



Environmental Product Declaration

Program Operator: Smart EPD®

www.smartepd.com

IN ACCORDANCE WITH ISO 14025 AND ISO 21930:2017



Interface®

SmartEPD-2026-113-0874-02

Interface CN - Carpet on CushionBacRE® Backing PA6 Yarn

Date of Issue

Jun 08, 2026

Expiration Date

Jun 08, 2031

Last Updated

Jun 08, 2026



Refer to the EPD Library at www.smartepd.com for the latest EPD listing information

General Information

Interface, Inc.

1503 Orchard Hill Road, Lagrange, GA 30240

+1 (770) 437-6800

sustainability@interface.com

interface.com



Product Name:	Interface CN - Carpet on CushionBacRE® Backing PA6 Yarn
Functional Unit:	1 m2
Declaration Number:	SmartEPD-2026-113-0874-02
Date of Issue:	June 08, 2026
Expiration:	June 08, 2031
Last updated:	June 08, 2026
EPD Scope:	Cradle to grave A1 - A3, A4, A5, B1 - B7, C1 - C4, D
Market(s) of Applicability:	APAC, China, India, Japan, Korea, South East Asia

General Organization Information

Interface is a global flooring manufacturing company committed to the goal of sustainability and conducting business in ways that minimize the impact on the environment while enhancing shareholder value. As part of this commitment, Interface provides public disclosure of product environmental impacts through Environmental Product Declaration (EPDs). Interface first published EPDs in 2009.

Further information can be found at: [Interface.com](https://www.interface.com)

Limitations, Liability and Ownership

Limitations

Exclusions: EPDs do not indicate that any environmental or social performance benchmarks are met, and there may be impacts that they do not encompass. LCAs do not typically address the site-specific environmental impacts of raw material extraction, nor are they meant to assess human health toxicity. EPDs can complement but cannot replace tools and certifications that are designed to address these impacts and/or set performance thresholds – e.g. Type 1 certifications, health assessments and declarations, environmental impact assessments, etc.

Accuracy of Results: EPDs regularly rely on estimations of impacts; the level of accuracy in estimation of effect differs for any particular product line and reported impact.

Comparability: EPDs from different programs may not be comparable. Full conformance with a PCR allows EPD comparability only when all stages of a life cycle have been considered. However, variations and deviations are possible”. Example of variations: Different LCA software and background LCI datasets may lead to differences results for upstream or downstream of the life cycle stages declared.

Liability and Ownership

Interface is the owner of this EPD and is responsible for the accuracy of the data.

Reference Standards

Standard(s):	ISO 14025 and ISO 21930:2017
Core PCR:	UL Part A PCR for Building-Related Products and Services v.4
	Date of issue: March 01, 2022
Sub-category PCR:	UL Part B: Flooring v.2
	Date of issue: September 28, 2018
	Valid until: September 30, 2026
Sub-category PCR review panel:	 Contact Smart EPD for more information.
General Program Instructions:	 Smart EPD General Program Instructions v.2.0, March 2025

Verification Information

LCA Author/Creator:	 Kristen Wilder
	 Interface
	 kristen.wilder@interface.com
EPD Program Operator:	 Smart EPD
	 info@smartepd.com
	 www.smartepd.com
	 585 Grove St., Ste. 145, Herndon, VA 20170, USA
Verification:	Independent critical review of the LCA and data, according to ISO 14044 and ISO 14071:
	 Thomas P Gloria  Industrial Ecology Consultants
	 t.gloria@industrial-ecology.com
	Independent external verification of EPD, according to ISO 14025 and reference PCR(s):
	 Thomas P Gloria  Industrial Ecology Consultants
	 t.gloria@industrial-ecology.com

External

External

Product Information

Functional Unit:	1 m2
Mass:	3.94 kg
Reference Service Life:	15 Years
Product Specificity:	 Product Average
	 Product Specific
Supply Chain Specific Data:	24 %

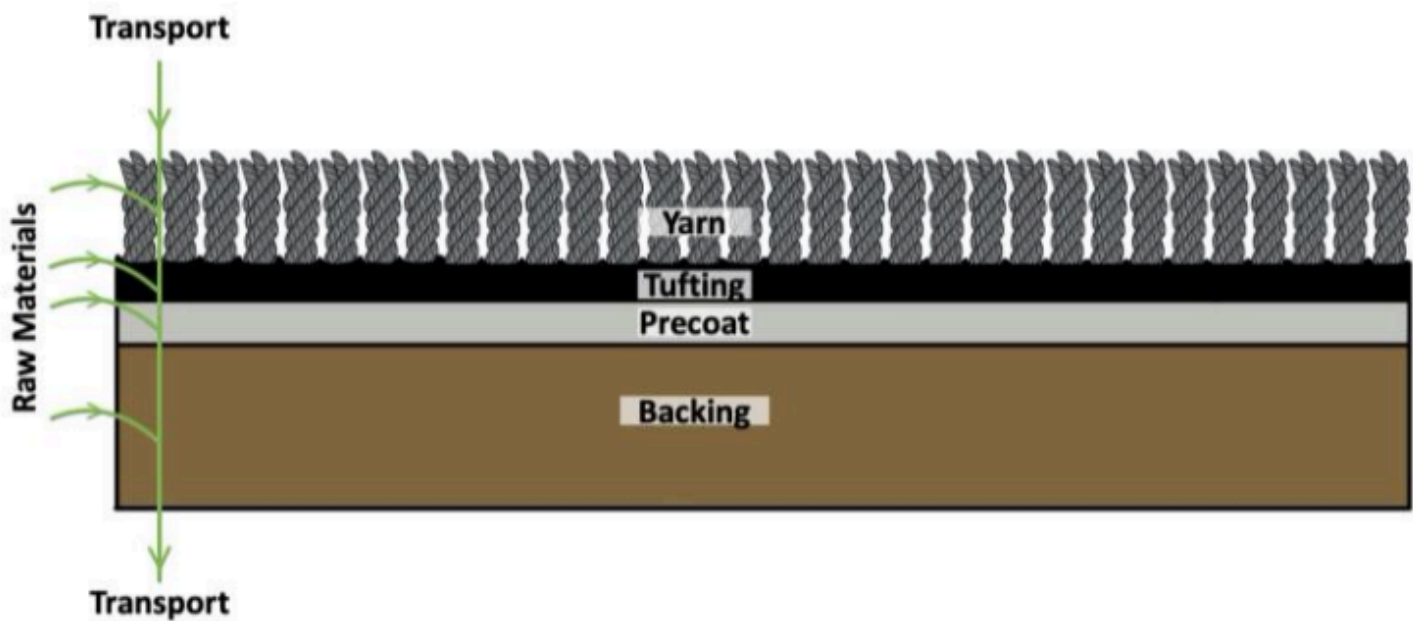
Product Description

This Environmental Product Declaration covers all styles and patterns of modular carpet on GlasBac® backing with PA6 yarn. The products are manufactured in Taicang, China. A medium yarn weight of 678 grams per square meter is reported and the Global Warming Potential for all additional manufactured yarn weights are provided in the additional information section.

Product Specifications

Product SKU(s):	NA
Product Classification Codes:	UNSPSC - 301617
Flooring type:	Carpet
Product thickness:	Variable mm
Product weight:	3940 g/m2
Recycled content:	52 %
Material composition:	The product is produced through tufting nylon yarn into a primary fleece then adhering the yarn and nonwoven fleece to a backing for added dimensional stability and modularity.
Material composition of primary backing type:	Polyester
Material composition of secondary backing type:	Interface CN Glasbac® is a compound backing made with vinyl, plasticizer, and recycled inorganic fillers.
CRI rating:	3.5 Severe
Surface pile weight:	678 g/m2

Product Composition Diagram



Material Composition

Material/Component Category	Origin	% Mass
PA6 Yarn	China	17
Tufting Primary	Taiwan	3
Precoat	Japan/China	11
Stabilisation Layer	Germany/China	2
CushionBacRE® Compound	Germany/China/Thailand	67

Packaging Material	Origin	kg Mass
Carboard	China	0.224
PE	China	0.0025

Biogenic Carbon Content	kg C per m2
Biogenic carbon content in product	0.01
Biogenic carbon content in accompanying packaging	0.1

Hazardous Materials
No regulated hazardous or dangerous substances are included in this product.

EPD Data Specificity

Primary Data Year:	2025
Manufacturing Specificity:	✗ Industry Average ✗ Manufacturer Average ✓ Facility Specific

Averaging:
This EPD uses a representative yarn mix that was calculated using an average. All products manufactured in Taicang during 2025 were considered, resulting in an average yarn weight of 678 grams per m² of carpet.

System Boundary

Production	A1	Raw material supply	✓
	A2	Transport	✓
	A3	Manufacturing	✓

Construction	A4	Transport to site	✓
	A5	Assembly / Install	✓
Use	B1	Use	✓
	B2	Maintenance	✓
	B3	Repair	✓
	B4	Replacement	✓
	B5	Refurbishment	✓
	B6	Operational Energy Use	✓
	B7	Operational Water Use	✓
End of Life	C1	Deconstruction	✓
	C2	Transport	✓
	C3	Waste Processing	✓
	C4	Disposal	✓
Benefits & Loads Beyond System Boundary	D	Recycling, Reuse Recovery Potential	✓

Note:

ND = Module not declared

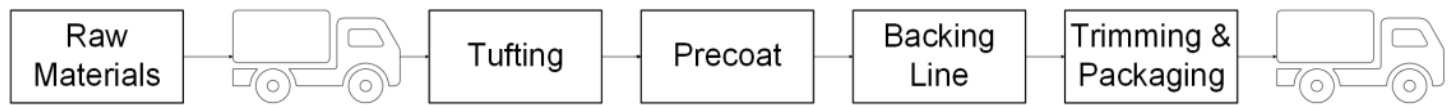
Product Composition Diagram

	PRODUCT STAGE			CONSTRUCTION PROCESS STAGE		USE STAGE							END OF LIFE STAGE				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 material supply	Transport	Manufacturing	Transport from gate to site	Assembly/Install	Use	Maintenance	Repair	Replacement	Refurbishment	Building operational energy use during product use	Building operational water use during product use	Deconstruction	Transport	Waste processing	Disposal	Reuse, Recovery, Recycling Potential
EPD Type	X			X	X	ND	X	ND	ND	ND	ND	ND	ND	X	X	X	X

Plants

Interface, Inc. Taicang, Suzhou, Jiangsu, China

Product Flow Diagram



Interface CN CushionBacRE® modular carpet tile is manufactured in Taicang, China. The product is produced through tufting nylon yarn into a primary fleece then adhering the yarn and nonwoven fleece to a backing for added dimensional stability and modularity. The product is then cut into tiles and packaged, with a production waste factor of 2.7%.

Software And Database

LCA Software:	☰ Sphera LCA for Experts (formerly GaBi) v. 10.9	
LCI Foreground Database(s):	☰ Sphera Managed LCA Content (formerly GaBi Professional Database) v. 2025.1	📍 US
LCI Background Database(s):	☰ Sphera Managed LCA Content (formerly GaBi Professional Database) v. 2025.1	📍 US

A foreground LCI database is the database used to model the primary, site-specific data collected for this EPD. A background LCI database is the database used to model generic or non-specific data.

Data Quality

The data quality ranges from good to very good. The temporal quality of the data is very good with both the manufacturing specific data and the LCA FE background data being from 2025.

Life Cycle Module Description

- A1–A3: Product Stage
- A1: Raw material extraction and processing, including recycled materials.
 - A2: Transport of raw and processed materials to manufacturing sites.
 - A3: Manufacturing at site, including materials, packaging, energy, and waste disposal or recycling. All energy purchased at manufacturing sites is allocated per square meter produced, including offices and warehouses. 100% renewable electricity and thermal energy credits are used. Waste factor in production (e.g., carpet tiles: 2.7% production waste). Modular carpets are produced by tufting nylon yarn into fleece, adhering to backing, cutting into tiles, and packaging.
- A4–A5: Construction Stage
- A4: Transport of finished product to building site.
 - A5: Installation includes ancillary materials (Tactiles™), trim waste disposal, and packaging waste. Assumed 2% installation waste for all flooring types. Installation waste sent to incineration or landfill, with energy recovery benefits accounted for in Module D.
- B1–B7: Use Stage
- B2: Maintenance effort declared for one year, repeated over the Reference Service Life (RSL). Modular carpet: daily vacuuming, biweekly wet extraction cleaning.
 - Other Use Modules (B1, B3–B7): Not relevant or not declared for these flooring products.
- C1–C4: End of Life
- C2: Transport of waste to local disposal using diesel truck datasets.
 - C3: Waste processing for reuse, recovery, or recycling.
 - C4: Disposal of post-consumer carpet tile, incineration or landfill. Energy recovery from incineration is accounted for in Module D.

Module D: Benefits and Loads Beyond the System Boundary

- Captures energy recovery from end-of-life incineration. Only modelled for incineration scenarios, as this is the most likely pathway for energy recovery. Credits for energy generated during incineration are included.

LCA Discussion

Allocation Procedure

Co-product allocation:

No co-products are produced in the manufacturing process for Interface CN CushionBacRE® modular carpet tiles, so allocation between co-products is not required.

Recycled and secondary raw materials:

Allocation for recycled content (such as recycled nylon, recycled polyester) is performed according to the “cut-off” approach. Only the impacts from collection and processing of recycled materials up to their entry into the product system are included. No upstream burdens from previous product life cycles are assigned to the recycled content.

Energy, ancillary, and operating materials:

Energy, ancillary materials, and operating materials are allocated to individual products based on production volumes and process-specific consumption data. Where direct measurement is not possible, allocation is performed using mass or area-based proxies. In-plant waste is assigned to the product and not allocated to other products, as there are no co-products.

Factory-wide allocation:

For facilities producing multiple products, shared energy and utilities are allocated according to the proportion of production output (mass or area) attributable to each product. No credits are taken for recycling of production waste; all relevant impacts are assigned to the declared product.

Cut-off Procedure

In the Life Cycle Assessment (LCA) for Interface CN CushionBacRE®, modular flooring product, cut-off criteria were rigorously applied to determine which material and energy flows should be included or excluded from the analysis. The objective was to ensure the study was both thorough and practical, focusing on flows that could meaningfully affect the environmental results.

The cut-off criteria were based on thresholds for mass and energy. Specifically:

- Any flow representing less than one percent of the total mass or energy for a given process could be excluded, provided it was not considered environmentally significant.
- If a flow met the exclusion threshold but was thought to have a notable environmental impact, it was included regardless of its size.
- The total sum of all excluded flows does not exceed five percent of the overall mass or energy for the product system.

In practice, this meant that all relevant flows—such as raw materials, processing, transportation, manufacturing, packaging, installation, maintenance, disposal, and recycling—were considered in the assessment. Flows that were excluded typically involved capital goods and equipment, or human labor and commuting, as these were not expected to contribute significantly to the results. Where specific data from suppliers was unavailable, conservative proxy datasets were used to ensure that any potentially important flows were still represented.

Renewable Electricity

Energy Attribute Certificates (EACs) such as Renewable Energy Certificates (RECs) or Power Purchase Agreements (PPAs) are included in the baseline reported results:	✓ Yes
Electricity Source:	Offsite
Renewable type(s):	Wind, Solar
Percent of EPD Owner's product-related electricity covered:	100 %

Commitment pledged for entire EPD validity period:	✓ Yes
Electricity accounting methodology:	Market-based

Scenarios

Transport to the building/construction site (A4)

A4 Module

Fuel Type:	Diesel mix
Liters of Fuel:	0.014 l/100km
Vehicle Type:	Truck
Transport Distance:	805 km
Capacity Utilization:	85 %
Packaging Mass:	0.227 kg
Gross density of products transported:	875 kg/m ³
Capacity utilization volume factor:	=1
Assumptions for scenario development:	Transportation distance uses a standardized distance of 500 miles (805 km). Transport is from the factory gate to the place of installation assuming a thickness of 4.5 mm and 0.014 kg diesel per 805 km per kg of product. All values refer to the declared functional unit (1 m ²). Packaging waste and installation waste are considered in subsequent modules (A5, C1–C4). Preparation of the floor and auxiliaries (adhesives, fixing agents, PET connectors) are included.

Installation in to the building/construction site (A5)

A5 Module

Installation Scrap Rate Assumed:	2 %
Ancillary Materials:	0.107 kg
Product Lost per Declared/Functional Unit:	0.08 kg
Waste Materials at the Construction Site Before Waste Processing:	0.08 kg
Mass of Packaging Waste Specified by Type:	0.227 kg
Biogenic Carbon Contained in Packaging (kg C):	0.1 kg
Assumptions for scenario development:	Interface CN CushionBacRE® modular carpet tile is recommended to be installed following the recommended guidelines, which are available online. In scenario development, we assume GreenGlue is used as adhesive and packaging waste is split between landfill, recycling, and waste incineration based on regional statistics. Interface recommends cardboard packaging be sent to recycling, where available.

Maintenance (B2)

B2 Module

Maintenance Cycle:	5490 Cycles/RSL 27450 Cycles/ESL
Net Fresh Water Consumption Specified by Water Source and Fate:	0.00193 m ³
Ancillary Materials Specified by Type:	0.00682 kg

Energy Input:	0.45 kWh
Maintenance Process Information:	See Interface Maintenance Guide for details (https://www.interface.com/). Ancillary Materials include soap for extraction cleaning. This scenario is based on vacuum cleaning 7 times a week and wet extraction cleaning 2 times a year.
Further assumptions for scenario development:	Service life depends on correct installation, use class (33, Heavy Commercial), and adherence to cleaning instructions. ESL for a building is set to 75 years.

End of Life (C1 - C4)

C1 - C4 Modules

C3/1 & C4/1: 100% Energy Recovery

Collection Process

Collected Separately:	4.04 kg
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Recovery

Incineration with Energy Recovery:	4.04 kg
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Assumptions for scenario development:

C3/1 – Waste processing (incineration with energy recovery end-of-life): Waste processing by incineration with energy recovery; 100% of the waste mass is treated by incineration in an installation with an R1-value > 0.6. C4/1 – Waste disposal (incineration with energy recovery end-of-life): Final disposal of 100% of the incineration residues in accordance with current disposal practices.

C3/2 & C4/2: 100% Landfill

Collection Process

Collected Separately:	4.04 kg
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Recovery

Landfill:	4.04 kg
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Disposal

Product or Material for Final Disposal:	4.04 kg
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Assumptions for scenario development:

C3/2 – Waste processing (landfill end-of-life): No waste processing is assumed; 100% of the waste mass is sent directly to landfill as the end-of-life scenario. C4/2 – Waste disposal (landfill end-of-life): Final disposal of 100% of the waste mass through landfilling, including landfill operation and management, in accordance with current disposal practices. Deconstruction: The modular aspect of the product along with Tactile installation as opposed to glue-down methods allows for easy reuse of the product. All products are designed for modular removal, typically done manually, with minimal environmental impact. Collection: Products can be collected separately or with mixed construction waste, depending on local practices and regulations. Recovery & Recycling: Interface intends for products to be recycled through the ReEntry program. For more information please visit: <https://www.interface.com/AU/en-AU/sustainability/recycling.html> Disposal: If not recycled, products are disposed of in landfill or incineration facilities, following local regulations. End of Life Scenarios are representative of national statistics. Transport: Typical transport distances 32 km.

Reuse, Recovery and / or Recycling Potentials & Relevant Scenario Information (D)

D Module

Net Energy Benefit from Energy Recovery from Waste Treatment Declared as Export Energy in C3:	16.27 MJ
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Results

Environmental Impact Assessment Results

EF3.1, IPCC AR5 GWP 100, TRACI 2.2, CML 2016 v4.8

per 1 m2 of product.

LCIA results are relative expressions and do not predict impacts on category endpoints, the exceeding of thresholds, safety margins or risks.

Impact Category	Unit	Method	A1 - A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3/1	C3/2	C4/1	C4/2	D/1	D/2	D/3
GWP- total	kg CO2 eq	EF3.1	8.03e+0	2.16e-1	7.48e-1	ND	5.26e-1	ND	ND	ND	ND	ND	ND	8.33e-3	5.16e+0	0	0	1.68e-1	-1.53e+0	-1.62e-1	ND
GWP- fossil	kg CO2 eq	EF3.1	8.43e+0	2.13e-1	3.68e-1	ND	5.25e-1	ND	ND	ND	ND	ND	ND	8.23e-3	5.11e+0	0	0	1.22e-1	-1.53e+0	-1.61e-1	ND
GWP-biogenic	kg CO2 eq	EF3.1	-4.08e-1	4.01e-4	3.80e-1	ND	3.86e-5	ND	ND	ND	ND	ND	ND	1.55e-5	4.58e-2	0	0	4.53e-2	0	0	ND
GWP-luluc	kg CO2 eq	EF3.1	7.05e-3	2.25e-3	1.59e-4	ND	1.08e-3	ND	ND	ND	ND	ND	ND	8.70e-5	5.07e-4	0	0	3.35e-4	-2.82e-3	-1.15e-3	ND
ODP	kg CFC11 eq	EF3.1	1.57e-6	3.63e-14	3.14e-8	ND	1.53e-9	ND	ND	ND	ND	ND	ND	1.40e-15	9.33e-13	0	0	4.17e-13	-1.18e-11	-5.39e-13	ND
AP	mol H+ eq	EF3.1	2.15e-2	1.29e-3	9.42e-4	ND	1.76e-3	ND	ND	ND	ND	ND	ND	4.98e-5	2.72e-3	0	0	7.28e-4	-2.04e-3	-5.44e-4	ND
PM	disease incidence	EF3.1	1.45e-7	8.43e-9	7.14e-9	ND	1.93e-8	ND	ND	ND	ND	ND	ND	3.25e-10	1.89e-8	0	0	7.49e-9	-1.82e-8	-5.99e-9	ND
IRP	kBq U235 eq	EF3.1	2.92e-1	7.60e-4	4.68e-2	ND	7.77e-3	ND	ND	ND	ND	ND	ND	2.93e-5	1.53e-2	0	0	3.91e-3	-2.77e-1	-1.21e-2	ND
POCP	kg NMVOC eq	EF3.1	1.20e-2	1.19e-3	5.74e-4	ND	1.18e-3	ND	ND	ND	ND	ND	ND	4.59e-5	2.77e-3	0	0	4.99e-4	-1.73e-3	-5.01e-4	ND
EP-fw	kg P eq	EF3.1	4.51e-3	5.90e-7	9.39e-5	ND	2.22e-7	ND	ND	ND	ND	ND	ND	2.28e-8	4.21e-7	0	0	6.82e-5	-4.20e-6	-3.09e-6	ND
EP-marine	kg N eq	EF3.1	6.96e-3	6.36e-4	2.31e-4	ND	4.39e-4	ND	ND	ND	ND	ND	ND	2.45e-5	1.06e-3	0	0	1.58e-4	-7.10e-4	-2.63e-4	ND
EP-terrestrial	mol N eq	EF3.1	3.71e-2	6.90e-3	1.58e-3	ND	4.37e-3	ND	ND	ND	ND	ND	ND	2.67e-4	1.21e-2	0	0	1.72e-3	-7.43e-3	-2.43e-3	ND
SQI	dimensionless	EF3.1	2.27e+1	1.24e+0	4.94e-1	ND	5.87e-1	ND	ND	ND	ND	ND	ND	4.79e-2	6.73e-1	0	0	3.13e-1	-1.13e+1	-7.21e+0	ND
WDP	m3 world eq deprived	EF3.1	2.26e+0	1.00e-3	8.70e-2	ND	1.32e-1	ND	ND	ND	ND	ND	ND	3.86e-5	6.38e-1	0	0	1.50e-2	-1.50e-1	-2.39e-2	ND
ADP-fossil	MJ, net calorific value	EF3.1	1.78e+2	2.80e+0	8.67e+0	ND	4.89e+0	ND	ND	ND	ND	ND	ND	1.08e-1	2.48e+0	0	0	2.02e+0	-2.64e+1	-2.36e+0	ND
ADP-minerals&metals	kg Sb eq	EF3.1	3.66e-5	1.46e-8	8.60e-7	ND	1.16e-7	ND	ND	ND	ND	ND	ND	5.62e-10	1.22e-8	0	0	8.30e-9	-2.07e-7	-8.37e-8	ND
ETP-fwio	CTUe	EF3.1	2.40e+1	2.04e+0	2.55e+0	ND	7.02e-1	ND	ND	ND	ND	ND	ND	7.86e-2	8.47e-1	0	0	1.34e+0	-2.15e+0	-4.65e-1	ND
ETP-fwo	CTUe	EF3.1	2.43e+0	1.61e+0	1.40e-1	ND	3.03e-2	ND	ND	ND	ND	ND	ND	6.22e-2	4.59e-1	0	0	3.29e+0	-6.38e-1	-4.14e-1	ND
HTP-cio	CTUh	EF3.1	5.34e-10	4.78e-11	3.79e-11	ND	2.56e-11	ND	ND	ND	ND	ND	ND	1.85e-12	5.84e-11	0	0	5.82e-11	-5.70e-11	-2.25e-11	ND

Impact Category	Unit	Method	A1 - A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3/1	C3/2	C4/1	C4/2	D/1	D/2	D/3
HTP-co	CTUh	EF3.1	2.55e-9	1.47e-12	5.85e-11	ND	6.40e-11	ND	ND	ND	ND	ND	ND	5.69e-14	2.74e-11	0	0	5.44e-12	-2.06e-10	-9.37e-12	ND
HTP-ncio	CTUh	EF3.1	1.93e-8	2.58e-9	9.95e-10	ND	1.25e-9	ND	ND	ND	ND	ND	ND	9.95e-11	6.51e-9	0	0	7.17e-10	-5.60e-9	-2.17e-9	ND
HTP-nco	CTUh	EF3.1	1.67e-9	1.74e-10	1.24e-10	ND	6.53e-11	ND	ND	ND	ND	ND	ND	6.71e-12	1.00e-10	0	0	4.14e-10	-2.80e-10	-5.76e-11	ND
GWP-total	kg CO2 eq	IPCC AR5 GWP 100	8.09e+0	2.20e-1	4.06e-1	ND	5.34e-1	ND	ND	ND	ND	ND	ND	8.50e-3	5.12e+0	0	0	1.25e-1	-1.31e+0	1.03e-1	ND
ODP	kg CFC 11 eq	TRACI 2.2	1.46e-6	4.32e-14	2.93e-8	ND	2.18e-9	ND	ND	ND	ND	ND	ND	1.67e-15	1.08e-12	0	0	4.93e-13	-6.35e-13	-6.35e-13	ND
AP	kg SO2 eq	TRACI 2.2	1.91e-2	1.19e-3	8.05e-4	ND	1.49e-3	ND	ND	ND	ND	ND	ND	4.58e-5	2.51e-3	0	0	6.20e-4	-4.71e-4	-4.71e-4	ND
EP-freshwater	kg P eq	TRACI 2.2	4.28e-3	2.66e-7	8.77e-5	ND	1.01e-7	ND	ND	ND	ND	ND	ND	1.03e-8	1.90e-7	0	0	3.70e-5	-1.39e-6	-1.39e-6	ND
EP-marine	kg N eq	TRACI 2.2	8.73e-3	1.07e-3	3.06e-4	ND	6.90e-4	ND	ND	ND	ND	ND	ND	4.15e-5	1.86e-3	0	0	2.69e-4	-3.49e-4	-3.49e-4	ND
POCP	kg O3 eq	TRACI 2.2	1.71e-1	2.63e-2	8.48e-3	ND	2.55e-2	ND	ND	ND	ND	ND	ND	1.01e-3	6.61e-2	0	0	9.70e-3	-1.06e-2	-1.06e-2	ND
ODP	kg CFC-11 eq	CML 2016 v4.8	1.54e-6	4.32e-14	3.09e-8	ND	2.00e-9	ND	ND	ND	ND	ND	ND	1.67e-15	1.08e-12	0	0	4.93e-13	-1.40e-11	-6.35e-13	ND
AP	kg SO2 eq	CML 2016 v4.8	1.88e-2	8.78e-4	8.15e-4	ND	1.44e-3	ND	ND	ND	ND	ND	ND	3.39e-5	2.03e-3	0	0	6.04e-4	-1.57e-3	-3.82e-4	ND
EP	kg PO4 eq	CML 2016 v4.8	1.02e-2	2.29e-4	3.08e-4	ND	2.49e-4	ND	ND	ND	ND	ND	ND	8.84e-6	3.81e-4	0	0	8.04e-4	-3.28e-4	-1.32e-4	ND
POCP	kg C2H4 eq	CML 2016 v4.8	2.98e-3	-3.33e-4	1.26e-4	ND	1.47e-4	ND	ND	ND	ND	ND	ND	-1.29e-5	1.23e-4	0	0	5.30e-5	-1.47e-4	-9.14e-7	ND
ADP-fossil	MJ	CML 2016 v4.8	1.73e+2	2.79e+0	8.40e+0	ND	4.55e+0	ND	ND	ND	ND	ND	ND	1.08e-1	2.19e+0	0	0	1.94e+0	-2.16e+1	-2.14e+0	ND

Note:

Not all abbreviated indicators listed below may be present in the results above. The inclusion of indicators varies based on PCR requirements.

Abbreviations:

GWP = Global Warming Potential, 100 years (may also be denoted as GWP-total, GWP-fossil (fossil fuels), GWP-biogenic (biogenic sources), GWP-luluc (land use and land use change)), ODP = Ozone Depletion Potential, AP = Acidification Potential, EP = Eutrophication Potential, SFP = Smog Formation Potential, POCP = Photochemical oxidant creation potential, ADP-Fossil = Abiotic depletion potential for fossil resources, ADP-Minerals&Metals = Abiotic depletion potential for non-fossil resources, WDP = Water deprivation potential, PM = Particular Matter Emissions, IRP = Ionizing radiation, human health, ETP-fw = Eco-toxicity (freshwater), HTP-c = Human toxicity (cancer), HTP-nc = Human toxicity (non-cancer), SQP = Soil quality index.

Discussion:

- The End of Life results for CushionBacRE® modular carpet tiles show that the product mass can be landfilled.
- The EPD provides one distinct scenarios, but in practice, the actual fate will depend on local waste management infrastructure and regulations.
- The product contains a high proportion of recycled content, which is positive for circularity, but the EPD does not quantify the environmental benefits of reuse or recycling.

Limitations:

- The EPD assumes 100% allocation to each EOL scenario for calculation purposes, which may not reflect real-world mixed disposal routes.

General Limitations Across All Products

- Scenario Modelling: EPDs typically model 100% allocation to each scenario (landfill, incineration, recycling), which simplifies calculations but does not reflect the mixed reality of waste management.
- Data Gaps: Some inventory categories (e.g., direct emissions, VOCs, energy conversion) are not fully quantified or are omitted.
- Regional Differences: Results are based on regional data (Europe, APAC, Korea) and may not be directly applicable to other locations.
- Uncertainty: Impact assessment methods (e.g., for toxicity, water depletion, microplastics) have high uncertainty and limited real-world validation.
- Comparability: EPDs from different programs or using different LCA software may not be directly comparable.

Resource Use Indicator

per 1 m2 of product.

Indicator	Unit	A1 - A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3/1	C3/2	C4/1	C4/2	D/1	D/2	D/3
PERE	MJ	1.18e+1	2.11e-1	1.70e+0	ND	1.22e+0	ND	ND	ND	ND	ND	ND	8.16e-3	7.86e+0	0	0	3.37e-1	-6.97e+0	-2.00e-2	ND
PERM	MJ	8.46e+0	0	-1.19e+0	ND	0	ND	ND	ND	ND	ND	ND	0	-7.27e+0	0	0	0	-4.03e+0	-4.03e+0	ND
PERT	MJ	2.03e+1	2.11e-1	5.11e-1	ND	1.22e+0	ND	ND	ND	ND	ND	ND	8.16e-3	5.86e-1	0	0	3.37e-1	-1.10e+1	-4.05e+0	ND
PENRE	MJ	5.28e+0	2.80e+0	1.54e+1	ND	4.89e+0	ND	ND	ND	ND	ND	ND	1.08e-1	5.72e+1	0	0	2.02e+0	-2.41e+1	-7.00e-2	ND
PENRM	MJ	6.37e+1	0	-8.97e+0	ND	0	ND	ND	ND	ND	ND	ND	0	-5.48e+1	0	0	0	-2.29e+0	-2.29e+0	ND
PENRT	MJ	6.90e+1	2.80e+0	6.48e+0	ND	4.89e+0	ND	ND	ND	ND	ND	ND	1.08e-1	2.48e+0	0	0	2.02e+0	-2.64e+1	-2.36e+0	ND
SM	kg	2.05e+0	0	0	ND	0	ND	ND	ND	ND	ND	ND	0	0	0	0	0	0	0	ND
RSF	MJ	0	0	0	ND	0	ND	ND	ND	ND	ND	ND	0	0	0	0	0	0	0	ND
NRSF	MJ	0	0	0	ND	0	ND	ND	ND	ND	ND	ND	0	0	0	0	0	0	0	ND
FW	m3	5.62e-2	1.04e-4	2.10e-3	ND	3.15e-3	ND	ND	ND	ND	ND	ND	4.03e-6	1.51e-2	0	0	4.41e-4	-6.70e-3	-1.28e-3	ND
RE	MJ	0	0	4.66e-2	ND	0	ND	ND	ND	ND	ND	ND	0	1.63e+1	0	0	0	0	0	ND

Note:

Not all abbreviated indicators listed below may be present in the results above. The inclusion of indicators varies based on PCR requirements.

Abbreviations:

RPRE or PERE = Renewable primary resources used as energy carrier (fuel), RPRM or PERM = Renewable primary resources with energy content used as material, RPRT or PERT = Total use of renewable primary resources with energy content, NRPRE or PENRE = Non-renewable primary resources used as an energy carrier (fuel), NRPRM or PENRM = Non-renewable primary resources with energy content used as material, NRPT or PENRT = Total non-renewable primary resources with energy content, SM = Secondary materials, RSF = Renewable secondary fuels, NRSF =

Non-renewable secondary fuels, RE = Recovered energy, ADPF = Abiotic depletion potential, FW = Use of net freshwater resources, VOCs = Volatile Organic Compounds.

Waste and Output Flow Indicators

per 1 m2 of product.

Indicator	Unit	A1 - A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3/1	C3/2	C4/1	C4/2	D/1	D/2	D/3
HWD	kg	2.22e-2	1.12e-10	5.45e-4	ND	3.03e-9	ND	ND	ND	ND	ND	ND	4.34e-12	1.16e-9	0	0	4.53e-10	-4.21e-8	-2.86e-8	ND
NHWD	kg	2.49e-2	3.92e-4	1.21e-1	ND	2.44e-3	ND	ND	ND	ND	ND	ND	1.51e-5	6.98e-1	0	0	4.03e+0	-1.61e-2	-5.09e-3	ND
RWD	kg	2.71e-4	5.29e-6	6.79e-5	ND	1.12e-4	ND	ND	ND	ND	ND	ND	2.04e-7	1.01e-4	0	0	2.91e-5	-1.67e-3	-7.37e-5	ND
CRU	kg	0	0	0	ND	0	ND	ND	ND	ND	ND	ND	0	0	0	0	0	0	0	ND
MFR	kg	0	0	1.73e-1	ND	0	ND	ND	ND	ND	ND	ND	0	0	0	0	0	0	0	ND
MER	kg	0	0	0	ND	0	ND	ND	ND	ND	ND	ND	0	0	0	0	0	0	0	ND
EEE	MJ	0	0	1.62e-2	ND	0	ND	ND	ND	ND	ND	ND	0	5.67e+0	0	0	0	0	0	ND
EET	MJ	0	0	3.04e-2	ND	0	ND	ND	ND	ND	ND	ND	0	1.06e+1	0	0	0	0	0	ND

Note:

Not all abbreviated indicators listed below may be present in the results above. The inclusion of indicators varies based on PCR requirements.

Abbreviations:

HWD = Hazardous waste disposed, NHWD = Non-hazardous waste disposed, RWD = Radioactive waste disposed, HLRW = High-level radioactive waste, ILLRW = Intermediate- and low-level radioactive waste, CRU = Components for re-use, MFR or MR = Materials for recycling, MER = Materials for energy recovery, MNER = Materials for incineration, no energy recovery, EE or EEE = Recovered energy exported from the product system, EET = Exported thermal energy.

Carbon Emissions and Removals

per 1 m2 of product.

Indicator	Unit	A1 - A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3/1	C3/2	C4/1	C4/2	D/1	D/2	D/3
BCRP	kg CO2	4.77e-2	0	0	ND	0	ND	ND	ND	ND	ND	ND	0	0	0	0	0	0	0	ND
BCEP	kg CO2	0	0	2.39e-3	ND	0	ND	ND	ND	ND	ND	ND	0	4.53e-2	0	0	4.53e-2	0	0	ND
BCRK	kg CO2	3.51e-1	0	0	ND	0	ND	ND	ND	ND	ND	ND	0	0	0	0	0	0	0	ND
BCEK	kg CO2	0	0	3.51e-1	ND	0	ND	ND	ND	ND	ND	ND	0	0	0	0	0	0	0	ND

Note:



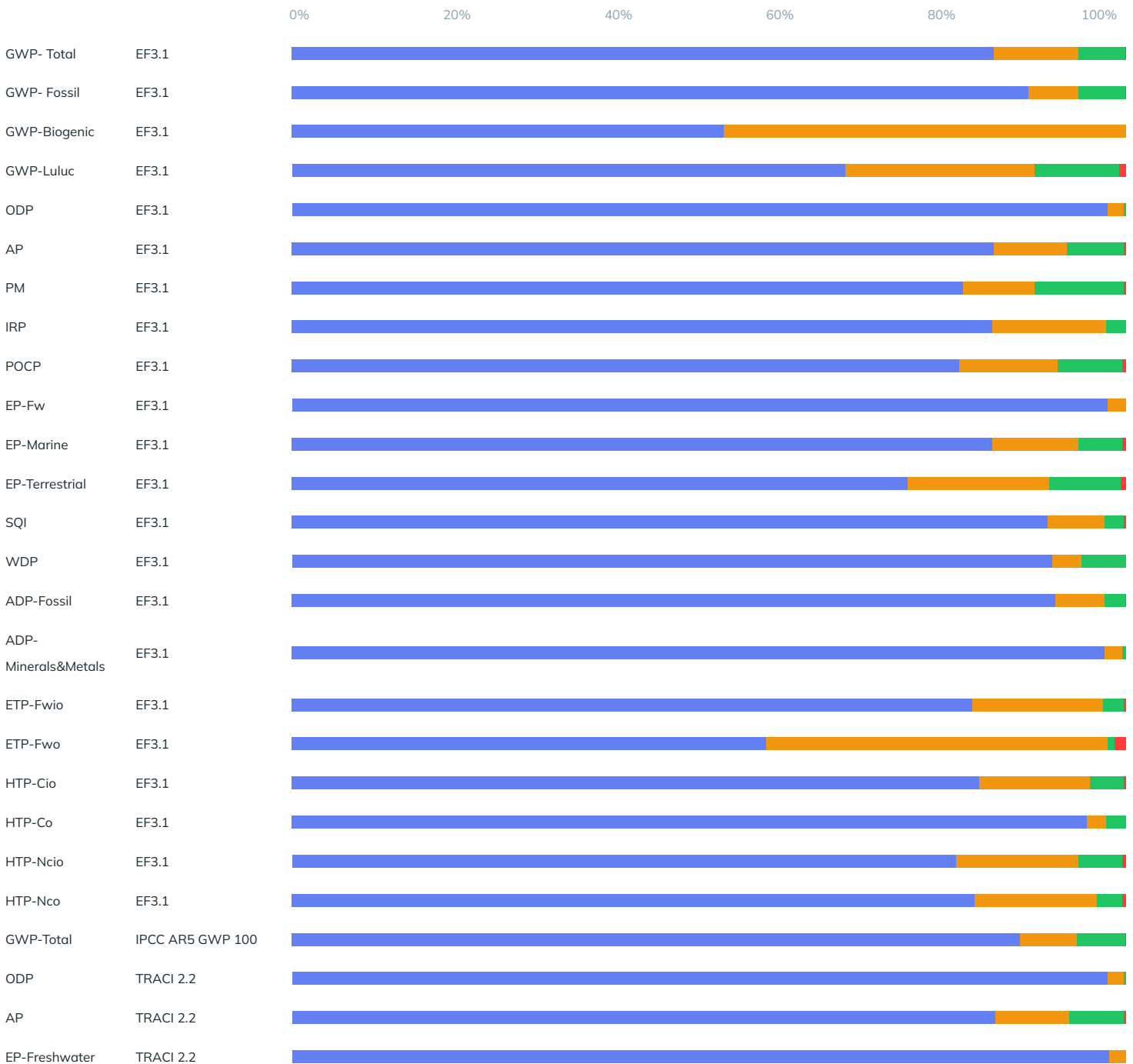
Not all abbreviated indicators listed below may be present in the results above. The inclusion of indicators varies based on PCR requirements.

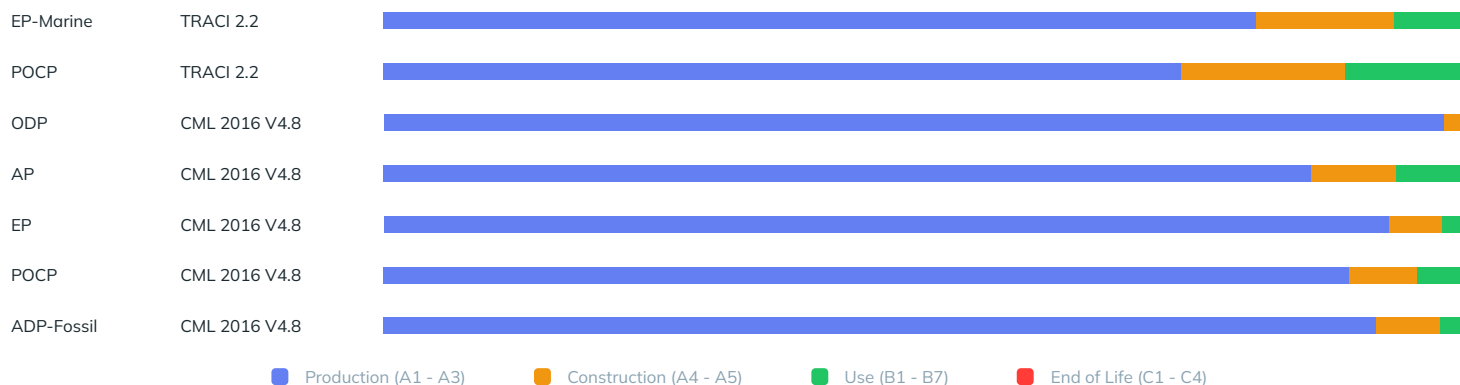
Abbreviations:

BCRP = Biogenic Carbon Removal from Product, BCEP = Biogenic Carbon Emission from Product, BCRK = Biogenic Carbon Removal from Packaging, BCEK = Biogenic Carbon Emission from Packaging, BCEW = Biogenic Carbon Emission from Combustion of Waste from Renewable Sources Used in Production Processes, CCE = Calcination Carbon Emissions, CCR = Carbonation Carbon Removals, CWNR = Carbon Emissions from Combustion of Waste from Non-Renewable Sources used in Production Processes, GWP-luc = Carbon Emissions from Land-use Change.

Interpretation

The life cycle impacts of modular carpets are driven by the Product Stage (A1-A3) and the impacts from this stage are driven by raw materials. Yarn and backing materials are the major contributors to impacts. The increased inclusion of biobased and recycled materials help in reducing the impacts as compared to virgin petrochemical-based materials. Interface is 'all in' on achieving its SBTi goal of being a carbon negative enterprise by 2040 and prioritizes product innovations that reduce impacts.





Additional Environmental Information

For further information on certifications and documentation, please visit the Interface website at <https://www.interface.com/US/en-US/sustainability/certifications-documentation.html>

A1-A3 GWP for additional yarn weights with EN15804+A2 (EF3.1)

oz/yd ²	g/m ²	GWP-total	GWP-fossil	GWP-biogenic	GWP-luluc
11	373	5.71	6.11	-0.41	0.01
12	407	5.97	6.37	-0.41	0.01
13	441	6.22	6.63	-0.41	0.01
14	475	6.48	6.88	-0.41	0.01
15	509	6.74	7.14	-0.41	0.01
16	542	7	7.4	-0.41	0.01
17	576	7.26	7.66	-0.41	0.01
18	610	7.51	7.91	-0.41	0.01
19	644	7.77	8.17	-0.41	0.01
20	678	8.03	8.43	-0.41	0.01
21	712	8.29	8.69	-0.41	0.01
22	746	8.54	8.94	-0.41	0.01
23	780	8.8	9.2	-0.41	0.01
24	814	9.06	9.46	-0.41	0.01
25	848	9.32	9.72	-0.41	0.01
26	881	9.57	9.97	-0.41	0.01
27	915	9.83	10.23	-0.41	0.01
28	949	10.09	10.49	-0.41	0.01
29	983	10.35	10.75	-0.41	0.01
30	1017	10.6	11	-0.41	0.01
31	1051	10.86	11.26	-0.41	0.01
32	1085	11.12	11.52	-0.41	0.01
33	1119	11.38	11.78	-0.41	0.01
34	1153	11.63	12.03	-0.41	0.01

oz/yd ²	g/m ²	GWP-total	GWP-fossil	GWP-biogenic	GWP-luluc
35	1187	11.89	12.29	-0.41	0.01
36	1220	12.15	12.55	-0.41	0.01
37	1254	12.41	12.81	-0.41	0.01
38	1288	12.66	13.07	-0.41	0.01
39	1322	12.92	13.32	-0.41	0.01
40	1356	13.18	13.58	-0.41	0.01
41	1390	13.44	13.84	-0.41	0.01
42	1424	13.7	14.1	-0.41	0.01
43	1458	13.95	14.35	-0.41	0.01
44	1492	14.21	14.61	-0.41	0.01
45	1526	14.47	14.87	-0.41	0.01
46	1559	14.73	15.13	-0.41	0.01
47	1593	14.98	15.38	-0.41	0.01

References

- ISO 14025 Environmental labels and declarations – Type III environmental declarations – Principles and procedures
- ISO 14040 Environmental management – Life cycle assessment – Principles and framework
- ISO 14044:2006 + Amendments Environmental management – Life cycle assessment – Requirements and guidelines
- ISO 21930:2017 Sustainability in buildings and civil engineering works — Core rules for environmental product declarations of construction products and services
- EN 15804:2019 + A2 Sustainability of construction works – Environmental product declarations – Core rules for the product category of construction products
- EN ISO 23997 Specifies weight per unit area for flooring products
- EN ISO 24346 Specifies thickness for flooring products
- EN ISO 10874 Classification of floor coverings for heavy traffic areas
- ISO 15686 Reference Service Life calculation (not applied for rubber flooring)
- ISO/IEC 25010 Software Product Quality
- ISO/IEC 27001 Information Security Management
- OWASP SAMM Software Assurance Maturity Model
- UL Environment Part A Life Cycle Assessment Calculation Rules and Report Requirements according to ISO 21930:2017, version 4.0
- PCR Guidance for Building-Related Products and Services – Part B UL Flooring EPD Requirements, UL 10010-7, v.2, September 2018, Extended to March 31, 2026
- EPA Criteria for Product Category Rules (PCRs) To Support the Label Program for Low Embodied Carbon Construction Materials, U.S. Environmental Protection Agency, 2024
- LCA FE (GaBi) 10.9.0.31 (2024) Software-System and Databases for Life Cycle Engineering (Sphera)
- Sphera LCA FE databases Used for secondary data and modelling
- Environmental Footprint (EF) 3.1 Characterisation factors (European Commission JRC, 2022)
- TRACI 2.2 Tool for the Reduction and Assessment of Chemicals and other Environmental Impacts (US EPA, 2021)
- CML 2001 Operational guide to the ISO standards (Guinee et al.), Centre for Milieukunde (CML) Leiden
- ERASM, FEFCO, Plastics Europe Industry associations for secondary data
- UL Environment PCRs (Part A and Part B) For EPD creation and verification
- ACLCA PCR Open Standard Guidance for Quantifying Renewable Electricity Instruments in Environmental Product Declarations. ACLCA. 2022
- ELCD European Commission Joint Research Center (2008). LCA Tools, Services and Data
- Frischknecht, Rolf (2009) LCI modelling approaches applied on recycling of materials
- US EPA (2024) C-MORE EPD Criteria for Data Quality and Transparency



ISO/TR 14047 Examples of impact categories and mechanisms