53E+02
Potential benefits and loads beyond the system boundaries	Disposal	C4	6.85E+00	0.00E+00	6.85E+00	-3.15E+01	3.53E+01	3.78E+00
	Reuse, recovery, recycling potential	D	-1.10E+03	-5.07E+02	-1.61E+03	-1.79E+04	0.00E+00	-1.79E+04

PERE = Use of renewable primary energy excluding renewable primary energy used as raw materials;
 PERM = Use of renewable primary energy resources used as raw materials;
 PERT = Total use of renewable primary energy resources;

PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials;
 PENRM = Use of non-renewable primary energy resources used as raw materials;
 PENRT = Total use of non-renewable primary energy resource

LCA Results (continued)

(MND = module not declared; MNR = module not relevant; INA = indicator not assessed; AGG = aggregated)

Parameters describing resource use, secondary materials and fuels, use of water						
			SM	RSF	NRSF	FW
			kg	MJ net calorific value	MJ net calorific value	m ³
Product stage	Raw material supply	A1	7.67E+01	0.00E+00	0.00E+00	1.45E+01
	Transport	A2	0.00E+00	0.00E+00	0.00E+00	6.76E-02
	Manufacturing	A3	4.40E+01	0.00E+00	0.00E+00	3.37E+00
	Total (Consumption grid)	A1-3	1.26E+02	0.00E+00	0.00E+00	1.79E+01
Construction process stage	Transport	A4	0.00E+00	0.00E+00	0.00E+00	1.67E-02
	Construction	A5	0.00E+00	0.00E+00	0.00E+00	1.18E-02
Use stage	Use stage	B1	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Maintenance	B2	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Repair	B3	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Replacement	B4	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Refurbishment	B5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Operational energy use	B6	0.00E+00	0.00E+00	0.00E+00	3.76E+00
End of life	Operational water use	B7	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Deconstruction, demolition	C1	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Transport	C2	0.00E+00	0.00E+00	0.00E+00	6.29E-02
	Waste processing	C3	0.00E+00	0.00E+00	0.00E+00	3.24E-01
Potential benefits and loads beyond the system boundaries	Disposal	C4	0.00E+00	0.00E+00	0.00E+00	-3.89E-03
	Reuse, recovery, recycling potential	D	1.80E+02	0.00E+00	0.00E+00	-7.32E+00

SM = Use of secondary material;
RSF = Use of renewable secondary fuels;

NRSF = Use of non-renewable secondary fuels;
FW = Net use of fresh water

LCA Results (continued)

(MND = module not declared; MNR = module not relevant; INA = indicator not assessed; AGG = aggregated)

Other environmental information describing waste categories					
			HWD	NHWD	RWD
			kg	kg	kg
Product stage	Raw material supply	A1	1.99E+03	4.02E+04	1.52E+00
	Transport	A2	2.29E-01	1.86E+00	1.19E-03
	Manufacturing	A3	3.25E+01	6.77E+02	3.26E-03
	Total (Consumption grid)	A1-3	2.02E+03	4.09E+04	1.52E+00
Construction process stage	Transport	A4	0.00E+00	0.00E+00	0.00E+00
	Construction	A5	2.34E-01	5.76E+00	1.82E-04
Use stage	Use stage	B1	0.00E+00	0.00E+00	0.00E+00
	Maintenance	B2	0.00E+00	0.00E+00	0.00E+00
	Repair	B3	0.00E+00	0.00E+00	0.00E+00
	Replacement	B4	0.00E+00	0.00E+00	0.00E+00
	Refurbishment	B5	0.00E+00	0.00E+00	0.00E+00
	Operational energy use	B6	4.93E+01	9.93E+02	1.28E-03
	Operational water use	B7	0.00E+00	0.00E+00	0.00E+00
End of life	Deconstruction, demolition	C1	0.00E+00	0.00E+00	0.00E+00
	Transport	C2	0.00E+00	0.00E+00	0.00E+00
	Waste processing	C3	2.24E+00	1.32E+02	1.42E-03
	Disposal	C4	6.52E-02	4.34E+00	5.92E-05
Potential benefits and loads beyond the system boundaries	Reuse, recovery, recycling potential	D	-2.93E+02	-2.75E+03	-2.86E-02

HWD = Hazardous waste disposed;
 NHWD = Non-hazardous waste disposed;
 RWD = Radioactive waste disposed



LCA Results (continued)

(MND = module not declared; MNR = module not relevant; INA = indicator not assessed; AGG = aggregated)

Other environmental information describing output flows – at end of life						
			CRU	MFR	MER	EE
			kg	kg	kg	MJ per energy carrier
Product stage	Raw material supply	A1	0.00E+00	1.92E-01	3.17E-04	0.00E+00
	Transport	A2	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Manufacturing	A3	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Total (Consumption grid)	A1-3	0.00E+00	1.92E-01	3.17E-04	0.00E+00
Construction process stage	Transport	A4	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Construction	A5	0.00E+00	8.63E+01	3.14E+00	0.00E+00
Use stage	Use stage	B1	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Maintenance	B2	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Repair	B3	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Replacement	B4	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Refurbishment	B5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Operational energy use	B6	0.00E+00	0.00E+00	0.00E+00	0.00E+00
End of life	Operational water use	B7	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Deconstruction, demolition	C1	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Transport	C2	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Waste processing	C3	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Potential benefits and loads beyond the system boundaries	Disposal	C4	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Reuse, recovery, recycling potential	D	0.00E+00	-7.78E-03	-4.73E-05	-7.88E+00

CRU = Components for reuse;
MFR = Materials for recycling

MER = Materials for energy recovery;
EE = Exported Energy



LCA Results – Tek Work with glass back. Weight of 658kg

(MND = module not declared; MNR = module not relevant; INA = indicator not assessed; AGG = aggregated)

Parameters describing environmental impacts			GWP-total	GWP-fossil	GWP-biogenic	GWP-luluc	ODP	AP	EP-freshwater
			kg CO ₂ eq	kg CO ₂ eq	kg CO ₂ eq	kg CO ₂ eq	kg CFC11 eq	mol H ⁺ eq	kg (PO ₄) ³⁻ eq
Product stage	Raw material supply	A1	1.91E+03	2.10E+03	-1.90E+02	3.52E+00	2.42E-04	1.27E+01	7.79E-01
	Transport	A2	3.56E+01	3.56E+01	1.07E-02	2.32E-02	7.19E-06	4.77E-01	2.76E-03
	Manufacturing	A3	4.51E+02	4.61E+02	-1.24E+01	1.97E+00	2.66E-05	1.78E+00	1.51E-01
	Total (Consumption grid)	A1-3	2.40E+03	2.59E+03	-2.02E+02	5.52E+00	2.75E-04	1.49E+01	9.33E-01
Construction process stage	Transport	A4	1.14E+01	1.14E+01	6.06E-03	4.66E-03	2.52E-06	4.73E-02	8.59E-04
	Construction	A5	7.77E+00	7.77E+00	1.02E-03	2.19E-04	3.41E-07	1.10E-02	4.56E-05
Use stage	Use stage	B1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Maintenance	B2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Repair	B3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Replacement	B4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Refurbishment	B5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Operational energy use	B6	4.74E+02	4.67E+02	3.29E+00	2.87E+00	1.35E-05	2.29E+00	2.10E-01
End of life	Operational water use	B7	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Deconstruction, demolition	C1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Transport	C2	3.58E+01	3.58E+01	1.77E-02	2.21E-02	7.27E-06	1.43E-01	3.60E-03
	Waste processing	C3	3.73E+02	2.66E+02	1.07E+02	5.73E-02	6.37E-06	3.57E-01	1.26E-02
Potential benefits and loads beyond the system boundaries	Disposal	C4	-1.41E-01	-1.38E-01	-2.97E-03	-1.94E-04	-1.49E-07	-3.00E-03	6.66E-05
	Reuse, recovery, recycling potential	D	-2.84E+03	-2.84E+03	4.01E+00	-3.50E+00	-1.03E-04	-1.79E+01	-9.36E-01

GWP-total = Global warming potential, total;
 GWP-fossil = Global warming potential, fossil;
 GWP-biogenic = Global warming potential, biogenic;
 GWP-luluc = Global warming potential, land use and land use change;

ODP = Depletion potential of the stratospheric ozone layer;
 AP = Acidification potential, accumulated exceedance; and
 EP-freshwater = Eutrophication potential, fraction of nutrients reaching freshwater end compartment

LCA Results (continued)

(MND = module not declared; MNR = module not relevant; INA = indicator not assessed; AGG = aggregated)

Parameters describing environmental impacts			EP-marine	EP-terrestrial	POCP	ADP-mineral&metals	ADP-fossil	WDP	PM
			kg N eq	mol N eq	kg NMVOC eq	kg Sb eq	MJ, net calorific value	m ³ world eq deprived	disease incidence
Product stage	Raw material supply	A1	2.33E+00	2.47E+01	7.88E+00	4.65E-02	2.36E+04	7.04E+02	2.48E-04
	Transport	A2	1.19E-01	1.32E+00	3.56E-01	1.56E-04	4.91E+02	2.26E+00	1.90E-06
	Manufacturing	A3	3.95E-01	3.05E+00	8.80E-01	7.44E-04	5.97E+03	1.39E+02	8.66E-06
	Total (Consumption grid)	A1-3	2.85E+00	2.91E+01	9.11E+00	4.74E-02	3.01E+04	8.46E+02	2.59E-04
Construction process stage	Transport	A4	1.39E-02	1.52E-01	4.64E-02	3.89E-05	1.68E+02	7.65E-01	9.73E-07
	Construction	A5	4.64E-03	4.90E-02	1.65E-02	1.76E-06	2.17E+01	4.28E-01	2.20E-07
Use stage	Use stage	B1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Maintenance	B2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Repair	B3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Replacement	B4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Refurbishment	B5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Operational energy use	B6	3.34E-01	3.22E+00	9.28E-01	4.95E-04	5.23E+03	1.57E+02	5.63E-06
End of life	Operational water use	B7	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Deconstruction, demolition	C1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Transport	C2	3.83E-02	4.17E-01	1.29E-01	2.12E-04	5.11E+02	2.87E+00	2.28E-06
	Waste processing	C3	1.18E-01	1.24E+00	3.37E-01	1.66E-03	4.96E+02	1.31E+01	6.14E-06
Potential benefits and loads beyond the system boundaries	Disposal	C4	3.33E-03	-1.38E-02	-3.88E-03	-1.19E-06	-9.33E+00	-4.92E-01	-7.44E-08
	Reuse, recovery, recycling potential	D	-3.09E+00	-3.23E+01	-9.73E+00	-1.55E-02	-2.80E+04	-4.23E+02	-2.23E-04

EP-marine = Eutrophication potential, fraction of nutrients reaching marine end compartment;
 EP-terrestrial = Eutrophication potential, accumulated exceedance;
 POCP = Formation potential of tropospheric ozone;
 ADP-mineral&metals = Abiotic depletion potential for non-fossil resources;

ADP-fossil = Depletion potential of the stratospheric ozone layer;
 WDP = Water (user) deprivation potential, deprivation-weighted water consumption; and
 PM = Particulate matter.

LCA Results (continued)

(MND = module not declared; MNR = module not relevant; INA = indicator not assessed; AGG = aggregated)

Parameters describing environmental impacts			IRP	ETP-fw	HTP-c	HTP-nc	SQP
			kBq U ²³⁵ eq	CTUe	CTUh	CTUh	dimensionless
Product stage	Raw material supply	A1	1.02E+02	6.02E+04	6.99E-06	4.89E-05	8.16E+03
	Transport	A2	2.24E+00	4.32E+02	1.96E-08	3.63E-07	1.87E+02
	Manufacturing	A3	7.52E+00	5.60E+03	1.34E-07	3.72E-06	2.39E+03
	Total (Consumption grid)	A1-3	1.11E+02	6.62E+04	7.14E-06	5.30E-05	1.07E+04
Construction process stage	Transport	A4	7.68E-01	1.46E+02	4.30E-09	1.41E-07	1.14E+02
	Construction	A5	9.54E-02	2.46E+01	7.67E-10	2.90E-08	3.97E+00
Use Stage	Use stage	B1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Maintenance	B2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Repair	B3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Replacement	B4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Refurbishment	B5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Operational energy use	B6	1.42E+00	4.65E+03	8.01E-08	3.81E-06	7.25E+02
End of life	Operational water use	B7	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Deconstruction, demolition	C1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Transport	C2	2.33E+00	5.13E+02	1.90E-08	4.56E-07	2.47E+02
	Waste processing	C3	3.97E+00	1.52E+03	9.41E-08	1.60E-06	3.06E+02
Potential benefits and loads beyond the system boundaries	Disposal	C4	-3.44E-02	4.26E+03	-1.48E-10	1.71E-09	-2.92E+01
	Reuse, recovery, recycling potential	D	-9.95E+01	-7.17E+04	-3.79E-06	-7.08E-05	-7.14E+03

IRP = Potential human exposure efficiency relative to U235;
ETP-fw = Potential comparative toxic unit for ecosystems;
HTP-c = Potential comparative toxic unit for humans;

HTP-nc = Potential comparative toxic unit for humans; and
SQP = Potential soil quality index.

LCA Results (continued)

(MND = module not declared; MNR = module not relevant; INA = indicator not assessed; AGG = aggregated)

Parameters describing resource use, primary energy			PERE	PERM	PERT	PENRE	PENRM	PENRT
			MJ	MJ	MJ	MJ	MJ	MJ
Product stage	Raw material supply	A1	5.21E+03	8.26E+02	6.04E+03	2.08E+04	2.30E+03	2.31E+04
	Transport	A2	1.01E+00	0.00E+00	1.01E+00	1.47E+02	0.00E+00	1.47E+02
	Manufacturing	A3	9.66E+01	5.70E+02	6.67E+02	4.30E+03	1.79E+02	4.47E+03
	Total (Consumption grid)	A1-3	5.31E+03	1.40E+03	6.70E+03	2.52E+04	2.48E+03	2.77E+04
Construction process stage	Transport	A4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Construction	A5	-6.29E+02	6.30E+02	1.08E+00	-5.22E+01	8.10E+01	2.88E+01
Use stage	Use stage	B1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Maintenance	B2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Repair	B3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Replacement	B4	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Refurbishment	B5	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Operational energy use	B6	4.32E+02	0.00E+00	4.32E+02	5.19E+03	0.00E+00	5.19E+03
End of life	Operational water use	B7	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Deconstruction, demolition	C1	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Transport	C2	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Waste processing	C3	-9.06E+02	9.32E+02	2.61E+01	3.30E+02	0.00E+00	3.30E+02
Potential benefits and loads beyond the system boundaries	Disposal	C4	1.50E+01	0.00E+00	1.50E+01	-2.99E+01	3.53E+01	5.44E+00
	Reuse, recovery, recycling potential	D	-1.72E+03	-3.66E+02	-2.09E+03	-2.78E+04	0.00E+00	-2.78E+04

PERE = Use of renewable primary energy excluding renewable primary energy used as raw materials;
 PERM = Use of renewable primary energy resources used as raw materials;
 PERT = Total use of renewable primary energy resources;

PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials;
 PENRM = Use of non-renewable primary energy resources used as raw materials;
 PENRT = Total use of non-renewable primary energy resource

LCA Results (continued)

(MND = module not declared; MNR = module not relevant; INA = indicator not assessed; AGG = aggregated)

Parameters describing resource use, secondary materials and fuels, use of water						
			SM	RSF	NRSF	FW
			kg	MJ net calorific value	MJ net calorific value	m ³
Product stage	Raw material supply	A1	9.01E+01	0.00E+00	0.00E+00	1.77E+01
	Transport	A2	0.00E+00	0.00E+00	0.00E+00	5.59E-02
	Manufacturing	A3	4.40E+01	0.00E+00	0.00E+00	3.33E+00
	Total (Consumption grid)	A1-3	1.27E+02	0.00E+00	0.00E+00	2.10E+01
Construction process stage	Transport	A4	0.00E+00	0.00E+00	0.00E+00	1.88E-02
	Construction	A5	0.00E+00	0.00E+00	0.00E+00	1.00E-02
Use stage	Use stage	B1	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Maintenance	B2	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Repair	B3	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Replacement	B4	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Refurbishment	B5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Operational energy use	B6	0.00E+00	0.00E+00	0.00E+00	3.76E+00
	Operational water use	B7	0.00E+00	0.00E+00	0.00E+00	0.00E+00
End of life	Deconstruction, demolition	C1	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Transport	C2	0.00E+00	0.00E+00	0.00E+00	7.08E-02
	Waste processing	C3	0.00E+00	0.00E+00	0.00E+00	3.18E-01
	Disposal	C4	0.00E+00	0.00E+00	0.00E+00	-1.14E-02
Potential benefits and loads beyond the system boundaries	Reuse, recovery, recycling potential	D	2.26E+02	0.00E+00	0.00E+00	-1.11E+01

SM = Use of secondary material;
RSF = Use of renewable secondary fuels;

NRSF = Use of non-renewable secondary fuels;
FW = Net use of fresh water

LCA Results (continued)

(MND = module not declared; MNR = module not relevant; INA = indicator not assessed; AGG = aggregated)

Other environmental information describing waste categories					
			HWD	NHWD	RWD
			kg	kg	kg
Product stage	Raw material supply	A1	1.62E+03	3.04E+04	1.12E+00
	Transport	A2	2.01E-01	1.63E+00	1.04E-03
	Manufacturing	A3	3.23E+01	6.71E+02	3.23E-03
	Total (Consumption grid)	A1-3	1.65E+03	3.10E+04	1.12E+00
Construction process stage	Transport	A4	0.00E+00	0.00E+00	0.00E+00
	Construction	A5	2.17E-01	5.25E+00	1.83E-04
Use stage	Use stage	B1	0.00E+00	0.00E+00	0.00E+00
	Maintenance	B2	0.00E+00	0.00E+00	0.00E+00
	Repair	B3	0.00E+00	0.00E+00	0.00E+00
	Replacement	B4	0.00E+00	0.00E+00	0.00E+00
	Refurbishment	B5	0.00E+00	0.00E+00	0.00E+00
	Operational energy use	B6	4.93E+01	9.93E+02	1.28E-03
	Operational water use	B7	0.00E+00	0.00E+00	0.00E+00
End of life	Deconstruction, demolition	C1	0.00E+00	0.00E+00	0.00E+00
	Transport	C2	0.00E+00	0.00E+00	0.00E+00
	Waste processing	C3	3.28E+00	1.34E+02	1.75E-03
	Disposal	C4	1.15E-01	7.67E+00	1.14E-04
Potential benefits and loads beyond the system boundaries	Reuse, recovery, recycling potential	D	-4.92E+02	-4.01E+03	-3.45E-02

HWD = Hazardous waste disposed;
 NHWD = Non-hazardous waste disposed;
 RWD = Radioactive waste disposed



LCA Results (continued)

(MND = module not declared; MNR = module not relevant; INA = indicator not assessed; AGG = aggregated)

Other environmental information describing output flows – at end of life						
			CRU	MFR	MER	EE
			kg	kg	kg	MJ per energy carrier
Product stage	Raw material supply	A1	0.00E+00	1.92E-01	3.17E-04	0.00E+00
	Transport	A2	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Manufacturing	A3	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Total (Consumption grid)	A1-3	0.00E+00	1.92E-01	3.17E-04	0.00E+00
Construction process stage	Transport	A4	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Construction	A5	0.00E+00	8.72E+01	2.63E+00	0.00E+00
Use stage	Use stage	B1	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Maintenance	B2	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Repair	B3	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Replacement	B4	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Refurbishment	B5	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Operational energy use	B6	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Operational water use	B7	0.00E+00	0.00E+00	0.00E+00	0.00E+00
End of life	Deconstruction, demolition	C1	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Transport	C2	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Waste processing	C3	0.00E+00	0.00E+00	0.00E+00	0.00E+00
	Disposal	C4	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Potential benefits and loads beyond the system boundaries	Reuse, recovery, recycling potential	D	0.00E+00	-1.71E-02	-1.04E-04	-1.73E+01

CRU = Components for reuse;
MFR = Materials for recycling

MER = Materials for energy recovery;
EE = Exported Energy

Information on biogenic carbon content

Information on biogenic carbon content			
Biogenic Carbon Content		Units	Results
Solid Back	Biogenic carbon (product)	kg C	3.87E+01
	Biogenic carbon (packaging)	kg C	2.06E+01
Glass Back	Biogenic carbon (product)	kg C	2.80E+01
	Biogenic carbon (packaging)	kg C	2.08E+01

Note: 1 kg biogenic carbon is equivalent to 44/12 kg CO₂.

Scenarios and additional technical information

Scenarios and additional technical information			
Scenario	Parameter	Units	Results
A4 – Transport to the building site	Products manufactured in Malaysia are distributed both domestically within Malaysia and internationally across the Asia region, Australia, and the Middle East. In this LCA analysis, 100km by road has been modelled for module A4 as a typical distance from the Teknion site to the construction unit. However, end-users of the EPD can use this information to calculate the impacts of a bespoke transport distance for module A4 if required Note: For B6 - operational energy use, we've taken Thailand geography to calculate the operational energy impacts because Thailand is the most selling geography.		
Transport 1	Road transport –16-32 metric ton lorry	km	100
	Fuel consumption	l/km	0.227
	Capacity utilisation (incl. empty returns)	%	26
A5 – Installation in the building	The product is installed manually using basic hand tools, requiring minimal energy input. Therefore, no product waste is generated during installation, and only packaging waste is produced.		
Installation waste	Installation wastage rate	%	0
	Packaging waste – Cardboard waste to recycling	kg	44.68
	Packaging waste – Plastic waste to incineration	kg	2.63
B1 – Use stage	Once installed, no emission to air, water, and soil throughout the service life of the product.		
B2 - Maintenance	Once installed, the product is ready for use. Throughout its 10-years reference service life, this product requires no maintenance, repair, replacement, refurbishment during its 10-year reference service life		
B3 - Repair			

Scenarios and additional technical information

Scenario	Parameter	Units	Results															
B4 - Replacement																		
B5 - Refurbishment																		
B6 - Operational energy use	Both the Tek Work monoleg version with solid back and glass back in this study features a ceiling light, a task light, four ventilation fans and a monoleg for height adjustable purpose. These electrical appliance is permanently installed in the infrastructure. One of the four fans is running continuously to ensure constant air circulation. The other three fans, task light and the ceiling light are linked to an occupancy sensor and will activate only when the Tek Work is in use. It is not anticipated that the product will be occupied for the entire working day. Therefore, an occupancy period of 4 hours per working day is assumed for energy calculations. <table><tr><th>Operational energy use</th><th>Quantity</th><th>kWh</th></tr><tr><td>continuous ventilation fan</td><td>1</td><td>126</td></tr><tr><td>on-demand ventilation fans</td><td>3</td><td>43</td></tr><tr><td>ceiling light</td><td>1</td><td>321</td></tr><tr><td>task light</td><td>1</td><td>73</td></tr></table> Based on the most selling geography, this LCA modelling here is based on the assumption of operation in Thailand and the Carbon footprint is 0.737 kgCO2eq/kWh.			Operational energy use	Quantity	kWh	continuous ventilation fan	1	126	on-demand ventilation fans	3	43	ceiling light	1	321	task light	1	73
Operational energy use	Quantity	kWh																
continuous ventilation fan	1	126																
on-demand ventilation fans	3	43																
ceiling light	1	321																
task light	1	73																
B7 - Operational water use	Tek Work is equipped with an electronic mechanism, needs electrical power to operate but no operational water is required																	
Reference service life	10 years																	
Study period used	10 years																	
Design Application Parameters	Use as indicated in product brochure, user instruction and warranty card																	
C1 – Deconstruction	At the end of the product's life, the Tek Work is dismantled, and materials are separated. Energy consumption is minimal due to manual dismantling with no involvement of machinery or power. It is assumed that 100% of the product is recovered at the demolition and sent to the waste processing facility for waste treatment.																	
C2 – Transportation	Distance from the dismantling site to a disposal site will be no more than 100km. The transport mode is a 3.5-7.5-ton truck.																	
	Road transport by Lorry 3.5 -7.5 metric ton	km	100															

Scenarios and additional technical information

Scenario	Parameter	Units	Results
C3 – waste processing	Tek Work monoleg version is made up metal (steel, Aluminum, zinc), particle board, glass, mixed plastic, electronics parts and powder coating. According to the BRE PCR EN15804+A2, the following end of life scenarios will be applied to the materials: • Metal components such as steel and zinc will be 95% recycled and reused while 5% may end up in landfill. Steel recycling will involve a process of collecting, separating, compacting, shredding, heating, refining, and solidifying. The powder coating cannot be separated out from the final waste so it is assumed that this will end up in landfill. • Mixed plastic components will be incinerated for energy recovery (e.g. heat, electricity.) • Glass component will have 61% recycled and reused while 39% may end up in landfill. • 45% of the particle boards will be incinerated for the energy recovery and 55% will be recycled • Zinc cannot be separated from the final waste because of the less quantity, which is less than 5% of the overall composition, therefore in this analysis its assumed as the zinc waste quantity has been treated as a steel waste (same assumption has been followed in the Module D calculation).		
Tek Work monoleg version with Solid Back	Steel waste to recycle - 95%	kg	182.76
	Aluminium waste to recycle - 95%	kg	74.15
	MDF wood waste to recycle - 55%	kg	50.70
	MDF wood waste to incinerate - 45%	kg	41.49
	Glass waste to recycle – 61%	kg	45.51
	Electronic waste to recycle – 45%	kg	0.83
	Plastic waste to incinerate- 100%	kg	144.93
Tek Work monoleg version with glass back	Steel waste to recycle - 95%	kg	185.57
	Aluminium waste to recycle - 95%	kg	130.76
	MDF wood waste to recycle - 55%	kg	36.65
	MDF wood waste to incinerate - 45%	kg	29.99
	Glass waste to recycle – 61%	kg	100.27
	Electronic waste to recycle – 45%	kg	0.83
	Plastic waste to incinerate- 100%	kg	91.70
C4 – Disposal	Some materials cannot be recycled during waste processing process and may end up in landfill. i.e., 5% of steel waste to landfill and 39% of glass waste sent to landfill,		

Scenarios and additional technical information

Scenario	Parameter	Units	Results
Tek Work monoleg version with Solid Back	Steel waste to landfill (with powder coating waste) – 5%	kg	9.62
	Aluminium waste to landfill – 5%	kg	3.90
	Glass waste to landfill - 39%	kg	29.10
	Electronic waste to landfill – 55%	kg	1.01
Tek Work monoleg version with glass back	Steel waste to landfill (with powder coating waste) – 5%	kg	9.77
	Aluminium waste to landfill – 5%	kg	6.88
	Glass waste to landfill - 39%	kg	64.11
	Electronic waste to landfill – 55%	kg	1.01
Module D – Tek Work monoleg version with solid back	Tek Work monoleg version with solid back is made up of post-consumer and virgin materials. When calculating the benefits of recycling steel and aluminium, the pre-existing recycled content has been removed, and the benefits have been calculated only for virgin steel and aluminium. The pre-existing recycled content in the Ecoinvent 3.8 Steel dataset is 36.4%; therefore, the benefits have been calculated by excluding the recycled content. That is, the benefits are calculated based solely on the virgin steel content. Pre - existing recycled content (Post-consumer waste) = 60.41 kg Benefits due to recycling of virgin steel = 122.35kg The pre-existing recycled content in the Ecoinvent 3.8 aluminium alloy dataset is 25.9%; therefore, the benefits have been calculated by excluding the recycled content. That is, the benefits are calculated based solely on the virgin aluminium content. Pre - existing recycled content (Post-consumer waste) = 16.31 kg Benefits due to recycling of virgin aluminium = 57.84kg Benefits due to recycling of glass = 45.51kg Benefits due to recycling of electronics components = 0.83kg Benefits due to recycling of particle board = 50.70kg Yield is assumed to be 100% during the recycling process. The incineration benefits have been calculated for mixed plastic waste and particle board waste. The incinerated energy and heat will replace the European average mix. Benefits due to incineration of plastic mixture = 144.93kg Benefits due to incineration of particle board = 41.49kg		

Scenarios and additional technical information

Scenario	Parameter	Units	Results
Module D - Tek Work monoleg version with glass back	Tek Work monoleg version with glass back is made up of post-consumer and virgin materials. When calculating the benefits of recycling steel and aluminium, the pre-existing recycled content has been removed, and the benefits have been calculated only for virgin steel and aluminium.		
	The pre-existing recycled content in the Ecoinvent 3.8 Steel dataset is 36.4%; therefore, the benefits have been calculated by excluding the recycled content. That is, the benefits are calculated based solely on the virgin steel content.		
	Pre - existing recycled content (Post-consumer waste) = 60.86 kg Benefits due to recycling of virgin steel = 124.24kg		
	The pre-existing recycled content in the Ecoinvent 3.8 aluminium alloy dataset is 25.9%; therefore, the benefits have been calculated by excluding the recycled content. That is, the benefits are calculated based solely on the virgin aluminium content.		
	Pre - existing recycled content (Post-consumer waste) = 28.77 kg Benefits due to recycling of virgin aluminium = 101.99 kg Benefits due to recycling of glass = 100.27kg Benefits due to recycling of electronics components = 0.83 kg Benefits due to recycling of particle board = 36.65 kg		
	Yield is assumed to be 100% during the recycling process.		
	The incineration benefits have been calculated for mixed plastic waste and particle board waste. The incinerated energy and heat will replace the European average mix. Benefits due to incineration of plastic mixture = 91.70 kg Benefits due to incineration of particle board = 29.99 kg		

Interpretation of results

The bulk of the environmental impacts and primary energy demand occur during the manufacturing phase (A1–A3), in accordance with EN 15804:2012+A2:2019. The results in the bar chart reflect the environmental impact of different processes involved in the production and lifecycle of Tek Work monoleg version, with a focus on Global Warming Potential (GWP) in kgCO₂ equivalent. Data shows that electricity uses for both production stage and 10-years operational stage (module A3 and B6) brings the highest impact which account for about 25% of the total impact for the whole lifecycle. Next follows by aluminium alloy (module A1) contribute about 20% of the total impact. Low-alloy steel production (module A1) and incineration of mixed plastic waste contribute another 20%. These processes are the most significant sources of carbon emissions across the product's life cycle. Conversely, processes like natural gas consumption, PET production, MDF waste incineration and glass production have minor impacts. Therefore, raw material processing, especially aluminium and steel production and mixed plastic waste treatment, represents the most critical area for targeted carbon reduction.

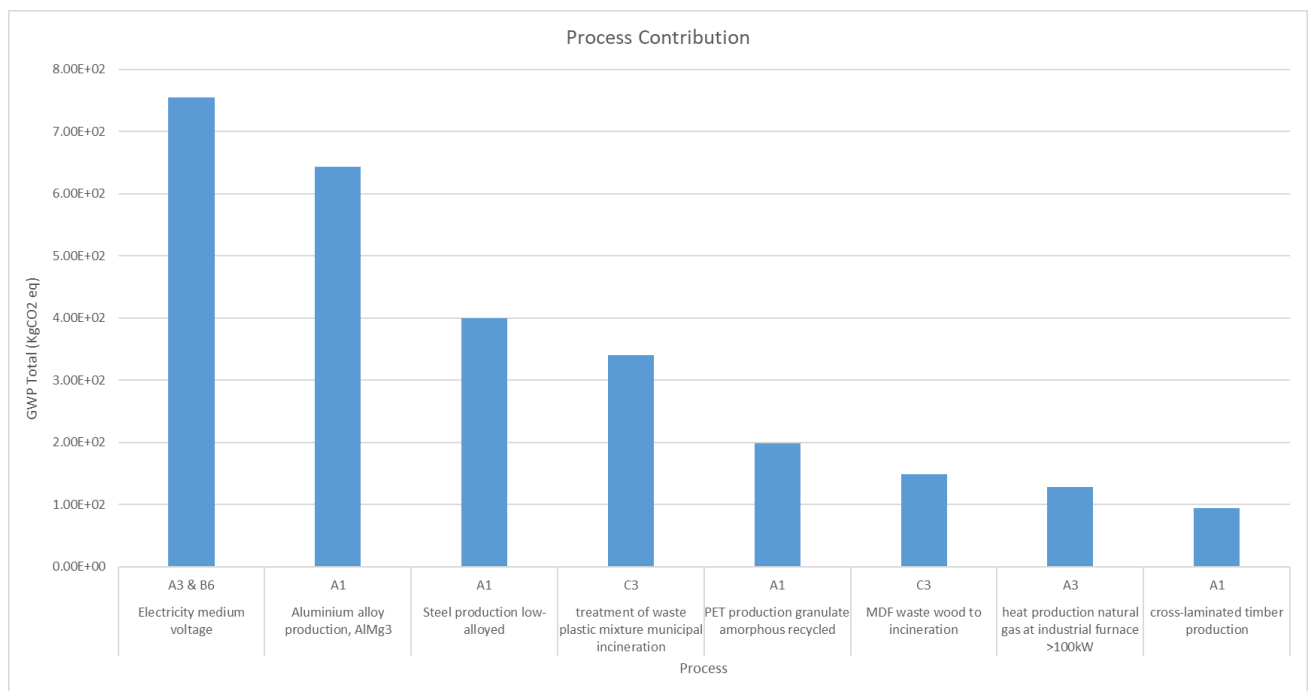


Chart 1: process contribution chart for Tek Work monoleg version with solid back

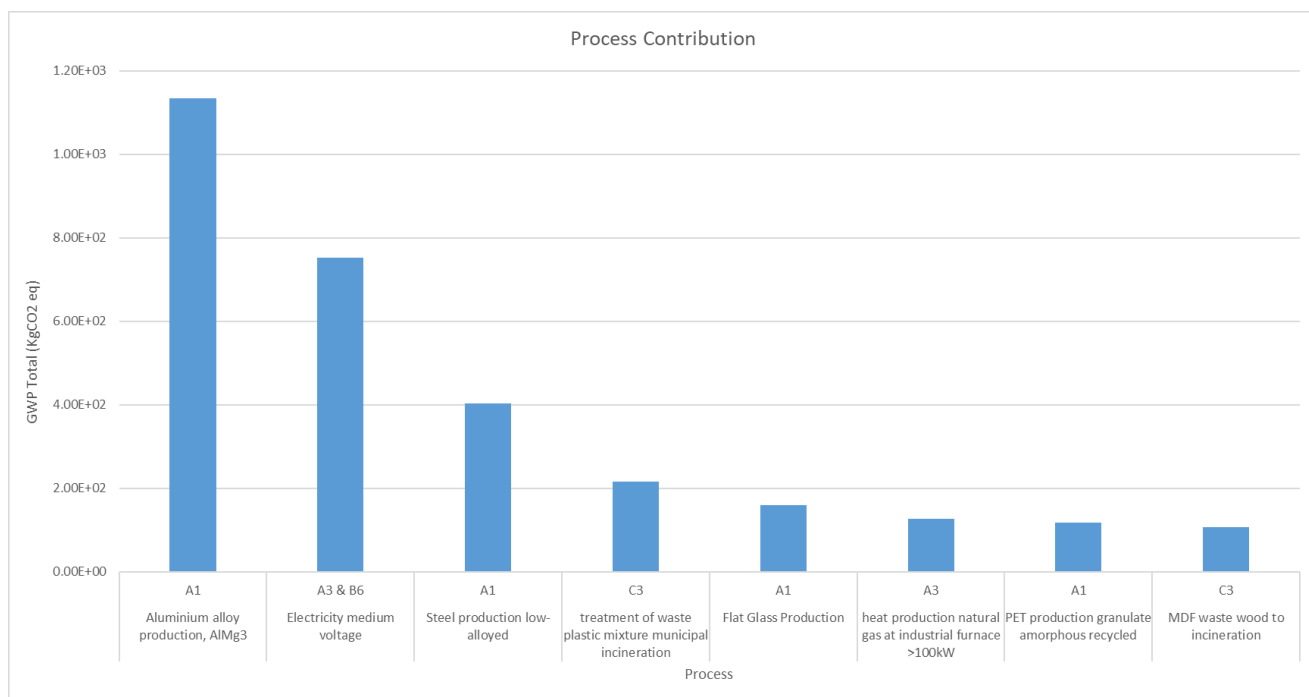


Chart 2: process contribution chart for Tek Work monoleg version with glass back

References

BSI. Sustainability of construction works – Environmental product declarations – Core rules for the product category of construction products. BS EN 15804:2012+A2:2019. London, BSI, 2019.

BSI. Environmental labels and declarations – Type III Environmental declarations – Principles and procedures. BS EN ISO 14025:2010 (exactly identical to ISO 14025:2006). London, BSI, 2010.

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Indoor Advantage™ Gold - certifies products for low emissions and good indoor air quality

BRE Environmental Profiles 2025 Product Category Rules for Type III environmental product declaration of construction products to EN 15804+A2 PN 514 Rev 3.2