

Environmental Product Declaration



In accordance with ISO 14025:2006 and EN 15804:2012+A2:2019/AC:2021 for:

INTRAlink² entrance matting

from

INTRAsystems



Programme:	The International EPD [®] System, www.environdec.com
Programme operator:	EPD International AB
EPD registration number:	S-P-06994
Publication date:	2023-01-15
Valid until:	2028-01-14

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.environdec.com



General information

Programme information

Programme:	The International EPD® System
Address:	EPD International AB Box 210 60 SE-100 31 Stockholm Sweden
Website:	www.environdec.com
E-mail:	info@environdec.com

Accountabilities for PCR, LCA and independent, third-party verification
Product Category Rules (PCR)
CEN standard EN 15804 serves as the Core Product Category Rules (PCR)
Product Category Rules (PCR): PCR 2019:14-c-PCR-004 Resilient, textile and laminate floor coverings (EN 16810) (2019-12-20) UN CPC code(s): 272 Carpets and other textile floor coverings
PCR review was conducted by: The Technical Committee of the International EPD® System. See [https://environdec.com/about-us/the-international-epd-system-about-the-system] for a list of members.
Life Cycle Assessment (LCA)
LCA accountability: Renuables Ltd [www.renuables.co.uk]
Third-party verification
Independent third-party verification of the declaration and data, according to ISO 14025:2006, via: <input checked="" type="checkbox"/> EPD verification by individual verifier, Dr. Hudai Kara, Metsims Sustainability Consulting [www.metsims.com] Approved by: The International EPD® System
Procedure for follow-up of data during EPD validity involves third party verifier: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

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.

Company information

Owner of the EPD: INTRAsystems, 6 Cobham Rd, Ferndown, Wimborne BH21 7PE, UK.

[<https://www.intrasystems.co.uk>]

Contact: Edwin Snow

Description of the organisation: Established in 1977, INTRAsystems is a market-leading supplier of premium quality, sustainable entrance matting, architectural grilles, and creative ceiling products to discerning architects and interior designers. The family-run business manufactures an unrivalled portfolio of products from its dedicated, UK production facility based in Dorset and is proud to supply hundreds of high-profile businesses, institutions, and retailers worldwide. INTRAsystems believes in making the most of each space's design opportunities and architectural elements. That's why the team provides a wide range of creative materials and solutions, enabling clients to turn a pedestrian product into something beautiful, reliable, and efficient.

Product-related or management system-related certifications: We are proud to be accredited by ISO 9001 and ISO 14001. All production in the UK is also carried out in accordance with the Waste Management Act. We only use similarly accredited suppliers.

Name and location of production site(s): 6 Cobham Rd, Ferndown, Wimborne BH21 7PE, UK

Product information

Product name: INTRALink² entrance matting

Product identification: INTRALink²

Product description: An easy-to-install, closed construction 100% recycled PVC interlocking stud tile. Compatible with all Econyl inserts including our PVC-free fibre backing option, PureBase, for the highest environmental credentials. Durable, cost effective, and highly absorbent square fibre insert arrangement.

Manufacturing Process:

- Recycled PVC is moulded by a 3rd party and sent to the INTRAsystems factory. (Cardboard and pallets are re-used and stretch film is recycled).
- Sheet fibre matting material is cut up.
- Sheet fibre matting cut pieces are then bonded into the PVC mould.
- The finished INTRALink² tiles are packed into cardboard boxes and then onto pallets (cardboard and pallets are recycled).
- Cardboard packaging or pallets can be recycled or reused from the installation site.

UN CPC code: 272 Carpets and other textile floor coverings

Geographical scope: Global

LCA information

Functional unit / declared unit: One square metre of floor covering

Reference service life: 5 years

Time representativeness: 2021

Database(s) and LCA software used: Ecoinvent 3.7 with Simapro 9.1.0.7.

Description of system boundaries: Cradle to grave + module D (A + B + C + D).

System diagram:



More information: This EPD is based upon an underlying LCA of the INTRAform entrance matting product manufacturing process, with operational data obtained for 2021. The declared unit is one square metre floor covering. The EPD covers the entire product lifetime from cradle to grave. The underlying LCA was conducted by Dr Andrew Norton, senior consultant at Renuables Ltd [<http://renuables.co.uk/>]. All relevant inputs and outputs have been considered in the LCA.

For indicator values: CML baseline for the GWP, AP, ADP-elements, ADP-fossil resources, ReCiPe for POCP, EUTREND for EP, CED for Primary energy resources renewable/non-renewable used as energy carrier, AWARE for water scarcity potential. Lower heating value was used for all calculations involving primary energy resources including PERM, PENRM and recovered energy from wastes and end of life (see <https://www.environdec.com/resources/indicators> for more information).

Cut-off criteria were based upon input flows being less than 1% of the total individually, subject to the sum of all flows being less than 5% of the total, and subject to verification that the impacts associated with such flows were not of a magnitude to affect the reported data significantly (less than 5% in total).

The underlying LCA is based upon the following information and assumptions:

Modules A1-A3: Standard UK grid electricity mix used. Transport of materials to manufacturing site, all material and energy contributions to manufacture of flooring products and packaging are included, subject to cut-off criteria.

Modules A4-A5: Perimeter frame and INTRAsystems product transported 290 km to installation site, fittings transported 100 km to installation site. Product supplied ready for installation so there is no onsite waste.

Modules B1-B7: Vacuum cleaning – assume 250 days per year = 0.377 kWh/m²/y. Deep cleaning every six months, requiring 0.12 kg non-ionic surfactant cleaning agent and 0.005 m³ of water per m² per year. No repair, replacement, or refurbishment assumed during 10-year reference service life.

Modules C1-C4: Manual removal assumed. Disposal of 10% of materials to landfill with transport distance of 20 km (remainder leaves system boundary). Landfill disposal is considered worst case since INTRAsystems operates a chargeable take-back scheme.

Module D: It is assumed that 90% of the carpet material is recovered at end of life and incinerated with energy recovery of the calorific content, substituting for the burning of fossil methane in a small heating plant. The aluminium content is recovered and assumed to be recycled, substituting for virgin aluminium.

Where modules have zero entries, they are not reported in the tables in order to make the information more legible.

Modules declared, geographical scope, share of specific data (in GWP-GHG results) and data variation (in GWP-GHG results)

	Product stage			Construction process stage		Use stage							End of life stage				Resource recovery stage		
	Raw material supply	Transport	Manufacturing	Transport	Construction installation	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	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	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
Geography	GLO	GLO	GLO	GLO	GLO	GLO	GLO	GLO	GLO	GLO	GLO	GLO	GLO	GLO	GLO	GLO	GLO	GLO	
Specific data used	>90%					-	-	-	-	-	-	-	-	-	-	-	-	-	
Variation – products	Less than 10%					-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation – sites	Single site					-	-	-	-	-	-	-	-	-	-	-	-	-	-

Content information

Product components	Weight, kg	Post-consumer material, weight-%	Biogenic material, weight-% and kg C/kg
Aluminium	0.0	0	0%
Polyester backing tape	0.0	0	0%
PVC	7.3	100	0%
Adhesive (cyanoacrylate)	0.1	0	0%
Nylon fibre	3.3	100	0%
Polypropylene	0.0	0	0%
Rubber	0.0	0	0%
TOTAL	10.7	99	0%
Packaging materials	Weight, kg	Weight-% (versus the product)	Weight biogenic carbon, kg C
PVC	0.014	0.11	0.00
Cardboard	0.07	0.05	0.03
TOTAL	0.084	0.16	0.03

Dangerous substances from the candidate list of SVHC for Authorisation	EC No.	CAS No.	Weight-% per functional or declared unit
N/A	N/A	N/A	N/A

Environmental Information

This EPD contains information about environmental impact, use of resources and waste production in the form of quantitative indicators. The following abbreviations and have been used in the tables which quantify environmental performance:

Indicator	Abbreviation
Global warming potential (Fossil, biogenic, land use and transformation (LUT))	GWP
Depletion potential of the stratospheric ozone layer	ODP
Acidification potential	AP
Eutrophication potential	EP
Formation potential of tropospheric ozone	POCP
Abiotic depletion potential – Elements	ADPE
Abiotic depletion potential – Fossil resources	ADPF
Water scarcity potential	WSP
Primary energy resources – Renewable (use as energy carrier)	PERE
Primary energy resources – Renewable (use raw materials)	PERM
Primary energy resources – Renewable (total)	PERT
Primary energy resources – Non-renewable (use as energy carrier)	PENRE
Primary energy resources – Non-renewable (use raw materials)	PENRM
Primary energy resources – Non-renewable (total)	PENRT
Secondary material	SM
Renewable secondary fuels	RSF
Non-renewable secondary fuels	NRSF
Net use of fresh water	NUFW
Hazardous waste disposed	HWD
Non-hazardous waste disposed	NHWD
Radioactive waste disposed	RWD
Components for re-use	CFR
Material for recycling	MFR
Materials for energy recovery	MFER
Exported energy, electricity	EE-E
Exported energy, thermal	EE-T

All environmental data is given for the functional unit which is 1 m² of floor covering with packaging.

Environmental Information for 1m² of flooring product

Potential environmental impact– mandatory indicators according to EN 15804

Indicator	Unit	A1-A3	A4	A5	B2	C2	C4	D
GWP-fossil	kg CO ₂ eq.	5.18E+01	3.05E-01	1.58E+00	2.51E+00	1.85E-02	1.85E-02	-3.82E+00
GWP-biogenic	kg CO ₂ eq.	2.52E-01	1.47E-04	4.41E-02	-7.54E-01	1.10E-05	7.27E-04	-2.95E-03
GWP-luluc	kg CO ₂ eq.	1.13E-02	1.14E-04	1.07E-02	5.65E-01	6.24E-06	7.94E-05	-3.95E-04
GWP-total	kg CO ₂ eq.	5.21E+01	3.05E-01	1.64E+00	2.32E+00	1.85E-02	1.93E-02	-3.83E+00
GWP-GHG	kg CO ₂ eq.	5.21E+01	3.05E-01	1.64E+00	2.32E+00	1.85E-02	1.93E-02	-3.83E+00
ODP	kg CFC 11 eq.	8.82E-07	7.29E-08	1.09E-07	1.69E-07	4.52E-09	6.66E-09	-3.81E-07
AP	mol H ⁺ eq.	2.93E-01	2.11E-03	1.19E-02	1.36E-02	5.93E-05	1.49E-04	-4.34E-03
EP-freshwater	kg P eq.	1.40E-02	8.58E-05	1.40E-03	1.96E-03	3.39E-06	1.16E-05	-2.44E-04
EP-marine	kg N eq.	4.37E-02	5.06E-04	2.00E-03	7.51E-03	1.33E-05	5.23E-05	-8.09E-04
EP-terrestrial	mol N eq.	4.17E-01	5.58E-03	1.85E-02	3.61E-02	1.45E-04	5.53E-04	-8.56E-03
POCP	kg NMVOC eq.	1.52E-01	1.71E-03	6.18E-03	1.17E-02	5.66E-05	1.49E-04	-3.82E-03
ADP-minerals&metals*	kg Sb eq.	9.54E-05	4.65E-06	6.26E-03	4.73E-05	3.05E-07	5.55E-07	-7.48E-06
ADP-fossil*	MJ	7.49E+02	4.79E+00	1.92E+01	5.33E+01	2.98E-01	5.01E-01	-5.42E+01
WDP*	m ³	2.62E+01	1.55E-02	1.28E+00	3.03E+00	1.03E-03	4.67E-03	-4.23E-02

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

Note: All modules, are declared, but where there are nil entries, they are not included in the EPD to make the data more legible.

Additional environmental information

INTRAsystems is committed to the sustainable operation and development of our business and we are constantly seeking better ways to control and minimise the impact we have on our environment.

Working on key projects throughout the UK and Europe, we are familiar with all environmental ratings such as BREEAM, LEED and WELL Building standards and help clients achieve, and exceed, their sustainability goals.

The INTRAsystems Environmental Policy sets clear targets for ongoing improvement to ensure the company continues to lead in our increasingly aware society.

To demonstrate our commitment, we pledge to continually improve our products, services and partnerships and to have accreditation for your ease of environmental scoring for green building certification.

With a commitment to reduce our environmental impact, 90% of our fibre range is now made from 100% Econyl regenerated nylon, contributing to green building practices. ECONYL® carpet fibres are eligible for LEED® points, so you can specify high-performance entrance matting without compromising the environment.

Our profiles or 'rails' are made from 100% recycled aluminium, which can be recycled to infinity without any loss of quality and our extrusion process uses a closed-loop cooling system that reduces energy and waste by recycling water to further minimise our environmental impact.

An estimated 92% of the stainless steel used in architecture, building and construction is recaptured and recycled at the end of service according to the International Stainless-Steel Forum, so it's the natural choice for architects working towards BREEAM and LEED.

We minimise the use of virgin PVC across our entire product range and now offer a 100% recycled PVC tile product, INTRALink²

INTRAsystems is committed to recover, recycle and reuse raw materials whenever possible. Through our regeneration contract, aluminium is cleaned and recycled, and inserts are removed and converted into secondary synthetics. We are proud that our regeneration contract achieves an average 98% recovery rate.

By using high-quality materials and considered production processes to produce our Entrance Matting and grilles, you can expect our products to perform for 8–15 years without issue and we offer some of the longest warranties in the industry. Specifying high-quality products that don't require frequent replacement and upgrade means we help clients further reduce their environmental impact.

Correctly specified and well-designed entrance matting can remove up to 80% of dirt and allergens from foot traffic, minimising the need and significantly reducing the costs for cleaning. Full cleaning and maintenance guides are available for all products.

We provide a wide selection of free BIM objects, through the BIM Store and National BIM Library to enable faster, safer, less wasteful construction. Electronic versions of all our product brochures, spec sheets and CAD cross-sections are also available for download on our website.

INTRAsystems matting and grilles are produced bespoke to order with distribution direct to client site to reduce unnecessary transport and CO₂ emissions. All our installations are assembled to precise

measurements to further reduce wastage and our production achieves an impressive component wastage of less than 0.5%.

We work closely with our suppliers to design products and evaluate processes to minimise waste, reduce energy usage and seek continuous improvements to jointly minimise our impact on our environment.

As part of our Corporate Social Responsibility and commitment to the environment, we are pleased to support Plastic Oceans UK to help raise awareness of the plastic pollution issue – to change attitudes, behaviours, and practices with the aim to stop plastic pollution from reaching the ocean within a generation.

References

General Programme Instructions of the International EPD® System. Version 4.1.

PCR 2019:14, version 1.2 Construction products.

PCR 2019:14-c-PCR-004 Resilient, textile and laminate floor coverings (EN 16810) (2019-12-20).

EN 15804:2012+A2:2019/AC:2021 Sustainability of construction works - Environmental product declarations - Core rules for the product category of construction products.

ISO 14025:2006 Environmental labels and declarations — Type III environmental declarations - Principles and procedures.

ISO 21930:2017 Sustainability in buildings and civil engineering works — Core rules for environmental product declarations of construction products and services.

EN 16810:2017 Resilient, textile and laminate floor coverings - Environmental product declarations - Product category rules.