ASP™ access floors INTERNATIONAL

ENVIRONMENTAL PRODUCT DECLARATION OF

MAGNES FLOOR COVERING

ENVIRONMENTAL PRODUCT DECLARATION (EPD)
IN ACCORDANCE WITH
ISO 14025: 2006 AND EN 15804+A2:2019/AC:2021

PROGRAMME: THE INTERNATIONAL EPD® SYSTEM www.environdec.com
PROGRAMME OPERATOR: EPD INTERNATIONAL AB
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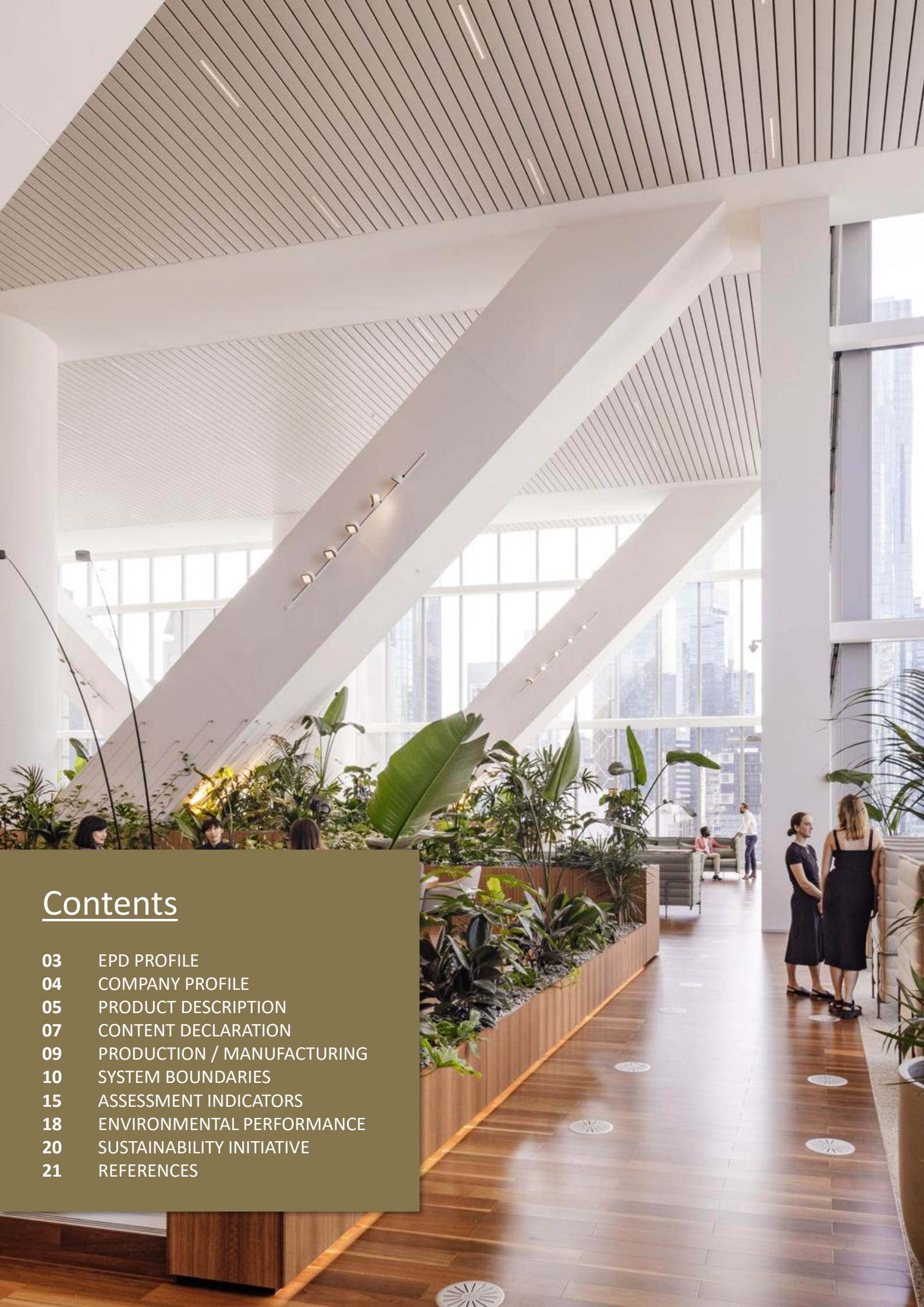
EPD INTERNATIONAL EPD SYSTEM

AUSTRALASIA EPD® ENVIRONMENTAL PRODUCT DECLARATION

ECO PLATFORM EPD VERIFIED



Contents

EPD Profile

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 registered in different EPD programmes, or not compliant with EN 15804, may not be comparable. 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.

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CEN standard EN 15804 serve as the core Product Category Rules (PCR) Geographical Scope: Australia
Reference year for data: 2023-08-01 to 2024-07-31
Product category rules (PCR):c-PCR-004 Resilient, textile and laminate floor coverings (EN 16810:2017) version 1.0.0 from 2025-04-08**.** PCR 2019:14 Construction products, version 1.3.4 from 2024-04-30
PCR review was conducted by: The Technical Committee of the International EPD® System. See www.environdec.com for a list of members.
The most recent review chair: Claudia Peña, PINDA LCT SpA.
The review panel may be contacted via the Secretariat: www.environdec.com/contact

Independent verification of the declaration and data, according to ISO 14025:

- [ ] EDP process certification (internal)
- [X] EPD verification (external)

This EPD can be used to claim points under Green Building Council Australia (GBCA) Green Star rating tools, specifically Material credits (up to 7 credits total) and Responsible Building Material Credits (up to 3 credits) in the Green Star Design & As Built tool.

The EPD owner has the sole ownership, liability, and responsibility for the EPD. .

Third-party verification
Independent verification of the declaration and data, according to ISO 14025: 2006, via:

EPD verification by individual verification by individual verifier.

Third-party verifier: *Claudia A. Peña, PINDA LCT SpA*
pinda.lct@gmail.com

Verifier approved by: *EPD Australasia*

Procedure for follow-up of data during EPD validity involved third-party verifier

- [ ] *Yes*
- [X] *No*

Company Profile

ASP Access Floors Pty Ltd is a global leader in the design, manufacture, and installation of access flooring systems. Our company has been at the forefront of innovation in the access flooring industry, delivering exceptional products and services to clients across the globe.

Building on our expertise in access flooring, ASP has expanded its research and development capabilities to include premium Magnes finishes—specifically engineered for integration with access flooring systems. This cutting-edge solution offers an elegant, high-performance surface designed to meet the aesthetic and functional demands of modern commercial, retail, and public spaces.

Through collaboration with architects, designers, and industry experts, we have developed Magnes as a versatile and sustainable finish that complements the flexibility of access floors while delivering a sophisticated, seamless design aesthetic.

Seamless Integration

Magnes is engineered to work perfectly with access flooring, maintaining the functionality and flexibility of raised floors while elevating the visual impact of interior spaces.

Design Versatility

Magnes offers a refined surface that replicates the look of premium materials such as terrazzo, concrete, or stone, with exceptional durability and reduced environmental impact.

Sustainability Focus

Our commitment to sustainability is embedded in the Magnes system. It is manufactured using environmentally conscious materials, supporting green building certifications and reducing lifecycle impacts.

Applications

Magnes is ideal for commercial offices, retail environments, education facilities, healthcare projects, and public buildings where durability and design excellence are essential.

At ASP Access Floors, we are driven by innovation, quality, and sustainability. The development of Magnes exemplifies our dedication to providing clients with solutions that meet the evolving needs of modern architecture and design. We continue to lead the way in access flooring systems by offering products that combine technical performance with aesthetic appeal.

Product Description

This is a product-specific EPD. The product included is Magnes timber flooring planks (colour Maple).

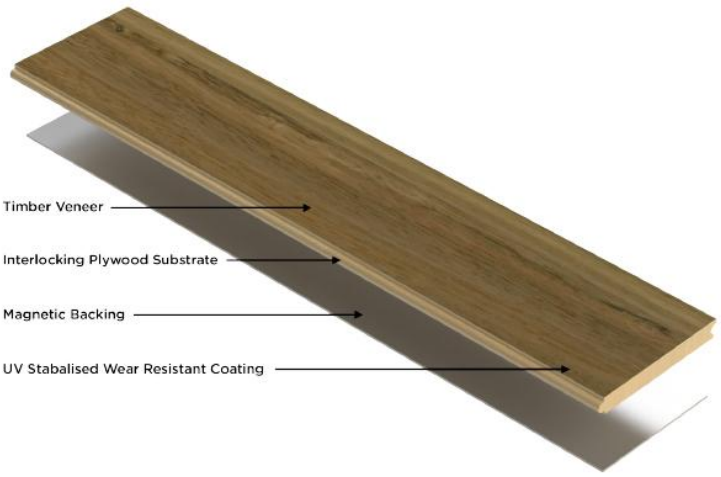
ASP Magnes is an innovative, interlocking magnetic flooring system designed for direct installation over ASP steel access floor systems (Figure 1). The product comprises engineered timber planks with a magnetic backing, enabling secure yet removable adhesion to raised access flooring without the use of adhesives or mechanical fasteners.

Magnes timber planks are designed with a built-in magnetic base, which allows the flooring to bond to the steel cementitious access flooring system (Figure 2). Access floor systems are designed to allow full accessibility to the under-floor services. The use of the Magnes flooring finish ensures that this accessibility is not obstructed. Each plank features a patented interlocking profile that enables individual panels to be lifted and replaced independently, reducing material waste and enabling efficient in-use maintenance.

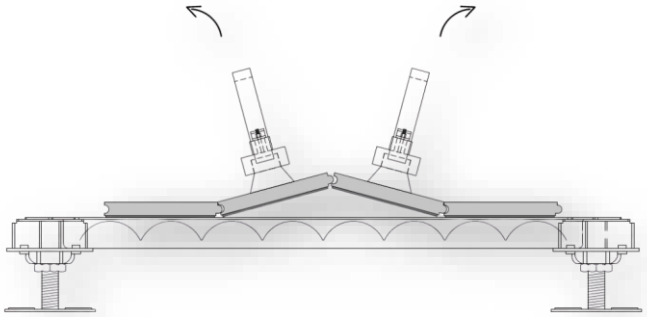
ASP Magnes is intended for use in commercial, institutional, or residential buildings where raised access flooring is required for underfloor service distribution. The magnetic backing facilitates full access to underfloor systems while maintaining the aesthetic and tactile qualities of timber flooring.

Magnes is Class 33 as per ISO 10874 and EN 685.

(Figure 1)



(Figure 2)



Technical Characteristics

- → Material composition: Engineered timber planks with an integrated magnetic base layer.
- → Installation method: Dry-lay and magnetic bonding (no adhesives or mechanical fixings required).
- → Dimensions: Long plank format 120 x 900 x 17 mm.
- → Certifications: FSC-certified timber.
- → Access capability: Full access to subfloor systems maintained post-installation.
- → Service life: 10 years. ASP warrants the product for 12 months.

Description of product characteristics

CHARACTERISTICS	AMOUNT	UNIT
Thickness of the element	17	mm
Thickness of surface or decorative layer	2	mm
Thickness of core	13	mm
Thickness of backing	2	mm
Length of the surface layer	900	mm
Width of the surface layer	120	mm
Density	871	kg/m^3

Guidance on safe and effective installation, use and disposal of the product:

Installation:

Magnes® is a magnetic, interlocking timber flooring system designed for fast installation over a steel cementitious access floor. The planks feature a magnetic backing that securely bonds to the floor below, while the interlocking tongue-and-groove profile ensures stability and alignment. To install, simply place the planks in position, allowing the magnets to bond and the profiles to click into place.

Adjustments can be made using panel lifters to fine-tune alignment. The system allows for easy removal and reinstallation at any time, providing full access to underfloor services without damaging the planks.

Maintenance:

Dust and grit should be removed daily from all timber floors using an antistatic mop. A damp mop can be used once a month using just mist water or a compatible Bona cleaning product. Avoid wet mopping and steam mops to extend the life of the floor's coating.

In hospitality or other such environments, all spills must be cleaned as soon as possible to avoid damage to the timber surface. Similarly, in such areas where spills or concentrated traffic might be expected, preventative measures such as additional mats should be considered to reduce the impact upon the floor.

Follow this simple cleaning regimen combined with using felt pads on furniture feet and mats at entryways to avoid deep scratches.

Restoration:

When it is believed that the surface of the floor has become worn, or there are frequent deep gouges, then it is necessary to refinish the floor. This can be achieved by simply sanding the floor back to an even finish using a 150-grit abrasive, taking care not to breach the finished surface, before applying a further coating of Bona Naturalle.

Disposal:

At the end of its life, the Magnes® flooring system supports responsible disposal practices. Approximately 75% of the product is recyclable. Recycling and waste separation should be carried out in accordance with local regulations to maximise environmental outcomes.

Table 1: Industry Classification

PRODUCT	CLASSIFICATION	CODE	CATEGORY
ASP Magnes	UN CPC Ver.2	31600	Builders' joinery and carpentry of wood (including cellular wood panels, assembled parquet panels, shingles, and shakes)
	ANZSIC 2006	1499	Other Wood Product Manufacturing n.e.c.

Functional Unit & Reference Service Life

The functional unit is 1 square meter (m2) of installed floor covering for specified applications and use, according to EN 16810:2017. The reference flow is 1 m2 of installed Magnes floor, which weights 14.8 kg.

As per EN16810, the service lifetime of a floor covering for a certain application on a floor is too widespread to give one common number. For this EPD model the reference service lifetime (RSL) is set to one year.

Content Declaration

The content declaration for this product-specific EPD is shown in Table 2 for product and Table 3 for packaging. No products declared within this EPD contain substances exceeding the limits for registration according to the REACH Regulation of "Candidate List of Substances of Very High Concern for authorisation".

Table 2: Composition of ASP Magnes (per 1 m2)

PRODUCT COMPONENTS	WEIGHT, KG	POST-CONSUMER RECYCLED MATERIAL, WEIGHT-% OF PRODUCT	BIOGENIC MATERIAL, WEIGHT-% OF PRODUCT	BIOGENIC MATERIAL, KG C/PRODUCT
Multi-layer Wood	9.27	0	58.5	4.33
Oak Veneer	1.73	0	10.9	0.808
Barium Ferrite	3.33	0	0	0
Acrylonitrile Butadiene Styrene (ABS)	0.370	0	0	0
UV Coating	0.0882	0	0	0
Wood Putty	0.00803	0	0	0
Total	14.8	0	69.4	5.13

Table 3: Composition of packaging (per 1 m2 product)

PACKAGING MATERIALS	WEIGHT, KG	WEIGHT-% (VERSUS THE PRODUCT)	BIOGENIC MATERIAL, KG C/PRODUCT
Wood Pallet	0.213	1.44	0.0994
Cardboard	0.0656	0.443	0.0235
Sum	0.279	1.88	0.123

ASP has delivered some of the most **effective solutions** on the market

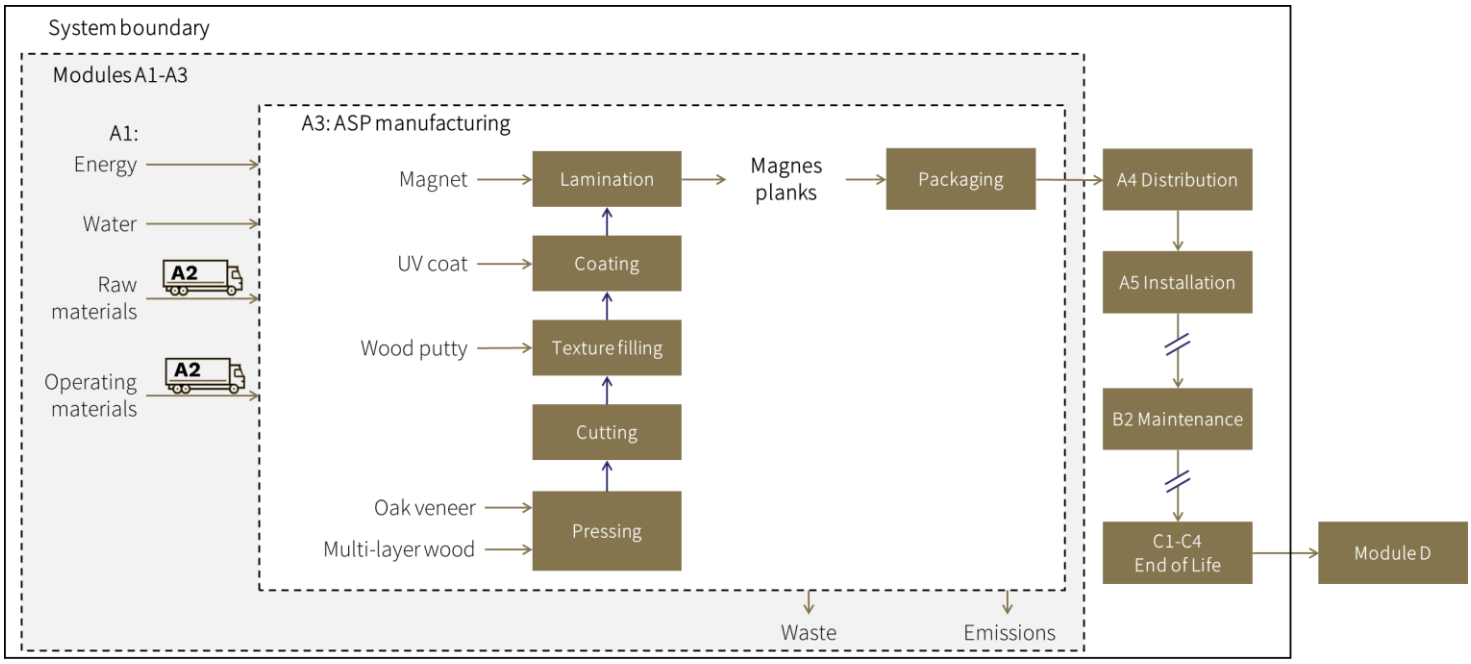
Production

Flooring manufacture is undertaken at a manufacturing plant in Jiangsu, China, including generation of electricity, steam and heat from primary energy resources, including:

- → Pressing of multi-layer wood and veneer
- → Cutting planks to size
- → Texture finishing with wood putty and sanding
- → Coating with UV paint
- → Lamination of wood and magnet
- → Packaging and storage (including packaging materials)
- → Treatment of waste generated from the manufacturing processes to its final fate

A high-level diagram of the processed included is presented in Figure 3.

Figure 3: High level processes (modules A1-A3, A4, A5, B2, C1-C4, and D)



System Boundaries

As shown in the table below, this EPD is of the type 'cradle-to-grave'. The included modules are A1-A3, A4, A5, B1-B7, C1-C4, and D. The production stage (Modules A1-A3) includes all aspects of the floor production from cradle to gate, using elementary and product flows. The building use stages (modules B1, B3-B7) are not relevant for flooring systems, as stated in EN 16810, and are calculated as 0.

Table 4: Modules included in the scope of the EPD

	PRODUCT STAGE			CONSTRUCTION PROCESS STAGE		USE STAGE							END OF LIFE STAGE				RESOURCE RECOVERY STAGE
	Raw material supply	Transport	Manufacturing	Transport to customer	Construction / Installation	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	Deconstruction	Transport	Waste processing	Disposal	Future reuse, recycling or energy recovery potential
	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Geography	CN	CN	CN	AU	AU	AU	AU	AU	AU	AU	AU	AU	AU	AU	AU	AU	AU
Share of specific data	11%			-		-	-	-	-	-	-	-	-	-	-	-	-
Variation: Products	-			-		-	-	-	-	-	-	-	-	-	-	-	-
Variation: Sites	-			-		-	-	-	-	-	-	-	-	-	-	-	-

X = included in the EPD; Variation of products for all environmental impacts.

Specific data covers material transport and energy use for A1-A3 modules. The calculation is done by the share of impacts of these flows over the total GWP-GHG results of module A1-A3.

Product Stage (Modules A1-A3)

The production stage includes the environmental impacts associated with raw materials extraction and processing of inputs, transport to, between and within the manufacturing site, and manufacturing of average product at the exit gate of the manufacturing site. The impacts include the production and use of fuels and electricity, production of auxiliary materials and packaging materials, and waste treatment of production wastes.

Since Module C is included in the EPD, the use of Module A1-A3 (A1-A5 for services) results without considering the results of Module C is discouraged.

Construction Stage (Modules A4, A5)

Distribution includes transport of product to customers (A4) in Australia. The weighted average transport distances and mode is based on sales freight information. This is an average scenario that may not be representative for any given customer. Customers should individually establish the transport requirements between distribution centre and their site rather than relying on the average.

Table 5: Distribution scenario information (module A4)

SCENARIO INFORMATION	UNIT (EXPRESSED PER FUNCTIONAL UNIT OR PER DECLARED UNIT)
Fuel type and consumption of vehicle or vehicle type used for transport e.g. long distance truck, boat etc.	100% of sea transport via container ship, heavy fuel oil 30% of land transport via freight, lorry, >32 metric ton, diesel, EURO 4 70% of land transport via freight, lorry, 3.5-7.5 metric ton, diesel, EURO 4 Electric pallet jacks used in distribution
Distance	190 km truck in China 8850 km ship from China to Australia 461 km truck in Australia
Capacity utilisation (including empty returns)	50% truck 48% ship
Bulk density of transported products	871.5 kg/m3
Volume capacity utilisation factor (factor: =1 or < 1 o r ≥ 1 for compressed or nested packaged products)	≥ 1

After being delivered on site, ASP Magnes floor planks are unpacked and installed. Depending on the building site, the product can be mechanically lifted using diesel machinery.

The installation does not require water or energy. However, ASP informed that a 1 mm polystyrene foam underlay and 2 mm fluted polypropylene are used as protection after installation. ASP also estimated up to 5% offcuts due to installation. The production, transport, and waste disposal of the offcut floors are calculated in module A5.

Table 6: Installation inventory (Module A5)

SCENARIO INFORMATION	UNIT (EXPRESSED PER FUNCTIONAL UNIT OR PER DECLARED UNIT)
Ancillary materials for installation (specified by material);	0.0325 kg Polystyrene foam underlay 0.295 kg Fluted polypropylene
Water use	0 m^3
Other resource use	0 kg
Quantitative description of energy type and consumption during the installation process	1.27 kWh electricity in pallet jacks 4.6 MJ diesel in forklifts
Waste materials on the building site before waste processing, generated by the product's installation (specified by type	0.74 kg of ASP Magnes floors to landfill (5% wastage due to offcuts)
Output materials (specified by type) as result of waste processing at the building site e.g. of collection for recycling, for energy recovery, disposal (specified by route)	0.0325 kg Polystyrene foam underlay to landfill 0.295 kg Fluted polypropylene to landfill
Direct emissions to ambient air, soil and water	0 kg

Use Stage (Module B)

Floor maintenance (module B2) is based on the recommended maintenance of ASP Magnes.

Table 7: Maintenance inventory (per 1 m2 of product)

SCENARIO INFORMATION	UNIT (PER DECLARED UNIT)
Maintenance process	Dust is regularly removed using a mop. A damp mop is used once a month using a Bona cleaning product.
Maintenance cycle	12 times in a RSL (once a month during a year)
Ancillary materials for maintenance, e.g. cleaning agent, specify materials	0.24 L/RSL of Bona cleaner with assumed density of 1 kg/cm3
Waste material resulting from maintenance (specify materials)	0.024 kg/RSL of polyethene packaging assumed to be disposed in landfill
Net fresh water consumption during maintenance	0 kg
Energy input during maintenance, e.g. vacuum cleaning, energy carrier type, e.g. electricity, and amount, if applicable and relevant	N/A

The building's use stages (modules B1, B3-B7) are not relevant for flooring systems, as stated in EN 16810, and are calculated as 0.

End of Life (Modules C1-C4)

When a building reaches its end-of-life, ASP Magnes is disposed of. In Australia, the waste materials are typically disposed of in a landfill or recycled. Module C includes waste processing followed by recycling/landfill of the product. The scenarios included are currently in use and are representative for one of the most probable alternatives.

Table 8: End of life scenarios for products

PROCESS	UNIT (PER DECLARED UNIT AND BY TYPE OF MATERIAL)
Recovery system specified by type	○ 0.33 kg or 100% of the magnet metal to recycling (90% of the magnet component weight) ○ 0 kg of the ABS part of magnet to recycling (10% of the magnet component weight) ○ 0 kg of wood for recycling
	○ 0 kg of the magnet metal to landfill (90% of the magnet component weight) ○ 0.37 kg or 100% of the ABS part of the magnet to landfill (10% of the magnet component weight) ○ 11.1 kg or 100% of wood to landfill
Disposal specified by type	○ ABS modelled as mixed plastic in landfill ○ Wood modelled as wood in landfill
Assumptions for scenario development	○ C1 – manual disassembly (no fuel consumption) ○ C2 – 50 km of transport by truck ○ C3 – 0.2 MJ of electrical energy from the Australian grid needed to process 1 kg of material.

A recycling yield of 100% is applied for the magnet. The R2 value, i.e., recycling efficiency, for magnetic wood flooring is not available in the European Union Guidance on PEF.

Recovery and Recycling potential (Module D)

Module D declares a potential credit or burden for the net scrap associated with ASP Magnes. Net scrap is the amount of scrap left after scrap from post-consumer needs are removed from scrap produced from product. That is, secondary product used in product manufacture is subtracted from the overall amount of recycled product after the first life cycle. If the net balance is positive, a credit given. The credit is calculated by comparing the impacts associated with primary product produced.

Life cycle inventory (LCI) data and assumptions

Specific data (still in PCR VERSION 1.3.4) were used for all manufacturing operations up to the factory gate, including upstream data for wood and magnet production Primary data were collected for ASP Magnes manufactured by ASP Access Floors for the 12-month period between 2023-08-01 to 2024-07-31. No changes to production technology have occurred since the data collection period and hence the data continues to be representative of current practice.

a. Additional information on assumptions of background data can be accessed in the document https://www.thinkstep-anz.com/assets/Download-files/Project-specific-files/ASP-Magnes-2024-ZP103871-Annex-F-Background-data-v1.0.pdf

Upstream Data

Australia- and China-specific datasets have been used where available, including electricity mix.

The upstream production impacts for materials used in the ASP Magnes production were calculated based on the quantities in the BOM, uplifted for any production waste, and using dataset-specific impacts extracted from the ecoinvent database.

LCA software and database

Background data for raw materials, energy, and transportation are all from the ecoinvent v3.11 database (Wernet, 2016) with reference years between 2023-2024. Both primary and background data fall within the EN 15804 and PCR requirements of 10 years for generic data and 5 years for producer specific data.

The LCA was conducted in Microsoft Excel. The LCA utilises lifecycle inventory data from ecoinvent, Allocation, cut-off, EN15804, ecoinvent database version 3.11 (Wernet, 2016) for several of the raw and process materials obtained from the background system. The ecoinvent datasets have not been adapted as they are provided in Excel and have not been used in conjunction with an LCA software. This includes capital goods and infrastructure as they are included in the background datasets provided by ecoinvent database for Excel and it is not possible to subtract them in Excel.

Electricity

Purchased electricity accounts for 100% of the electricity used at the ASP production site, in Jiangsu, China, and 100% renewable electricity is contracted from Three Gorges hydroelectric power generation. Therefore, manufacture of ASP Magnes is 100% generated from hydroelectric power. Transmission losses (4.37%) are calculated with literature information (Statista, 2025).

The emission factor for the electricity used in production for the GWP-GHG indicator is 0.00480 kg CO2eq./kWh (based on EF3.1).

Transport

Transport distance is calculated per raw material and fuel input. The distances of transport vary between 25 to 1900 km of truck transport. As there was not much information about specific trucks used, we conservatively used data for ‘transport, freight, lorry, unspecified’ Capacity utilisation is 50%, which accounts for empty returns.

Cutt off criteria

Personnel-related processes are excluded as per section 4.3.2 in the PCR (EPD International, 2024).

thinkstep-anz consistently excludes environmental impacts from infrastructure, construction, production equipment, and tools that are not directly consumed in the foreground production process, ('capital goods') regardless of potential significance. High-quality infrastructure-related data isn't always available and there is no clear cut-off for what to include. For this reason, capital goods data are applied to LCA studies inconsistently. This is expected to lead to reduced consistency and comparability of EPDs. Capital goods were previously excluded from EPDs, thus including capital goods in current EPDs would further reduce their comparability.

In this study capital goods and infrastructure have been included in the background datasets as provided by ecoinvent (Wernet, 2016). It is not possible, within reasonable effort, to subtract the data on infrastructure/capital goods from these datasets.

All other reported data were incorporated and modelled using the best available life cycle inventory data.

Allocation

Where subdivision of processes was not possible, allocation rules listed in PCR chapter 4.5 have been applied. Where economic allocation was required, revenue of product and co-products was based on the year 2023-08-01 to 2024-07-31. Electricity is the only data economically allocated.

No secondary materials are used in the foreground production of ASP Magnes. Allocation for input materials that contain secondary material occurs in the upstream dataset of barium ferrite metal; this is not reported in the content declaration table as it might not be sourced from post-consumer recycling.

End-of-life allocation follows the requirements of EN 15804:2017+A2:2019 § 6.4.3.3 and generally follows the polluter pays principle. 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 barium ferrite used in the product.

Assumptions

- Biogenic Carbon Accounting: Temporary carbon storage in wood is included but fully released at the end of life in accordance with PCR 2019:14.
- Offcut Rate: A fixed offcut rate of 5% is assumed during installation.
- End-of-Life Scenario: Wood is assumed to be landfilled, with corresponding biogenic carbon releases modelled accordingly.
- Use Phase (B2): Only light cleaning is considered; no significant refurbishment or replacement is assumed due to a defined Reference Service Life (RSL) of 1 year per the c-PCR.
- Data Representativeness: Impacts from transport and production are based on background databases and average transport distances. Specific impacts may vary.

Data Quality Assessment

The data quality assessment according to the EN15804 (scheme: UN Environment Global Guidance on LCA database development) is provided in Table 9.

Table 9: Data quality assessment summary of data used in the LCA

MATERIAL/PROCESS	GEO REP.	TECH REP.	TIME REP.
Energy (Module A1)	Very good	Very good	Very good
Raw materials (Module A1)	Good	Good	Very good
Transportation (Modules A2, A4)	Very good	Good	Very good
Packaging (Module A3)	Good	Very good	Very good
Installation (Module A5)	Very good	Good	Very good
Use (Module B2)	Good	Good	Very good
Waste treatment (Modules A3, A5, B2)	Good	Good	Very good
End of life (Module C1-C4)	Good	Good	Very good
Module D	Good	Good	Very good

Assessment Indicators

The results tables describe the different environmental indicators for each product per declared unit, for each declared module. The EN 15804 reference package based on EF 3.1 is used.

- → Table 10 contains the core environmental impact indicators in accordance with EN 15804:2012+A2:2019, describing the potential environmental impacts of the product.
- → Table 11 shows the life cycle inventory indicators for resource use.
- → Table 12 displays the life cycle inventory indicators for waste and other outputs.
- → Table 13 provides additional environmental impact indicators in accordance with EN 15804:2012+A2:2019.
- → Table 14 displays biogenic carbon content indicators.

The estimated impact results are only relative statements, which do not indicate the endpoints of the impact categories, exceeding threshold values, safety margins and/or risks.

The use of primary energy is separated into energy used as raw material and energy used as energy carrier as per option C in Annex 3 in the PCR (EPD International, 2023)

Energy indicators (MJ) are always given as net calorific value.

Table 10: EN15804+A2 Core Environmental Impact Indicators

IMPACT CATEGORY	ABBREVIATION	UNIT
Climate change – total	GWP-total	kg CO_2-eq.
Climate change – fossil	GWP-fossil	kg CO_2-eq.
Climate change – biogenic	GWP-biogenic	kg CO_2-eq.
Climate change – land use and land use change	GWP-luluc	kg CO_2-eq.
Ozone depletion	ODP	kg CFC11-eq.
Acidification	AP	Mole of H^+ eq.
Eutrophication aquatic freshwater	EP-freshwater	kg P eq.
Eutrophication aquatic marine	EP-marine	kg N eq.
Eutrophication terrestrial	EP-terrestrial	Mole of N eq.
Photochemical ozone formation	POFP	kg NMVOC eq.
Depletion of abiotic resources – minerals and metals[1,5]	ADP-m&m	kg Sb-eq.
Depletion of abiotic resources – fossil fuels[1]	ADP-fossil	MJ
Water use[1]	WDP	m^3 world equiv.

Table 11: Life cycle inventory indicators on use of resources

INDICATOR	ABBREVIATION	UNIT
Use of renewable primary energy excluding renewable primary energy resources used as raw materials	PERE	MJ
Use of renewable primary energy resources used as raw materials	PERM	MJ
Total use of renewable primary energy resources	PERT	MJ
Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials	PENRE	MJ
Use of non-renewable primary energy resources used as raw materials	PENRM	MJ
Total use of non-renewable primary energy resources	PENRT	MJ
Use of secondary material;	SM	kg
Use of renewable secondary fuels	RSF	MJ
Use of non-renewable secondary fuels	NRSF	MJ
Total use of net fresh water	FW	m^3

Table 12: Life cycle inventory indicators on waste categories and output flows

INDICATOR	ABBREVIATION	UNIT
Hazardous waste disposed	HWD	kg
Non-hazardous waste disposed	NHWD	kg
Radioactive waste disposed	RWD	kg
Components for reuse	CRU	kg
Materials for energy recovery	MER	kg
Materials for recycling	MFR	kg
Exported electrical energy	EEE	MJ
Exported thermal energy	EET	MJ

Table 13: EN15804+A2 Additional Environmental Impact Indicators

INDICATOR	ABBREVIATION	UNIT
Climate Change[2]	GWP-GHG	kg CO_2-eq
Particulate Matter emissions	PM	Disease incidences
Ionising Radiation – human health[3]	IRP	kBq U235 eq.
Eco-toxicity (freshwater)[1,5]	ETP-fw	CTUe
Human Toxicity, cancer[1,5]	HTP-c	CTUh
Human Toxicity, non-cancer[1,5]	HTP-nc	CTUh
Land use related impacts / soil quality[1]	SQP	Dimensionless

Table 14: Biogenic carbon content indicators

INDICATOR	ABBREVIATION	UNIT
Biogenic carbon content - product	BCC-prod	kg C
Biogenic carbon content - packaging	BCC-pack	kg C

Disclaimers

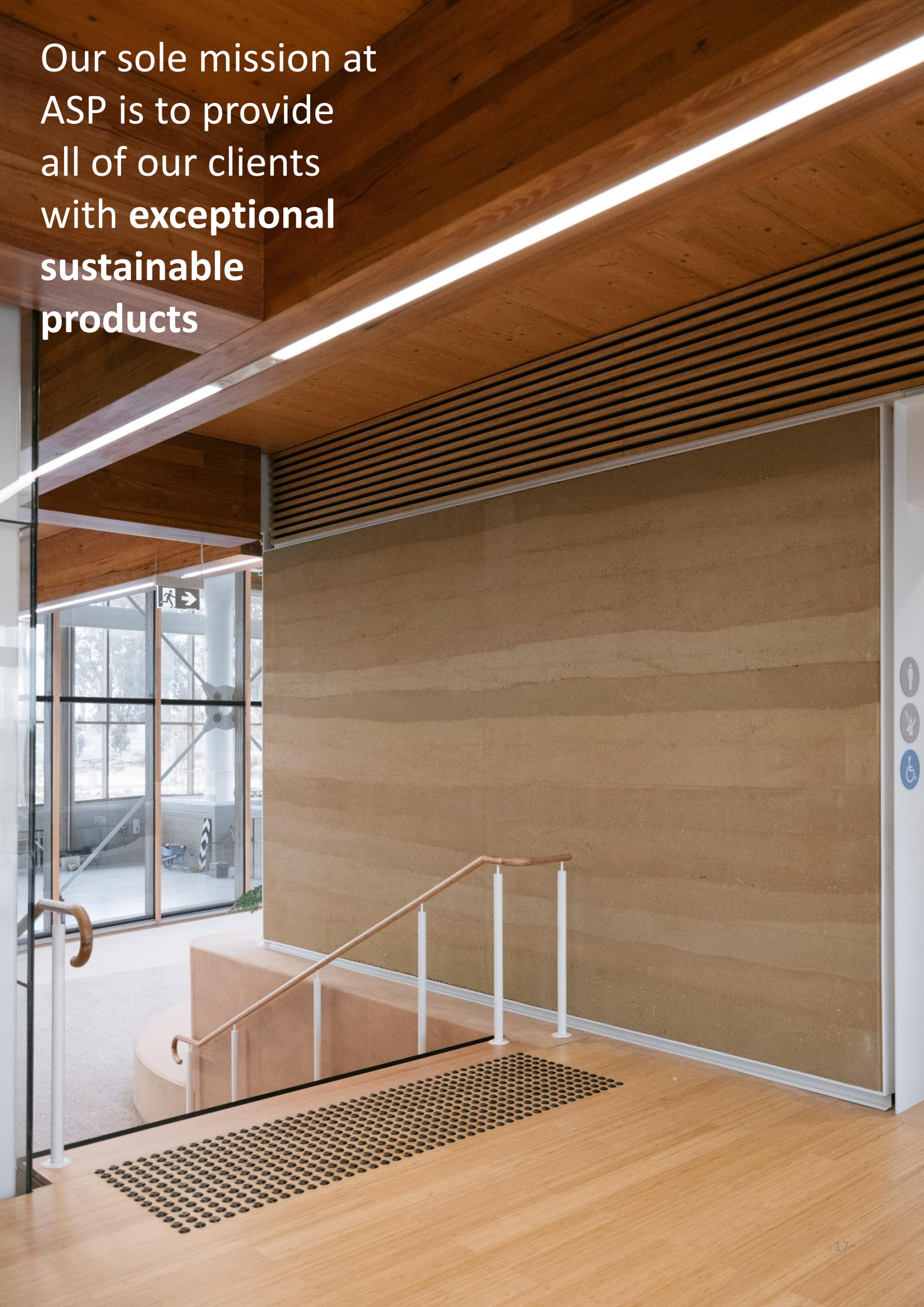
1The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experience with the indicator.

2This indicator is identical to GWP-total except that the CF for biogenic CO2 is set to zero. It has been included in the EPD following the PCR.

3GWP-GHG (IPCC AR5) is an additional GWP100 indicator that is aligned with the Intergovernmental Panel on Climate Change (IPCC) 2013 Fifth Assessment Report (AR5) (IPCC 2013), national greenhouse gas reporting frameworks in Australia and New Zealand and previous versions of the Construction Products PCR (PCR2019:14v1.11). It excludes biogenic carbon and indirect radiative forcing.

4This 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 also not measured by this indicator.

5The results of the impact categories abiotic depletion of minerals and metals, land use, human toxicity (cancer), human toxicity, noncancer and ecotoxicity (freshwater) may be highly uncertain in LCAs that include capital goods/infrastructure in generic datasets, in case infrastructure/capital goods contribute greatly to the total results. This is because the LCI data of infrastructure/capital goods used to quantify these indicators in currently available generic datasets sometimes lack temporal, technological and geographical representativeness. Caution should be exercised when using the results of these indicators for decision-making purposes.


Our sole mission at ASP is to provide all of our clients with **exceptional sustainable products**

Environmental Performance

The following tables show the results 1 square meter (m2) of access floor installed. The estimated impact results are only relative statements, which do not indicate the endpoints of the impact categories, exceeding threshold values, safety margins and/or risks.

Table 15: EN15804+A2 Core environmental impact indicators

ABB.	UNIT	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP-total	kg CO_2 eq.	-1.15E+00	6.16E+00	4.05E+00	0.00E+00	2.28E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.49E-01	7.62E-01	2.35E+01	-7.50E+00
GWP-fossil	kg CO_2 eq.	1.78E+01	6.15E+00	3.21E+00	0.00E+00	2.20E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.48E-01	7.62E-01	1.55E-01	-7.49E+00
GWP-biogenic	kg CO_2 eq.	-1.90E+01	2.49E-03	8.41E-01	0.00E+00	9.67E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.55E-04	0.00E+00	2.34E+01	0.00E+00
GWP-luluc	kg CO_2 eq.	3.46E-02	3.19E-03	2.81E-03	0.00E+00	8.47E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.44E-04	1.03E-04	7.48E-05	-6.62E-03
ODP	kg CFC 11 eq.	1.40E-07	8.21E-08	4.80E-08	0.00E+00	5.15E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.80E-09	4.76E-09	3.15E-09	-3.78E-08
AP	mol H^+ eq.	1.24E-01	5.96E-02	1.74E-02	0.00E+00	1.48E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.81E-03	3.49E-03	8.71E-04	-4.73E-02
EP-freshwater	kg P eq.	6.94E-03	6.04E-04	2.20E-03	0.00E+00	6.62E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.47E-05	1.24E-03	9.58E-05	-3.88E-03
EP-marine	kg N eq.	3.53E-02	1.67E-02	4.55E-03	0.00E+00	4.15E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.07E-04	8.23E-04	4.69E-03	-1.04E-02
EP-terrestrial	mol N eq.	3.83E-01	1.84E-01	4.29E-02	0.00E+00	3.46E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.60E-03	6.42E-03	3.64E-03	-1.10E-01
POCP	kg NMVOC eq.	1.18E-01	5.57E-02	1.53E-02	0.00E+00	1.24E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.33E-03	1.71E-03	1.51E-03	-3.60E-02
ADP-m&m	kg Sb eq.	5.71E-05	2.15E-05	1.34E-05	0.00E+00	1.69E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.03E-06	5.23E-07	2.37E-07	-2.04E-05
ADP-fossil	MJ	2.39E+02	8.18E+01	5.29E+01	0.00E+00	4.24E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.08E+00	8.06E+00	2.78E+00	-9.56E+01
WDP	m^3 world eq. deprived	1.14E+01	4.08E-01	1.00E+00	0.00E+00	1.63E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.45E-02	6.40E-02	1.22E-01	-1.97E+00

Table 16: Use of Resources

ABB.	UNIT	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
PERE	MJ	2.55E+02	1.22E+00	1.54E+01	0.00E+00	6.09E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.08E-01	7.38E-01	1.24E-03	0.00E+00
PERM	MJ	2.04E+02	0.00E+00	6.87E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PERT	MJ	4.59E+02	1.22E+00	2.22E+01	0.00E+00	6.09E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.08E-01	7.38E-01	1.24E-03	0.00E+00
PENRE	MJ	2.00E+02	8.18E+01	4.00E+01	0.00E+00	3.03E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.09E+00	8.06E+00	2.69E+00	0.00E+00
PENRM	MJ	2.27E+01	0.00E+00	1.13E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PENRT	MJ	2.23E+02	8.18E+01	4.11E+01	0.00E+00	3.03E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.09E+00	8.06E+00	2.69E+00	0.00E+00
SM	kg	3.96E-01	4.11E-02	2.59E-02	0.00E+00	9.37E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-3.95E-01
RSF	MJ	8.89E-02	4.34E-04	4.50E-03	0.00E+00	9.52E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.13E-05	2.93E-06	1.92E-05	-5.39E-04
NRSF	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
FWT	m^3	2.59E-01	1.03E-02	1.88E-02	0.00E+00	3.91E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.80E-04	1.48E-03	-4.25E-02	-4.58E-02

Table 17: Waste Production & Output Flows

ABB.	UNIT	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
HWD	kg	5.33E+00	1.83E-01	4.22E-01	0.00E+00	1.68E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.56E-02	6.00E-02	4.57E-03	-4.60E+00
NHWD	kg	3.88E+01	3.46E+00	1.76E+01	0.00E+00	1.02E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.08E-01	5.99E+00	4.08E+01	-2.32E+01
RWD	kg	7.66E-05	4.87E-06	7.72E-06	0.00E+00	9.74E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.22E-07	7.49E-08	1.57E-07	-3.05E-05
CRU	kg	0.00E+00	0.00E+00	1.92E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MER	kg	2.11E-02	1.64E-02	3.64E-03	0.00E+00	3.81E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.33E+00	0.00E+00	-4.69E-03
MFR	kg	4.12E-05	6.98E-06	3.56E-06	0.00E+00	2.82E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.82E-07	8.26E-08	1.88E-07	-5.72E-06
EEE	MJ	1.13E-01	6.75E-03	1.21E-02	0.00E+00	1.97E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.74E-04	1.35E-04	2.47E-04	-6.14E-02
EET	MJ	4.07E-02	7.74E-03	8.34E-03	0.00E+00	4.22E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.15E-04	2.52E-04	2.95E-04	-1.74E-02

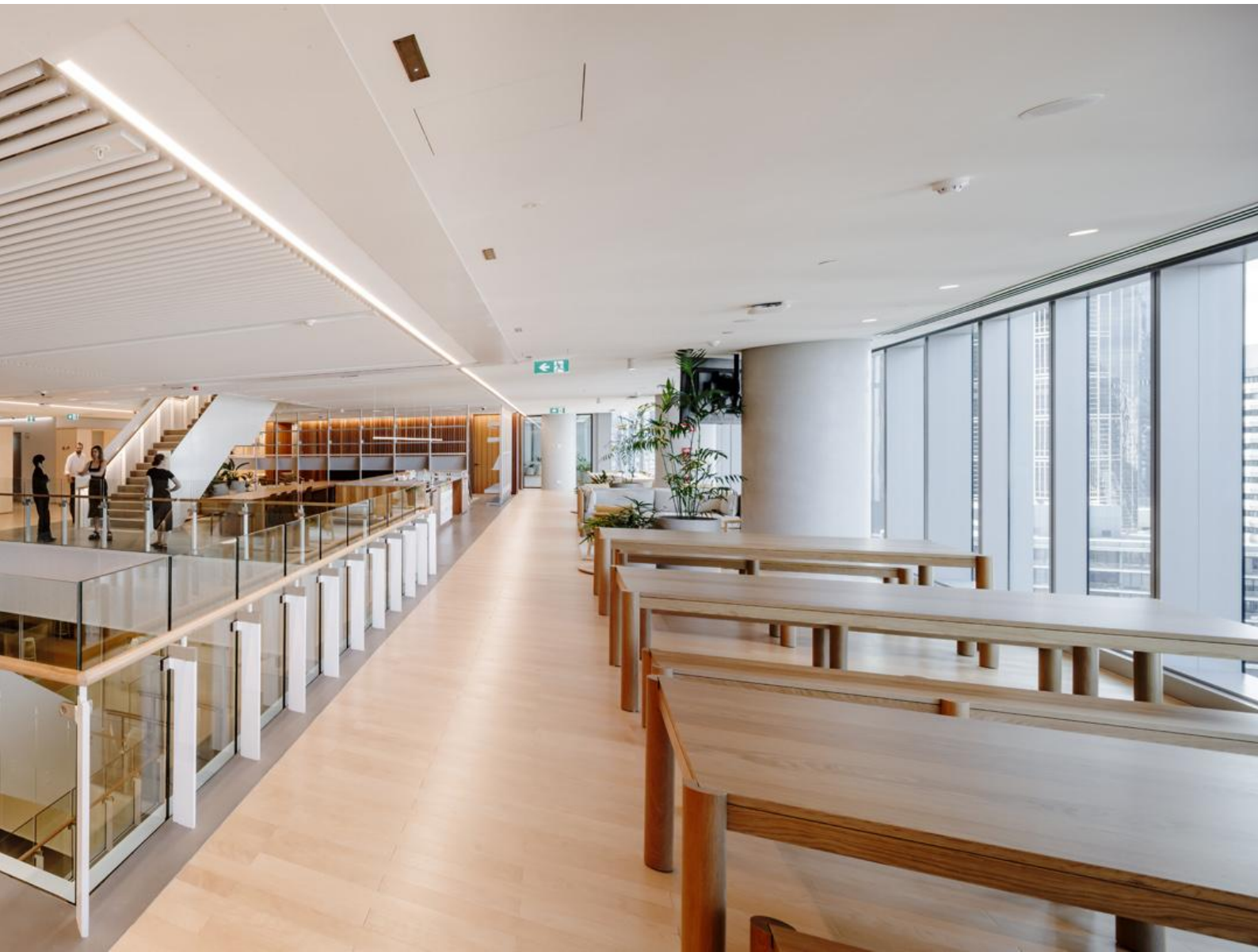
Environmental Performance

Table 18: EN15804+A2 Additional Environmental Impact Indicators

INDICATOR	UNIT	A1-A3	A4	A5	B1	B2	B3	B4	B5	B6	C1	C2	C3	C4	D
GWP-GHG	kg CO_2-eq	1.78E+01	6.15E+00	3.21E+00	0.00E+00	1.18E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.49E-01	7.62E-01	1.21E-01	-7.50E+00
GWP-GHG (IPCCAR5)	kg CO_2-eq	1.83E+01	6.30E+00	3.30E+00	0.00E+00	2.31E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.59E-01	7.70E-01	1.65E-01	-7.73E+00
PM	Disease incidences	2.14E-06	3.52E-07	1.77E-07	0.00E+00	1.23E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.74E-08	5.66E-09	2.02E-08	-5.43E-07
IR	kBq U235 eq.	1.01E+00	6.66E-02	1.08E-01	0.00E+00	1.46E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.75E-03	1.18E-03	2.25E-03	-4.61E-01
ETP-fw	CTUe	5.17E+03	6.77E+01	3.23E+02	0.00E+00	5.55E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.77E+00	1.17E+01	2.99E+01	-5.17E+03
HTP-c	CTUh	4.61E-04	1.79E-06	2.35E-05	0.00E+00	5.58E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.44E-07	1.50E-07	4.47E-08	-4.72E-04
HTP-nc	CTUh	2.24E-05	1.39E-06	2.17E-06	0.00E+00	8.80E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.25E-07	3.55E-07	6.85E-07	-1.69E-05
SQP	Dimensionless	2.52E+03	2.97E+01	1.31E+02	0.00E+00	2.47E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.53E+00	6.06E-01	6.60E+00	-2.89E+01

Table 19: Biogenic Carbon Content

INDICATOR	UNIT	A1-A3
BCC-PROD	kg C.	4.74E+00
BCC-PROD	Kg C	1.22E-01



Sustainability Initiative

FSC CERTIFIED

Magnes Timber is proudly FSC® Certified, ensuring our wood comes from responsibly managed forests that provide environmental, social, and economic benefits. This certification supports our commitment to sustainable building practices and traceable material sourcing.

MAGNES DECLARE LABEL

Magnes holds a Declare Label, offering complete transparency around its ingredients and lifecycle. As a Red List Free product, it supports healthier buildings and aligns with leading green building standards like WELL and Living Building Challenge.

Project Feature

405 BOURKE ST, MELBOURNE

Magnes was selected for the premium office fit-out at 405 Bourke Street, a landmark commercial tower in the heart of Melbourne's CBD. Designed to meet the needs of a high-performing corporate environment, the project required a flooring solution that combined visual sophistication with long-term durability — and Magnes delivered on both fronts.

Installed as part of a raised access flooring system, Magnes provided a clean, architectural finish while ensuring full underfloor accessibility. Its hardwearing composition and refined surface appearance made it ideal for spaces that demand both performance and aesthetic appeal. With FSC® Certified timber at its core, Magnes also aligned with the project's sustainability goals, offering a responsible material choice without compromising on design quality.

This installation at 405 Bourke Street highlights the strength, adaptability, and design potential of Magnes in commercial environments — setting a benchmark for sustainable, functional flooring in modern office spaces.

References

C-PCR-004, Resilient, textile and laminate floor coverings, version 2024-04-30. EPD International.

EN 15804:2012+A1:2013; Sustainability of construction works — Environmental product declarations — Core rules for the product category of construction products. Brussels: European Committee for Standardization.

EN 15804:2012+A2:2019; Sustainability of construction works — Environmental product declarations — Core rules for the product category of construction products. Brussels: European Committee for Standardization.

EN 16810:2017, Resilient, textile and laminate floor coverings – Environmental product declarations – Product category rules. Brussels: European Committee for Standardization.

European Union. (2024). Candidate List of substances of very high concern for Authorisation. Retrieved from European Chemical Agency: https://echa.europa.eu/candidate-list-table

General Programme Instructions for the International EPD® System. Version 4.0, dated 2021-03-29. www.environdec.com

ISO 14025:2006; Environmental labels and declarations — Type III environmental declarations — Principles and procedures. Geneva: International Organization for Standardization.

ISO 14040:2006; Environmental management – Life cycle assessment – Principles and framework. Geneva: International Organization for Standardization.

ISO 14044:2006; Environmental management – Life cycle assessment – Requirements and guidelines. Geneva: International Organization for Standardization.

PCR 2019:14 Construction Products, Version 1.3.4, 2024-04-30. EPD International.

Statista. (2025, 01 20). China electric power transmission loss. Retrieved from Statista: https://www.statista.com/statistics/302292/china-electric-power-transmission-loss/

Wernet, G. (2016). The ecoinvent database version 3 (part I): overview and methodology. The International Journal of Life Cycle Assessment, 21(9), 1218–1230.

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