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Statement of Verification

BREG EN EPD No.: 000262

This is to verify that the

Environmental Product Declaration provided by:

Altro Ltd

is in accordance with the requirements of:

EN 15804:2012+A1:2013

and **BRE Global Scheme Document SD207**

This declaration is for: Altro Wood Safety, 2mm

Company Address

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Signed for BRE Global Ltd

09 March 2019

Date of First Issue



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BRE/Global erified **EPD**

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Environmental Product Declaration

EPD Number: 000262

General Information

EPD Programme Operator	Applicable Product Category Rules							
BRE Global Watford, Herts WD25 9XX United Kingdom	BRE Environmental Profiles 2013 Product Category Rules for Type III environmental product declaration of construction products to EN 15804:2012+A1:2013							
Commissioner of LCA study	LCA consultant/Tool							
Altro Ltd Works Road Letchworth Garden City Hertfordshire SG6 1NW United Kingdom	BRE LINA v2.0							
Declared/Functional Unit	Applicability/Coverage							
1m ² of PVC flooring	Manufacturer specific product range							
ЕРД Туре	Background database							
Cradle to Gate	ecoinvent v3.2							
Demonstra	ation of Verification							
CEN standard EN 1	5804 serves as the core PCR ^a							
Independent verification of the declara □Internal	ation and data according to EN ISO 14025:2010 ⊠ External							
	(Where appropriate ^b) Third party verifier: Nigel Jones							
a: Product category rules b: Optional for business-to-business communication; mandatory for business-to-consumer communication (see EN ISO 14025:2010, 9.4)								
Comparability								
Environmental product declarations from different programmes may not be comparable if not compliant with EN 15804:2012+A1:2013. Comparability is further dependent on the specific product category rules, system boundaries and allocations, and background data sources. See Clause 5.3 of EN 15804:2012+A1:2013 for further guidance								

Information modules covered

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

Note: Ticks indicate the Information Modules declared.

Manufacturing site

Altro
Ebertalle 209
06846 Dessau
Germany

Construction Product

Product Description

Altro Wood Safety product is a 2.0 mm sheet PVC based safety flooring to (EN 13845) covering a range of wood designs.

Technical Information

The below table covers the basic technical properties of the Altro Wood Safety product. For further properties, please see the product's page on Altro's website: <u>https://www.altro.co.uk/Altro-Wood-Safety</u>

Property	Value, Unit
Thickness (EN 428)	2.0 mm
Mass per area (EN ISO 23997)	2.66 kg/m ²
Slip resistance (TRRL)	PTV ≥ 36
Fire performance (EN 13501-1, EN ISO 9239-1, EN ISO11925-2)	Class Bfl-s1, ≥8 kW/m²,pass
Sound insulation (ISO 140-8)	4 dB

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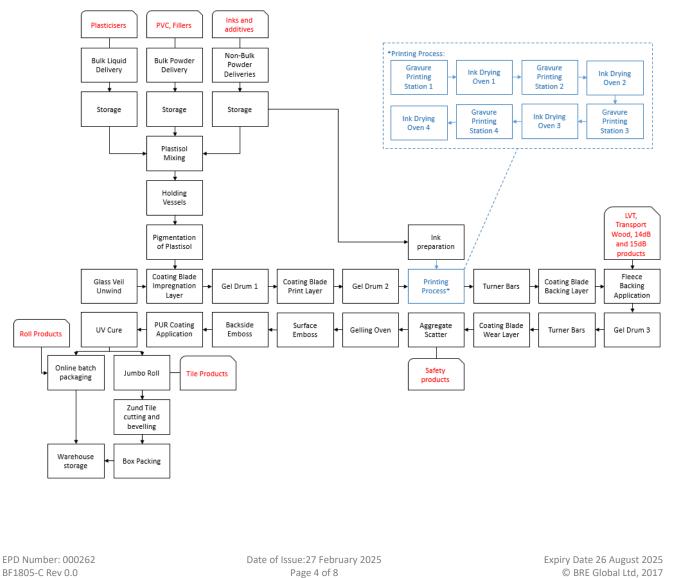
Main Product Contents

Material/Chemical Input	Mass (%)
Plastisol	93
Scatter	4
Scrim	2
Lacquer	<1
Print ink	<1

Manufacturing Process

Bulk liquids, powders, performance additives and some aggregates are mixed together into a plastisol and placed in a holding tank. The plastisol is then pigmented and passed into inline mixers. PVC plastisol is spreadcoated on to a glass matt and gravure printed to give a range of designs. PUR, and aggregates, are added to the surface to enhance cleanability and stain resistance, and to provide slip resistance, respectively. The product is then cured in an oven. Finally, the product is cut into rolls and packaged for dispatch.

Process flow diagram



Life Cycle Assessment Calculation Rules

Declared / Functional unit description

The declared unit is 1m² of 2.0 mm thick Altro Wood Safety flooring product of 2.66 kg/m².

System boundary

This is a cradle-to-gate EPD, reporting all production life cycle stages (modules A1 to A3) in accordance with EN 15804:2012+A1:2013.

Data sources, quality and allocation

The supporting LCA study was carried out using BRE LINA v2.0 using manufacturer specific data provided by Altro for the production period of the 12 months of 2017 at the Dessau, Germany site.

The Dessau site produces other PVC products in addition to this Altro Wood Safety product, so allocation was applied to site wide values for packaging, energy, water, non-production waste, and wastewater, on a m² of production basis. Production waste was allocated on a percentage mass of production basis. No allocation of raw material inputs was required as total raw material usage for all Altro Wood Safety product made over the production period was used.

Secondary data has been drawn from the BRE LINA database v2.0.42 and the background LCI datasets are based on ecoinvent v3.2.

Cut-off criteria

No inputs or outputs have been excluded. All raw materials and packaging inputs, plus their transport, process and general energy and water use, production and non-production waste, have been included, except for direct emissions to air, water and soil, which are not measured.

LCA Results

The results per declared unit (1m²) of the Altro Wood Safety flooring product for the declared modules can be found in the following tables.

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

Parameters describing environmental impacts											
			GWP	ODP	AP	EP	POCP	ADPE	ADPF		
	kg CO ₂ equiv.	kg CFC 11 equiv.	kg SO₂ equiv.	kg (PO ₄) ³⁻ equiv.	kg C₂H₄ equiv.	kg Sb equiv.	MJ, net calorific value.				
Product stage	Raw material supply	A1	AGG	AGG	AGG	AGG	AGG	AGG	AGG		
	Transport	A2	AGG	AGG	AGG	AGG	AGG	AGG	AGG		
	Manufacturing	A3	AGG	AGG	AGG	AGG	AGG	AGG	AGG		
	Total (of product stage)	A1-3	7.2	6.67e-7	0.039	1.87e-2	7.31e-3	4.66e-5	157		

GWP = Global Warming Potential;

ODP = Ozone Depletion Potential;

AP = Acidification Potential for Soil and Water; EP = Eutrophication Potential;

POCP = Formation potential of tropospheric Ozone;

ADPE = Abiotic Depletion Potential – Elements;

ADPF = Abiotic Depletion Potential - Fossil Fuels.

LCA Results (continued)

Parameters describing resource use, primary energy

			PERE	PERM	PERT	PENRE	PENRM	PENRT
			MJ	MJ	MJ	MJ	MJ	MJ
Product stage	Raw material supply	A1	AGG	AGG	AGG	AGG	AGG	AGG
	Transport	A2	AGG	AGG	AGG	AGG	AGG	AGG
	Manufacturing	A3	AGG	AGG	AGG	AGG	AGG	AGG
	Total (of product stage)	A1-3	20.8	1.96e-4	20.8	176	0	176

PERE = Use of renewable primary energy excluding renewable primary energy used as raw materials;

PERM = Use of renewable primary energy resources used as raw materials;

PERT = Total use of renewable primary energy resources;

PENRE = Use of non-renewable primary energy excluding nonrenewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials;

PENRT = Total use of non-renewable primary energy resource.

Parameters describing resource use, secondary materials and fuels, use of water									
			SM	RSF	NRSF	FW			
			kg	MJ net calorific value	MJ net calorific value	m³			
Product stage	Raw material supply	A1	AGG	AGG	AGG	AGG			
	Transport	A2	AGG	AGG	AGG	AGG			
	Manufacturing	A3	AGG	AGG	AGG	AGG			
	Total (of product stage)	A1-3	0	0	0	0.470			

SM = Use of secondary material;

RSF = Use of renewable secondary fuels;

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

Other environmental information describing waste categories

			HWD	NHWD	RWD				
			kg	kg	kg				
Product stage	Raw material supply	A1	AGG	AGG	AGG				
	Transport	A2	AGG	AGG	AGG				
	Manufacturing	A3	AGG	AGG	AGG				
	Total (of product stage)	A1-3	0.385	0.425	2.16e-4				

HWD = Hazardous waste disposed;

NHWD = Non-hazardous waste disposed;

RWD = Radioactive waste disposed.

LCA Results (continued)

Other environmental information describing output flows – at end of life									
			CRU	MFR	MER	EE			
			kg	kg	kg	MJ per energy carrier			
Product stage	Raw material supply	A1	AGG	AGG	AGG	AGG			
	Transport	A2	AGG	AGG	AGG	AGG			
	Manufacturing	A3	AGG	AGG	AGG	AGG			
	Total (of product stage)	A1-3	0.287	0.0349	6.67e-3	0			

CRU = Components for reuse; MFR = Materials for recycling;

MER = Materials for energy recovery; EE = Exported energy.

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References

BSI. Sustainability of construction works – Environmental product declarations – Core rules for the product category of construction products. BS EN 15804:2012+A1:2013. London, BSI, 2013.

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

BSI. Environmental management – Life cycle assessment – Principles and framework. BS EN ISO 14040:2006. London, BSI, 2006.

BSI. Environmental management – Life cycle assessment – Requirements and guidelines. BS EN ISO 14044:2006. London, BSI, 2006.

BSI. Resilient floor coverings. Determination of overall thickness. BS EN 428:1993. London, BSI, 1993.

BSI. Resilient floor coverings. Determination of mass per unit area. BS EN 430:1994. London, BSI, 1993.

BSI. Pendulum testers. Specification / Method of operation / Method of calibration (with TRRL rubber slider) BS EN 7976 parts 1 to 3: 2002+A1:2013. London, BSI, 2002.