



Environmental Product Declaration

IN ACCORDANCE WITH ISO 14025 AND EN15804 FOR INNOWOOD
WOOD COMPOSITE PRODUCTS

COMPANY

INNOWOOD PRODUCT

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PROGRAMME	THE AUSTRALASIAN EPD® PROGRAMME
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Company

ABOUT INNOWOOD

Established in 2005, INNOWOOD is an Australian company specialised in the design, manufacture and supply of composite timber products.

We pride ourselves on continuous improvement and innovation resulting in the delivery of high quality products and services for commercial, residential and industrial applications.

INNOWOOD products represent an alternative to natural timber. Manufactured predominantly from natural wood waste, our products help to prevent forest depletion through efficient use of recycled material and energy management.

INNOWOOD is the chosen composite timber supplier of leading national and international architects, designers and builders. Our versatility and product performance are instrumental to the continued success of various projects completed within Australia and overseas.

**WE ARE NOT SATISFIED WITH SIMPLY
COMPLYING WITH
ENVIRONMENTAL REGULATIONS**

ENVIRONMENTAL POLICY

INNOWOOD composite timber products was created as an alternative to natural timber in the face of the rapidly depleting global forests and timber resources. We want to help shape the world we live in by doing our part, and to continue to push the boundaries of our commitment to the environment.

INNOWOOD composite timber products use wood waste as the main resource and through an energy conserving production process with low emission to air, soil and water. After the service life of the material the product can be recycled through use of INNOWOOD proprietary recycling program to continue to remanufacture and reuse.

INNOWOOD PRODUCT SYSTEMS ARE COST EFFECTIVE & DURABLE

Since 2005, our expert technical team has designed and developed a range of product systems based on INNOWOOD material properties, INNOWOOD composite timber product system are flexible to design, lightweight solution, easy to install and suitable for use in indoor & outdoor environment.

INNOWOOD composite timber material is resistant to termites, water & fire, durable and requires low maintenance.

INNWOOD Product

CLADDING

INNWOOD Cladding is low VOC formaldehyde emission, 100% recyclable composite wood cladding product that is suitable for residential and commercial applications.

CEILING

InnoCeil offers Architect & Designers the flexibility to create architectural features, curves, waves and shadows effects while incorporating basic building services such as lighting, ventilation, sprinklers and air vents.

SCREENING

INNWOOD Screen System offers an exciting alternative to conventional facade design. They provide a softened timber look to internal and external wall surfaces and soffits, which not only greatly enhances their appearance, but also protects the building and its occupants from the harsh sun.

SHADING

Architecturally designed and developed to create shade, privacy, control amount of light, and it can fully retract for reducing light glare and reducing solar heat gain by up to 90%.

DECKING

INNWOOD Decking looks and feels like natural timber without any of natural timber's challenges. InnoDeck's nature-inspired embossed surface delivers the highest wet pendulum slip rating possible to create a safe, slip-resistant surface.

This EPD covers INNWOOD's product range for internal and external cladding, Internal and soffit ceiling, external decking, external screen and external louvers, specifically for the products depicted in Table 1.

Table 1 – Product dimensions of products included in this EPD.

Product code	Name and description	Weight per meter length (kg)	Weight per m ² (kg)
WC13625	InnoClad, External Cladding	1.08	10.80
WC20025	InnoClad, External Cladding	1.6	9.70
WC24025	InnoClad, External Cladding	1.8	8.78
WC05025	InnoClad, External Cladding	0.7	14.00
WC08025	InnoClad, External Cladding	1.03	12.88
WC14025	InnoClad, External Cladding	1.5	10.71
WC17533	InnoClad, External Cladding	1.7	9.71
CL14010	InnoCeil, Internal Ceiling	0.6	4.29
CL17012	InnoCeil, Internal Ceiling	1.03	6.06
CL16728	InnoCeil, Internal Ceiling	1.2	7.19
CL20420	InnoCeil, Internal Ceiling	0.94	4.61
CL27766	InnoCeil, Internal Ceiling	2.4	8.66
FS04030	InnoScreen, External Screening	0.4	10.00
FS06516	InnoScreen, External Screening	0.8	12.31
FS05050	InnoScreen, External Screening	0.63	12.60
FS06040	InnoScreen, External Screening	0.58	9.67
FS07550	InnoScreen, External Screening	1.1	22.00
FS10050	InnoScreen, External Screening	1.2	24.00
SS05050	InnoScreen, External Screening	0.77	15.40
FS06535	InnoScreen, External Screening	0.76	11.69
FS09028	InnoScreen, External Screening	1.2	13.33
FS10050	InnoScreen, External Screening	1.1	11.00
FS12530	InnoScreen, External Screening	1.3	10.40
FS15050	InnoScreen, External Screening	2.46	16.40
LV9119	InnoShade, External Louvre	0.48	5.27
LV15035	InnoShade, External Louvre	1.16	7.73
LV30060	InnoShade, External Louvre	3.8	12.67
DB14523	InnoDeck, External Decking	3.2	22.07

Table 2 - Product characteristics of INNOWOOD products

	Product Characteristics
Product names	<p>InnoClad – Internal & External Cladding - Shiplap, Concealed Clip Fixing and Flat Joint systems</p> <p>InnoCeil - Internal & Soffit Ceiling - Concealed Clip, Shiplap, Slatted and Suspended Click On systems</p> <p>InnoScreen - External Screening - Conceal Snap In, Conceal Lock On, Face and Rear fixing systems</p> <p>InnoShade - External Louvers - Sol 'ART shading systems</p> <p>InnoDeck - External Decking - Concealed Smart Clip fixing system</p>
UN CPC Code	54
Modulus of Rupture	30.78 - 32.2 MPa (N/mm ²) (AS/NZS 4266.5:2004)
Modulus of Elasticity	1.527 - 2.102 GPa (103N/mm ²) (AS/NZS 4266.5:2004)
Moisture Absorption	0.54 % Mass Change (AS/NZS 4266.5:2004)
Moisture Movement	$\delta = 4.4 \times 10^{-6}$ mm/mm/% R.H. Extrapolated Average (AS/NZS 4266.14:2004)
Surface Water Absorption	1.0435 g/m ² /hr Extrapolated Average (AS/NZS 4266.12:2003)
Internal Bond Strength	1.36 MPa = N/mm ² (AS/NZS 4266.5:2004)
Thermal Coefficient of Linear Expansion (α)	$A = \sim 6.0 \times 10^{-5}$ mm/mm/°C Estimated Average (REF AS 4459.8)
Impact Resistance	Mean failure height: 1330mm, Mean failure energy: 59J (ASTM D4495-12)
Static Coefficients of friction	0.57 (ASTM D2394-05 (2011) Section 33~37)
Sliding Coefficients of friction	0.36 (ASTM D2394-05 (2011) Section 33~37)
Abrasion Resistance	Weight loss: 108mg (ASTM D4060-10)
Fire Hazard Property	Group 1 (By Request) (AS/NZS 3837 Specification A2.4 of BCA)
Bushfire Attack Level (BAL rating)	Up to BAL-29 (By Request) (AS3959:2009 Construction of Buildings in Bushfire Prone Areas. Appendix F)
Early Fire Hazard Indices	Ignitability Index 11/20, Spread of Flame Index 0/10, Heat Evolved Index 0/10, Smoke Developed Index 6/10 (AS/NZS 1530.3 CSIRO Report FNE11482)

Product Life Cycle Overview

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 (AEPDP, 2015) and four information modules according to ISO 21930 and EN 15804. The scope of the EPD is “cradle to the grave with options” as defined by EN 15804 – the specific system boundary is shown in Figure 1.

The intent of the EPD is to cover all significant

environmental impact over the full product lifecycle. Stages A5 to B6 were not included due to uncertainty and variability in installation and maintenance. Installation and use practices will vary significantly with the type of system, if the elements are installed externally or internally and their exposure to natural stressors (radiation, saltwater, rainfall). Please see further sections for additional information on life cycle stage.

Table 3 - System boundary and scope of the study

PRODUCT STAGE			CONSTRUCTION STAGE		USE STAGE							END OF LIFE STAGE				BENEFITS & LOADS BEYOND THE SYSTEM BOUNDARY
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Raw Material Supply	Transport	Manufacturing	Transport	Installation	Material Emissions	Maintenance	Repair	Replacement	Refurbishment	Operational Energy	Operational Water	Deconstruction/Demolition	Transport	Waste Processing	Disposal	Reuse/Recycling/Recovery Potential
X	X	X	X	MND	MND	MND	MND	MND	MND	MND	MND	X	X	X	X	X

X = module included in EPD

MND= module not declared (does not indicate zero impact result) – see text above table for explanation.



Figure 1 - Life cycle diagram of INNOWOOD products.

INNWOOD Product Manufacturing

INNWOOD products are manufactured in China.

The main raw materials are wood powder wood recycling, which is bound with polyvinyl chloride resin. Nearly 20% of the feedstock mix is scrap material, either from internal recycling of reject product and offcuts, or recycled post-consumer scrap. No wood composite waste leaves the factory.

The raw materials are delivered by truck from

suppliers in China. The materials are mixed and extruded into granules. The granules are then mixed with scrap and extruded into finished product. The extruded product is cooled down with water, which is internally recycled. After the cooling down process, the material is needed to undergo a proper ageing process at least for 48 hours and then depending on individual specification, the finished product may be subjected to an additional surface treatment such as finishing or embossed wood grain.

Distribution Stage

Prior to shipping, the products are packaged in cardboard boxes and shipped to the nearby port of Huangpu, China. From there, 90% is shipped by sea to Australia, while the remaining is split between nearby Hong Kong or as far as New Zealand, western USA and Mediterranean Europe.

Use Stage

INNWOOD recommends that periodic cleaning is carried out to help maintain the beauty of the product. This will also assist in prolonging the life of the INNWOOD product.

End of Life and Recycling

INNWOOD has a recycling policy that aims to take back used composite timber product and return it to the factory in China and used as feedstock for new INNWOOD products. Given the longevity of INNWOOD products, only 7.5%

of the product sold is currently being recycled. The end of life stage was modelled according to this recycling rate, assuming the remainder product stock is sent to landfill.

Life Cycle Assessment Methodology

This section includes the main details of the LCA study as well as assumptions and methods of the assessment. A summary of the life cycle assessment parameters is given in Table 4.

Although the functional unit and sale unit is square meter (m²) or linear meters, there is no direct proportion between product area and life cycle inputs because INNWOOD commercializes products with a variety of shapes and profiles. As all products have the same composition, ensuring the same volumetric density of raw material, and undergo the same manufacture process, a declared unit of 1 kg ensures that proportionality. Potential impacts can be assessed per product or per m² for each product using the dimensions given in Table 1.

LCA requires a compilation of the inputs, outputs and environmental impacts of a product

system throughout its life cycle. LCA can enable businesses to identify resource flows, waste generation and contribution to environmental impacts (such as climate change) associated with the provision of products and services.

Life cycle thinking is a core concept in sustainable consumption and production for policy and business. Upstream and downstream consequences of decisions must be taken into account to help avoid the shifting of burdens from one type of environmental impact to another, from one political region to another, or from one stage to another in a product's life cycle from the cradle to the grave.

According to EN 15804, EPDs of construction products may not be comparable if they do not comply with this standard, particularly if hailing from different programmes or if different functional units are used.

Declared unit	1 kg of INNWOOD composite timber product
Geographical coverage	Australia New Zealand, Hong Kong, Western USA and Mediterranean Europe
LCA scope	Cradle to grave with options

Table 4 - Details of LCA

Although the functional unit and sale unit is square meter (m²) or linear meters, there is no direct proportion between product area and life cycle inputs because INNWOOD commercializes products with a variety of shapes and profiles. As all products have the same composition, ensuring the same

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Core Data Collection

Life cycle data has been sourced from first hand sources from:

- Core manufacturing data was collected directly from factory, pertaining to activity in 2016;
- Product properties, applications and recyclability information retrieved from INNWOOD's catalogue and material safety datasheets.

Background Data

Generic background data was sourced for raw materials in the upstream module, transportation and end of life. Background data was adapted to represent INNWOOD product as accurately as possible. Inputs to manufacture and to transport within China were primarily modelled with ecoinvent 3.2 database based on global averages. Data on manufactured materials (raw materials, additives, packaging, consumables), which are locally sourced, were amended with Chinese electricity. Global averages were used since the sourcing of these materials often changes from year to year. Australian inputs for distribution transport and waste disposal were primarily modelled with the AusLCI database (AusLCI, 2016) all background data used was less than 10 years old.

Cut Off Criteria

Environmental impacts relating to personnel, infrastructure, and production equipment not directly consumed in the process are excluded from the system boundary as per the PCR CPC 54, Version 2.1, dated 2017-01-04 (EPD International, 2017). All other reported data were incorporated and modelled using the best available life cycle inventory data.

Allocation

Allocation was carried out in accordance with the PCR (EPD International, 2017). No-allocation between co-products in the core module as there were no co-products created during manufacturing. Allocation between different products can be done using the area densities given in Table 1 as a mass allocation key.

Content Declaration

Material	Percentage Content (on mass)	CAS No.
Wood powder	52.5%	Not applicable
Polyvinyl chloride	38.2%	9002-86-2
Calcium carbonate	5.8%	471-34-1
Pigments	2.5%	147-14-8, 1328-53-6, 129423-54-7, 78245-94-0

Table 4 - Details of LCA










Environmental Performance

The potential environmental impacts used in this EPD are explained in Table 6 and the results for INNWOOD InnoClad, InnoCeil, InnoScreen, InnoShade and InnoDeck are shown in Table 7. The use of energy and fresh water resources is shown in Table 8. Table 9 shows the generation of waste throughout the product life cycle.

Some indicators have not been assessed (in the tables as "indicator not assessed – INA") because the background databases used for this LCA do not support separating out these resource flows. As such, only primary data for these inventory flows are included and declared. INA should not be considered zero.

Table 6 - Environmental indicators used in the EPD

Environmental Indicator	Unit	Description
 Global Warming Potential ^a	kg carbon dioxide	Increase in the Earth's average temperature, mostly through the release of greenhouse gases to the atmosphere. A common outcome of this is an shift in climatic patterns and sea level rise.
 Ozone Depletion Potential ^b	kg CFC-11	The decline in ozone in the Earth's stratosphere. The depletion of the ozone layer increases the amount of UVB that reaches the Earth's surface. UVB is generally accepted to be a contributing factor to skin cancer, cataracts and decreased crop yields
 Acidification Potential ^c	kg sulphur dioxide	A process whereby pollutants are converted into acidic substances which degrade the natural environment. Common outcomes of this are acidified lakes and rivers, toxic metal leaching, forest damage and destruction of buildings
 Eutrophication Potential ^c	kg phosphate	An increase in the levels of nutrients released to the environment. A common outcome of this is high biological productivity that can lead to oxygen depletion, as well as significant impacts on water quality, affecting all forms of aquatic and plant life.
 Photo-chemical Ozone Creation Potential ^c	kg ethylene	Ozone in the troposphere is a constituent of smog that is caused by a reaction between sunlight, nitrogen oxide and volatile organic compounds (VOCs). This is a known cause for respiratory health problems and damage to vegetation.
 Abiotic Depletion Potential – Elements / minerals ^c	kg antimony	The extraction of non-living and non-renewable elements and minerals. These resources are essential in our everyday lives and many are currently being extracted at an unsustainable rate.
 Abiotic Depletion Potential – Fossil Fuels ^c	MJ net calorific value	The extraction of non-living and non-renewable fossil fuels. These resources are essential in our everyday lives and many are currently being extracted at an unsustainable rate.

Life cycle impact assessment methods used: a - CML (v4.02) – based on IPCC AR4 (GWP 100); b - CML (v4.02) – based on WMO 1999; c - CML (v4.02)

POTENTIAL ENVIRONMENTAL IMPACT

Table 7 - Potential environmental impacts per 1 kg InnoClad, InnoCeil, InnoScreen, InnoShade or InnoDeck.

	A1 - A3	A4	C1-C4	D
GWP (kgCO ₂ eq)	1.44	0.122	0.01	-0.072
ODP (kgCFC11 eq)	5.82E-08	1.98E-08	2.67E-09	-3.48E-09
AP (kgSO ₂ eq)	2.74E-04	7.19E-05	3.15E-06	-1.32E-05
EP (kgPO ₄ ³⁻ eq)	0.006	0.002	7.29E-05	-2.48E-04
POCP (kgC ₂ H ₂ eq)	7.07E-04	2.02E-04	1.29E-05	-3.58E-05
ADPE (kgSb eq)	9.99E-07	8.89E-08	1.73E-08	-5.85E-08
ADPF (MJ)	27.7	1.73	0.29	-1.55
GWP = Global Warming Potential, ODP = Ozone Depletion Potential, AP = Acidification Potential, EP = Eutrophication Potential, POCP = Photochemical Oxidant Formation Potential, ADPE = Abiotic Resource Depletion Potential – Elements, ADPF = Abiotic Resource Depletion Potential – Fossil Fuel				

USE OF RESOURCES

Table 8 - Use of resources per 1 kg InnoClad, InnoCeil, InnoScreen, InnoShade or InnoDeck.

	A1 - A3	A4	C1-C4	D
PERE (MJ)	1.17	0.036	3.16E-03	-0.029
PERM (MJ)	8.50	INA	INA	-0.574
PERT (MJ)	9.68	0.036	3.16E-03	-0.603
PENRE (MJ)	32.3	1.86	0.28	-1.93
PENRM (MJ)	INA	INA	INA	INA
PENRT (MJ)	32.3	1.86	0.28	-1.93
SM (kg)	0.535	INA	INA	-0.035
RSF (MJ)	INA	INA	INA	INA
NRSF (MJ)	INA	INA	INA	INA
FW (m ³)	0.074	4.18E-04	2.70E-04	-4.95E-03
PERE = Use of renewable primary energy excluding raw materials, PERM = Use of renewable primary energy resources used as raw materials, PERT = Total use of renewable primary energy resources, PENRE = Use of non-renewable primary energy excluding raw materials, PENRM = Use of non-renewable primary energy resources used as raw materials, PENRT = Total use of non-renewable primary energy resources, SM = Use of secondary material, RSF = Use of renewable secondary fuels, NRSF = Use of non-renewable secondary fuels, FW = Use of net fresh water, INA = Indicator not assessed				

WASTE PRODUCTION

Table 9 - Generation of waste per 1 kg InnoClad, InnoCeil, InnoScreen, InnoShade or InnoDeck

	A1 – A3	A4	C1-C4	D
HWD (kg)	8.31E-06	1.03E-06	1.36E-07	-1.97E-07
NHWD (kg)	0.215	0.014	9.04E-04	-0.014
RWD (kg)	3.21E-05	1.13E-05	9.34E-08	-1.93E-06
CRE (kg)	INA	INA	0.00	0.00
MRE (kg)	0.031	INA	0.068	0.00
MER (kg)	INA	INA	0.00	0.00
EE (MJ)	INA	INA	0.00	0.00
HWD = Hazardous waste disposed, NHWD = Non-hazardous waste disposed, RWD = Radioactive waste disposed, CRE = Components for reuse, MRE = Materials for recycling, MER = Materials for energy recovery, EE = Exported energy				

INTERPRETATION OF LCA RESULTS

Most environmental impact lies within the manufacturing inputs supplied to Kingfa for INNOWOOD composite timber product manufacture, particularly polyvinyl chloride and electricity. Transport for distribution follows, and end of life has a negligible impact.

INNOWOOD wood composite products are fully recyclable, having a quality degradation factor of 10%. The main benefit of recycling is offsetting the need for virgin materials to be used. With a present rate of 7.5% of material which is taken back for reprocessing, this offset reduces impacts by 1% and up to 7%.



Additional Information

In regards to the Environmental management system, INNWOOD has signed up for a Material Recycling Stewardship Scheme with the manufacturer and set out the required commitments to the environment with the participant. The agreement also helps business and organisation to identify any preparation they need to make before they process. The manufacturers of INNWOOD have been certified with ISO9001:2008 for the quality management system and also has passed through TS16949 automotive quality management system certification in 2005 that provides an effective guarantee for the stability of product quality. Added to the above, the manufacturer has the OHSAS18001 Occupational Health and Safety Management System (OHSMS) certification.

PRODUCT STEWARDSHIP

In Australia from 2006 - 2016, 240 tonnes of timber has been supplied into the Australian market. The vast majority of Australia's product supplied has yet to reach end-of-life. A small proportion of end-of-life are recycled or used in Australia.

When end-of-life product are put to environmentally sound use they: reduce the demand for virgin materials in the production of goods and energy; reduce pressure on landfill space and improve the amenity of the land.

The scheme is designed to increase resource recovery and recycling and to minimise the environmental, health and safety impacts of all end-of-life product generated in Australia; and develop Australia's recycling industry and markets for INNWOOD composite timber derived products.

The INNWOOD composite timber stewardship

scheme is an arrangement between the parties in the supply chain to share responsibility for the long term management of end-of-life products in Australia.

Scope

The scheme will be national in scope and is relevant to all INNWOOD composite timber products entering the Australian market for the first time.

Guiding Principles

In this scheme, INNWOOD:

- acknowledges the inherent value of all end-of-life product across Australia
- recognises that there is a cost associated with ensuring the environmentally sound use of end-of-life product
- is committed to market based solutions for environmentally sound end-of-life management
- is committed to achieving the highest value end use possible for end-of-life in accordance with the waste management hierarchy
- complements relevant policies and legislation and supports compliance with relevant laws and practices, including those that apply to the environment and occupational health and safety, and
- is appropriately resourced and empowered to deliver its objectives according to agreed timeframes and
- is committed to environmentally sound use.

Commitment to sound use

Innowood's commitment to environmentally sound use includes:

- recycling into crumbs, shred, chips, granules components;
- use as a fuel (other than in direct incineration without effective energy recovery and unsustainable burning for energy recovery) or other means to generate energy;
- production derived products, including for ground cover;
- Civil engineering.

INNWOOD Material Recycling Policy

INNWOOD material is 100% recyclable, and aims to protect the environment by reusing wood that would otherwise be destined for the landfill. We are protecting forests, using a low energy consumption manufacturing methods to further reduce our already carbon neutral footprint.

INNWOOD's Material Recycling Service is in line with our commitment to the environment and our product stewardship. Our goal of this service is to make it simple for our customers to dispose of our products in an environmentally conscious manner.

INNWOOD is a composite timber alternative material. INNWOOD material is non-toxic and safe. Any waste material or off cuts can be disposed of in the same manner that you would typically dispose of general building materials in accordance with your local regulations.

Please find the INNWOOD recycling policy in the following link - <http://innowood.com/recycling-policy/>



PROGRAMME-RELATED INFORMATION AND VERIFICATION

Programme The Australasian EPD® Programme Limited
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Product Category Rules	Products and Services, Version 2.1, 2017-01-04
Product group classification	UN CPC 54 2016
Reference year for data:	Australia, New Zealand, West Coast USA,
Geographical scope	Mediterranean Europe, Hong Kong

Product category rules (PCR):
PCR 2012:01 Construction Products and Services, Version 2.1, 2017-01-04

PCR review was conducted by:
IVL Swedish Environmental Research Institute
Moderator: Martin Erlandsson, martin.erlandsson@ivl.se
Independent verification of the declaration and data, according to ISO 14025:2006:
☐ EPD Process Certification (internal) ☒ EPD Verification (external)

Third party verifier:



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Approved by the International EPD System

Mandatory statements

The EPD of construction products may not be comparable if they do not comply with the requirements of comparability set in EN 15804. EPDs within the same product category but from different programmes may not be comparable.

The EPD report has been developed in accordance with the General Programme Instructions and template.

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

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REFERENCES

AEPDP. (2015). *General Programme Instructions of the Australasian EPD Programme, Version 1.0, 2015-02-02*. Australasian EDP[®]Programme (AEPDP).

AusLCI. (2016). *The Australian Life Cycle Inventory Database Initiative, The Australian Life Cycle Assessment Society (ALCAS)*. Retrieved from <http://alcas.asn.au/AusLCI/>

EPD International. (2017). *Product Category Rules for Construction Products and Construction Services, PCR2012:01*. Stockholm: EPD International.

ISO. (2007). *Sustainability in building construction - Environmental declaration of building products. ISO 21930:2007*. Geneva: ISO.

