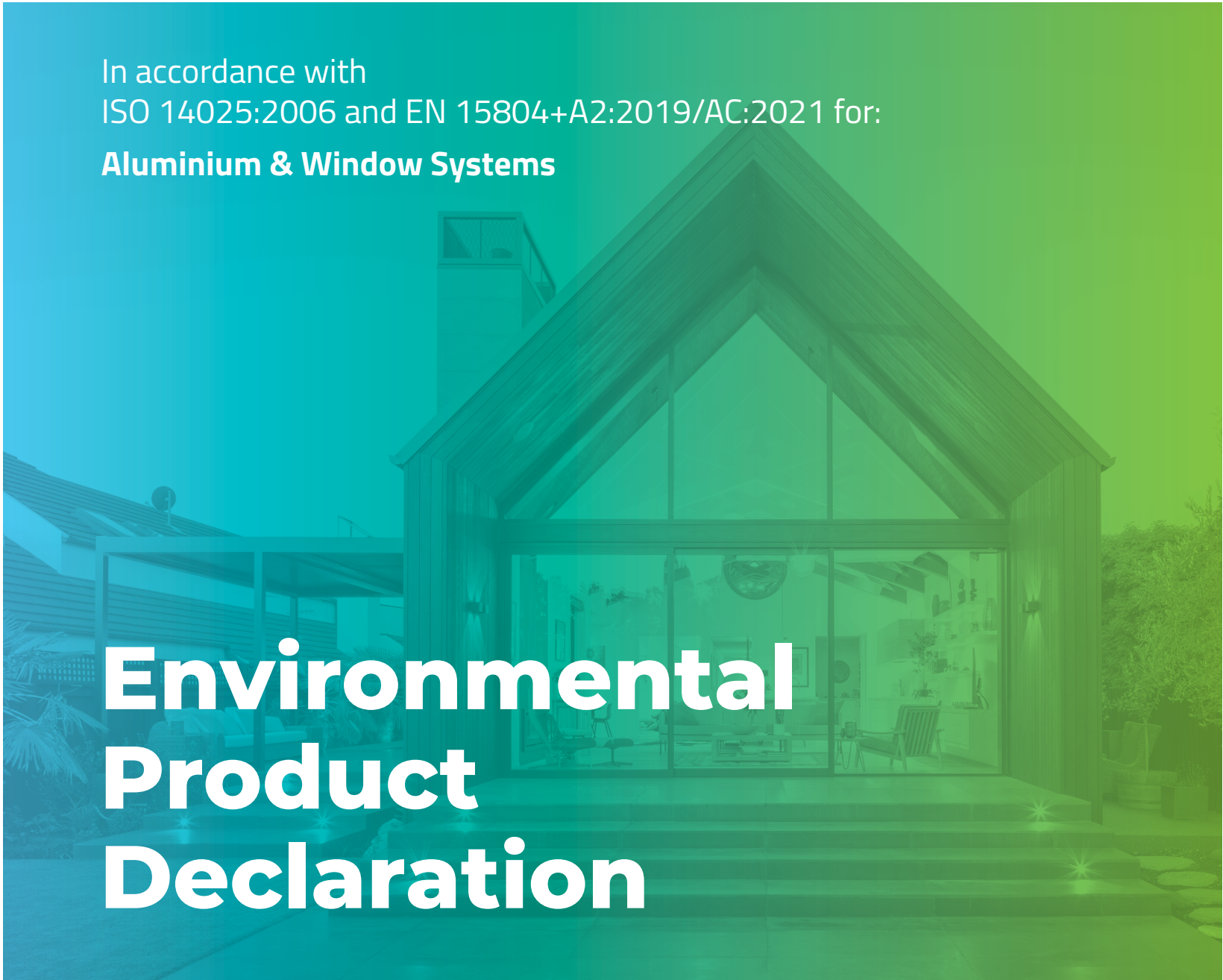


In accordance with
ISO 14025:2006 and EN 15804+A2:2019/AC:2021 for:
Aluminium & Window Systems



Environmental Product Declaration

Programme:	The International EPD [®] System, www.environdec.com
Programme operator:	EPD International AB
Regional programme operator:	EPD Australasia, www.epd-australasia.com
EPD registration number:	EPD-IES-0007443:002
Valid from:	2023-07-30
Revision date:	2025-03-17
Valid until:	2028-07-30
Version number:	2.0
Geographical scope of EPD:	New Zealand

An EPD should provide current information and may be updated if conditions change.
The stated validity is therefore subject to the continued registration and publication at www.epd-australasia.com

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About Altus

Our Commitment

Our strategies for success, passion, and direction enable us to provide our customers, staff, suppliers, and stakeholders with ongoing excellence in:

- Customer Experience
- Operational Excellence
- Product Leadership

Our Legacy

While Altus may be a relatively new name, our history spans over 60 years of pioneering and innovation in the aluminium industry in New Zealand. Our exclusive national network of fabricator brands, including Bradnam's™, Fisher Windows™, Nebulite™, Nulook™, Rylock™, and Vistalite™, has been integral to the country's unique environment and Kiwi lifestyle, offering both standard and bespoke window and door systems.

Together, Better

At Altus, our purpose is encapsulated in four words: "Success is better shared." We recognise that our contribution is always part of a larger whole, helping to create better, safer, and more productive environments. We work closely with our customers, suppliers, and team to raise standards through partnerships built on respect, integrity, transparency, accuracy, and reliability.

Sustainability

We are committed to minimizing the environmental impact of our activities through effective management practices. Our Environmental Management Plan, conforming to ISO 45001:2015, ensures all inputs, outputs, and processes are monitored.

Practical Steps for a Better World

Lean Manufacturing: Our principles focus on reducing waste and improving worker safety by:

- Avoiding waste creation wherever possible
- Recycling waste products when avoidance isn't possible
- Preferring suppliers with similar green policies
- Reducing energy use
- Using zero or low VOC (volatile organic compounds) products
- Championing eco-friendly practices within Altus and among all our stakeholders
- Providing a safe and healthy workplace
- Choosing workplace environments designed with green principles
- Minimising our environmental impact

Recycling Aluminium

Aluminium is one of the most successfully recycled materials in construction. Scrap aluminium from manufacturing, building demolition, and market collections is highly sought after and fetches high prices. Reprocessing scrap aluminium uses only about 5% of the electricity needed to produce primary aluminium, significantly reducing the carbon footprint.

Gate to Gate Initiative

Our "Gate to Gate" initiative aims to reduce the environmental impact of aluminium at every stage of its journey, from the smelter gate to its final destination. This includes transportation, manufacturing, packaging, fabrication, and recycling of off-cuts.

Building for Climate Change

Following guidance from the Ministry of Business, Innovation & Employment (MBIE), we are working to reduce emissions from buildings during construction and operation. We are also preparing buildings to withstand climate fluctuations.

Product Information

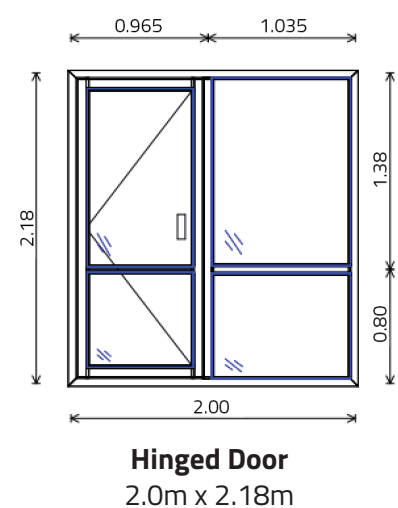
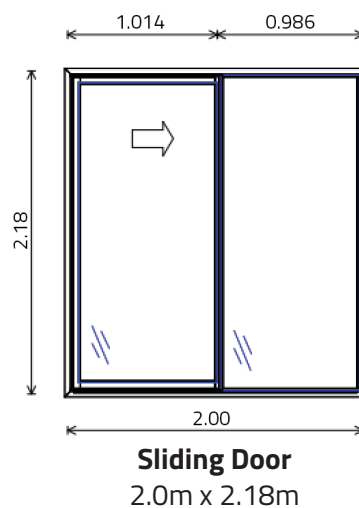
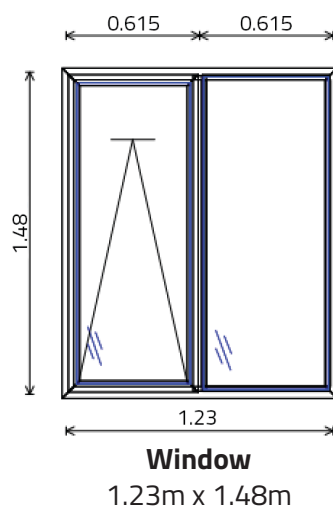
Product(s) covered by EPD

This EPD covers residential and commercial window and door products manufactured at the Altus manufacturing facility located at 47-69 Maui Street and 61 Hounsell Road, Hamilton, New Zealand, and fabricated by Altus and their franchised window and door fabricators. Product specifications are detailed in Table 1.

Table 1 Product specifications

Product name	Dimensions [m x m]	Mass [kg/m²]	Aluminium Frame	Glazing	Average R-value (m².K/W)
Atlantic 48 Window	1.23 x 1.48	29.8	Standard	Low emissivity IGU	0.34
Atlantic 48 Sliding door	2.0 x 2.18	35.3	Standard	Low emissivity IGU	0.34
Atlantic 48 Hinged door	2.0 x 2.18	26.8	Standard	Low emissivity IGU	0.34
Pacific 52 Window	1.23 x 1.48	28.0	Thermally Broken	Low emissivity IGU	0.54
Pacific 52 Sliding door	2.0 x 2.18	29.1	Thermally Broken	Low emissivity IGU	0.54
Pacific 52 Hinged door	2.0 x 2.18	27.5	Thermally Broken	Low emissivity IGU	0.54
Flushglaze 132TB Window	1.23 x 1.48	31.9	Thermally Broken	Low emissivity IGU	0.38
Flushglaze 132TB Sliding door	2.0 x 2.18	34.6	Thermally Broken	Low emissivity IGU	0.38
Flushglaze 132TB Hinged door	2.0 x 2.18	31.0	Thermally Broken	Low emissivity IGU	0.38
Pacific 41 Window	1.23 x 1.48	25.9	Standard	Low emissivity IGU	0.39
Pacific 41 Sliding door	2.0 x 2.18	25.9	Standard	Low emissivity IGU	0.39
Pacific 41 Hinged door	2.0 x 2.18	27.1	Standard	Low emissivity IGU	0.39
Southern 41 Window	1.23 x 1.48	26.4	Thermally Broken	Low emissivity IGU	0.48
Southern 41 Sliding door	2.0 x 2.18	27.3	Thermally Broken	Low emissivity IGU	0.48
Southern 41 Hinged door	2.0 x 2.18	27.5	Thermally Broken	Low emissivity IGU	0.48

IGU - Insulated Glass Unit



Industry Classification

Table 2: Industry classification of products included in this EPD

Product	Classification	Code	Category
Residential and Commercial Windows and Doors	UN CPC Ver.2	42120	Doors, windows and their frames and thresholds for doors, of iron, steel or aluminium
	ANZSIC 2006	2223	Commercial Aluminium Product Manufacturing

Declared Unit

The declared unit for all products included in this EPD is 1 m² of window or door, normalised from standard window sizes required by EN 17213 (EVS, 2020). Standard window and door sizes for each product grouping are provided above in Table 1. The mass to area conversion factors are presented in Table 1.

Content Declaration

The windows and doors declared in this EPD are made from an aluminium extrusion frame enclosing. A content declaration is provided in Table 3 as per EN15804 requirements. None of the products in this EPD contain hazardous materials identified in the European Chemicals Agency's Candidate List of Substances of Very High Concern (ECHA, 2022) at a concentration of greater than 0.1% of the mass.

Table 3: Content declaration, kg per m² of window or door

Materials / chemical substances	Atlantic 48 Window	Atlantic 48 Sliding door	Atlantic 48 Hinged door	Pacific 52 Window	Pacific 52 Sliding door	Pacific 52 Hinged door	Flushglaze 132TB Window	Flushglaze 132TB Sliding door	Flushglaze 132TB Hinged door	Pacific 41 Window	Pacific 41 Sliding door	Pacific 41 Hinged door	Southern 41 Window	Southern 41 Sliding door	Southern 41 Hinged door	CAS
Al extrusion (Powder coated)	8.19	8.33	6.83	7.36	9.08	6.93	15.5	14.3	13.5	5.22	5.55	6.74	5.77	7.25	7.52	7429-90-5
Timber	2.77	10.3	1.91	2.97	1.91	1.91	0	0	0	2.96	1.91	1.91	2.96	1.91	1.91	NA
IGU	17.6	15.5	17.4	16.4	16.9	17.6	14.3	18.8	15.6	16.7	17.8	17.2	16.7	17.2	17.2	65997-17-3
Components	1.21	0.740	0.502	1.20	0.976	0.818	0.840	0.822	1.09	0.943	0.430	0.739	0.926	0.661	0.635	NA
Total (kg/m ²)	29.8	35.3	26.8	28.0	29.1	27.5	31.9	34.6	31.0	25.9	25.9	27.1	26.4	27.3	27.5	

Packaging

Fabricated window and door unit assemblies are generally transported directly to the customer (building site) from fabrication factory on trucks or trailers towed by utility vehicles. Window and door units are loaded vertically on an inverted

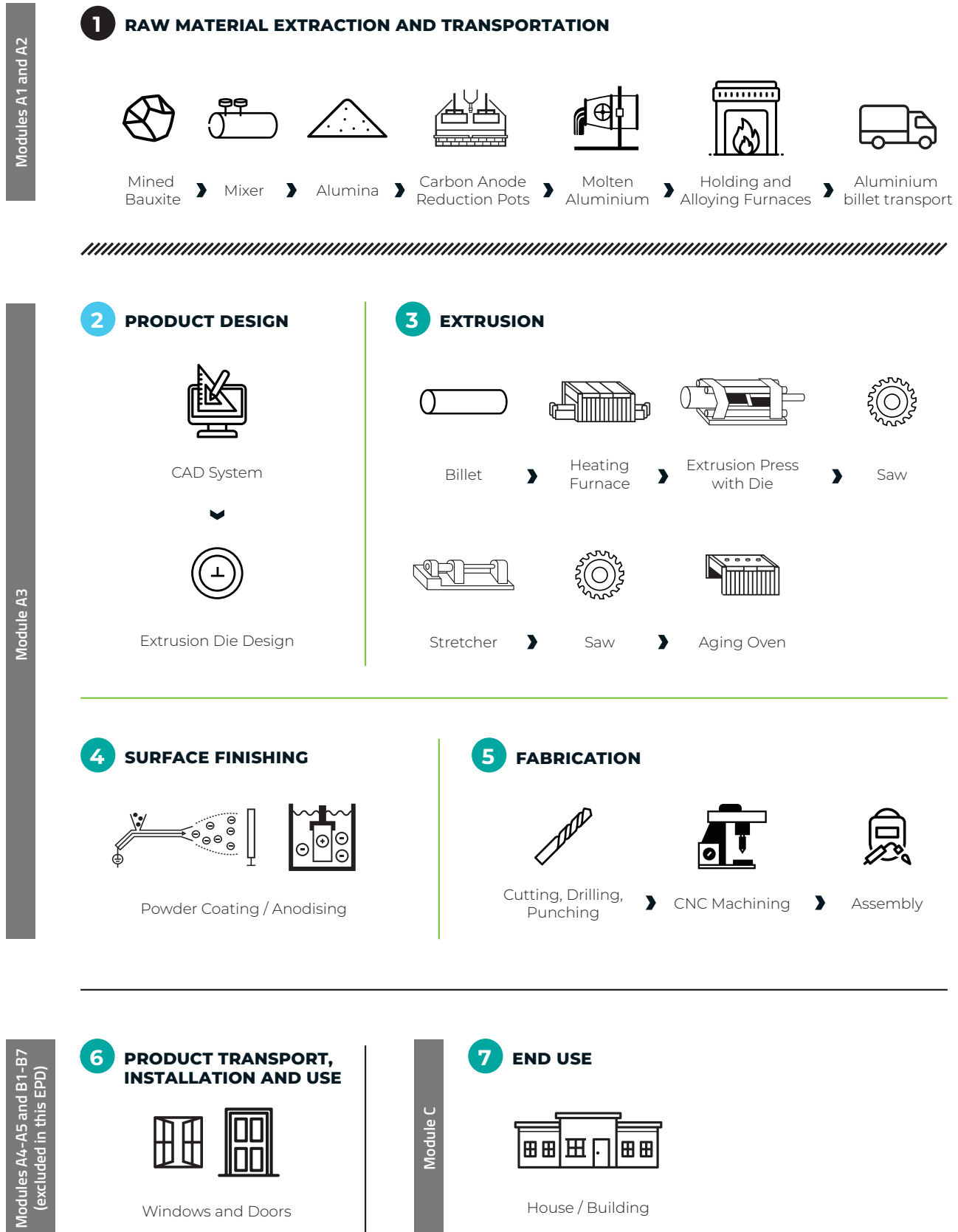
"V" pallet (commonly referred to as A-frame) for the journey. Window and door units are separated from each other by expanded polyurethane foam blocks and strips. The window and door units are secured with load retaining straps to the A-frame.

These packaging materials are returned to fabrication facility for reuse until end of their 'fit-for-purpose' life. These materials are included in the scope of this EPD.

Table 4: Packaging content declaration, kg per m² of window and door

Materials / chemical substances	Atlantic 48 Window	Atlantic 48 Sliding door	Atlantic 48 Hinged door	Pacific 52 Window	Pacific 52 Sliding door	Pacific 52 Hinged door	Flushglaze 132TB Window	Flushglaze 132TB Sliding door	Flushglaze 132TB Hinged door	Pacific 41 Window	Pacific 41 Sliding door	Pacific 41 Hinged door	Southern 41 Window	Southern 41 Sliding door	Southern 41 Hinged door	CAS
Timber (pallets)	6.50	6.61	5.43	5.85	7.21	5.50	12.3	11.3	10.7	4.14	4.41	5.35	4.58	5.75	5.97	NA
Paper (interleaving, cardboard, and labels)	0.176	0.179	0.147	0.158	0.195	0.149	0.334	0.307	0.290	0.112	0.119	0.145	0.124	0.156	0.162	65996-61-4
Steel straps	0.0111	0.0113	0.00930	0.0100	0.0124	0.00942	0.0211	0.0194	0.0184	0.00710	0.00755	0.00917	0.00785	0.00986	0.0102	12597-69-2
Plastic (wrap films, bubble wraps)	0.101	0.102	0.0841	0.0906	0.112	0.0852	0.191	0.176	0.166	0.0642	0.0683	0.0829	0.0710	0.0891	0.0925	9002-88-4
TOTAL	6.80	6.91	5.67	6.11	7.54	5.75	12.9	11.9	11.2	4.33	4.61	5.60	4.79	6.02	6.24	

Life Cycle of Aluminium Windows/Doors (Modules A-C)



System Boundaries

The life cycle of a building product is divided into three process modules according to the General Program Instructions (GPI) of the Australasian EPD Programme (EPD Australasia, 2019) and four information modules according to EN 15804 (CEN, 2019) and supplemented by an optional information module on potential loads and benefits beyond the building life cycle. As shown in the table below, this EPD is of the type 'cradle-to-gate with modules C1-C4 and module D (A1-A3 + C + D)' (EPD International, 2021). Use phase and installation modules are dependent on particular scenarios and best considered at the building level.

Table 5: Modules included in the scope of the EPD

	Product stage			Construction process stage		Use stage							End of life stage				Recovery Stage
	Raw material supply	Transport of raw materials	Manufacturing	Transport to customer	Construction / Installation	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	Deconstruction / demolition	Transport to waste processing	Waste processing	Disposal	Reuse - Recovery- Recycling-potential
Module	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Modules declared	X	X	X	ND	ND	ND	ND	ND	ND	ND	ND	ND	X	X	X	X	X
Geography	GLO	GLO	NZ	-	-	-	-	-	-	-	-	-	NZ	NZ	NZ	NZ	NZ
Share of specific data	59%-78%^			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation: Products	Not applicable			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation: Sites	0%			-	-	-	-	-	-	-	-	-	-	-	-	-	-

X = included in the EPD; ND = Module not declared (such a declaration shall not be regarded as an indicator result of zero)*;

^only includes upstream aluminium production, aluminium extrusion process, fabrication process and raw materials transport

Production (Modules A1-A3)

The processes below are included in the product system to be studied. For modules beyond A3, the scenarios included are currently in use and are representative for one of the most probable alternatives.

Modules A1-A3 represent the manufacturing and packaging of aluminium extrusion profiles (including extraction and processing of raw materials and the transport to manufacturing site), manufacturing of the rest of the components of the window/door (IGUs, hardware fittings, gaskets/seals, and sealants), and transportation of these components and assemblies. Packaging is also included.

Upstream processes

A1) Raw material supply

- Extraction and processing of raw materials and packaging.
- Aluminium billets are sourced from the Tiwai Point, New Zealand Aluminium smelter.
- Insulated Glass Units (IGUs) are manufactured by Metro Performance Glass Ltd (New Zealand) with materials imported from Europe, Middle East, South Asia, and Southeast Asia.
- Components and materials for finishing are predominantly sourced nationally.
- Generation of electricity from primary energy resources, also including their extraction, refining and transport. This includes energy needed for raw material supply and energy for manufacturing in core process.
- Processing up to the end-of-waste state.

Core processes

A2) Transportation

- Transport of raw material to Altus manufacturing site in Te Rapa, Hamilton (New Zealand).

A3) Manufacturing

- Material handling and assembly- mainly, processing aluminium extrusion profiles from aluminium billet and surface finishing.
- Transport within the manufacturing site.
- Processing to manufacture the Altus products. At Te Rapa, aluminium extrusions are produced and powder coated. But note that some extrusions may be mill finished (no surface finishing processes after extrusion).
- Fabrication of the finished windows and doors is then undertaken at fabricator sites across New Zealand.
- Transport and processing of waste outputs up to the end-of-waste state.

End-of-Life (Modules C1-C4)

- C1) Deconstruction / demolition
- Deconstruction of doors and windows, the mass allocated impact of full building demolition using diesel powered machinery (100-kW construction excavator).
- C2) Transport
- Transport of waste to waste processing facilities in New Zealand.
- C3) Waste processing
- Aluminium and stainless steel are commonly recycled in New Zealand.
- C4) Disposal
- Landfilling of waste:
 - » Wood-based components: Disposal in a construction and demolition waste landfill with landfill gas utilisation. Landfill gas is used to generate electricity to be supplied to the national grid mix.
 - » Disposal on plastic landfill.
 - » Remaining material: rubber, plastic and glass are disposed of in inert construction waste on landfill.
 - » Remaining metals: aluminium and stainless steel

Table 6: End-of-life scenarios for products

Processes	Unit (expressed per kg of window/door)
Excavator	1 kg collected separately (includes metals, glass and plastics)
Recovery system specified by type	0% for re-use 85% of metals for recycling (BRANZ, 2024) 0% for energy recovery
Disposal specified by type	15% of recovered metals are landfilled: inert matter (metals and glass) on landfill. All glass and plastics are landfilled
Assumptions for scenario development	C1 – demolishing with an Excavator (100kW); fuel consumption is calculated at 0.172 kg diesel input per tonne of material C2 – 50 km of transport by truck with a utilisation rate of 50% C3 – construction waste processing C4 – 15% of recovered metals are landfilled; 100% glass and plastics are landfilled. Modelled as inert matter (metal and glass) on landfill.

*The European Union Guidance on PEF identifies an R2 value of 95% for aluminium building cladding (European Commission, 2020). However, it is more accurate to use the New Zealand value.

Recovery and Recycling potential (Module D)

- This module includes recycling credits for recycled aluminium and stainless-steel scraps that are fed into a second life cycle. This module is modelled considering the avoided aluminium and stainless-steel production.
- A credit is given for replaced electricity from landfill gas.

Note that the end-of-life (Modules C and D) scenarios included are currently in use and are representative for one of the most probable alternatives.

Life Cycle Inventory (LCI) Data and Assumptions

Primary data were used for all manufacturing operations up to the factory gate, including upstream data for aluminium extrusions and glass. Primary data for window and door fabrication operations was sourced from the period 01 January 2023 to 31 December 2023. Background data was used for input materials sourced from other suppliers.

All data in the background system were from the Sphera Life Cycle Inventory Database 2022 (Sphera, 2022). Most datasets have a reference year between 2016 and 2022 and all fall within the 10 year limit allowable for generic data under EN 15804.

Upstream data

With the exception of steel for energy and glass (which correctly reflect New Zealand conditions), minor upstream (supply chain) data used were European/US due to a lack of consistent LCI data for Australasia/New Zealand at the time this study was conducted - for example, aluminium billet produced at the Tiwai Smelter in Southland was largely modelled using the background datasets in the Sphera Life Cycle Inventory Database 2022 (Sphera, 2022).

Electricity

The residual electricity grid mix of New Zealand was used in this study. The composition of the residual electricity grid mix of New Zealand is modelled using published data for the period 1 April 2021 – 31 March 2022 (BraveTrace, 2023). The New Zealand residual electricity mix is made up of hydro (56.6%), geothermal (19.7%) natural gas (12.5%), wind (6.55%), coal (4.25%), biomass (0.266%) and biogas (0.160%). On-site consumption (3.00%), and the medium voltage (1kV-60kV) grid's transmission and distribution losses (3.17%) are calculated based on data from the Ministry of Business, Innovation & Employment (MBIE, 2023). The emission factor for the New Zealand residual grid mix for the GWP-GHG indicator is 0.156 kg CO₂-eq./kWh (medium voltage, based on EF3.1).

Recycling

Benefits from recycling the recovered aluminium and stainless steel in Module C4 are considered in Module D. Both metals' credits are modelled as avoided burdens of virgin materials. Both metals are modelled towards fully virgin production, considering recycling efficiency. This leads to recycling credits being slightly lower than the impact of virgin production.

Transport

- The average distribution distance from the Altus extrusion and surface finishing production facility to the fabricator and then final customer was calculated as an average total delivery distance, from invoice data.
- Any wastes from the production process (A3) are assumed to be transported over a 50 km distance to a treatment or disposal site.
- Where transport data was not available for each production plant, a standard value of 100 km is used.

Transport modes:

- Truck (diesel), Euro 0 - 6 mix, 34 - 40t gross weight / 27t payload capacity.
- Container ship (heavy fuel oil), 5 000 to 200 000 dwt payload capacity, ocean going.

Cut-off criteria

The system boundary was defined based on relevance to the goal of the study. For the processes within the system boundary, all available energy and material flow data have been included in the model. In cases where no matching life cycle inventories are available to represent a flow, proxy data have been applied based on conservative assumptions regarding environmental impacts. The influence of these proxy data on the results of the assessment has been carefully analysed.

Cut-off criteria was applied for recovered aluminium and stainless steel scraps in Module C4 – impacts associated with transportation and recycling of these metals were not considered in this study, but the credits were given for avoided virgin metals (in Module D).

Allocation

Multi-output allocation generally follows the requirements of ISO 14044, section 4.3.4.2. Allocation is necessary for Altus, given input/outputs (including aluminium extrusions) are measured only at the site level.

When allocation becomes necessary during the data collection phase, the allocation rule most suitable for the respective process step is applied based on the following principles:

- Impacts due to multi-output processes within the foreground system are allocated to coproducts by economic value, if the difference in the revenue of coproducts is high (>25% according to EN 15804).
- This is applicable for processes that involves aluminium and scraps – such as aluminium extrusion and fabrication.
- Aluminium scrap is generated during aluminium profile extrusion and fabrication (Module A3). The aluminium scrap is sold to a recycler, which has an economic value compared to the main product. In this study, we applied economic allocation for aluminium scrap, according to section 4.5.1 of the PCR (EPD International, 2021). CY 2023 economic data was used for allocation.
- For other processes such as glass production, site overheads (e.g. water, wastewater, fuels, electricity, and waste) are allocated based on the mass of outputs.
- The packaging materials are allocated by mass across the total output of packaged Altus products.

No secondary materials were used in the production processes. Allocation for input materials that contain secondary material occurs in the upstream datasets.

End-of-life allocation follows the requirements of EN 15804:2017+A2:2019 § 6.4.3.3 and generally follows the 'polluter pays' principle.

In cases where materials are sent to landfills, they are linked to an inventory that accounts for waste composition, regional leakage rates, landfill gas capture as well as utilisation rates (flaring vs. power production). A credit is assigned for power output using the national grid mix.

Any open scrap inputs into manufacturing remain unconnected. At the end-of-life of product, scrap is collected for recycling and is thus available to produce a recycling credit within Module D. A credit for net scrap is given in Module D based on the base metal used in the product.

Assessment Indicators

The results tables describe the different environmental indicators for each product per declared unit, for each declared module. The first section of each table contains the environmental impact indicators, describing the potential environmental impacts of the product as shown in Table 7. The second section shows the resource indicators, describing the use of renewable and non-renewable material resources, renewable and non-renewable primary energy and water, as shown in Table 8. The final section of each table displays the waste and other outputs, as shown in Table 9.

Table 7: Core environmental indicators in accordance with EN15804+A2

Impact category	Abbreviation
Climate change – total	GWP-total
Climate change – fossil	GWP-fossil
Climate change – biogenic	GWP-biogenic
Climate change – land use and land use change	GWP-luluc
Ozone depletion	ODP
Acidification	AP
Eutrophication aquatic freshwater	EP-freshwater
Eutrophication aquatic marine	EP-marine
Eutrophication terrestrial	EP-terrestrial
Photochemical ozone formation	POCP
Depletion of abiotic resources – minerals and metals*	ADP-minerals&metals
Depletion of abiotic resources – fossil fuels*	ADP-fossil
Water Depletion Potential*	WDP

Table 8: Life cycle inventory indicators on use of resources

Indicator	Abbreviation
Use of renewable primary energy excluding renewable primary energy resources used as raw materials	PERE
Use of renewable primary energy resources used as raw materials	PERM
Total use of renewable primary energy resources	PERT
Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials	PENRE
Use of non-renewable primary energy resources used as raw materials	PENRM
Total use of non-renewable primary energy resources	PENRT
Use of secondary material;	SM
Use of renewable secondary fuels	RSF
Use of non-renewable secondary fuels	NRSF
Total use of net fresh water	FWT

Table 9: Life cycle inventory indicators on waste categories and output flows

Indicator	Abbreviation
Hazardous waste disposed	HWD
Non-hazardous waste disposed	NHWD
Radioactive waste disposed	RWD
Components for reuse	CRU
Materials for energy recovery	MER
Materials for recycling	MFR
Exported electrical energy	EEE
Exported thermal energy	EET

Table 10: Additional Environmental Impact Indicators

Indicator	Abbreviation
Climate Change, IPCC AR5 GWP**	GWP-GHG ¹
Particulate Matter emissions	PM
Ionising Radiation – human health***	IRP
Eco-toxicity (freshwater)*	ETP-fw
Human Toxicity, cancer*	HTP-c
Human Toxicity, non-cancer*	HTP-nc
Land use related impacts / soil quality*	SQP

*The results of this environmental impact indicator should be used with care as the uncertainties on these results are high or as there is limited experience with the indicator.

**This indicator is calculated using the characterisation factors from the IPCC AR5 report (IPCC 2013) and has been included in the EPD following the PCR.

***This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and some construction materials, is not measured by this indicator.

¹ The indicator includes all greenhouse gases included in GWP-total but excludes biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product.

Table 11: Environmental Impact Indicators in accordance with EN15804+A1

Indicator	Abbreviation
Global warming potential	GWP
Ozone depletion potential	ODP
Acidification potential	AP
Eutrophication potential	EP
Photochemical oxone creation potential	POCP
Abiotic depletion potential for non-fossil resources	ADPE
Abiotic depletion potential for fossil resources	ADPF

Environmental Performance

Atlantic48 - Window

Core environmental indicators per Declared unit (1 m² of window ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Climate Change - total [kg CO ₂ eq.]	122	0.0192	0.131	0.0205	8.61	-40.4
Climate Change, fossil [kg CO ₂ eq.]	126	0.0192	0.126	0.0204	0.554	-40.4
Climate Change, biogenic [kg CO ₂ eq.]	-3.74	0	0.00552	4.98E-05	8.05	-0.0291
Climate Change, land use and land use change [kg CO ₂ eq.]	0.0181	2.07E-07	1.41E-06	6.22E-05	7.65E-04	-0.00142
Ozone depletion [kg CFC 11 eq.]	4.93E-08	1.93E-15	1.32E-14	5.51E-14	1.13E-12	-1.56E-11
Acidification [Mole of H ⁺ eq.]	0.860	9.66E-05	2.35E-04	1.00E-04	0.00343	-0.262
Eutrophication, freshwater [kg P eq.]	1.42E-04	3.16E-09	2.16E-08	4.67E-08	7.53E-07	-8.27E-06
Eutrophication, marine [kg N eq.]	0.142	4.59E-05	9.85E-05	4.67E-05	9.43E-04	-0.0170
Eutrophication, terrestrial [Mole of N eq.]	1.60	5.03E-04	0.00109	5.16E-04	0.0104	-0.186
Photochemical ozone formation, human health [kg NMVOC eq.]	0.372	1.29E-04	2.31E-04	1.26E-04	0.00340	-0.0605
Resource use, mineral and metals [kg Sb eq.]	1.45E-04	3.46E-10	2.36E-09	2.31E-08	5.49E-08	-1.55E-05
Resource use, fossils [MJ]	1 370	0.255	1.74	0.386	7.28	-297
Water use [m ³ world equiv.]	29.9	1.22E-04	8.30E-04	0.00346	0.0458	-13.4

Since Module C is included in the EPD, the use of Module A1-A3 results without considering the results of Module C is discouraged.

Atlantic48 - Window

Resource Use indicators per Declared unit (1 m² of window ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Use of renewable primary energy (PERE) [MJ]	1 110	0.00125	0.00850	0.0378	1.01	-493
Primary energy resources used as raw materials (PERM) [MJ]	45.9	0	0	0	0	0
Total use of renewable primary energy resources (PERT) [MJ]	1 160	0.00125	0.00850	0.0378	1.01	-493
Use of non-renewable primary energy (PENRE) [MJ]	1 350	0.255	1.74	0.386	7.29	-297
Non-renewable primary energy resources used as raw materials (PENRM) [MJ]	25.8	0	0	0	0	0
Total use of non-renewable primary energy resources (PENRT) [MJ]	1 370	0.255	1.74	0.386	7.29	-297
Input of secondary material (SM) [kg]	0	0	0	0	0	0
Use of renewable secondary fuels (RSF) [MJ]	0	0	0	0	0	0
Use of non-renewable secondary fuels (NRSF) [MJ]	0	0	0	0	0	0
Use of net fresh water (FW) [m ³]	3.12	2.43E-06	1.66E-05	1.00E-04	0.00164	-1.56

Waste indicators per Declared unit (1 m² of window ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Hazardous waste disposed (HWD) [kg]	3.73E-07	4.14E-13	2.82E-12	5.20E-12	4.05E-10	-1.51E-07
Non-hazardous waste disposed (NHWD) [kg]	13.0	6.19E-06	4.22E-05	1.15E-04	27.1	-0.592
Radioactive waste disposed (RWD) [kg]	0.0243	4.98E-08	3.40E-07	2.98E-06	6.75E-05	-0.00304

Output flow indicators per Declared unit (1 m² of window ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Components for re-use (CRU) [kg]	0	0	0	0	0	0
Materials for Recycling (MFR) [kg]	2.94	0	0	7.48	0	0
Material for Energy Recovery (MER) [kg]	0	0	0	0	0	0
Exported electrical energy (EEE) [MJ]	0	0	0	0	0.498	0
Exported thermal energy (EET) [MJ]	0	0	0	0	0	0

Since Module C is included in the EPD, the use of Module A1-A3 results without considering the results of Module C is discouraged.

Atlantic48 - Window

Additional indicators per Declared unit (1 m² of window ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Particulate matter [Disease incidences]	1.45E-05	1.11E-09	1.66E-09	1.94E-09	3.86E-08	-5.43E-06
Ionising radiation, human health [kBq U235 eq.]	4.13	6.48E-06	4.42E-05	2.94E-04	0.00733	-0.505
Ecotoxicity, freshwater [CTUe]	1 590	0.102	0.698	0.291	9.61	-115
Human toxicity, cancer [CTUh]	1.58E-07	1.73E-12	1.18E-11	6.25E-12	5.06E-10	-3.21E-08
Human toxicity, non-cancer [CTUh]	4.72E-06	8.65E-11	4.18E-10	3.26E-10	5.46E-08	-3.08E-07
Land Use [Pt]	3 810	7.20E-04	0.00491	0.0855	1.16	-10.2
Climate Change-GHG IPCC AR5 [kg CO ₂ eq.]	126	0.0192	0.125	0.0204	2.56	-40.7

EN15804+A1 indicators per Declared unit (1 m² of window ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Global warming potential (GWP) [kg CO ₂ eq.]	120	0.0189	0.129	0.0199	7.89	-40.3
Ozone Depletion Potential (ODP) [kg R11 eq.]	6.47E-08	2.27E-15	1.55E-14	6.49E-14	1.33E-12	-1.84E-11
Acidification potential (AP) [kg SO ₂ eq.]	0.712	6.75E-05	1.69E-04	7.00E-05	0.00270	-0.232
Eutrophication potential (EP) [kg Phosphate eq.]	0.0516	1.54E-05	3.35E-05	1.63E-05	3.27E-04	-0.00584
Photochemical Ozone Creation Potential (POCP) [kg Ethene eq.]	0.00230	6.34E-06	-2.72E-05	7.92E-06	5.70E-04	-0.0109
Abiotic depletion potential for non-fossil resources (ADPE) [kg Sb eq.]	1.45E-04	3.47E-10	2.37E-09	2.31E-08	5.54E-08	-1.55E-05
Abiotic depletion potential for fossil resources (ADPF) [MJ]	1 270	0.254	1.74	0.376	7.08	-287

Carbon content indicators per Declared unit (1 m² of window ready for installation.)

Indicators	A1-A3
Biogenic content in product [kg C]	1.23
Biogenic content in packaging [kg C]	3.13

Since Module C is included in the EPD, the use of Module A1-A3 results without considering the results of Module C is discouraged.

Atlantic48 - Hinged Door

Core environmental indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Climate Change - total [kg CO ₂ eq.]	108	0.0173	0.118	0.0173	5.95	-34.2
Climate Change, fossil [kg CO ₂ eq.]	111	0.0173	0.113	0.0172	0.471	-34.2
Climate Change, biogenic [kg CO ₂ eq.]	-2.43	0	0.00498	4.21E-05	5.48	-0.0247
Climate Change, land use and land use change [kg CO ₂ eq.]	0.0162	1.87E-07	1.27E-06	5.26E-05	6.93E-04	-0.00119
Ozone depletion [kg CFC 11 eq.]	4.74E-08	1.74E-15	1.19E-14	4.66E-14	9.89E-13	-1.33E-11
Acidification [Mole of H ⁺ eq.]	0.778	8.72E-05	2.12E-04	8.48E-05	0.00300	-0.222
Eutrophication, freshwater [kg P eq.]	1.24E-04	2.85E-09	1.95E-08	3.95E-08	6.71E-07	-7.00E-06
Eutrophication, marine [kg N eq.]	0.132	4.14E-05	8.89E-05	3.95E-05	8.11E-04	-0.0144
Eutrophication, terrestrial [Mole of N eq.]	1.50	4.54E-04	9.80E-04	4.36E-04	0.00891	-0.158
Photochemical ozone formation, human health [kg NMVOC eq.]	0.342	1.16E-04	2.08E-04	1.07E-04	0.00283	-0.0512
Resource use, mineral and metals [kg Sb eq.]	1.28E-04	3.13E-10	2.13E-09	1.95E-08	4.70E-08	-1.32E-05
Resource use, fossils [MJ]	1 200	0.230	1.57	0.326	6.18	-251
Water use [m ³ world equiv.]	25.8	1.10E-04	7.49E-04	0.00293	0.0414	-11.4

Since Module C is included in the EPD, the use of Module A1-A3 results without considering the results of Module C is discouraged.

Atlantic48 - Hinged Door

Resource Use indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Use of renewable primary energy (PERE) [MJ]	951	0.00112	0.00767	0.0320	0.872	-418
Primary energy resources used as raw materials (PERM) [MJ]	31.7	0	0	0	0	0
Total use of renewable primary energy resources (PERT) [MJ]	983	0.00112	0.00767	0.0320	0.872	-418
Use of non-renewable primary energy (PENRE) [MJ]	1 190	0.230	1.57	0.327	6.19	-252
Non-renewable primary energy resources used as raw materials (PENRM) [MJ]	9.89	0	0	0	0	0
Total use of non-renewable primary energy resources (PENRT) [MJ]	1 200	0.230	1.57	0.327	6.19	-252
Input of secondary material (SM) [kg]	0	0	0	0	0	0
Use of renewable secondary fuels (RSF) [MJ]	0	0	0	0	0	0
Use of non-renewable secondary fuels (NRSF) [MJ]	0	0	0	0	0	0
Use of net fresh water (FW) [m ³]	2.66	2.19E-06	1.50E-05	8.47E-05	0.00142	-1.32

Waste indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Hazardous waste disposed (HWD) [kg]	3.18E-07	3.73E-13	2.55E-12	4.40E-12	3.39E-10	-1.28E-07
Non-hazardous waste disposed (NHWD) [kg]	12.7	5.58E-06	3.81E-05	9.76E-05	24.7	-0.501
Radioactive waste disposed (RWD) [kg]	0.0225	4.49E-08	3.07E-07	2.52E-06	5.96E-05	-0.00258

Output flow indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Components for re-use (CRU) [kg]	0	0	0	0	0	0
Materials for Recycling (MFR) [kg]	2.36	0	0	6.33	0	0
Material for Energy Recovery (MER) [kg]	0	0	0	0	0	0
Exported electrical energy (EEE) [MJ]	0	0	0	0	0.339	0
Exported thermal energy (EET) [MJ]	0	0	0	0	0	0

Since Module C is included in the EPD, the use of Module A1-A3 results without considering the results of Module C is discouraged.

Atlantic48 - Hinged Door

Additional indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Particulate matter [Disease incidences]	1.25E-05	1.00E-09	1.50E-09	1.64E-09	3.44E-08	-4.61E-06
Ionising radiation, human health [kBq U235 eq.]	3.89	5.84E-06	3.99E-05	2.48E-04	0.00650	-0.428
Ecotoxicity, freshwater [CTUe]	1 460	0.0923	0.629	0.246	8.09	-97.6
Human toxicity, cancer [CTUh]	1.05E-07	1.56E-12	1.06E-11	5.29E-12	4.49E-10	-2.71E-08
Human toxicity, non-cancer [CTUh]	4.53E-06	7.80E-11	3.77E-10	2.76E-10	4.88E-08	-2.61E-07
Land Use [Pt]	3 040	6.49E-04	0.00443	0.0723	1.04	-8.67
Climate Change-GHG IPCC AR5 [kg CO ₂ eq.]	111	0.0173	0.113	0.0173	1.83	-34.4

EN15804+A1 indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Global warming potential (GWP) [kg CO ₂ eq.]	107	0.0171	0.117	0.0168	5.46	-34.1
Ozone Depletion Potential (ODP) [kg R11 eq.]	6.24E-08	2.05E-15	1.40E-14	5.49E-14	1.16E-12	-1.57E-11
Acidification potential (AP) [kg SO ₂ eq.]	0.641	6.09E-05	1.52E-04	5.92E-05	0.00237	-0.196
Eutrophication potential (EP) [kg Phosphate eq.]	0.0480	1.39E-05	3.03E-05	1.38E-05	2.82E-04	-0.00494
Photochemical Ozone Creation Potential (POCP) [kg Ethene eq.]	-8.20E-04	5.72E-06	-2.45E-05	6.70E-06	4.29E-04	-0.00924
Abiotic depletion potential for non-fossil resources (ADPE) [kg Sb eq.]	1.28E-04	3.13E-10	2.13E-09	1.95E-08	4.74E-08	-1.32E-05
Abiotic depletion potential for fossil resources (ADPF) [MJ]	1 120	0.230	1.57	0.318	6.01	-243

Carbon content indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3
Biogenic content in product [kg C]	0.85
Biogenic content in packaging [kg C]	2.78

Since Module C is included in the EPD, the use of Module A1-A3 results without considering the results of Module C is discouraged.

Atlantic48 - Sliding Door

Core environmental indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Climate Change - total [kg CO ₂ eq.]	110	0.0227	0.155	0.0211	30.3	-40.9
Climate Change, fossil [kg CO ₂ eq.]	126	0.0227	0.148	0.0210	1.01	-40.9
Climate Change, biogenic [kg CO ₂ eq.]	-16.2	0	0.00651	5.13E-05	29.3	-0.0285
Climate Change, land use and land use change [kg CO ₂ eq.]	0.0205	2.44E-07	1.67E-06	6.41E-05	9.30E-04	-0.00153
Ozone depletion [kg CFC 11 eq.]	4.46E-08	2.28E-15	1.55E-14	5.68E-14	1.75E-12	-1.45E-11
Acidification [Mole of H ⁺ eq.]	0.847	1.14E-04	2.77E-04	1.03E-04	0.00534	-0.263
Eutrophication, freshwater [kg P eq.]	1.41E-04	3.73E-09	2.55E-08	4.81E-08	1.04E-06	-8.36E-06
Eutrophication, marine [kg N eq.]	0.138	5.42E-05	1.16E-04	4.82E-05	0.00161	-0.0172
Eutrophication, terrestrial [Mole of N eq.]	1.56	5.94E-04	0.00128	5.31E-04	0.0177	-0.189
Photochemical ozone formation, human health [kg NMVOC eq.]	0.367	1.52E-04	2.72E-04	1.30E-04	0.00684	-0.0614
Resource use, mineral and metals [kg Sb eq.]	2.37E-04	4.09E-10	2.79E-09	2.38E-08	9.68E-08	-1.56E-05
Resource use, fossils [MJ]	1 350	0.301	2.05	0.398	13.3	-300
Water use [m ³ world equiv.]	30.5	1.44E-04	9.80E-04	0.00357	0.0565	-13.5

Since Module C is included in the EPD, the use of Module A1-A3 results without considering the results of Module C is discouraged.

Atlantic48 - Sliding Door

Resource Use indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Use of renewable primary energy (PERE) [MJ]	1 110	0.00147	0.0100	0.0390	1.70	-493
Primary energy resources used as raw materials (PERM) [MJ]	171	0	0	0	0	0
Total use of renewable primary energy resources (PERT) [MJ]	1 280	0.00147	0.0100	0.0390	1.70	-493
Use of non-renewable primary energy (PENRE) [MJ]	1 340	0.301	2.05	0.398	13.3	-301
Non-renewable primary energy resources used as raw materials (PENRM) [MJ]	14.5	0	0	0	0	0
Total use of non-renewable primary energy resources (PENRT) [MJ]	1 360	0.301	2.05	0.398	13.3	-301
Input of secondary material (SM) [kg]	0	0	0	0	0	0
Use of renewable secondary fuels (RSF) [MJ]	0	0	0	0	0	0
Use of non-renewable secondary fuels (NRSF) [MJ]	0	0	0	0	0	0
Use of net fresh water (FW) [m ³]	3.14	2.87E-06	1.96E-05	1.03E-04	0.00261	-1.57

Waste indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Hazardous waste disposed (HWD) [kg]	3.75E-07	4.89E-13	3.33E-12	5.36E-12	7.95E-10	-1.51E-07
Non-hazardous waste disposed (NHWD) [kg]	11.8	7.30E-06	4.98E-05	1.19E-04	31.1	-0.599
Radioactive waste disposed (RWD) [kg]	0.0222	5.88E-08	4.01E-07	3.07E-06	9.93E-05	-0.00299

Output flow indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Components for re-use (CRU) [kg]	0	0	0	0	0	0
Materials for Recycling (MFR) [kg]	4.86	0	0	7.71	0	0
Material for Energy Recovery (MER) [kg]	0	0	0	0	0	0
Exported electrical energy (EEE) [MJ]	0	0	0	0	1.81	0
Exported thermal energy (EET) [MJ]	0	0	0	0	0	0

Since Module C is included in the EPD, the use of Module A1-A3 results without considering the results of Module C is discouraged.

Atlantic48 - Sliding Door

Additional indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Particulate matter [Disease incidences]	1.66E-05	1.31E-09	1.96E-09	2.00E-09	5.27E-08	-5.46E-06
Ionising radiation, human health [kBq U235 eq.]	3.67	7.65E-06	5.21E-05	3.03E-04	0.0104	-0.500
Ecotoxicity, freshwater [CTUe]	1 510	0.121	0.824	0.300	12.8	-116
Human toxicity, cancer [CTUh]	6.04E-07	2.04E-12	1.39E-11	6.44E-12	7.15E-10	-3.28E-08
Human toxicity, non-cancer [CTUh]	4.30E-06	1.02E-10	4.93E-10	3.36E-10	7.41E-08	-3.11E-07
Land Use [Pt]	7 090	8.49E-04	0.00579	0.0882	1.48	-9.99
Climate Change-GHG IPCC AR5 [kg CO ₂ eq.]	127	0.0226	0.148	0.0211	8.29	-41.2

EN15804+A1 indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Global warming potential (GWP) [kg CO ₂ eq.]	108	0.0223	0.153	0.0205	27.7	-40.8
Ozone Depletion Potential (ODP) [kg R11 eq.]	5.83E-08	2.68E-15	1.83E-14	6.69E-14	2.06E-12	-1.71E-11
Acidification potential (AP) [kg SO ₂ eq.]	0.703	7.97E-05	1.99E-04	7.21E-05	0.00415	-0.233
Eutrophication potential (EP) [kg Phosphate eq.]	0.0502	1.82E-05	3.96E-05	1.68E-05	5.56E-04	-0.00593
Photochemical Ozone Creation Potential (POCP) [kg Ethene eq.]	0.00564	7.48E-06	-3.21E-05	8.16E-06	0.00162	-0.0111
Abiotic depletion potential for non-fossil resources (ADPE) [kg Sb eq.]	2.36E-04	4.09E-10	2.79E-09	2.38E-08	9.75E-08	-1.56E-05
Abiotic depletion potential for fossil resources (ADPF) [MJ]	1 260	0.300	2.05	0.388	13.0	-291

Carbon content indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3
Biogenic content in product [kg C]	4.60
Biogenic content in packaging [kg C]	3.38

Since Module C is included in the EPD, the use of Module A1-A3 results without considering the results of Module C is discouraged.

Pacific52 - Window

Core environmental indicators per Declared unit (1 m² of window ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Climate Change - total [kg CO ₂ eq.]	111	0.0180	0.123	0.0186	9.11	-35.6
Climate Change, fossil [kg CO ₂ eq.]	115	0.0180	0.118	0.0185	0.539	-35.6
Climate Change, biogenic [kg CO ₂ eq.]	-4.16	0	0.00517	4.52E-05	8.57	-0.0242
Climate Change, land use and land use change [kg CO ₂ eq.]	0.0184	1.94E-07	1.32E-06	5.64E-05	7.20E-04	-0.00139
Ozone depletion [kg CFC 11 eq.]	4.56E-08	1.81E-15	1.23E-14	5.00E-14	1.08E-12	-1.19E-11
Acidification [Mole of H ⁺ eq.]	0.800	9.06E-05	2.20E-04	9.10E-05	0.00328	-0.228
Eutrophication, freshwater [kg P eq.]	1.31E-04	2.97E-09	2.02E-08	4.24E-08	7.14E-07	-7.27E-06
Eutrophication, marine [kg N eq.]	0.131	4.30E-05	9.24E-05	4.24E-05	9.10E-04	-0.0150
Eutrophication, terrestrial [Mole of N eq.]	1.49	4.71E-04	0.00102	4.68E-04	0.0100	-0.165
Photochemical ozone formation, human health [kg NMVOC eq.]	0.345	1.20E-04	2.16E-04	1.14E-04	0.00334	-0.0536
Resource use, mineral and metals [kg Sb eq.]	2.84E-04	3.25E-10	2.21E-09	2.10E-08	5.32E-08	-1.34E-05
Resource use, fossils [MJ]	1 250	0.239	1.63	0.350	7.08	-262
Water use [m ³ world equiv.]	28.0	1.14E-04	7.78E-04	0.00314	0.0431	-11.6

Since Module C is included in the EPD, the use of Module A1-A3 results without considering the results of Module C is discouraged.

Pacific52 - Window

Resource Use indicators per Declared unit (1 m² of window ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Use of renewable primary energy (PERE) [MJ]	998	0.00117	0.00797	0.0343	0.975	-426
Primary energy resources used as raw materials (PERM) [MJ]	49.2	0	0	0	0	0
Total use of renewable primary energy resources (PERT) [MJ]	1 050	0.00117	0.00797	0.0343	0.975	-426
Use of non-renewable primary energy (PENRE) [MJ]	1 230	0.239	1.63	0.351	7.09	-262
Non-renewable primary energy resources used as raw materials (PENRM) [MJ]	28.8	0	0	0	0	0
Total use of non-renewable primary energy resources (PENRT) [MJ]	1 260	0.239	1.63	0.351	7.09	-262
Input of secondary material (SM) [kg]	0	0	0	0	0	0
Use of renewable secondary fuels (RSF) [MJ]	0	0	0	0	0	0
Use of non-renewable secondary fuels (NRSF) [MJ]	0	0	0	0	0	0
Use of net fresh water (FW) [m ³]	2.82	2.28E-06	1.55E-05	9.09E-05	0.00157	-1.35

Waste indicators per Declared unit (1 m² of window ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Hazardous waste disposed (HWD) [kg]	3.37E-07	3.88E-13	2.65E-12	4.72E-12	3.96E-10	-1.30E-07
Non-hazardous waste disposed (NHWD) [kg]	11.7	5.80E-06	3.96E-05	1.05E-04	25.4	-0.521
Radioactive waste disposed (RWD) [kg]	0.0201	4.67E-08	3.19E-07	2.70E-06	6.44E-05	-0.00255

Output flow indicators per Declared unit (1 m² of window ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Components for re-use (CRU) [kg]	0	0	0	0	0	0
Materials for Recycling (MFR) [kg]	2.76	0	0	6.79	0	0
Material for Energy Recovery (MER) [kg]	0	0	0	0	0	0
Exported electrical energy (EEE) [MJ]	0	0	0	0	0.530	0
Exported thermal energy (EET) [MJ]	0	0	0	0	0	0

Since Module C is included in the EPD, the use of Module A1-A3 results without considering the results of Module C is discouraged.

Pacific52 - Window

Additional indicators per Declared unit (1 m² of window ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Particulate matter [Disease incidences]	1.36E-05	1.04E-09	1.56E-09	1.76E-09	3.66E-08	-4.73E-06
Ionising radiation, human health [kBq U235 eq.]	3.27	6.07E-06	4.14E-05	2.66E-04	0.00697	-0.429
Ecotoxicity, freshwater [CTUe]	1 460	0.0959	0.654	0.264	8.93	-101
Human toxicity, cancer [CTUh]	7.95E-07	1.62E-12	1.10E-11	5.68E-12	4.81E-10	-2.87E-08
Human toxicity, non-cancer [CTUh]	4.40E-06	8.11E-11	3.92E-10	2.96E-10	5.18E-08	-2.70E-07
Land Use [Pt]	3 640	6.74E-04	0.00460	0.0776	1.09	-8.49
Climate Change-GHG IPCC AR5 [kg CO ₂ eq.]	116	0.0180	0.118	0.0185	2.67	-35.8

EN15804+A1 indicators per Declared unit (1 m² of window ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Global warming potential (GWP) [kg CO ₂ eq.]	109	0.0177	0.121	0.0181	8.35	-35.5
Ozone Depletion Potential (ODP) [kg R11 eq.]	5.99E-08	2.13E-15	1.45E-14	5.89E-14	1.27E-12	-1.40E-11
Acidification potential (AP) [kg SO ₂ eq.]	0.663	6.33E-05	1.58E-04	6.35E-05	0.00259	-0.202
Eutrophication potential (EP) [kg Phosphate eq.]	0.0479	1.44E-05	3.14E-05	1.48E-05	3.16E-04	-0.00517
Photochemical Ozone Creation Potential (POCP) [kg Ethene eq.]	0.00216	5.94E-06	-2.55E-05	7.19E-06	5.84E-04	-0.00963
Abiotic depletion potential for non-fossil resources (ADPE) [kg Sb eq.]	2.84E-04	3.25E-10	2.22E-09	2.10E-08	5.36E-08	-1.34E-05
Abiotic depletion potential for fossil resources (ADPF) [MJ]	1 180	0.239	1.63	0.341	6.89	-254

Carbon content indicators per Declared unit (1 m² of window ready for installation.)

Indicators	A1-A3
Biogenic content in product [kg C]	1.32
Biogenic content in packaging [kg C]	2.81

Since Module C is included in the EPD, the use of Module A1-A3 results without considering the results of Module C is discouraged.

Pacific52 - Hinged Door

Core environmental indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Climate Change - total [kg CO ₂ eq.]	111	0.0177	0.121	0.0177	5.95	-34.9
Climate Change, fossil [kg CO ₂ eq.]	113	0.0177	0.116	0.0176	0.479	-34.8
Climate Change, biogenic [kg CO ₂ eq.]	-2.43	0	0.00509	4.30E-05	5.47	-0.0251
Climate Change, land use and land use change [kg CO ₂ eq.]	0.0166	1.91E-07	1.30E-06	5.36E-05	7.09E-04	-0.00122
Ozone depletion [kg CFC 11 eq.]	4.80E-08	1.78E-15	1.22E-14	4.75E-14	1.01E-12	-1.35E-11
Acidification [Mole of H ⁺ eq.]	0.790	8.92E-05	2.17E-04	8.65E-05	0.00306	-0.226
Eutrophication, freshwater [kg P eq.]	1.27E-04	2.92E-09	1.99E-08	4.03E-08	6.85E-07	-7.13E-06
Eutrophication, marine [kg N eq.]	0.135	4.24E-05	9.10E-05	4.03E-05	8.26E-04	-0.0146
Eutrophication, terrestrial [Mole of N eq.]	1.52	4.64E-04	0.00100	4.45E-04	0.00908	-0.160
Photochemical ozone formation, human health [kg NMVOC eq.]	0.349	1.19E-04	2.13E-04	1.09E-04	0.00288	-0.0522
Resource use, mineral and metals [kg Sb eq.]	1.36E-04	3.20E-10	2.18E-09	1.99E-08	4.78E-08	-1.34E-05
Resource use, fossils [MJ]	1 240	0.235	1.61	0.333	6.29	-256
Water use [m ³ world equiv.]	26.2	1.12E-04	7.66E-04	0.00299	0.0423	-11.6

Since Module C is included in the EPD, the use of Module A1-A3 results without considering the results of Module C is discouraged.

Pacific52 - Hinged Door

Resource Use indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Use of renewable primary energy (PERE) [MJ]	968	0.00115	0.00785	0.0326	0.888	-425
Primary energy resources used as raw materials (PERM) [MJ]	31.7	0	0	0	0	0
Total use of renewable primary energy resources (PERT) [MJ]	1 000	0.00115	0.00785	0.0326	0.888	-425
Use of non-renewable primary energy (PENRE) [MJ]	1 220	0.235	1.61	0.333	6.30	-256
Non-renewable primary energy resources used as raw materials (PENRM) [MJ]	20.3	0	0	0	0	0
Total use of non-renewable primary energy resources (PENRT) [MJ]	1 250	0.235	1.61	0.333	6.30	-256
Input of secondary material (SM) [kg]	0	0	0	0	0	0
Use of renewable secondary fuels (RSF) [MJ]	0	0	0	0	0	0
Use of non-renewable secondary fuels (NRSF) [MJ]	0	0	0	0	0	0
Use of net fresh water (FW) [m ³]	2.70	2.24E-06	1.53E-05	8.63E-05	0.00145	-1.35

Waste indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Hazardous waste disposed (HWD) [kg]	3.23E-07	3.82E-13	2.61E-12	4.49E-12	3.44E-10	-1.30E-07
Non-hazardous waste disposed (NHWD) [kg]	12.9	5.71E-06	3.90E-05	9.95E-05	25.3	-0.510
Radioactive waste disposed (RWD) [kg]	0.0236	4.60E-08	3.14E-07	2.57E-06	6.08E-05	-0.00262

Output flow indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Components for re-use (CRU) [kg]	0	0	0	0	0	0
Materials for Recycling (MFR) [kg]	2.38	0	0	6.45	0	0
Material for Energy Recovery (MER) [kg]	0	0	0	0	0	0
Exported electrical energy (EEE) [MJ]	0	0	0	0	0.338	0
Exported thermal energy (EET) [MJ]	0	0	0	0	0	0

Since Module C is included in the EPD, the use of Module A1-A3 results without considering the results of Module C is discouraged.

Pacific52 - Hinged Door

Additional indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Particulate matter [Disease incidences]	1.27E-05	1.02E-09	1.53E-09	1.67E-09	3.52E-08	-4.69E-06
Ionising radiation, human health [kBq U235 eq.]	4.09	5.98E-06	4.08E-05	2.53E-04	0.00664	-0.435
Ecotoxicity, freshwater [CTUe]	1 490	0.0945	0.644	0.251	8.23	-99.4
Human toxicity, cancer [CTUh]	1.34E-07	1.59E-12	1.09E-11	5.39E-12	4.58E-10	-2.77E-08
Human toxicity, non-cancer [CTUh]	4.60E-06	7.99E-11	3.86E-10	2.81E-10	4.98E-08	-2.66E-07
Land Use [Pt]	3 080	6.64E-04	0.00453	0.0738	1.07	-8.81
Climate Change-GHG IPCC AR5 [kg CO ₂ eq.]	114	0.0177	0.116	0.0176	1.84	-35.1

EN15804+A1 indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Global warming potential (GWP) [kg CO ₂ eq.]	109	0.0175	0.119	0.0172	5.46	-34.7
Ozone Depletion Potential (ODP) [kg R11 eq.]	6.31E-08	2.10E-15	1.43E-14	5.60E-14	1.19E-12	-1.59E-11
Acidification potential (AP) [kg SO ₂ eq.]	0.652	6.23E-05	1.56E-04	6.04E-05	0.00241	-0.200
Eutrophication potential (EP) [kg Phosphate eq.]	0.0489	1.42E-05	3.10E-05	1.41E-05	2.87E-04	-0.00503
Photochemical Ozone Creation Potential (POCP) [kg Ethene eq.]	-5.60E-04	5.85E-06	-2.51E-05	6.83E-06	4.33E-04	-0.00941
Abiotic depletion potential for non-fossil resources (ADPE) [kg Sb eq.]	1.36E-04	3.20E-10	2.18E-09	1.99E-08	4.82E-08	-1.34E-05
Abiotic depletion potential for fossil resources (ADPF) [MJ]	1 160	0.235	1.60	0.324	6.11	-248

Carbon content indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3
Biogenic content in product [kg C]	0.85
Biogenic content in packaging [kg C]	2.82

Since Module C is included in the EPD, the use of Module A1-A3 results without considering the results of Module C is discouraged.

Pacific52 - Sliding Door

Core environmental indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Climate Change - total [kg CO ₂ eq.]	128	0.0188	0.128	0.0221	6.20	-43.7
Climate Change, fossil [kg CO ₂ eq.]	130	0.0188	0.123	0.0220	0.499	-43.7
Climate Change, biogenic [kg CO ₂ eq.]	-2.26	0	0.00540	5.38E-05	5.70	-0.0315
Climate Change, land use and land use change [kg CO ₂ eq.]	0.0179	2.02E-07	1.38E-06	6.72E-05	7.39E-04	-0.00153
Ozone depletion [kg CFC 11 eq.]	4.85E-08	1.89E-15	1.29E-14	5.96E-14	1.05E-12	-1.70E-11
Acidification [Mole of H ⁺ eq.]	0.885	9.45E-05	2.30E-04	1.08E-04	0.00318	-0.283
Eutrophication, freshwater [kg P eq.]	1.50E-04	3.09E-09	2.11E-08	5.05E-08	7.14E-07	-8.94E-06
Eutrophication, marine [kg N eq.]	0.141	4.49E-05	9.64E-05	5.05E-05	8.61E-04	-0.0184
Eutrophication, terrestrial [Mole of N eq.]	1.60	4.92E-04	0.00106	5.57E-04	0.00946	-0.201
Photochemical ozone formation, human health [kg NMVOC eq.]	0.374	1.26E-04	2.26E-04	1.36E-04	0.00300	-0.0655
Resource use, mineral and metals [kg Sb eq.]	1.39E-04	3.39E-10	2.31E-09	2.50E-08	4.98E-08	-1.68E-05
Resource use, fossils [MJ]	1 420	0.250	1.70	0.417	6.56	-321
Water use [m ³ world equiv.]	32.2	1.19E-04	8.12E-04	0.00374	0.0441	-14.5

Since Module C is included in the EPD, the use of Module A1-A3 results without considering the results of Module C is discouraged.

Pacific52 - Sliding Door

Resource Use indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Use of renewable primary energy (PERE) [MJ]	1 200	0.00122	0.00832	0.0409	0.926	-533
Primary energy resources used as raw materials (PERM) [MJ]	31.7	0	0	0	0	0
Total use of renewable primary energy resources (PERT) [MJ]	1 230	0.00122	0.00832	0.0409	0.926	-533
Use of non-renewable primary energy (PENRE) [MJ]	1 380	0.250	1.70	0.417	6.57	-321
Non-renewable primary energy resources used as raw materials (PENRM) [MJ]	40.8	0	0	0	0	0
Total use of non-renewable primary energy resources (PENRT) [MJ]	1 420	0.250	1.70	0.417	6.57	-321
Input of secondary material (SM) [kg]	0	0	0	0	0	0
Use of renewable secondary fuels (RSF) [MJ]	0	0	0	0	0	0
Use of non-renewable secondary fuels (NRSF) [MJ]	0	0	0	0	0	0
Use of net fresh water (FW) [m ³]	3.39	2.38E-06	1.62E-05	1.08E-04	0.00151	-1.69

Waste indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Hazardous waste disposed (HWD) [kg]	4.04E-07	4.05E-13	2.76E-12	5.62E-12	3.59E-10	-1.63E-07
Non-hazardous waste disposed (NHWD) [kg]	12.4	6.05E-06	4.13E-05	1.25E-04	26.3	-0.640
Radioactive waste disposed (RWD) [kg]	0.0235	4.87E-08	3.32E-07	3.22E-06	6.34E-05	-0.00329

Output flow indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Components for re-use (CRU) [kg]	0	0	0	0	0	0
Materials for Recycling (MFR) [kg]	2.98	0	0	8.09	0	0
Material for Energy Recovery (MER) [kg]	0	0	0	0	0	0
Exported electrical energy (EEE) [MJ]	0	0	0	0	0.353	0
Exported thermal energy (EET) [MJ]	0	0	0	0	0	0

Since Module C is included in the EPD, the use of Module A1-A3 results without considering the results of Module C is discouraged.

Pacific52 - Sliding Door

Additional indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Particulate matter [Disease incidences]	1.51E-05	1.08E-09	1.63E-09	2.10E-09	3.66E-08	-5.88E-06
Ionising radiation, human health [kBq U235 eq.]	3.93	6.34E-06	4.32E-05	3.17E-04	0.00692	-0.546
Ecotoxicity, freshwater [CTUe]	1 610	0.100	0.683	0.315	9.84	-125
Human toxicity, cancer [CTUh]	1.43E-07	1.69E-12	1.15E-11	6.76E-12	4.78E-10	-3.47E-08
Human toxicity, non-cancer [CTUh]	4.62E-06	8.46E-11	4.09E-10	3.52E-10	5.19E-08	-3.33E-07
Land Use [Pt]	3 690	7.04E-04	0.00480	0.0925	1.11	-11.1
Climate Change-GHG IPCC AR5 [kg CO ₂ eq.]	132	0.0187	0.123	0.0221	1.92	-44.0

EN15804+A1 indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Global warming potential (GWP) [kg CO ₂ eq.]	126	0.0185	0.127	0.0215	5.69	-43.6
Ozone Depletion Potential (ODP) [kg R11 eq.]	6.35E-08	2.22E-15	1.52E-14	7.01E-14	1.24E-12	-2.00E-11
Acidification potential (AP) [kg SO ₂ eq.]	0.735	6.60E-05	1.65E-04	7.56E-05	0.00252	-0.251
Eutrophication potential (EP) [kg Phosphate eq.]	0.0514	1.51E-05	3.28E-05	1.76E-05	2.99E-04	-0.00631
Photochemical Ozone Creation Potential (POCP) [kg Ethene eq.]	0.00487	6.20E-06	-2.66E-05	8.56E-06	4.51E-04	-0.0118
Abiotic depletion potential for non-fossil resources (ADPE) [kg Sb eq.]	1.39E-04	3.39E-10	2.31E-09	2.50E-08	5.03E-08	-1.68E-05
Abiotic depletion potential for fossil resources (ADPF) [MJ]	1 320	0.249	1.70	0.407	6.37	-311

Carbon content indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3
Biogenic content in product [kg C]	0.85
Biogenic content in packaging [kg C]	3.69

Since Module C is included in the EPD, the use of Module A1-A3 results without considering the results of Module C is discouraged.

Flushglaze132TB - Window

Core environmental indicators per Declared unit (1 m² of window ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Climate Change - total [kg CO ₂ eq.]	217	0.0219	0.149	0.0448	0.368	-87.3
Climate Change, fossil [kg CO ₂ eq.]	216	0.0219	0.143	0.0445	0.378	-87.3
Climate Change, biogenic [kg CO ₂ eq.]	1.52	0	0.00628	1.09E-04	-0.0112	-0.0614
Climate Change, land use and land use change [kg CO ₂ eq.]	0.0269	2.35E-07	1.61E-06	1.36E-04	6.98E-04	-0.00321
Ozone depletion [kg CFC 11 eq.]	5.10E-08	2.20E-15	1.50E-14	1.21E-13	8.89E-13	-3.19E-11
Acidification [Mole of H ⁺ eq.]	1.33	1.10E-04	2.67E-04	2.19E-04	0.00268	-0.563
Eutrophication, freshwater [kg P eq.]	2.47E-04	3.60E-09	2.45E-08	1.02E-07	6.41E-07	-1.78E-05
Eutrophication, marine [kg N eq.]	0.175	5.22E-05	1.12E-04	1.02E-04	6.86E-04	-0.0368
Eutrophication, terrestrial [Mole of N eq.]	1.98	5.72E-04	0.00124	0.00113	0.00753	-0.403
Photochemical ozone formation, human health [kg NMVOC eq.]	0.496	1.46E-04	2.62E-04	2.76E-04	0.00208	-0.131
Resource use, mineral and metals [kg Sb eq.]	3.25E-04	3.94E-10	2.69E-09	5.05E-08	3.88E-08	-3.33E-05
Resource use, fossils [MJ]	2 190	0.290	1.98	0.844	4.95	-641
Water use [m ³ world equiv.]	56.6	1.38E-04	9.44E-04	0.00757	0.0415	-28.8

Since Module C is included in the EPD, the use of Module A1-A3 results without considering the results of Module C is discouraged.

Flushglaze132TB - Window

Resource Use indicators per Declared unit (1 m² of window ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Use of renewable primary energy (PERE) [MJ]	2 170	0.00142	0.00967	0.0827	0.743	-1 060
Primary energy resources used as raw materials (PERM) [MJ]	0.0274	0	0	0	0	0
Total use of renewable primary energy resources (PERT) [MJ]	2 170	0.00142	0.00967	0.0827	0.743	-1 060
Use of non-renewable primary energy (PENRE) [MJ]	2 170	0.290	1.98	0.845	4.96	-642
Non-renewable primary energy resources used as raw materials (PENRM) [MJ]	20.2	0	0	0	0	0
Total use of non-renewable primary energy resources (PENRT) [MJ]	2 190	0.290	1.98	0.845	4.96	-642
Input of secondary material (SM) [kg]	0	0	0	0	0	0
Use of renewable secondary fuels (RSF) [MJ]	0	0	0	0	0	0
Use of non-renewable secondary fuels (NRSF) [MJ]	0	0	0	0	0	0
Use of net fresh water (FW) [m ³]	6.27	2.76E-06	1.89E-05	2.19E-04	0.00126	-3.35

Waste indicators per Declared unit (1 m² of window ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Hazardous waste disposed (HWD) [kg]	7.28E-07	4.71E-13	3.21E-12	1.14E-11	2.55E-10	-3.23E-07
Non-hazardous waste disposed (NHWD) [kg]	14.6	7.04E-06	4.80E-05	2.52E-04	25.4	-1.28
Radioactive waste disposed (RWD) [kg]	0.0363	5.67E-08	3.86E-07	6.51E-06	5.51E-05	-0.00644

Output flow indicators per Declared unit (1 m² of window ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Components for re-use (CRU) [kg]	0	0	0	0	0	0
Materials for Recycling (MFR) [kg]	4.85	0	0	16.4	0	0
Material for Energy Recovery (MER) [kg]	0	0	0	0	0	0
Exported electrical energy (EEE) [MJ]	0	0	0	0	0	0
Exported thermal energy (EET) [MJ]	0	0	0	0	0	0

Since Module C is included in the EPD, the use of Module A1-A3 results without considering the results of Module C is discouraged.

Flushglaze132TB - Window

Additional indicators per Declared unit (1 m² of window ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Particulate matter [Disease incidences]	2.51E-05	1.26E-09	1.89E-09	4.24E-09	3.30E-08	-1.17E-05
Ionising radiation, human health [kBq U235 eq.]	6.22	7.37E-06	5.02E-05	6.42E-04	0.00612	-1.07
Ecotoxicity, freshwater [CTUe]	2 130	0.116	0.794	0.637	17.2	-248
Human toxicity, cancer [CTUh]	9.41E-07	1.96E-12	1.34E-11	1.37E-11	4.24E-10	-6.98E-08
Human toxicity, non-cancer [CTUh]	4.86E-06	9.84E-11	4.75E-10	7.13E-10	4.69E-08	-6.65E-07
Land Use [Pt]	5 310	8.18E-04	0.00558	0.187	1.03	-21.5
Climate Change-GHG IPCC AR5 [kg CO ₂ eq.]	217	0.0218	0.143	0.0447	0.378	-87.8

EN15804+A1 indicators per Declared unit (1 m² of window ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Global warming potential (GWP) [kg CO ₂ eq.]	215	0.0215	0.147	0.0435	0.359	-87.0
Ozone Depletion Potential (ODP) [kg R11 eq.]	6.56E-08	2.58E-15	1.76E-14	1.42E-13	1.05E-12	-3.75E-11
Acidification potential (AP) [kg SO ₂ eq.]	1.13	7.68E-05	1.92E-04	1.53E-04	0.00214	-0.499
Eutrophication potential (EP) [kg Phosphate eq.]	0.0645	1.75E-05	3.81E-05	3.57E-05	2.38E-04	-0.0126
Photochemical Ozone Creation Potential (POCP) [kg Ethene eq.]	0.0287	7.21E-06	-3.09E-05	1.73E-05	1.68E-04	-0.0236
Abiotic depletion potential for non-fossil resources (ADPE) [kg Sb eq.]	3.25E-04	3.94E-10	2.69E-09	5.05E-08	3.91E-08	-3.33E-05
Abiotic depletion potential for fossil resources (ADPF) [MJ]	2 030	0.289	1.97	0.822	4.79	-621

Carbon content indicators per Declared unit (1 m² of window ready for installation.)

Indicators	A1-A3
Biogenic content in product [kg C]	0.00
Biogenic content in packaging [kg C]	6.74

Since Module C is included in the EPD, the use of Module A1-A3 results without considering the results of Module C is discouraged.

Flushglaze132TB - Hinged Door

Core environmental indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Climate Change - total [kg CO ₂ eq.]	171	0.0199	0.136	0.0342	0.366	-67.5
Climate Change, fossil [kg CO ₂ eq.]	170	0.0199	0.130	0.0340	0.377	-67.5
Climate Change, biogenic [kg CO ₂ eq.]	1.16	0	0.00572	8.32E-05	-0.0112	-0.0485
Climate Change, land use and land use change [kg CO ₂ eq.]	0.0210	2.14E-07	1.46E-06	1.04E-04	6.96E-04	-0.00238
Ozone depletion [kg CFC 11 eq.]	4.99E-08	2.00E-15	1.36E-14	9.21E-14	8.86E-13	-2.61E-11
Acidification [Mole of H ⁺ eq.]	1.11	1.00E-04	2.43E-04	1.68E-04	0.00267	-0.437
Eutrophication, freshwater [kg P eq.]	1.75E-04	3.28E-09	2.24E-08	7.81E-08	6.39E-07	-1.38E-05
Eutrophication, marine [kg N eq.]	0.156	4.76E-05	1.02E-04	7.81E-05	6.83E-04	-0.0283
Eutrophication, terrestrial [Mole of N eq.]	1.76	5.21E-04	0.00113	8.62E-04	0.00751	-0.311
Photochemical ozone formation, human health [kg NMVOC eq.]	0.427	1.33E-04	2.39E-04	2.11E-04	0.00208	-0.101
Resource use, mineral and metals [kg Sb eq.]	1.63E-04	3.59E-10	2.45E-09	3.86E-08	3.86E-08	-2.59E-05
Resource use, fossils [MJ]	1 710	0.264	1.80	0.645	4.94	-496
Water use [m ³ world equiv.]	43.6	1.26E-04	8.60E-04	0.00578	0.0413	-22.4

Since Module C is included in the EPD, the use of Module A1-A3 results without considering the results of Module C is discouraged.

Flushglaze132TB - Hinged Door

Resource Use indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Use of renewable primary energy (PERE) [MJ]	1 660	0.00129	0.00881	0.0632	0.741	-823
Primary energy resources used as raw materials (PERM) [MJ]	0.0210	0	0	0	0	0
Total use of renewable primary energy resources (PERT) [MJ]	1 660	0.00129	0.00881	0.0632	0.741	-823
Use of non-renewable primary energy (PENRE) [MJ]	1 690	0.264	1.80	0.645	4.94	-496
Non-renewable primary energy resources used as raw materials (PENRM) [MJ]	28.9	0	0	0	0	0
Total use of non-renewable primary energy resources (PENRT) [MJ]	1 710	0.264	1.80	0.645	4.94	-496
Input of secondary material (SM) [kg]	0	0	0	0	0	0
Use of renewable secondary fuels (RSF) [MJ]	0	0	0	0	0	0
Use of non-renewable secondary fuels (NRSF) [MJ]	0	0	0	0	0	0
Use of net fresh water (FW) [m ³]	4.77	2.52E-06	1.72E-05	1.67E-04	0.00125	-2.61

Waste indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Hazardous waste disposed (HWD) [kg]	5.63E-07	4.29E-13	2.93E-12	8.70E-12	2.54E-10	-2.51E-07
Non-hazardous waste disposed (NHWD) [kg]	13.9	6.41E-06	4.37E-05	1.93E-04	25.3	-0.988
Radioactive waste disposed (RWD) [kg]	0.0316	5.16E-08	3.52E-07	4.97E-06	5.49E-05	-0.00507

Output flow indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Components for re-use (CRU) [kg]	0	0	0	0	0	0
Materials for Recycling (MFR) [kg]	3.72	0	0	12.5	0	0
Material for Energy Recovery (MER) [kg]	0	0	0	0	0	0
Exported electrical energy (EEE) [MJ]	0	0	0	0	0	0
Exported thermal energy (EET) [MJ]	0	0	0	0	0	0

Since Module C is included in the EPD, the use of Module A1-A3 results without considering the results of Module C is discouraged.

Flushglaze132TB - Hinged Door

Additional indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Particulate matter [Disease incidences]	1.99E-05	1.15E-09	1.72E-09	3.24E-09	3.29E-08	-9.07E-06
Ionising radiation, human health [kBq U235 eq.]	5.60	6.71E-06	4.58E-05	4.91E-04	0.00610	-0.842
Ecotoxicity, freshwater [CTUe]	1 700	0.106	0.723	0.487	13.2	-192
Human toxicity, cancer [CTUh]	2.54E-07	1.79E-12	1.22E-11	1.04E-11	4.22E-10	-5.36E-08
Human toxicity, non-cancer [CTUh]	4.56E-06	8.96E-11	4.33E-10	5.45E-10	4.68E-08	-5.15E-07
Land Use [Pt]	4 120	7.46E-04	0.00509	0.143	1.03	-17.0
Climate Change-GHG IPCC AR5 [kg CO ₂ eq.]	171	0.0199	0.130	0.0341	0.376	-67.9

EN15804+A1 indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Global warming potential (GWP) [kg CO ₂ eq.]	169	0.0196	0.134	0.0333	0.358	-67.3
Ozone Depletion Potential (ODP) [kg R11 eq.]	6.48E-08	2.36E-15	1.61E-14	1.08E-13	1.04E-12	-3.07E-11
Acidification potential (AP) [kg SO ₂ eq.]	0.930	6.99E-05	1.75E-04	1.17E-04	0.00213	-0.387
Eutrophication potential (EP) [kg Phosphate eq.]	0.0566	1.60E-05	3.48E-05	2.73E-05	2.38E-04	-0.00975
Photochemical Ozone Creation Potential (POCP) [kg Ethene eq.]	0.0162	6.57E-06	-2.82E-05	1.32E-05	1.67E-04	-0.0182
Abiotic depletion potential for non-fossil resources (ADPE) [kg Sb eq.]	1.63E-04	3.59E-10	2.45E-09	3.86E-08	3.90E-08	-2.59E-05
Abiotic depletion potential for fossil resources (ADPF) [MJ]	1 580	0.264	1.80	0.629	4.77	-480

Carbon content indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3
Biogenic content in product [kg C]	0.00
Biogenic content in packaging [kg C]	5.49

Since Module C is included in the EPD, the use of Module A1-A3 results without considering the results of Module C is discouraged.

Flushglaze132TB - Sliding Door

Core environmental indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Climate Change - total [kg CO ₂ eq.]	174	0.0213	0.145	0.0315	0.415	-62.2
Climate Change, fossil [kg CO ₂ eq.]	172	0.0213	0.139	0.0313	0.427	-62.1
Climate Change, biogenic [kg CO ₂ eq.]	1.20	0	0.00611	7.66E-05	-0.0127	-0.0447
Climate Change, land use and land use change [kg CO ₂ eq.]	0.0222	2.29E-07	1.56E-06	9.56E-05	7.89E-04	-0.00219
Ozone depletion [kg CFC 11 eq.]	5.67E-08	2.14E-15	1.46E-14	8.48E-14	1.00E-12	-2.40E-11
Acidification [Mole of H ⁺ eq.]	1.14	1.07E-04	2.60E-04	1.54E-04	0.00303	-0.402
Eutrophication, freshwater [kg P eq.]	1.98E-04	3.50E-09	2.39E-08	7.19E-08	7.24E-07	-1.27E-05
Eutrophication, marine [kg N eq.]	0.170	5.08E-05	1.09E-04	7.19E-05	7.75E-04	-0.0261
Eutrophication, terrestrial [Mole of N eq.]	1.92	5.57E-04	0.00120	7.93E-04	0.00851	-0.286
Photochemical ozone formation, human health [kg NMVOC eq.]	0.458	1.42E-04	2.55E-04	1.94E-04	0.00235	-0.0931
Resource use, mineral and metals [kg Sb eq.]	1.79E-04	3.84E-10	2.62E-09	3.56E-08	4.38E-08	-2.39E-05
Resource use, fossils [MJ]	1 810	0.283	1.93	0.594	5.60	-456
Water use [m ³ world equiv.]	43.4	1.35E-04	9.19E-04	0.00533	0.0469	-20.7

Since Module C is included in the EPD, the use of Module A1-A3 results without considering the results of Module C is discouraged.

Flushglaze132TB - Sliding Door

Resource Use indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Use of renewable primary energy (PERE) [MJ]	1 640	0.00138	0.00942	0.0582	0.840	-758
Primary energy resources used as raw materials (PERM) [MJ]	0.0199	0	0	0	0	0
Total use of renewable primary energy resources (PERT) [MJ]	1 640	0.00138	0.00942	0.0582	0.840	-758
Use of non-renewable primary energy (PENRE) [MJ]	1 780	0.283	1.93	0.594	5.60	-457
Non-renewable primary energy resources used as raw materials (PENRM) [MJ]	34.3	0	0	0	0	0
Total use of non-renewable primary energy resources (PENRT) [MJ]	1 810	0.283	1.93	0.594	5.60	-457
Input of secondary material (SM) [kg]	0	0	0	0	0	0
Use of renewable secondary fuels (RSF) [MJ]	0	0	0	0	0	0
Use of non-renewable secondary fuels (NRSF) [MJ]	0	0	0	0	0	0
Use of net fresh water (FW) [m ³]	4.68	2.69E-06	1.84E-05	1.54E-04	0.00142	-2.40

Waste indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Hazardous waste disposed (HWD) [kg]	5.52E-07	4.58E-13	3.13E-12	8.01E-12	2.88E-10	-2.32E-07
Non-hazardous waste disposed (NHWD) [kg]	14.8	6.85E-06	4.68E-05	1.78E-04	28.7	-0.910
Radioactive waste disposed (RWD) [kg]	0.0301	5.52E-08	3.76E-07	4.58E-06	6.23E-05	-0.00466

Output flow indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Components for re-use (CRU) [kg]	0	0	0	0	0	0
Materials for Recycling (MFR) [kg]	3.52	0	0	11.5	0	0
Material for Energy Recovery (MER) [kg]	0	0	0	0	0	0
Exported electrical energy (EEE) [MJ]	0	0	0	0	0	0
Exported thermal energy (EET) [MJ]	0	0	0	0	0	0

Since Module C is included in the EPD, the use of Module A1-A3 results without considering the results of Module C is discouraged.

Flushglaze132TB - Sliding Door

Additional indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Particulate matter [Disease incidences]	1.96E-05	1.23E-09	1.84E-09	2.98E-09	3.73E-08	-8.35E-06
Ionising radiation, human health [kBq U235 eq.]	5.08	7.17E-06	4.89E-05	4.52E-04	0.00691	-0.775
Ecotoxicity, freshwater [CTUe]	1 980	0.113	0.773	0.448	12.5	-177
Human toxicity, cancer [CTUh]	2.46E-07	1.91E-12	1.30E-11	9.62E-12	4.79E-10	-4.93E-08
Human toxicity, non-cancer [CTUh]	5.37E-06	9.58E-11	4.63E-10	5.02E-10	5.30E-08	-4.74E-07
Land Use [Pt]	3 960	7.97E-04	0.00544	0.132	1.16	-15.7
Climate Change-GHG IPCC AR5 [kg CO ₂ eq.]	173	0.0212	0.139	0.0314	0.427	-62.5

EN15804+A1 indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Global warming potential (GWP) [kg CO ₂ eq.]	171	0.0210	0.143	0.0306	0.405	-61.9
Ozone Depletion Potential (ODP) [kg R11 eq.]	7.39E-08	2.52E-15	1.72E-14	9.98E-14	1.18E-12	-2.82E-11
Acidification potential (AP) [kg SO ₂ eq.]	0.948	7.48E-05	1.87E-04	1.08E-04	0.00242	-0.356
Eutrophication potential (EP) [kg Phosphate eq.]	0.0621	1.71E-05	3.72E-05	2.51E-05	2.69E-04	-0.00897
Photochemical Ozone Creation Potential (POCP) [kg Ethene eq.]	0.0116	7.02E-06	-3.01E-05	1.22E-05	1.90E-04	-0.0168
Abiotic depletion potential for non-fossil resources (ADPE) [kg Sb eq.]	1.79E-04	3.84E-10	2.62E-09	3.56E-08	4.42E-08	-2.39E-05
Abiotic depletion potential for fossil resources (ADPF) [MJ]	1 690	0.282	1.92	0.579	5.41	-442

Carbon content indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3
Biogenic content in product [kg C]	0.00
Biogenic content in packaging [kg C]	5.20

Since Module C is included in the EPD, the use of Module A1-A3 results without considering the results of Module C is discouraged.

Pacific41 - Window

Core environmental indicators per Declared unit (1 m² of window ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Climate Change - total [kg CO ₂ eq.]	86.6	0.0167	0.114	0.0132	8.71	-25.6
Climate Change, fossil [kg CO ₂ eq.]	91.0	0.0167	0.109	0.0131	0.514	-25.5
Climate Change, biogenic [kg CO ₂ eq.]	-4.34	0	0.00479	3.20E-05	8.19	-0.0178
Climate Change, land use and land use change [kg CO ₂ eq.]	0.0150	1.80E-07	1.23E-06	4.00E-05	6.86E-04	-9.58E-04
Ozone depletion [kg CFC 11 eq.]	4.43E-08	1.68E-15	1.14E-14	3.55E-14	1.03E-12	-9.07E-12
Acidification [Mole of H ⁺ eq.]	0.673	8.39E-05	2.04E-04	6.45E-05	0.00313	-0.164
Eutrophication, freshwater [kg P eq.]	9.56E-05	2.75E-09	1.87E-08	3.01E-08	6.81E-07	-5.22E-06
Eutrophication, marine [kg N eq.]	0.120	3.98E-05	8.55E-05	3.01E-05	8.68E-04	-0.0108
Eutrophication, terrestrial [Mole of N eq.]	1.35	4.36E-04	9.43E-04	3.32E-04	0.00954	-0.118
Photochemical ozone formation, human health [kg NMVOC eq.]	0.306	1.12E-04	2.00E-04	8.11E-05	0.00319	-0.0384
Resource use, mineral and metals [kg Sb eq.]	1.86E-04	3.01E-10	2.05E-09	1.49E-08	5.07E-08	-9.72E-06
Resource use, fossils [MJ]	1 000	0.221	1.51	0.248	6.75	-188
Water use [m ³ world equiv.]	21.0	1.06E-04	7.20E-04	0.00223	0.0411	-8.40

Since Module C is included in the EPD, the use of Module A1-A3 results without considering the results of Module C is discouraged.

Pacific41 - Window

Resource Use indicators per Declared unit (1 m² of window ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Use of renewable primary energy (PERE) [MJ]	738	0.00108	0.00738	0.0243	0.929	-308
Primary energy resources used as raw materials (PERM) [MJ]	49.2	0	0	0	0	0
Total use of renewable primary energy resources (PERT) [MJ]	786	0.00108	0.00738	0.0243	0.929	-308
Use of non-renewable primary energy (PENRE) [MJ]	980	0.221	1.51	0.248	6.76	-188
Non-renewable primary energy resources used as raw materials (PENRM) [MJ]	22.9	0	0	0	0	0
Total use of non-renewable primary energy resources (PENRT) [MJ]	1 000	0.221	1.51	0.248	6.76	-188
Input of secondary material (SM) [kg]	0	0	0	0	0	0
Use of renewable secondary fuels (RSF) [MJ]	0	0	0	0	0	0
Use of non-renewable secondary fuels (NRSF) [MJ]	0	0	0	0	0	0
Use of net fresh water (FW) [m ³]	2.05	2.11E-06	1.44E-05	6.44E-05	0.00150	-0.977

Waste indicators per Declared unit (1 m² of window ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Hazardous waste disposed (HWD) [kg]	2.51E-07	3.59E-13	2.45E-12	3.35E-12	3.78E-10	-9.42E-08
Non-hazardous waste disposed (NHWD) [kg]	11.3	5.37E-06	3.66E-05	7.42E-05	24.2	-0.374
Radioactive waste disposed (RWD) [kg]	0.0178	4.32E-08	2.95E-07	1.91E-06	6.14E-05	-0.00187

Output flow indicators per Declared unit (1 m² of window ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Components for re-use (CRU) [kg]	0	0	0	0	0	0
Materials for Recycling (MFR) [kg]	2.17	0	0	4.81	0	0
Material for Energy Recovery (MER) [kg]	0	0	0	0	0	0
Exported electrical energy (EEE) [MJ]	0	0	0	0	0.507	0
Exported thermal energy (EET) [MJ]	0	0	0	0	0	0

Since Module C is included in the EPD, the use of Module A1-A3 results without considering the results of Module C is discouraged.

Pacific41 - Window

Additional indicators per Declared unit (1 m² of window ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Particulate matter [Disease incidences]	1.07E-05	9.62E-10	1.44E-09	1.25E-09	3.49E-08	-3.41E-06
Ionising radiation, human health [kBq U235 eq.]	2.97	5.62E-06	3.83E-05	1.89E-04	0.00664	-0.312
Ecotoxicity, freshwater [CTUe]	1 250	0.0888	0.606	0.187	7.12	-72.4
Human toxicity, cancer [CTUh]	3.88E-07	1.50E-12	1.02E-11	4.02E-12	4.58E-10	-2.05E-08
Human toxicity, non-cancer [CTUh]	4.19E-06	7.51E-11	3.62E-10	2.10E-10	4.93E-08	-1.94E-07
Land Use [Pt]	3 020	6.24E-04	0.00426	0.0550	1.04	-6.24
Climate Change-GHG IPCC AR5 [kg CO ₂ eq.]	91.4	0.0166	0.109	0.0131	2.55	-25.7

EN15804+A1 indicators per Declared unit (1 m² of window ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Global warming potential (GWP) [kg CO ₂ eq.]	85.3	0.0164	0.112	0.0128	7.99	-25.5
Ozone Depletion Potential (ODP) [kg R11 eq.]	5.83E-08	1.97E-15	1.35E-14	4.18E-14	1.21E-12	-1.07E-11
Acidification potential (AP) [kg SO ₂ eq.]	0.553	5.86E-05	1.46E-04	4.50E-05	0.00247	-0.146
Eutrophication potential (EP) [kg Phosphate eq.]	0.0432	1.34E-05	2.91E-05	1.05E-05	3.01E-04	-0.00370
Photochemical Ozone Creation Potential (POCP) [kg Ethene eq.]	-0.00398	5.50E-06	-2.36E-05	5.09E-06	5.58E-04	-0.00690
Abiotic depletion potential for non-fossil resources (ADPE) [kg Sb eq.]	1.86E-04	3.01E-10	2.05E-09	1.49E-08	5.11E-08	-9.72E-06
Abiotic depletion potential for fossil resources (ADPF) [MJ]	936	0.221	1.51	0.242	6.57	-182

Carbon content indicators per Declared unit (1 m² of window ready for installation.)

Indicators	A1-A3
Biogenic content in product [kg C]	1.32
Biogenic content in packaging [kg C]	1.99

Since Module C is included in the EPD, the use of Module A1-A3 results without considering the results of Module C is discouraged.

Pacific41 - Hinged Door

Core environmental indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Climate Change - total [kg CO ₂ eq.]	107	0.0174	0.119	0.0170	5.93	-33.4
Climate Change, fossil [kg CO ₂ eq.]	110	0.0174	0.114	0.0169	0.474	-33.4
Climate Change, biogenic [kg CO ₂ eq.]	-2.44	0	0.00501	4.12E-05	5.46	-0.0240
Climate Change, land use and land use change [kg CO ₂ eq.]	0.0162	1.88E-07	1.28E-06	5.15E-05	7.01E-04	-0.00118
Ozone depletion [kg CFC 11 eq.]	4.69E-08	1.75E-15	1.19E-14	4.56E-14	9.98E-13	-1.29E-11
Acidification [Mole of H ⁺ eq.]	0.769	8.77E-05	2.13E-04	8.30E-05	0.00302	-0.216
Eutrophication, freshwater [kg P eq.]	1.24E-04	2.87E-09	1.96E-08	3.87E-08	6.77E-07	-6.84E-06
Eutrophication, marine [kg N eq.]	0.131	4.17E-05	8.94E-05	3.87E-05	8.18E-04	-0.0140
Eutrophication, terrestrial [Mole of N eq.]	1.49	4.56E-04	9.86E-04	4.27E-04	0.00899	-0.154
Photochemical ozone formation, human health [kg NMVOC eq.]	0.340	1.17E-04	2.09E-04	1.04E-04	0.00285	-0.0501
Resource use, mineral and metals [kg Sb eq.]	1.37E-04	3.14E-10	2.14E-09	1.91E-08	4.73E-08	-1.29E-05
Resource use, fossils [MJ]	1 220	0.231	1.58	0.319	6.23	-246
Water use [m ³ world equiv.]	25.7	1.10E-04	7.53E-04	0.00287	0.0419	-11.1

Since Module C is included in the EPD, the use of Module A1-A3 results without considering the results of Module C is discouraged.

Pacific41 - Hinged Door

Resource Use indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Use of renewable primary energy (PERE) [MJ]	940	0.00113	0.00771	0.0313	0.879	-408
Primary energy resources used as raw materials (PERM) [MJ]	31.7	0	0	0	0	0
Total use of renewable primary energy resources (PERT) [MJ]	971	0.00113	0.00771	0.0313	0.879	-408
Use of non-renewable primary energy (PENRE) [MJ]	1 190	0.231	1.58	0.320	6.24	-246
Non-renewable primary energy resources used as raw materials (PENRM) [MJ]	29.8	0	0	0	0	0
Total use of non-renewable primary energy resources (PENRT) [MJ]	1 220	0.231	1.58	0.320	6.24	-246
Input of secondary material (SM) [kg]	0	0	0	0	0	0
Use of renewable secondary fuels (RSF) [MJ]	0	0	0	0	0	0
Use of non-renewable secondary fuels (NRSF) [MJ]	0	0	0	0	0	0
Use of net fresh water (FW) [m ³]	2.62	2.20E-06	1.50E-05	8.29E-05	0.00144	-1.29

Waste indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Hazardous waste disposed (HWD) [kg]	3.15E-07	3.76E-13	2.56E-12	4.31E-12	3.41E-10	-1.25E-07
Non-hazardous waste disposed (NHWD) [kg]	12.4	5.61E-06	3.83E-05	9.55E-05	25.0	-0.490
Radioactive waste disposed (RWD) [kg]	0.0223	4.52E-08	3.08E-07	2.46E-06	6.02E-05	-0.00251

Output flow indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Components for re-use (CRU) [kg]	0	0	0	0	0	0
Materials for Recycling (MFR) [kg]	2.33	0	0	6.19	0	0
Material for Energy Recovery (MER) [kg]	0	0	0	0	0	0
Exported electrical energy (EEE) [MJ]	0	0	0	0	0.338	0
Exported thermal energy (EET) [MJ]	0	0	0	0	0	0

Since Module C is included in the EPD, the use of Module A1-A3 results without considering the results of Module C is discouraged.

Pacific41 - Hinged Door

Additional indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Particulate matter [Disease incidences]	1.24E-05	1.01E-09	1.51E-09	1.61E-09	3.48E-08	-4.50E-06
Ionising radiation, human health [kBq U235 eq.]	3.80	5.88E-06	4.01E-05	2.43E-04	0.00656	-0.417
Ecotoxicity, freshwater [CTUe]	1 450	0.0928	0.633	0.241	8.00	-95.3
Human toxicity, cancer [CTUh]	1.47E-07	1.57E-12	1.07E-11	5.18E-12	4.53E-10	-2.65E-08
Human toxicity, non-cancer [CTUh]	4.50E-06	7.85E-11	3.79E-10	2.70E-10	4.93E-08	-2.55E-07
Land Use [Pt]	3 020	6.53E-04	0.00445	0.0708	1.05	-8.44
Climate Change-GHG IPCC AR5 [kg CO ₂ eq.]	111	0.0174	0.114	0.0169	1.83	-33.6

EN15804+A1 indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Global warming potential (GWP) [kg CO ₂ eq.]	106	0.0172	0.117	0.0165	5.45	-33.3
Ozone Depletion Potential (ODP) [kg R11 eq.]	6.16E-08	2.06E-15	1.41E-14	5.37E-14	1.17E-12	-1.52E-11
Acidification potential (AP) [kg SO ₂ eq.]	0.634	6.12E-05	1.53E-04	5.79E-05	0.00239	-0.192
Eutrophication potential (EP) [kg Phosphate eq.]	0.0476	1.40E-05	3.04E-05	1.35E-05	2.84E-04	-0.00483
Photochemical Ozone Creation Potential (POCP) [kg Ethene eq.]	-6.30E-04	5.75E-06	-2.47E-05	6.55E-06	4.30E-04	-0.00902
Abiotic depletion potential for non-fossil resources (ADPE) [kg Sb eq.]	1.37E-04	3.15E-10	2.15E-09	1.91E-08	4.77E-08	-1.29E-05
Abiotic depletion potential for fossil resources (ADPF) [MJ]	1 140	0.231	1.57	0.311	6.05	-238

Carbon content indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3
Biogenic content in product [kg C]	0.85
Biogenic content in packaging [kg C]	2.74

Since Module C is included in the EPD, the use of Module A1-A3 results without considering the results of Module C is discouraged.

Pacific41 - Sliding Door

Core environmental indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Climate Change - total [kg CO ₂ eq.]	94.8	0.0167	0.114	0.0138	5.79	-27.2
Climate Change, fossil [kg CO ₂ eq.]	97.4	0.0167	0.109	0.0137	0.464	-27.2
Climate Change, biogenic [kg CO ₂ eq.]	-2.53	0	0.00481	3.36E-05	5.32	-0.0195
Climate Change, land use and land use change [kg CO ₂ eq.]	0.0151	1.80E-07	1.23E-06	4.19E-05	6.85E-04	-9.60E-04
Ozone depletion [kg CFC 11 eq.]	4.70E-08	1.68E-15	1.15E-14	3.71E-14	9.75E-13	-1.05E-11
Acidification [Mole of H ⁺ eq.]	0.711	8.41E-05	2.04E-04	6.75E-05	0.00295	-0.176
Eutrophication, freshwater [kg P eq.]	1.10E-04	2.75E-09	1.88E-08	3.15E-08	6.62E-07	-5.56E-06
Eutrophication, marine [kg N eq.]	0.126	4.00E-05	8.58E-05	3.15E-05	8.00E-04	-0.0114
Eutrophication, terrestrial [Mole of N eq.]	1.44	4.38E-04	9.46E-04	3.47E-04	0.00878	-0.125
Photochemical ozone formation, human health [kg NMVOC eq.]	0.323	1.12E-04	2.01E-04	8.49E-05	0.00279	-0.0407
Resource use, mineral and metals [kg Sb eq.]	1.37E-04	3.02E-10	2.06E-09	1.56E-08	4.63E-08	-1.04E-05
Resource use, fossils [MJ]	1 080	0.222	1.51	0.260	6.09	-200
Water use [m ³ world equiv.]	22.3	1.06E-04	7.23E-04	0.00233	0.0409	-9.03

Since Module C is included in the EPD, the use of Module A1-A3 results without considering the results of Module C is discouraged.

Pacific41 - Sliding Door

Resource Use indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Use of renewable primary energy (PERE) [MJ]	801	0.00109	0.00740	0.0255	0.859	-331
Primary energy resources used as raw materials (PERM) [MJ]	31.7	0	0	0	0	0
Total use of renewable primary energy resources (PERT) [MJ]	833	0.00109	0.00740	0.0255	0.859	-331
Use of non-renewable primary energy (PENRE) [MJ]	1 070	0.222	1.52	0.260	6.10	-200
Non-renewable primary energy resources used as raw materials (PENRM) [MJ]	17.5	0	0	0	0	0
Total use of non-renewable primary energy resources (PENRT) [MJ]	1 080	0.222	1.52	0.260	6.10	-200
Input of secondary material (SM) [kg]	0	0	0	0	0	0
Use of renewable secondary fuels (RSF) [MJ]	0	0	0	0	0	0
Use of non-renewable secondary fuels (NRSF) [MJ]	0	0	0	0	0	0
Use of net fresh water (FW) [m ³]	2.22	2.12E-06	1.44E-05	6.74E-05	0.00140	-1.05

Waste indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Hazardous waste disposed (HWD) [kg]	2.69E-07	3.60E-13	2.46E-12	3.51E-12	3.33E-10	-1.01E-07
Non-hazardous waste disposed (NHWD) [kg]	12.1	5.39E-06	3.67E-05	7.77E-05	24.4	-0.398
Radioactive waste disposed (RWD) [kg]	0.0195	4.34E-08	2.96E-07	2.00E-06	5.88E-05	-0.00204

Output flow indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Components for re-use (CRU) [kg]	0	0	0	0	0	0
Materials for Recycling (MFR) [kg]	2.00	0	0	5.04	0	0
Material for Energy Recovery (MER) [kg]	0	0	0	0	0	0
Exported electrical energy (EEE) [MJ]	0	0	0	0	0.329	0
Exported thermal energy (EET) [MJ]	0	0	0	0	0	0

Since Module C is included in the EPD, the use of Module A1-A3 results without considering the results of Module C is discouraged.

Pacific41 - Sliding Door

Additional indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Particulate matter [Disease incidences]	1.10E-05	9.65E-10	1.45E-09	1.31E-09	3.40E-08	-3.65E-06
Ionising radiation, human health [kBq U235 eq.]	3.30	5.64E-06	3.85E-05	1.98E-04	0.00642	-0.339
Ecotoxicity, freshwater [CTUe]	1 380	0.0891	0.608	0.196	6.98	-77.4
Human toxicity, cancer [CTUh]	1.39E-07	1.50E-12	1.03E-11	4.21E-12	4.43E-10	-2.16E-08
Human toxicity, non-cancer [CTUh]	4.50E-06	7.53E-11	3.64E-10	2.20E-10	4.82E-08	-2.07E-07
Land Use [Pt]	2 670	6.26E-04	0.00427	0.0576	1.03	-6.85
Climate Change-GHG IPCC AR5 [kg CO ₂ eq.]	97.9	0.0167	0.109	0.0138	1.79	-27.4

EN15804+A1 indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Global warming potential (GWP) [kg CO ₂ eq.]	93.4	0.0165	0.113	0.0134	5.31	-27.1
Ozone Depletion Potential (ODP) [kg R11 eq.]	6.20E-08	1.98E-15	1.35E-14	4.37E-14	1.15E-12	-1.23E-11
Acidification potential (AP) [kg SO ₂ eq.]	0.582	5.88E-05	1.47E-04	4.71E-05	0.00234	-0.156
Eutrophication potential (EP) [kg Phosphate eq.]	0.0460	1.34E-05	2.92E-05	1.10E-05	2.77E-04	-0.00393
Photochemical Ozone Creation Potential (POCP) [kg Ethene eq.]	-0.00434	5.52E-06	-2.37E-05	5.33E-06	4.20E-04	-0.00734
Abiotic depletion potential for non-fossil resources (ADPE) [kg Sb eq.]	1.37E-04	3.02E-10	2.06E-09	1.56E-08	4.67E-08	-1.04E-05
Abiotic depletion potential for fossil resources (ADPF) [MJ]	1 010	0.222	1.51	0.253	5.92	-193

Carbon content indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3
Biogenic content in product [kg C]	0.85
Biogenic content in packaging [kg C]	2.26

Since Module C is included in the EPD, the use of Module A1-A3 results without considering the results of Module C is discouraged.

Southern41 - Window

Core environmental indicators per Declared unit (1 m² of window ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Climate Change - total [kg CO ₂ eq.]	93.1	0.0170	0.116	0.0140	8.82	-27.7
Climate Change, fossil [kg CO ₂ eq.]	97.4	0.0170	0.111	0.0140	0.524	-27.7
Climate Change, biogenic [kg CO ₂ eq.]	-4.26	0	0.00489	3.42E-05	8.29	-0.0199
Climate Change, land use and land use change [kg CO ₂ eq.]	0.0150	1.83E-07	1.25E-06	4.26E-05	7.01E-04	-9.74E-04
Ozone depletion [kg CFC 11 eq.]	4.48E-08	1.71E-15	1.17E-14	3.78E-14	1.05E-12	-1.07E-11
Acidification [Mole of H ⁺ eq.]	0.699	8.56E-05	2.08E-04	6.88E-05	0.00320	-0.179
Eutrophication, freshwater [kg P eq.]	1.11E-04	2.80E-09	1.91E-08	3.20E-08	6.96E-07	-5.67E-06
Eutrophication, marine [kg N eq.]	0.123	4.07E-05	8.73E-05	3.21E-05	8.86E-04	-0.0116
Eutrophication, terrestrial [Mole of N eq.]	1.39	4.45E-04	9.62E-04	3.54E-04	0.00973	-0.128
Photochemical ozone formation, human health [kg NMVOC eq.]	0.316	1.14E-04	2.04E-04	8.65E-05	0.00325	-0.0415
Resource use, mineral and metals [kg Sb eq.]	1.27E-04	3.07E-10	2.09E-09	1.58E-08	5.18E-08	-1.07E-05
Resource use, fossils [MJ]	1 090	0.226	1.54	0.265	6.89	-203
Water use [m ³ world equiv.]	22.7	1.08E-04	7.35E-04	0.00237	0.0420	-9.21

Since Module C is included in the EPD, the use of Module A1-A3 results without considering the results of Module C is discouraged.

Southern41 - Window

Resource Use indicators per Declared unit (1 m² of window ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Use of renewable primary energy (PERE) [MJ]	815	0.00110	0.00753	0.0259	0.948	-338
Primary energy resources used as raw materials (PERM) [MJ]	49.2	0	0	0	0	0
Total use of renewable primary energy resources (PERT) [MJ]	864	0.00110	0.00753	0.0259	0.948	-338
Use of non-renewable primary energy (PENRE) [MJ]	1 060	0.226	1.54	0.265	6.89	-204
Non-renewable primary energy resources used as raw materials (PENRM) [MJ]	31.5	0	0	0	0	0
Total use of non-renewable primary energy resources (PENRT) [MJ]	1 090	0.226	1.54	0.265	6.89	-204
Input of secondary material (SM) [kg]	0	0	0	0	0	0
Use of renewable secondary fuels (RSF) [MJ]	0	0	0	0	0	0
Use of non-renewable secondary fuels (NRSF) [MJ]	0	0	0	0	0	0
Use of net fresh water (FW) [m ³]	2.27	2.15E-06	1.47E-05	6.87E-05	0.00153	-1.07

Waste indicators per Declared unit (1 m² of window ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Hazardous waste disposed (HWD) [kg]	2.76E-07	3.67E-13	2.50E-12	3.57E-12	3.85E-10	-1.03E-07
Non-hazardous waste disposed (NHWD) [kg]	11.3	5.48E-06	3.74E-05	7.91E-05	24.7	-0.406
Radioactive waste disposed (RWD) [kg]	0.0187	4.41E-08	3.01E-07	2.04E-06	6.27E-05	-0.00208

Output flow indicators per Declared unit (1 m² of window ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Components for re-use (CRU) [kg]	0	0	0	0	0	0
Materials for Recycling (MFR) [kg]	2.33	0	0	5.13	0	0
Material for Energy Recovery (MER) [kg]	0	0	0	0	0	0
Exported electrical energy (EEE) [MJ]	0	0	0	0	0.513	0
Exported thermal energy (EET) [MJ]	0	0	0	0	0	0

Since Module C is included in the EPD, the use of Module A1-A3 results without considering the results of Module C is discouraged.

Southern41 - Window

Additional indicators per Declared unit (1 m² of window ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Particulate matter [Disease incidences]	1.13E-05	9.82E-10	1.47E-09	1.33E-09	3.56E-08	-3.73E-06
Ionising radiation, human health [kBq U235 eq.]	3.09	5.74E-06	3.91E-05	2.01E-04	0.00678	-0.346
Ecotoxicity, freshwater [CTUe]	1 350	0.0906	0.618	0.200	7.46	-78.9
Human toxicity, cancer [CTUh]	1.22E-07	1.53E-12	1.04E-11	4.29E-12	4.68E-10	-2.20E-08
Human toxicity, non-cancer [CTUh]	4.29E-06	7.66E-11	3.70E-10	2.24E-10	5.04E-08	-2.11E-07
Land Use [Pt]	3 190	6.37E-04	0.00435	0.0587	1.07	-6.99
Climate Change-GHG IPCC AR5 [kg CO ₂ eq.]	97.9	0.0170	0.111	0.0140	2.59	-27.9

EN15804+A1 indicators per Declared unit (1 m² of window ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Global warming potential (GWP) [kg CO ₂ eq.]	91.8	0.0168	0.115	0.0136	8.09	-27.6
Ozone Depletion Potential (ODP) [kg R11 eq.]	5.90E-08	2.01E-15	1.37E-14	4.45E-14	1.24E-12	-1.26E-11
Acidification potential (AP) [kg SO ₂ eq.]	0.573	5.98E-05	1.49E-04	4.80E-05	0.00252	-0.159
Eutrophication potential (EP) [kg Phosphate eq.]	0.0445	1.36E-05	2.97E-05	1.12E-05	3.07E-04	-0.00400
Photochemical Ozone Creation Potential (POCP) [kg Ethene eq.]	-0.00271	5.61E-06	-2.41E-05	5.43E-06	5.66E-04	-0.00748
Abiotic depletion potential for non-fossil resources (ADPE) [kg Sb eq.]	1.27E-04	3.07E-10	2.10E-09	1.58E-08	5.22E-08	-1.07E-05
Abiotic depletion potential for fossil resources (ADPF) [MJ]	1 020	0.225	1.54	0.258	6.70	-197

Carbon content indicators per Declared unit (1 m² of window ready for installation.)

Indicators	A1-A3
Biogenic content in product [kg C]	1.32
Biogenic content in packaging [kg C]	2.20

Since Module C is included in the EPD, the use of Module A1-A3 results without considering the results of Module C is discouraged.

Southern41 - Hinged Door

Core environmental indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Climate Change - total [kg CO ₂ eq.]	112	0.0177	0.121	0.0182	6.04	-36.0
Climate Change, fossil [kg CO ₂ eq.]	115	0.0177	0.116	0.0181	0.481	-35.9
Climate Change, biogenic [kg CO ₂ eq.]	-2.38	0	0.00508	4.43E-05	5.55	-0.0259
Climate Change, land use and land use change [kg CO ₂ eq.]	0.0166	1.91E-07	1.30E-06	5.53E-05	7.11E-04	-0.00126
Ozone depletion [kg CFC 11 eq.]	4.77E-08	1.78E-15	1.21E-14	4.90E-14	1.01E-12	-1.39E-11
Acidification [Mole of H ⁺ eq.]	0.802	8.90E-05	2.16E-04	8.92E-05	0.00307	-0.233
Eutrophication, freshwater [kg P eq.]	1.31E-04	2.91E-09	1.99E-08	4.16E-08	6.87E-07	-7.35E-06
Eutrophication, marine [kg N eq.]	0.133	4.23E-05	9.07E-05	4.16E-05	8.30E-04	-0.0151
Eutrophication, terrestrial [Mole of N eq.]	1.51	4.63E-04	0.00100	4.59E-04	0.00912	-0.165
Photochemical ozone formation, human health [kg NMVOC eq.]	0.348	1.18E-04	2.12E-04	1.12E-04	0.00289	-0.0538
Resource use, mineral and metals [kg Sb eq.]	1.40E-04	3.19E-10	2.18E-09	2.06E-08	4.80E-08	-1.38E-05
Resource use, fossils [MJ]	1 240	0.235	1.60	0.343	6.32	-264
Water use [m ³ world equiv.]	27.7	1.12E-04	7.64E-04	0.00308	0.0424	-11.9

Since Module C is included in the EPD, the use of Module A1-A3 results without considering the results of Module C is discouraged.

Southern41 - Hinged Door

Resource Use indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Use of renewable primary energy (PERE) [MJ]	1 020	0.00115	0.00783	0.0336	0.892	-438
Primary energy resources used as raw materials (PERM) [MJ]	31.7	0	0	0	0	0
Total use of renewable primary energy resources (PERT) [MJ]	1 050	0.00115	0.00783	0.0336	0.892	-438
Use of non-renewable primary energy (PENRE) [MJ]	1 220	0.235	1.60	0.344	6.33	-264
Non-renewable primary energy resources used as raw materials (PENRM) [MJ]	24.6	0	0	0	0	0
Total use of non-renewable primary energy resources (PENRT) [MJ]	1 240	0.235	1.60	0.344	6.33	-264
Input of secondary material (SM) [kg]	0	0	0	0	0	0
Use of renewable secondary fuels (RSF) [MJ]	0	0	0	0	0	0
Use of non-renewable secondary fuels (NRSF) [MJ]	0	0	0	0	0	0
Use of net fresh water (FW) [m ³]	2.86	2.24E-06	1.53E-05	8.91E-05	0.00146	-1.39

Waste indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Hazardous waste disposed (HWD) [kg]	3.44E-07	3.81E-13	2.60E-12	4.63E-12	3.46E-10	-1.34E-07
Non-hazardous waste disposed (NHWD) [kg]	12.0	5.70E-06	3.89E-05	1.03E-04	25.3	-0.526
Radioactive waste disposed (RWD) [kg]	0.0204	4.59E-08	3.13E-07	2.65E-06	6.10E-05	-0.00270

Output flow indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Components for re-use (CRU) [kg]	0	0	0	0	0	0
Materials for Recycling (MFR) [kg]	2.54	0	0	6.66	0	0
Material for Energy Recovery (MER) [kg]	0	0	0	0	0	0
Exported electrical energy (EEE) [MJ]	0	0	0	0	0.344	0
Exported thermal energy (EET) [MJ]	0	0	0	0	0	0

Since Module C is included in the EPD, the use of Module A1-A3 results without considering the results of Module C is discouraged.

Southern41 - Hinged Door

Additional indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Particulate matter [Disease incidences]	1.33E-05	1.02E-09	1.53E-09	1.73E-09	3.53E-08	-4.83E-06
Ionising radiation, human health [kBq U235 eq.]	3.36	5.96E-06	4.07E-05	2.61E-04	0.00666	-0.449
Ecotoxicity, freshwater [CTUe]	1 490	0.0942	0.642	0.259	8.48	-102
Human toxicity, cancer [CTUh]	1.50E-07	1.59E-12	1.08E-11	5.56E-12	4.60E-10	-2.85E-08
Human toxicity, non-cancer [CTUh]	4.54E-06	7.96E-11	3.85E-10	2.90E-10	5.00E-08	-2.74E-07
Land Use [Pt]	3 240	6.62E-04	0.00452	0.0761	1.07	-9.07
Climate Change-GHG IPCC AR5 [kg CO ₂ eq.]	115	0.0176	0.116	0.0182	1.86	-36.2

EN15804+A1 indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Global warming potential (GWP) [kg CO ₂ eq.]	111	0.0174	0.119	0.0177	5.54	-35.8
Ozone Depletion Potential (ODP) [kg R11 eq.]	6.26E-08	2.09E-15	1.43E-14	5.77E-14	1.19E-12	-1.64E-11
Acidification potential (AP) [kg SO ₂ eq.]	0.663	6.21E-05	1.55E-04	6.23E-05	0.00242	-0.206
Eutrophication potential (EP) [kg Phosphate eq.]	0.0485	1.42E-05	3.09E-05	1.45E-05	2.88E-04	-0.00519
Photochemical Ozone Creation Potential (POCP) [kg Ethene eq.]	6.32E-04	5.83E-06	-2.50E-05	7.04E-06	4.37E-04	-0.00970
Abiotic depletion potential for non-fossil resources (ADPE) [kg Sb eq.]	1.40E-04	3.19E-10	2.18E-09	2.06E-08	4.84E-08	-1.38E-05
Abiotic depletion potential for fossil resources (ADPF) [MJ]	1 160	0.234	1.60	0.335	6.14	-256

Carbon content indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3
Biogenic content in product [kg C]	0.85
Biogenic content in packaging [kg C]	3.06

Since Module C is included in the EPD, the use of Module A1-A3 results without considering the results of Module C is discouraged.

Southern41 - Sliding Door

Core environmental indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Climate Change - total [kg CO ₂ eq.]	111	0.0176	0.120	0.0180	6.00	-35.6
Climate Change, fossil [kg CO ₂ eq.]	114	0.0176	0.115	0.0179	0.478	-35.6
Climate Change, biogenic [kg CO ₂ eq.]	-2.41	0	0.00506	4.38E-05	5.52	-0.0256
Climate Change, land use and land use change [kg CO ₂ eq.]	0.0164	1.90E-07	1.29E-06	5.47E-05	7.05E-04	-0.00125
Ozone depletion [kg CFC 11 eq.]	4.75E-08	1.77E-15	1.21E-14	4.85E-14	1.00E-12	-1.38E-11
Acidification [Mole of H ⁺ eq.]	0.793	8.86E-05	2.15E-04	8.82E-05	0.00304	-0.230
Eutrophication, freshwater [kg P eq.]	1.28E-04	2.90E-09	1.98E-08	4.11E-08	6.82E-07	-7.28E-06
Eutrophication, marine [kg N eq.]	0.133	4.21E-05	9.03E-05	4.11E-05	8.24E-04	-0.0149
Eutrophication, terrestrial [Mole of N eq.]	1.50	4.61E-04	9.96E-04	4.54E-04	0.00905	-0.164
Photochemical ozone formation, human health [kg NMVOC eq.]	0.347	1.18E-04	2.11E-04	1.11E-04	0.00287	-0.0533
Resource use, mineral and metals [kg Sb eq.]	1.35E-04	3.18E-10	2.17E-09	2.03E-08	4.77E-08	-1.37E-05
Resource use, fossils [MJ]	1 240	0.234	1.60	0.339	6.28	-261
Water use [m ³ world equiv.]	27.0	1.12E-04	7.61E-04	0.00304	0.0421	-11.8

Since Module C is included in the EPD, the use of Module A1-A3 results without considering the results of Module C is discouraged.

Southern41 - Sliding Door

Resource Use indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Use of renewable primary energy (PERE) [MJ]	992	0.00114	0.00780	0.0332	0.885	-434
Primary energy resources used as raw materials (PERM) [MJ]	31.7	0	0	0	0	0
Total use of renewable primary energy resources (PERT) [MJ]	1 020	0.00114	0.00780	0.0332	0.885	-434
Use of non-renewable primary energy (PENRE) [MJ]	1 220	0.234	1.60	0.340	6.28	-261
Non-renewable primary energy resources used as raw materials (PENRM) [MJ]	23.8	0	0	0	0	0
Total use of non-renewable primary energy resources (PENRT) [MJ]	1 240	0.234	1.60	0.340	6.28	-261
Input of secondary material (SM) [kg]	0	0	0	0	0	0
Use of renewable secondary fuels (RSF) [MJ]	0	0	0	0	0	0
Use of non-renewable secondary fuels (NRSF) [MJ]	0	0	0	0	0	0
Use of net fresh water (FW) [m ³]	2.79	2.23E-06	1.52E-05	8.81E-05	0.00145	-1.37

Waste indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Hazardous waste disposed (HWD) [kg]	3.33E-07	3.80E-13	2.59E-12	4.58E-12	3.43E-10	-1.33E-07
Non-hazardous waste disposed (NHWD) [kg]	12.4	5.67E-06	3.87E-05	1.02E-04	25.1	-0.521
Radioactive waste disposed (RWD) [kg]	0.0221	4.57E-08	3.12E-07	2.62E-06	6.05E-05	-0.00267

Output flow indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Components for re-use (CRU) [kg]	0	0	0	0	0	0
Materials for Recycling (MFR) [kg]	2.47	0	0	6.58	0	0
Material for Energy Recovery (MER) [kg]	0	0	0	0	0	0
Exported electrical energy (EEE) [MJ]	0	0	0	0	0.342	0
Exported thermal energy (EET) [MJ]	0	0	0	0	0	0

Since Module C is included in the EPD, the use of Module A1-A3 results without considering the results of Module C is discouraged.

Southern41 - Sliding Door

Additional indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Particulate matter [Disease incidences]	1.30E-05	1.02E-09	1.52E-09	1.71E-09	3.50E-08	-4.78E-06
Ionising radiation, human health [kBq U235 eq.]	3.76	5.94E-06	4.05E-05	2.58E-04	0.00660	-0.444
Ecotoxicity, freshwater [CTUe]	1 490	0.0938	0.640	0.256	8.36	-101
Human toxicity, cancer [CTUh]	1.30E-07	1.58E-12	1.08E-11	5.50E-12	4.56E-10	-2.82E-08
Human toxicity, non-cancer [CTUh]	4.53E-06	7.93E-11	3.83E-10	2.87E-10	4.96E-08	-2.71E-07
Land Use [Pt]	3 160	6.60E-04	0.00450	0.0752	1.06	-8.99
Climate Change-GHG IPCC AR5 [kg CO ₂ eq.]	114	0.0176	0.115	0.0180	1.85	-35.8

EN15804+A1 indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3	C1	C2	C3	C4	D
Global warming potential (GWP) [kg CO ₂ eq.]	110	0.0174	0.119	0.0175	5.51	-35.4
Ozone Depletion Potential (ODP) [kg R11 eq.]	6.24E-08	2.08E-15	1.42E-14	5.71E-14	1.18E-12	-1.62E-11
Acidification potential (AP) [kg SO ₂ eq.]	0.656	6.19E-05	1.55E-04	6.16E-05	0.00241	-0.204
Eutrophication potential (EP) [kg Phosphate eq.]	0.0485	1.41E-05	3.08E-05	1.44E-05	2.86E-04	-0.00513
Photochemical Ozone Creation Potential (POCP) [kg Ethene eq.]	2.96E-04	5.81E-06	-2.49E-05	6.96E-06	4.34E-04	-0.00960
Abiotic depletion potential for non-fossil resources (ADPE) [kg Sb eq.]	1.35E-04	3.18E-10	2.17E-09	2.03E-08	4.81E-08	-1.37E-05
Abiotic depletion potential for fossil resources (ADPF) [MJ]	1 160	0.233	1.59	0.331	6.10	-253

Carbon content indicators per Declared unit (1 m² of door ready for installation.)

Indicators	A1-A3
Biogenic content in product [kg C]	0.85
Biogenic content in packaging [kg C]	2.95

Since Module C is included in the EPD, the use of Module A1-A3 results without considering the results of Module C is discouraged.

Additional Environmental Information

Certifications

ISO 9001:2015 Quality Management System – Telarc Registered No. 14 (Please see page 62 for the certificate)

Standards

Windows and Doors are tested in an internationally accredited New Zealand laboratory, using an independent testing engineer, and comply with the New Zealand Standards – NZS4211:2008 Specification for Performance of Windows and NZS3504:1979 Specification for Aluminium Windows.

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General information

An Environmental Product Declaration, or EPD, is a standardised and verified way of quantifying the environmental impacts of a product based on a consistent set of rules known as a PCR (Product Category Rules).

The EPD owner has the sole ownership, liability, and responsibility for the EPD. EPDs within the same product category but from different programmes may not be comparable. EPDs of construction products may not be comparable if they do not comply with EN 15804.

For two EPDs to be comparable, they must be based on the same PCR (including the same version number) or be based on fully-aligned PCRs or versions of PCRs; cover products with identical functions, technical performances and use (e.g. identical declared/functional units); have equivalent system boundaries and descriptions of data; apply equivalent data quality requirements, methods of data collection, and allocation methods; apply identical cut-off rules and impact assessment methods (including the same version of characterisation factors); have equivalent content declarations; and be valid at the time of comparison. For further information about comparability, see EN 15804 and ISO 14025.

The results for EN15804+A1 compliant EPDs are not comparable with EN15804+A2 compliant studies as the methodologies are different. Results that are A1 compliant are given in an annex to this document to assist comparability across EPDs.



Telarc.
The Mark of Success

This is to certify that

Altus NZ Limited

47 - 67 Maui Street
Pukete Industrial Estate Te Rapa Hamilton New Zealand

having been assessed by Telarc Limited and having been found to operate a quality management system conforming to

ISO 9001:2015

is hereby designated

Telarc Registered

for the following goods and services

No. 14

The design, extrusion, powder coating, fabrication, and supply of aluminium industrial and residential profiles and joinery from Hamilton.

Certificate Issued: 11 March 2024

Current Registration: 11 March 2024

Acting Chairperson
Vikki Brannagan



Quality
ISO 9001

Original Registration: 19 December 1989

Expiry Date: 8 March 2027

Chief Executive
Philip Cryer



Registered by Telarc Limited Building 7, Central Park 660-670 Great South Road, Ellerslie, Auckland 1051, Private Bag 28901, Remuera, Auckland 1541, Telephone: 64 9 525 0100 Facsimile: 64 9 525 1900 and subject to the Telarc Limited Terms and Conditions for Certification. While all due care and skill was exercised in carrying out this assessment, Telarc Limited accepts responsibility only for proven negligence. To verify that this certificate is current please refer to the JAS-ANZ register at www.jasanz.org/register. This certificate and its associated schedules remain the property of Telarc Limited and must be returned if registration is withdrawn.

Programme-related Information and Verifications

Declaration owner:

 altus [®] Industrial Aluminium & Window Systems	Name	Sen Chen
	Company Name	Altus NZ Limited
	Web	www.altus.co.nz/contact-us/
	Email	Sen.chen@altus.co.nz
	Post	49, Business Parade North, East Tamaki PO Box 204123, Highbrook, Auckland 2161
	Geographical Scope	New Zealand
	Reference Year for Data	1 January 2023 - 31 December 2023

EPD produced by:

 thinkstep anz	Name	thinkstep Ltd LCA Practitioner: Barbara Nebel LCA PM: Chanjief Chandrakumar LCA analyst: Haoran Lei
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EPD programme operator:

 EPD [®] THE INTERNATIONAL EPD [®] SYSTEM	Name	The International EPD [®] System
	Operator	EPD International AB
	Web	www.environdec.com
	Email	info@environdec.com
	Post	EPD International AB, Box 210 60, SE-100 31 Stockholm, Sweden

Regional programme:

 EPD [®] AUSTRALASIA ENVIRONMENTAL PRODUCT DECLARATION	Name	EPD Australasia Limited
	Web	www.epd-australasia.com
	Email	info@epd-australasia.com
	Post	EPD Australasia Limited, 315a Hardy Street, Nelson 7010, New Zealand

CEN standard EN 15804+A2 served as the core PCR

	PCR	PCR 2019:14 Construction Products v1.11 and C-PCR-007 (to PCR 2019:14) Windows and Doors (EN 17213:2020)
	PCR review was conducted by	The Technical Committee of the International EPD [®] System
	Chair	Claudia A. Peña. Contact via info@environdec.com
	Independent verification of the declaration and data, according to ISO 14025	☐ EPD process certification (Internal) ☒ EPD verification (External)

Third party verifier:		
	Name	Claudia A. Peña (Director of PINDA LCT SpA)
	Email	pinda.lct@gmail.com
	Verifier approved by	EPD Australasia Limited
	Procedure for follow-up of data during EPD validity involved third-party verifier	☐ Yes ☒ No
Version history:		
	Versions	Version history 1.0 (2023-07-30) - Original EPD release Version History 2.0 (2025-03-17) Updated to reflect the: ▪ closure of one of the two manufacturing sites – Mt. Wellington, Auckland (New Zealand) ▪ address the changes to the product range ▪ use of residual electricity grid mix

Altus Fabricators



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