

**Declaration Owner****PLAE**

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Product

Exceed 7mm Rubber Flooring
Exceed 12mm Rubber Flooring

(UNSPSC Class Code 30161705; CSI Masterformat code 09 65 19.33)

EPD represents delivery of product to customers in North America.

Functional Unit

The functional unit is one square meter of flooring covering installed and maintained for use over a 75-year period

EPD Number and Period of Validity

SCS-EPD-10445
EPD Valid June 18, 2025 through June 17, 2030

Product Category Rule



PCR for Building-Related Products and Services - Part A: LCA
Calculation Rules and Report Requirements, UL 10010, UL v.4.0,
March 2022.

PCR Guidance for Building-Related Products and Services - Flooring
EPD Requirements, v.2.0, validity extended to July 1, 2025.

Program Operator

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Declaration Owner:	PLAE
Address:	190 Etowah Industrial Court, Canton GA 30114, United States
Declaration Number:	SCS-EPD-10445
Declaration Validity Period:	EPD Valid June 18, 2025 through June 17, 2030
Program Operator:	SCS Global Services
Declaration URL Link:	https://www.scsglobalservices.com/certified-green-products-guide
LCA Practitioner:	Gerard Mansell, Ph.D., SCS Global Services
LCA Software and LCI database:	OpenLCA 2.4 software and the Ecoinvent v3.11 database
Product RSL:	Various
Markets of Applicability:	North America
EPD Type:	Product-Specific
EPD Scope:	Cradle-to-Grave
LCIA Method and Version:	CML-IA and TRACI 2.1
Independent critical review of the LCA and data, according to ISO 14044 and ISO 14071	<input type="checkbox"/> internal <input checked="" type="checkbox"/> external
LCA Reviewer:	 Lindita Bushi, Ph.D., Athena Sustainable Materials Institute
Part A Product Category Rule:	PCR for Building-Related Products and Services - Part A: LCA Calculation Rules and Report Requirements, UL 10010, UL v.4.0, March 2022
Part A PCR Review conducted by:	Lindita Bushi, PhD (Chair); Hugues Imbeault-Tétreault, ing., M.Sc.A.; Jack Geibig
Part B Product Category Rule:	PCR Guidance for Building-Related Products and Services - Flooring EPD Requirements, v.2.0, validity extended to July 1, 2025
Part B PCR Review conducted by:	Jack Geibig (chair), Ecoform; Thomas Gloria, Industrial Ecology Consultants; Thaddeus Owen
Independent verification of the declaration and data, according to ISO 14025 and the PCR	<input type="checkbox"/> internal <input checked="" type="checkbox"/> external
EPD Verifier:	 Lindita Bushi, Ph.D., Athena Sustainable Materials Institute
Declaration Contents:	1. PLAE2 2. Product2 3. LCA: Calculation Rules5 4. LCA: Scenarios and Additional Technical Information 12 5. LCA: Results..... 15 6. LCA: Interpretation 20 7. Additional Environmental Information 20 8. References 21
<p>Disclaimers: This EPD conforms to ISO 14025, 14040, 14044, and 21930.</p> <p>Scope of Results Reported: The PCR requirements limit the scope of the LCA metrics such that the results exclude environmental and social performance benchmarks and thresholds, and exclude impacts from the depletion of natural resources, land use ecological impacts, ocean impacts related to greenhouse gas emissions, risks from hazardous wastes and impacts linked to hazardous chemical emissions.</p> <p>Accuracy of Results: Due to PCR constraints, this EPD provides estimations of potential impacts that are inherently limited in terms of accuracy.</p> <p>Comparability: The PCR this EPD was based on was not written to support comparative assertions. EPDs based on different PCRs, or different calculation models, may not be comparable. When attempting to compare EPDs or life cycle impacts of products from different companies, the user should be aware of the uncertainty in the final results, due to and not limited to, the practitioner's assumptions, the source of the data used in the study, and the specifics of the product modeled.</p> <p>In accordance with ISO 21930:2017, EPDs are comparable only if they comply with the core PCR, use the same sub-category PCR where applicable, include all relevant information modules and are based on equivalent scenarios with respect to the context of construction works. The owner of the declaration shall be liable for the underlying information and evidence; SCS shall not be liable with respect to manufacturer information, life cycle assessment data, and evidence supplied or made available to SCS.</p>	

1. PLAE

PLAE innovates and distributes the most advanced athletic products in the world for clients who refuse to accept second best. We use the hardest materials available to create dynamic surfaces that outperform, outlast, and totally dominate their competition. We run our own race, pursue our own goals, because when it comes to the athletes who fuel our passion, good enough is never enough.

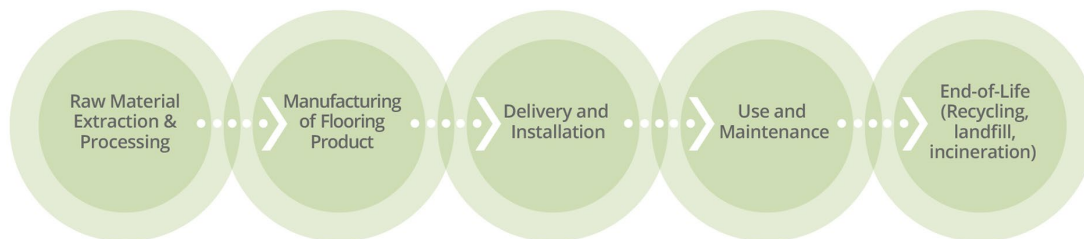
2. Product

2.1 PRODUCT DESCRIPTION

Product	Representative Thickness	Product Description
Exceed 7mm	7 mm	Exceed takes multi-purpose flooring to an unprecedented new place. Its high-tension top layer offers a randomized wood grain aesthetic complete with vinyl embossing, available in seven natural hues, suitable for any event. But underneath lies our acclaimed Plaetech shock layer, made of reclaimed rubber, engineered alongside strength coaches around the world to deliver ideal force absorption and energy return levels. The dual layers undergo a patented fusion process, which fuses them into a single system that will never separate or weaken, regardless of age or application
Exceed 12mm	12 mm	Exceed takes multi-purpose flooring to an unprecedented new place. Its high-tension top layer offers a randomized wood grain aesthetic complete with vinyl embossing, available in three natural hues, suitable for any event. But underneath lies our acclaimed Plaetech shock layer, made of reclaimed rubber, engineered alongside strength coaches around the world to deliver ideal force absorption and energy return levels. The dual layers undergo a patented fusion process, which fuses them into a single system that will never separate or weaken, regardless of age or application

2.2 PRODUCT FLOW DIAGRAM

A flow diagram illustrating the production processes and life cycle phases included in the scope of the EPD is provided below.



2.3 APPLICATION

The rubber flooring products provide the primary function of flooring for interior applications. The products are used in various commercial applications including retail, healthcare, education, and hospitality.

2.4 DECLARATION OF METHODOLOGICAL FRAMEWORK

The scope of the EPD is cradle-to-grave, including raw material extraction and processing, transportation, product manufacture, product delivery, installation and use, and product disposal. The life cycle phases included in the product system boundary are shown below.

Cut-off and allocation procedures are described below and conform to the PCR and ISO standards. The assessment follows the attributional LCA approach.

Table 1. Life cycle phases included in the rubber flooring product system boundary.

Product			Construction Process		Use							End-of-life				Benefits and loads beyond the system boundary
A1	A2	A3	A4	A5	B1	B1	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Raw material extraction and processing	Transport to manufacturer	Manufacturing	Transport	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
X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	MND

X = Module Included | MND = Module Not Declared

2.5 TECHNICAL DATA

Technical specifications for the flooring product are summarized in Table 2 and Table 3.

Table 2. Product Characteristics for the **Exceed 7mm** flooring product.

Characteristic		Description			
Sustainable certifications		-			
VOC emissions test method		FloorScore®			
Characteristic		Average Value	Unit	Min Value	Max Value
Product thickness		7.00 (0.28)	mm (in)	7.00 (0.28)	7.00 (0.28)
Wear layer thickness (where applicable)		2.00 (0.08)	mm (in)	2.00 (0.08)	2.00 (0.08)
Product weight		6,835 (22.4)	g/m ² (oz/ft ²)	6,835 (22.4)	6,835 (22.4)
Product Form	Rolls	Width	1,829 (72.0)	mm (in)	1,829 (72.0)
		Length	9.14 (30.0)	m (ft)	9.14 (30.0)

Table 3. Product Characteristics for the **Exceed 12mm** flooring product.

Characteristic		Description			
Sustainable certifications		-			
VOC emissions test method		FloorScore®			
Characteristic		Average Value	Unit	Min Value	Max Value
Product thickness		12.00 (0.472)	mm (in)	12.00 (0.472)	12.00 (0.472)
Wear layer thickness (where applicable)		2.00 (0.079)	mm (in)	2.00 (0.079)	2.00 (0.079)
Product weight		8,788 (28.8)	g/m ² (oz/ft ²)	8,788 (28.8)	8,788 (28.8)
Product Form	Rolls	Width	1,829 (72.0)	mm (in)	1,829 (72.0)
		Length	9,144 (360.0)	mm (in)	9,144 (360.0)

Table 4. Product performance test results.

Test Method	Value
ASTM F970: Static Load Limit	PASS
ASTM D2047: Coefficient of Friction	Dry=0.92/Wet=0.95
ASTM D3389: Abrasive Testing	PASS

2.6 MARKET PLACEMENT/APPLICATION RULES

Technical specifications and product performance results for the flooring products can be found on the manufacturer's website <https://www.plae.us/exceed/>.

2.7 PROPERTIES OF DECLARED PRODUCT AS DELIVERED

The products are delivered for installation in the form of rolls of various dimensions.

2.8 MATERIAL COMPOSITION

The primary materials include virgin and recycled rubber, fillers and binders.

Table 5. Material content for the rubber flooring products in kg per square meter and percent of total mass.

Material	Exceed 7mm		Exceed 12mm	
	kg/m ²	Percent mass	kg/m ²	Percent mass
SBR	6.86	91%	11.0	90%
Polymer binder	0.298	4.0%	0.653	5.4%
Water	2.98x10 ⁻²	0.40%	6.97x10 ⁻²	0.58%
Other	0.332	4.4%	0.443	3.7%
Total Product	7.53	100%	12.1	100%

No chemicals regulated by the Resource Conservation and Recovery Act (RCRA) were identified in the product or product components. There are no releases of such substances associated with the production, use or maintenance of the products.

2.9 MANUFACTURING

The products are manufactured at the production facility in the United States. The manufacturer provided primary data for their annual production, resource use and electricity consumption and waste generation at the facility. Electricity consumption is modeled using Ecoinvent datasets for the applicable regional electricity grid resource mix. No green power sources or CO₂ certificates are included in the present study.

Lacking primary data regarding manufacturing waste for the products, a 5% scrap rate was assumed and accounted for within the raw material extraction and processing and upstream transport phases of the assessment. Disposal of manufacturing scrap, via landfilling, is accounted for in the manufacturing stage.

2.10 PACKAGING

The products are packaged for shipment using cardboard cartons, plastic wrap and wooden pallets.

Table 6. Material content for the flooring product packaging, in kg per square meter and percent of total mass.

Material	Exceed 7mm		Exceed 12mm	
	kg/m ²	Percent mass	kg/m ²	Percent mass
Corrugated	0.119	17%	0.119	17%
Wood	0.299	42%	0.299	42%
Plastic	0.293	41%	0.293	41%
Total Packaging	0.710	100%	0.710	100%

2.11 PRODUCT INSTALLATION

Installation of the product is accomplished using hand tools with negligible impacts and waste. For the current assessment, approximately 4% of the product mass is assumed lost as waste during product installation which is assumed landfilled. Impacts associated with the production, transport, waste processing, and disposal of installation wastage are included in this life cycle phase. The impacts associated with packaging disposal are included with the installation phase as per PCR requirements.

2.12 USE CONDITIONS

No special conditions of use are noted.

2.13 PRODUCT REFERENCE SERVICE LIFE AND BUILDING ESTIMATED SERVICE LIFE

The Reference Service Life (RSL) of the flooring product is based on the manufacturer's estimated product lifetime and is summarized in Table 7 below. The building Estimated Service Life (ESL) is 75 years, consistent with the PCR.

2.14 RE-USE PHASE

The flooring products are not reused at end-of-life.

2.15 DISPOSAL

At end-of-life, the products are disposed of in a landfill, per PCR guidance. It is assumed that no components of the product are recycled at end-of-life.

2.16 FURTHER INFORMATION

Further information on the product can be found on the manufacturers' website at <https://www.plae.us/exceed/>.

3. LCA: Calculation Rules

3.1 FUNCTIONAL UNIT

The functional unit used in the study is defined as 1 m² of floor covering installed for use over a 75-year period. The corresponding reference flow for each product system is presented in Table 7. For the present assessment, a reference service lifetime (RSL) corresponding to the manufacturer's estimated lifetime is assumed. The total number of required product lifecycles during the 75-year period over which the product system is modeled is also summarized for the product in Table 7.

Table 7. *Reference flows and RSL for the rubber flooring products.*

Product	Reference Flow (kg/m ²)	Reference Service Lifetime (yr)	Replacement Cycle	Total # of Life Cycles
Exceed 7mm	7.52	10	6.5	7.5
Exceed 12mm	12.12	10	6.5	7.5

3.2 SYSTEM BOUNDARY

The scope of the EPD is cradle-to-grave, including raw material extraction and processing, transportation, product manufacture, product delivery, installation and use, and product disposal. The life cycle phases included in the EPD scope are described in Table 8 and illustrated in Figure 1.

Table 8. *The modules and unit processes included in the scope for the flooring products.*

Module	Module Description	Unit Processes Included in Scope
A1	Extraction and processing of raw materials; any reuse of products or materials from previous product systems; processing of secondary materials; generation of electricity from primary energy resources; energy, or other, recovery processes from secondary fuels	Extraction and processing of raw materials for the rubber flooring components.
A2	Transport (to the manufacturer)	Transport of component materials to the manufacturing facility
A3	Manufacturing, including ancillary material production	Manufacturing of flooring products and packaging (including upstream unit processes)
A4	Transport (to the building site)	Transport of product (including packaging) to the building site
A5	Construction-installation process	Impacts from the installation of product are assumed negligible. Impacts from the production, transport and disposal of waste material associated with installation are included in this phase in addition to impacts from packaging disposal.
B1	Product use	Use of the flooring in a commercial building setting. There are no associated emissions or impacts from the use of the product
B2	Product maintenance	Maintenance of products over the 75-year ESL, including periodic cleaning.
B3	Product repair	The flooring is not expected to require repair over its lifetime
B4	Product replacement	The materials and energy required for replacement of the product over the 75-year ESL of the assessment are included in this phase
B5	Product refurbishment	The flooring is not expected to require refurbishment over its lifetime
B6	Operational energy use by technical building systems	There is no operational energy use associated with the use of the product
B7	Operational water uses by technical building systems	There is no operational water use associated with the use of the product
C1	Deconstruction, demolition	Demolition of the product is accomplished using hand tools with no associated emissions and negligible impacts
C2	Transport (to waste processing)	Transport of flooring product to waste treatment at end-of-life
C3	Waste processing for reuse, recovery and/or recycling	The products are disposed of by landfilling which requires no waste processing
C4	Disposal	Disposal of flooring product via landfilling
D	Reuse-recovery-recycling potential	Module Not Declared

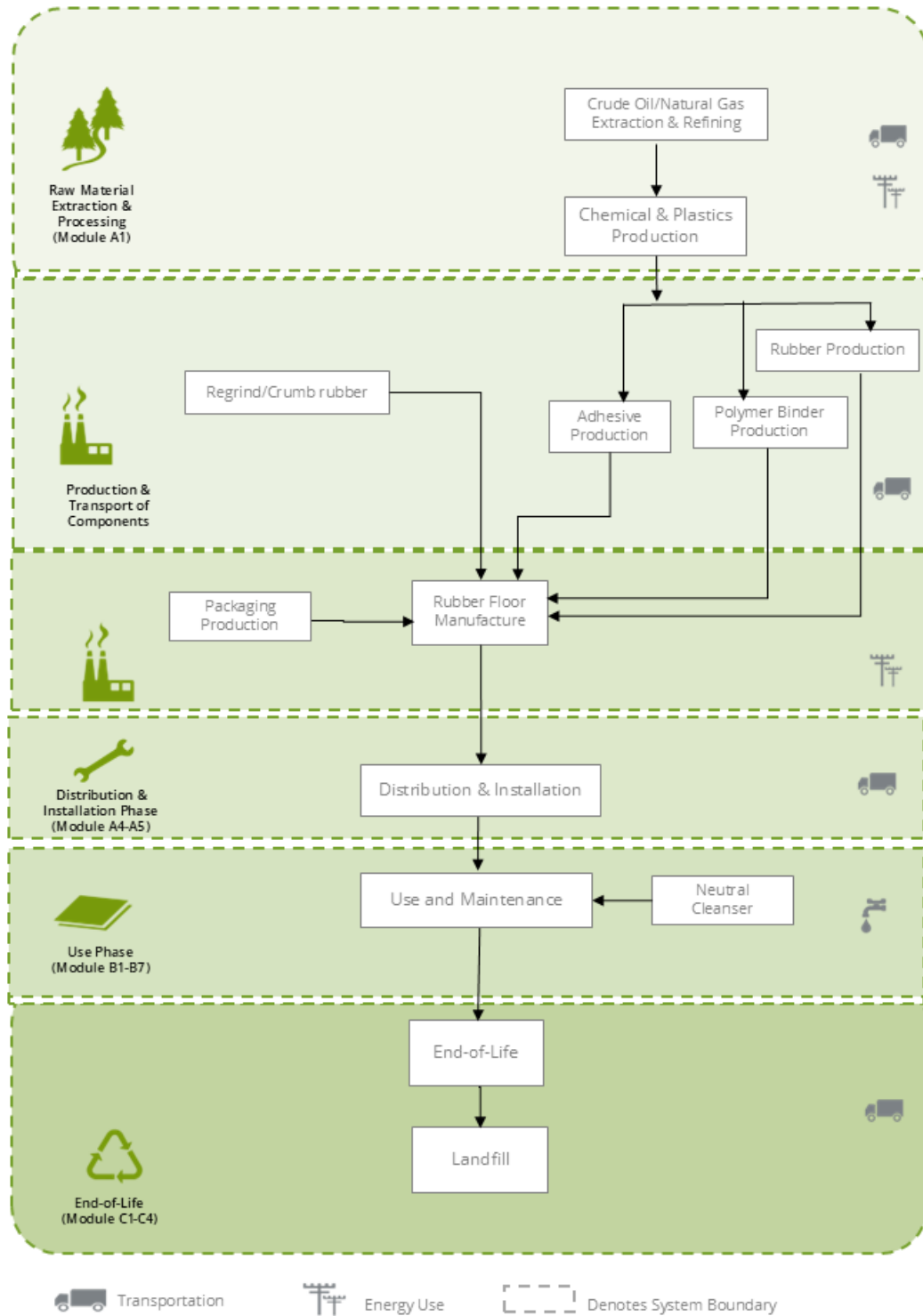


Figure 1. Flow Diagram for the life cycle of the rubber flooring product system.

3.3 PRODUCT SPECIFIC CALCULATION FOR USE PHASE

The recommended cleaning regime is highly dependent on the use of the premises where the floor covering is installed. In high traffic areas more frequent cleaning will be needed compared to areas where there is low traffic. For the purposes of this EPD, average maintenance (moderate traffic levels) is presented based on typical installations.

3.4 UNITS

All data and results are presented using SI units.

3.5 ESTIMATES AND ASSUMPTIONS

- The Reference Service Life (RSL) of the products was modeled based on information provided by the manufacturer assuming their products are installed and maintained as recommended and used for the specific application noted.
- For the product end-of-life, disposal of product packaging is modeled based on the PCR guidance regarding recycling rates of packaging materials.
- For final disposal of the packaging material and flooring products at end-of-life, all materials are assumed to be transported 100 miles (161 km) by diesel truck to either a landfill or material reclamation facility (for recycling). Datasets representing disposal in a landfill and waste incineration are from Ecoinvent.
- Modeling of recycled materials follows the recycled content method (also known as 100-0 method or cut-off method) whereby only the burdens of reprocessing the waste material are allocated to the system from the use of the recycled material.
- Electricity use at the manufacturing facility was allocated to the flooring products based on the product area as a fraction of the total production.
- The production facility is located in the RFCE eGRID EPA NERC subregions. An Ecoinvent inventory dataset was modified to reflect the eGRID energy mixes to estimate resource use and emissions from electricity use at the manufacturing facility.
- Downstream transport was modeled based on information provided by the manufacturer representing transport for product distribution across North America
- The maintenance phase of the product life cycle was modeled based on information provided by the manufacturer including recommended installation and cleaning methods, as well as cleaning frequency.

The PCR requires the results for several inventory flows related to construction products to be reported including energy and resource use and waste and outflows. These are aggregated inventory flows, and do not characterize any potential impact; results should be interpreted considering this limitation.

3.6 CUT-OFF RULES

According to the PCR, processes contributing greater than 1% of the total environmental impact indicator for each impact are included in the inventory. No data gaps were allowed which were expected to significantly affect the outcome of the indicator results. No known flows are deliberately excluded from this EPD.

3.7 DATA SOURCES

Primary data were provided by the manufacturer for their production facility. The sources of secondary LCI data are the Ecoinvent database.

Table 9. Data sources for the rubber flooring product system.

Component	Dataset	Source	Publication date
Product			
Adhesive	ethylene vinyl acetate copolymer production ethylene vinyl acetate copolymer Cutoff, S/RoW	EI v3.11	2024
Water	market group for tap water tap water Cutoff, S/GLO	EI v3.11	2024
Polymer binder			
Binder	methylene diphenyl diisocyanate production methylene diphenyl diisocyanate Cutoff, S/RoW	EI v3.11	2024
Rubber Wear Layer	synthetic rubber production synthetic rubber Cutoff, S/RoW	EI v3.11	2024
SBR-Crumb	SBR - Crumb, recycled (Liberty) - LCI	EI v3.11	2024
Packaging			
Plastic	packaging film production, low density polyethylene packaging film, low density polyethylene Cutoff, S/RoW polypropylene production, granulate polypropylene, granulate Cutoff, S/RoW	EI v3.11	2024
Pulp	containerboard production, linerboard, kraftliner containerboard, linerboard Cutoff, S/RoW	EI v3.11	2024
Wood	market for EUR-flat pallet EUR-flat pallet Cutoff, S/GLO	EI v3.11	2024
Resources			
Grid electricity	market for electricity, medium voltage electricity, medium voltage Cutoff, U - RFCE/US-RFC	EI v3.11	2024
Heat, natural gas	market group for heat, district or industrial, natural gas heat, district or industrial, natural gas Cutoff, S/GLO	EI v3.11	2024
Heat, diesel	diesel, burned in building machine diesel, burned in building machine Cutoff, S/GLO	EI v3.11	2024
Heat, propane	propane, burned in building machine propane, burned in building machine Cutoff, S/GLO	EI v3.11	2024
Waste Disposal			
Landfill	treatment of municipal solid waste, sanitary landfill municipal solid waste Cutoff, S/RoW	EI v3.11	2024
	treatment of waste wood, untreated, sanitary landfill waste wood, untreated Cutoff, S/RoW	EI v3.11	2024
	treatment of waste polyethylene, sanitary landfill waste polyethylene Cutoff, S/RoW	EI v3.11	2024
	treatment of waste paperboard, sanitary landfill waste paperboard Cutoff, S/RoW	EI v3.11	2024
	treatment of waste plastic, mixture, sanitary landfill waste plastic, mixture Cutoff, S/RoW	EI v3.11	2024
Incineration	treatment of waste polyethylene, municipal incineration waste polyethylene Cutoff, S/RoW	EI v3.11	2024
	treatment of waste wood, untreated, municipal incineration waste wood, untreated Cutoff, S/RoW	EI v3.11	2024
	treatment of waste paperboard, municipal incineration waste paperboard Cutoff, S/RoW	EI v3.11	2024
Transportation			
Truck	market for transport, freight, lorry 16-32 metric ton, EURO4 transport, freight, lorry 16-32 metric ton, EURO4 Cutoff, S/RoW	EI v3.11	2024
Rail	market for transport, freight train transport, freight train Cutoff, S/US	EI v3.11	2024
Ship	transport, freight, sea, transoceanic ship transport, freight, sea, transoceanic ship Cutoff, S/GLO	EI v3.11	2024

3.8 DATA QUALITY

The data quality assessment addressed the following parameters: time-related coverage, geographical coverage, technological coverage, precision, completeness, representativeness, consistency, reproducibility, sources of data, and uncertainty.

Table 10. *Data quality assessment for the flooring product system.*

Data Quality Parameter	Data Quality Discussion
Time-Related Coverage: Age of data and the minimum length of time over which data is collected	The most recent available data are used, based on other considerations such as data quality and similarity to the actual operations. Typically, these data are less than 5 years old. All of the data used represented an average of at least one year's worth of data collection, and up to three years in some cases. Manufacturer-supplied data (primary data) are based on annual production for 2023-24.
Geographical Coverage: Geographical area from which data for unit processes is collected to satisfy the goal of the study	The data used in the analysis provide the best possible representation available with current data. Electricity use for product manufacture is modeled using representative data for the US. Surrogate data used in the assessment are representative of global or European operations. Data representative of European operations are considered sufficiently similar to actual processes. Data representing disposal processes are based on US statistics.
Technology Coverage: Specific technology or technology mix	For the most part, data are representative of the actual technologies used for processing, transportation, and manufacturing operations. Representative fabrication datasets, specific to the type of material, are used to represent the actual processes, as appropriate.
Precision: Measure of the variability of the data values for each data expressed	Precision of results are not quantified due to a lack of data. Data collected for operations were typically averaged for one or more years and over multiple operations, which is expected to reduce the variability of results.
Completeness: Percentage of flow that is measured or estimated	The LCA model included all known mass and energy flows for production of the flooring products. In some instances, surrogate data used to represent upstream and downstream operations may be missing some data which is propagated in the model. No known processes or activities contributing to more than 1% of the total environmental impact for each indicator are excluded.
Representativeness: Qualitative assessment of the degree to which the data set reflects the true population of interest	Data used in the assessment represent typical or average processes as currently reported from multiple data sources and are therefore generally representative of the range of actual processes and technologies for production of these materials. Considerable deviation may exist among actual processes on a site-specific basis; however, such a determination would require detailed data collection throughout the supply chain back to resource extraction.
Consistency: Qualitative assessment of whether the study methodology is applied uniformly to the various components of the analysis	The consistency of the assessment is considered to be high. Data sources of similar quality and age are used; with a bias towards the most recent data where available. Different portions of the product life cycle are equally considered; however, it must be noted that final disposition of the product is based on assumptions of current average practices in the United States.
Reproducibility: Qualitative assessment of the extent to which information about the methodology and data values would allow an independent practitioner to reproduce the results reported in the study	Based on the description of data and assumptions used, this assessment would be reproducible by other practitioners. All assumptions, models, and data sources are documented.
Sources of the Data: Description of all primary and secondary data sources	Data representing energy use at the manufacturing facility represents an annual average and are considered of high quality due to the length of time over which these data are collected, as compared to a snapshot that may not accurately reflect fluctuations in production. For secondary LCI data, Ecoinvent v3.11 LCI data are used.
Uncertainty of the Information: Uncertainty related to data, models, and assumptions	Uncertainty related to materials in the flooring products and packaging is low. Actual supplier data for upstream operations was not available for all suppliers and the study relied upon the use of existing representative datasets. These datasets contained relatively recent data (<10 years) but lacked geographical representativeness. Uncertainty related to the impact assessment methods used in the study are high. The impact assessment method required by the PCR includes impact potentials, which lack characterization of providing and receiving environments or tipping points.

3.9 PERIOD UNDER REVIEW

Manufacturer-supplied data (primary data) are based on annual production for September 2023-August 2024.

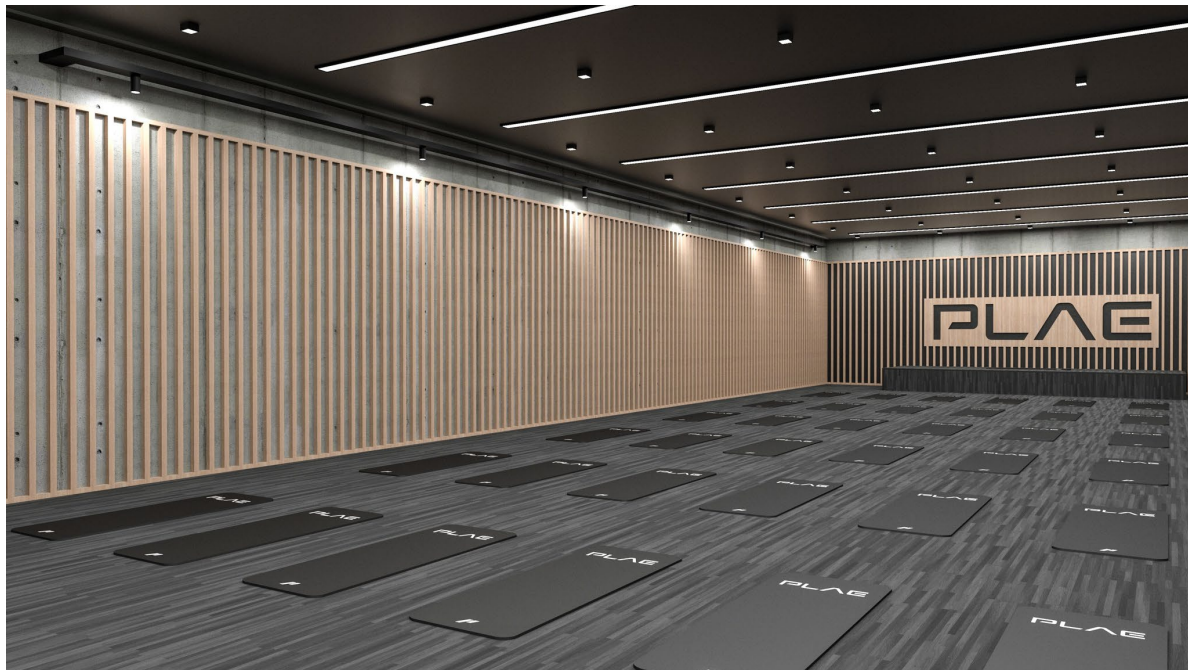
3.10 ALLOCATION

Resource use at the production facility (e.g., water and energy) was allocated to the product based on the product area as a fraction of the total facility production volume (i.e., area-based allocation). Area-based allocation was deemed most appropriate for the flooring products as total facility production was available as total square meters of product produced. Based on the location, electricity use at the manufacturing facility was modeled using inventory datasets modified to reflect the eGRID energy mix for the applicable eGRID EPA NERC subregion.

Impacts from transportation were attributed to the products based on the mass of material and distance transported.

3.11 COMPARABILITY

The PCR this EPD was based on was not written to support comparative assertions. EPDs based on different PCRs, or different calculation models, may not be comparable. When attempting to compare EPDs or life cycle impacts of products from different companies, the user should be aware of the uncertainty in the final results, due to and not limited to, the practitioner's assumptions, the source of the data used in the study, and the specifics of the product modeled.



4. LCA: Scenarios and Additional Technical Information

Delivery and Installation stage (A4 - A5)

Distribution of the flooring products to the point of installation is included in the assessment. Transportation parameters for modeling product distribution are summarized in Table 11. Production-weighted average distances by transport mode were used to represent product distribution across North America.

Table 11. *Distribution parameters for the flooring products.*

Parameter	Unit	Value
Ground transport		
Fuel type	-	Diesel
Liters of fuel	L/100km	18.7
Vehicle type	-	Diesel truck
Capacity utilization	%	76
Product Name	Gross mass transported (kg) ¹	Transport Distance (km)
Road		
Exceed 7mm	8.23	987
Exceed 12mm	12.83	987

¹ Including packaging

Installation of the product and periodic cleaning are included in the life cycle use phase. The manufacturer provided installation and maintenance guidelines detailing the recommended installation method and maintenance routine. For the current assessment, approximately 4% of the product mass is assumed lost as waste during product installation which is assumed landfilled. Impacts associated with the production, transport, waste processing, and disposal of installation wastage are included in this life cycle phase. The VOC emissions associated with the installation, use and maintenance of the products are negligible. The impacts associated with packaging disposal are included with the installation phase as per PCR requirements. The relevant disposal statistics used for the packaging are summarized in Table 12. For material not recycled, 80% are assumed landfilled and 20% incinerated. Modeling parameters for product installation are summarized in Table 13.

Table 12. *Recycling rates for packaging materials at end-of-life.*

Material	Packaging Recycling Rate (%)
<i>Recycling Rates</i>	
Plastics	9%
Paper & Pulp	68%
Wood	0%
<i>Disposal of Non-recyclables</i>	
Landfill	80%
Incineration	20%

Table 13. *Installation parameters for the rubber flooring products, per 1 m².*

Parameter		Exceed 7mm	Exceed 12mm
Ancillary materials		0.00	0.00
Net freshwater consumption (m ³)		0.00	0.00
Electricity consumption (kWh)		0.00	0.00
Product loss per functional unit (kg)		0.301	0.485
Waste materials generated by product installation (kg)		1.01	1.20
Output materials resulting from on-site waste processing (kg)			n/a
Mass of packaging waste (kg)	Plastic	0.293	0.293
	Corrugate	0.119	0.119
	Wood	0.299	0.299
Biogenic carbon contained in packaging (kg CO ₂) ¹		0.765	0.765
Direct emissions (kg)		0.00	0.00

¹ Biogenic carbon contained in packaging calculated assuming the carbon content of corrugate and wood is 50% by weight.

Use stage (B1)

No impacts are associated with the use of the product over the Reference Service Lifetime.

Maintenance stage (B2)

According to the manufacturer, typical maintenance involves regular sweeping and damp mopping. The present assessment is based on a recommended weekly cleaning schedule including sweeping and damp mopping with a neutral cleaner.

Table 14. *Maintenance parameters for the flooring products, per 1 m².*

Parameter	Maintenance cycle		Maintenance process	Net freshwater consumption	Cleaning agent	Further assumptions
	Cycles/RSL	Cycles/ESL	-	m ³ /m ² /yr	kg/m ² /yr	-
Exceed 7mm	520	3,900	Damp mopping	0.0058	0.119	Moderate traffic; weekly maintenance
Exceed 12mm	520	3,900	Damp mopping	0.0058	0.119	Moderate traffic; weekly maintenance

Repair/Refurbishment stage (B3; B5)

Product repair and refurbishment are not relevant during the lifetime of the product.

Replacement stage (B4)

The materials and energy required for replacement of the product over the 75-year estimated service lifetime of the assessment are included in this stage. Modeling parameters for the product replacement stage are summarized in Table 15. Impacts associated with the production, transport, waste processing, and disposal of all materials required for the replacement of the product over the 75-year assessment period are included in this life cycle phase.

Table 15. *Product replacement parameters for the flooring products, per 1 m².*

Parameter	Units	Exceed 7mm	Exceed 12mm
Reference service life	Years	10	10
Replacement cycle	-	6.5	6.5
Energy input	kWh	0	0
Freshwater consumption	m ³	0	0
Ancillary materials	kg	Negligible	Negligible
Replacement parts ¹	kg	56.0	87.3
Direct emissions	kg	0	0

¹ Replacement parts calculated as the product weight, including scrap material, times the replacement cycle

Building operation stage (B6 – B7)

There is no operational energy or water use associated with the use of the product.

Disposal stage (C1 - C4)

The disposal stage includes removal of the products (C1); transport of the flooring products to waste treatment facilities (C2); waste processing (C3); and associated emissions as the product degrades in a landfill (C4). For the flooring products, no emissions are generated during demolition (C1) while no waste processing (C3) is required for landfill disposal.

Transportation of waste materials at end-of-life (C2) assumes a 100 mile (~161 km) average distance to disposal, consistent with the PCR. The recycling rates used for the product packaging are based on the PCR. No recycling of the product materials is assumed at end-of-life. The relevant disposal parameters are summarized in Table 16.

Table 16. End-of-life disposal scenario parameters for the flooring products.

Product	Scenario assumptions	Collection process		Recovery	Disposal			Removals of biogenic carbon ¹
		Collected separately	Collected with mixed waste		Recycling	Landfill	Incineration	
Exceed 7mm	Landfill	-	7.52	n/a	0	7.52	0	n/a
Exceed 12mm	Landfill	-	12.12	n/a	0	12.12	0	n/a

¹ Excluding packaging



5. LCA: Results

Results of the Life Cycle Assessment are presented below. It is noted that LCA results are relative expressions and do not predict impacts on category endpoints, the exceeding of thresholds, safety margins or risks. All LCA results are stated to three significant figures in agreement with the PCR for this flooring product and therefore the sum of the total values may not exactly equal 100%.

The following environmental impact category indicators are reported using characterization factors based on the U.S. EPA's Tool for the Reduction and Assessment of Chemical and Other Environmental Impacts – TRACI 2.1 and CML-IA.

CML-IA Impact Category	Unit	TRACI 2.1 Impact Category	Unit
Global Warming Potential (GWP)	kg CO ₂ eq	Global Warming Potential (GWP)	kg CO ₂ eq
Depletion potential of the stratospheric ozone layer (ODP)	kg CFC 11 eq	Ozone Depletion Potential (ODP)	kg CFC 11 eq
Acidification Potential of soil and water (AP)	kg SO ₂ eq	Acidification Potential (AP)	kg SO ₂ eq
Eutrophication Potential (EP)	kg (PO ₄) ³⁻ eq	Eutrophication Potential (EP)	kg N eq
Photochemical Oxidant Creation Potential (POCP)	kg C ₂ H ₄ eq	Smog Formation Potential (SFP)	kg O ₃ eq
Abiotic depletion potential for non-fossil resources (ADPE)	kg Sb eq	Fossil Fuel Depletion Potential (FFD)	MJ Surplus, LHV
Abiotic depletion potential for fossil resources (ADPF)	MJ, LHV	-	-

These impact categories are globally deemed mature enough to be included in Type III environmental declarations. Other categories are being developed and defined and LCA should continue making advances in their development. However, the EPD users shall not use additional measures for comparative purposes.

The following inventory parameters, specified by the PCR, are also reported.

Resources	Unit	Waste and Outflows	Unit
RPR _E : Renewable primary resources used as energy carrier (fuel)	MJ, LHV	HWD: Hazardous waste disposed	kg
RPR _M : Renewable primary resources with energy content used as material	MJ, LHV	NHWD: Non-hazardous waste disposed	kg
NRPR _E : Non-renewable primary resources used as an energy carrier (fuel)	MJ, LHV	HLRW: High-level radioactive waste, conditioned, to final repository	kg
NRPR _M : Non-renewable primary resources with energy content used as material	MJ, LHV	ILLRW: Intermediate- and low-level radioactive waste, conditioned, to final repository	kg
SM: Secondary materials	kg	CRU: Components for re-use	kg
RSF: Renewable secondary fuels	MJ, LHV	MR: Materials for recycling	kg
NRSF: Non-renewable secondary fuels	MJ, LHV	MER: Materials for energy recovery	kg
RE: Recovered energy	MJ, LHV	EE: Recovered energy exported from the product system	MJ, LHV
FW: Use of net freshwater resources	m ³	-	-

Modules B1, B3, B5, B6, and B7 are not associated with any impact and are therefore declared as zero. In addition, modules C1 and C3 are likewise not associated with any impact as the floor is manually deconstructed. Additionally, as rubber flooring products do not typically contain bio-based materials, biogenic carbon emissions and removals are not declared. Module D is not declared. In the interest of space and table readability, these modules are not included in the results presented below.

Table 17. Life Cycle Impact Assessment results, per 1 m², for the flooring products over a 75-yr time horizon. Results reported in MJ are calculated using lower heating values. All values are rounded to three significant digits. **(Exceed 7mm)**

Impact Category	A1	A2	A3	A4	A5	B2	B4	C2	C4
CML									
GWP (kg CO ₂ eq)	8.13	0.608	3.33	1.54	0.989	3.01	123	0.230	4.05
	5.6%	0.42%	2.3%	1.1%	0.68%	2.1%	85%	0.16%	2.8%
AP (kg SO ₂ eq)	2.71x10 ⁻²	5.50x10 ⁻³	7.18x10 ⁻³	5.11x10 ⁻³	1.99x10 ⁻³	1.02x10 ⁻²	0.314	7.61x10 ⁻⁴	7.73x10 ⁻⁴
	7.3%	1.5%	1.9%	1.4%	0.53%	2.7%	84%	0.2%	0.21%
EP (kg (PO ₄) ³⁻ eq)	1.17x10 ⁻²	8.20x10 ⁻⁴	1.10x10 ⁻²	1.29x10 ⁻³	1.02x10 ⁻²	3.96x10 ⁻³	0.621	1.92x10 ⁻⁴	6.04x10 ⁻²
	1.6%	0.11%	1.5%	0.18%	1.4%	0.55%	86%	0.027%	8.4%
POCP (kg C ₂ H ₄ eq)	2.03x10 ⁻³	1.80x10 ⁻⁴	8.54x10 ⁻⁴	2.46x10 ⁻⁴	1.91x10 ⁻⁴	7.07x10 ⁻⁴	2.87x10 ⁻²	3.67x10 ⁻⁵	8.68x10 ⁻⁴
	6%	0.53%	2.5%	0.73%	0.57%	2.1%	85%	0.11%	2.6%
ODP (kg CFC-11 eq)	1.77x10 ⁻⁷	7.75x10 ⁻⁹	3.74x10 ⁻⁸	2.04x10 ⁻⁸	1.04x10 ⁻⁸	4.83x10 ⁻⁸	1.67x10 ⁻⁶	3.05x10 ⁻⁹	1.72x10 ⁻⁹
	8.9%	0.39%	1.9%	1%	0.52%	2.4%	85%	0.15%	0.087%
ADPF (MJ eq)	176	8.20	48.6	21.6	10.9	63.7	1,760	3.23	1.98
	8.4%	0.39%	2.3%	1%	0.52%	3%	84%	0.15%	0.095%
ADPE (kg Sb eq)	5.03x10 ⁻⁵	1.48x10 ⁻⁶	2.61x10 ⁻⁶	4.99x10 ⁻⁶	2.49x10 ⁻⁶	6.46x10 ⁻⁶	4.07x10 ⁻⁴	7.43x10 ⁻⁷	8.13x10 ⁻⁸
	11%	0.31%	0.55%	1%	0.52%	1.4%	85%	0.16%	0.017%
TRACI									
GWP (kg CO ₂ eq)	8.13	0.608	3.23	1.54	0.942	3.01	117	0.230	3.29
	5.9%	0.44%	2.3%	1.1%	0.68%	2.2%	85%	0.17%	2.4%
AP (kg SO ₂ eq)	2.94x10 ⁻²	6.04x10 ⁻³	8.09x10 ⁻³	6.10x10 ⁻³	2.23x10 ⁻³	1.13x10 ⁻²	0.350	9.09x10 ⁻⁴	1.03x10 ⁻³
	7.1%	1.5%	1.9%	1.5%	0.54%	2.7%	84%	0.22%	0.25%
EP (kg N eq)	2.37x10 ⁻²	6.18x10 ⁻⁴	2.76x10 ⁻²	1.45x10 ⁻³	2.78x10 ⁻²	8.01x10 ⁻³	1.61	2.16x10 ⁻⁴	0.166
	1.3%	0.033%	1.5%	0.078%	1.5%	0.43%	86%	0.012%	8.9%
SFP (kg O ₃ eq)	0.344	0.124	0.129	0.154	3.58x10 ⁻²	0.137	5.36	2.30x10 ⁻²	1.55x10 ⁻²
	5.4%	2%	2%	2.4%	0.57%	2.2%	85%	0.36%	0.25%
ODP (kg CFC-11 eq)	2.40x10 ⁻⁷	1.03x10 ⁻⁸	5.74x10 ⁻⁸	2.69x10 ⁻⁸	1.43x10 ⁻⁸	6.87x10 ⁻⁸	2.31x10 ⁻⁶	4.01x10 ⁻⁹	2.39x10 ⁻⁹
	8.8%	0.38%	2.1%	0.99%	0.52%	2.5%	84%	0.15%	0.088%
FFD (MJ surplus)	23.4	1.18	6.58	3.08	1.47	8.44	237	0.458	0.276
	8.3%	0.42%	2.3%	1.1%	0.52%	3%	84%	0.16%	0.098%

Table 18. Resource use and waste flows, per 1 m², for the flooring products over a 75-yr time horizon. Results reported in MJ are calculated using lower heating values. All values are rounded to three significant digits (**Exceed 7mm**)

Parameter	A1	A2	A3	A4	A5	B2	B4	C2	C4
Resources									
RPR _E (MJ)	6.86	9.46x10 ⁻²	13.1	0.279	0.518	2.28	86.4	4.16x10 ⁻²	4.32x10 ⁻²
	6.3%	0.086%	12%	0.25%	0.47%	2.1%	79%	0.038%	0.039%
RPR _M (MJ)	0.00	0.00	0.00	0.00	0.308	0.00	52.0	0.00	0.00
	0%	0%	0%	0%	0.59%	0%	99%	0%	0%
NRPR _E (MJ)	54.3	8.30	69.0	21.9	11.6	65.7	1,040	3.27	2.03
	4.3%	0.65%	5.4%	1.7%	0.91%	5.2%	81%	0.26%	0.16%
NRPR _M (MJ)	130	0.00	0.00	0.00	0.434	0.00	921	0.00	0.00
	12%	0%	0%	0%	0.041%	0%	88%	0%	0%
SM (kg)	4.25	0.00	0.00	0.00	0.170	0.00	28.8	0.00	0.00
	13%	0%	0%	0%	0.51%	0%	87%	0%	0%
RSF/NRSF (MJ)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RE (MJ)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FW (m ³)	0.620	5.62x10 ⁻³	0.290	1.67x10 ⁻²	3.80x10 ⁻²	0.675	6.34	2.49x10 ⁻³	2.64x10 ⁻³
	7.8%	0.07%	3.6%	0.21%	0.48%	8.4%	79%	0.031%	0.033%
Wastes									
HWD (kg)	2.08x10 ⁻³	5.10x10 ⁻⁵	5.55x10 ⁻⁴	1.42x10 ⁻⁴	1.18x10 ⁻⁴	9.65x10 ⁻⁴	1.94x10 ⁻²	2.11x10 ⁻⁵	1.39x10 ⁻⁵
	8.9%	0.22%	2.4%	0.61%	0.51%	4.1%	83%	0.091%	0.06%
NHWD (kg)	0.405	0.304	1.12	1.07	0.926	0.137	74.9	0.159	7.54
	0.47%	0.35%	1.3%	1.2%	1.1%	0.16%	87%	0.18%	8.7%
HLRW (kg)	3.28x10 ⁻⁵	4.39x10 ⁻⁷	5.91x10 ⁻⁵	1.31x10 ⁻⁶	3.79x10 ⁻⁶	9.17x10 ⁻⁶	6.36x10 ⁻⁴	1.95x10 ⁻⁷	2.00x10 ⁻⁷
	4.4%	0.059%	8%	0.18%	0.51%	1.2%	86%	0.026%	0.027%
ILLRW (kg)	9.42x10 ⁻⁵	1.05x10 ⁻⁶	2.37x10 ⁻⁴	3.12x10 ⁻⁶	1.35x10 ⁻⁵	2.16x10 ⁻⁵	2.27x10 ⁻³	4.65x10 ⁻⁷	4.79x10 ⁻⁷
	3.6%	0.04%	9%	0.12%	0.51%	0.82%	86%	0.018%	0.018%
CRU (kg)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MR (kg)	0.00	0.00	0.00	0.00	0.111	0.00	0.724	0.00	0.00
	0%	0%	0%	0%	13%	0%	87%	0%	0%
MER (kg)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EE (MJ)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 19. Life Cycle Impact Assessment results, per 1 m², for the flooring products over a 75-yr time horizon. Results reported in MJ are calculated using lower heating values. All values are rounded to three significant digits. **(Exceed 12mm)**

Impact Category	A1	A2	A3	A4	A5	B2	B4	C2	C4
CML									
GWP (kg CO ₂ eq)	11.1	1.11	3.47	2.40	1.27	3.01	170	0.370	6.44
	5.6%	0.56%	1.7%	1.2%	0.64%	1.5%	85%	0.19%	3.2%
AP (kg SO ₂ eq)	3.60x10 ⁻²	7.15x10 ⁻³	7.22x10 ⁻³	7.96x10 ⁻³	2.57x10 ⁻³	1.02x10 ⁻²	0.412	1.23x10 ⁻³	1.24x10 ⁻³
	7.4%	1.5%	1.5%	1.6%	0.53%	2.1%	85%	0.25%	0.25%
EP (kg (PO ₄) ³⁻ eq)	1.66x10 ⁻²	1.24x10 ⁻³	1.28x10 ⁻²	2.01x10 ⁻³	1.20x10 ⁻²	3.96x10 ⁻³	0.934	3.10x10 ⁻⁴	9.87x10 ⁻²
	1.5%	0.11%	1.2%	0.19%	1.1%	0.37%	86%	0.029%	9.1%
POCP (kg C ₂ H ₄ eq)	2.72x10 ⁻³	2.59x10 ⁻⁴	8.83x10 ⁻⁴	3.84x10 ⁻⁴	2.51x10 ⁻⁴	7.07x10 ⁻⁴	3.86x10 ⁻²	5.91x10 ⁻⁵	1.38x10 ⁻³
	6%	0.57%	2%	0.85%	0.56%	1.6%	85%	0.13%	3.1%
ODP (kg CFC-11 eq)	2.36x10 ⁻⁷	1.43x10 ⁻⁸	3.76x10 ⁻⁸	3.18x10 ⁻⁸	1.36x10 ⁻⁸	4.83x10 ⁻⁸	2.22x10 ⁻⁶	4.91x10 ⁻⁹	2.77x10 ⁻⁹
	9.1%	0.55%	1.4%	1.2%	0.52%	1.9%	85%	0.19%	0.11%
ADPF (MJ eq)	224	15.2	48.8	33.7	13.7	63.7	2,230	5.20	3.19
	8.5%	0.58%	1.8%	1.3%	0.52%	2.4%	85%	0.2%	0.12%
ADPE (kg Sb eq)	5.61x10 ⁻⁵	3.09x10 ⁻⁶	2.64x10 ⁻⁶	7.77x10 ⁻⁶	2.92x10 ⁻⁶	6.46x10 ⁻⁶	4.80x10 ⁻⁴	1.20x10 ⁻⁶	1.31x10 ⁻⁷
	10%	0.55%	0.47%	1.4%	0.52%	1.2%	86%	0.21%	0.023%
TRACI									
GWP (kg CO ₂ eq)	11.1	1.11	3.34	2.40	1.21	3.01	161	0.370	5.24
	5.9%	0.59%	1.8%	1.3%	0.64%	1.6%	85%	0.2%	2.8%
AP (kg SO ₂ eq)	3.95x10 ⁻²	8.01x10 ⁻³	8.15x10 ⁻³	9.51x10 ⁻³	2.89x10 ⁻³	1.13x10 ⁻²	0.463	1.46x10 ⁻³	1.65x10 ⁻³
	7.2%	1.5%	1.5%	1.7%	0.53%	2.1%	85%	0.27%	0.3%
EP (kg N eq)	3.34x10 ⁻²	1.09x10 ⁻³	3.25x10 ⁻²	2.26x10 ⁻³	3.24x10 ⁻²	8.01x10 ⁻³	2.43	3.48x10 ⁻⁴	0.272
	1.2%	0.039%	1.2%	0.08%	1.2%	0.29%	86%	0.012%	9.7%
SFP (kg O ₃ eq)	0.450	0.174	0.130	0.240	4.64x10 ⁻²	0.137	7.16	3.70x10 ⁻²	2.50x10 ⁻²
	5.4%	2.1%	1.5%	2.9%	0.55%	1.6%	85%	0.44%	0.3%
ODP (kg CFC-11 eq)	3.17x10 ⁻⁷	1.90x10 ⁻⁸	5.76x10 ⁻⁸	4.20x10 ⁻⁸	1.85x10 ⁻⁸	6.87x10 ⁻⁸	3.02x10 ⁻⁶	6.47x10 ⁻⁹	3.85x10 ⁻⁹
	8.9%	0.53%	1.6%	1.2%	0.52%	1.9%	85%	0.18%	0.11%
FFD (MJ surplus)	29.4	2.17	6.60	4.79	1.83	8.44	299	0.739	0.445
	8.3%	0.62%	1.9%	1.4%	0.52%	2.4%	85%	0.21%	0.13%

Table 20. Resource use and waste flows, per 1 m², for the flooring products over a 75-yr time horizon. Results reported in MJ are calculated using lower heating values. All values are rounded to three significant digits (**Exceed 12mm**)

Parameter	A1	A2	A3	A4	A5	B2	B4	C2	C4
Resources									
RPR _E (MJ)	8.43	0.185	13.2	0.435	0.593	2.28	99.1	6.70x10 ⁻²	6.92x10 ⁻²
	6.8%	0.15%	11%	0.35%	0.48%	1.8%	80%	0.054%	0.056%
RPR _M (MJ)	0.00	0.00	0.00	0.00	0.308	0.00	52.0	0.00	0.00
	0%	0%	0%	0%	0.59%	0%	99%	0%	0%
NRPR _E (MJ)	28.8	15.4	69.1	34.2	14.6	65.7	1,040	5.27	3.26
	2.3%	1.2%	5.4%	2.7%	1.1%	5.1%	81%	0.41%	0.26%
NRPR _M (MJ)	208	0.00	0.00	0.00	0.434	0.00	1,430	0.00	0.00
	13%	0%	0%	0%	0.027%	0%	87%	0%	0%
SM (kg)	8.35	0.00	0.00	0.00	0.334	0.00	56.4	0.00	0.00
	13%	0%	0%	0%	0.51%	0%	87%	0%	0%
RSF/NRSF (MJ)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RE (MJ)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
FW (m ³)	0.853	1.10x10 ⁻²	0.290	2.61x10 ⁻²	4.81x10 ⁻²	0.675	8.04	4.02x10 ⁻³	4.23x10 ⁻³
	8.6%	0.11%	2.9%	0.26%	0.48%	6.8%	81%	0.04%	0.043%
Wastes									
HWD (kg)	2.78x10 ⁻³	9.68x10 ⁻⁵	5.56x10 ⁻⁴	2.21x10 ⁻⁴	1.52x10 ⁻⁴	9.65x10 ⁻⁴	2.51x10 ⁻²	3.41x10 ⁻⁵	2.24x10 ⁻⁵
	9.3%	0.32%	1.9%	0.74%	0.51%	3.2%	84%	0.11%	0.075%
NHWD (kg)	0.546	0.648	1.36	1.66	1.17	0.137	116	0.256	12.2
	0.41%	0.49%	1%	1.2%	0.87%	0.1%	87%	0.19%	9.1%
HLRW (kg)	4.80x10 ⁻⁵	8.63x10 ⁻⁷	5.91x10 ⁻⁵	2.04x10 ⁻⁶	4.46x10 ⁻⁶	9.17x10 ⁻⁶	7.48x10 ⁻⁴	3.15x10 ⁻⁷	3.20x10 ⁻⁷
	5.5%	0.099%	6.8%	0.23%	0.51%	1.1%	86%	0.036%	0.037%
ILLRW (kg)	1.48x10 ⁻⁴	2.06x10 ⁻⁶	2.37x10 ⁻⁴	4.87x10 ⁻⁶	1.58x10 ⁻⁵	2.16x10 ⁻⁵	2.66x10 ⁻³	7.50x10 ⁻⁷	7.66x10 ⁻⁷
	4.8%	0.067%	7.7%	0.16%	0.51%	0.7%	86%	0.024%	0.025%
CRU (kg)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MR (kg)	0.00	0.00	0.00	0.00	0.111	0.00	0.724	0.00	0.00
	0%	0%	0%	0%	13%	0%	87%	0%	0%
MER (kg)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EE (MJ)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

6. LCA: Interpretation

The contributions to total impact indicator results are dominated by the product replacement phase (B4) of the assessment. Of the remaining life cycle phases, the raw material extraction and processing (A1) is generally the largest contributor to the overall impacts, followed by product disposal (C2/C4) and product distribution (A4). The Eutrophication Potential is dominated primarily by the product disposal stage while the Acidification and Smog Formation potential impacts are dominated by product distribution. Other life cycle phase contributions are minimal.

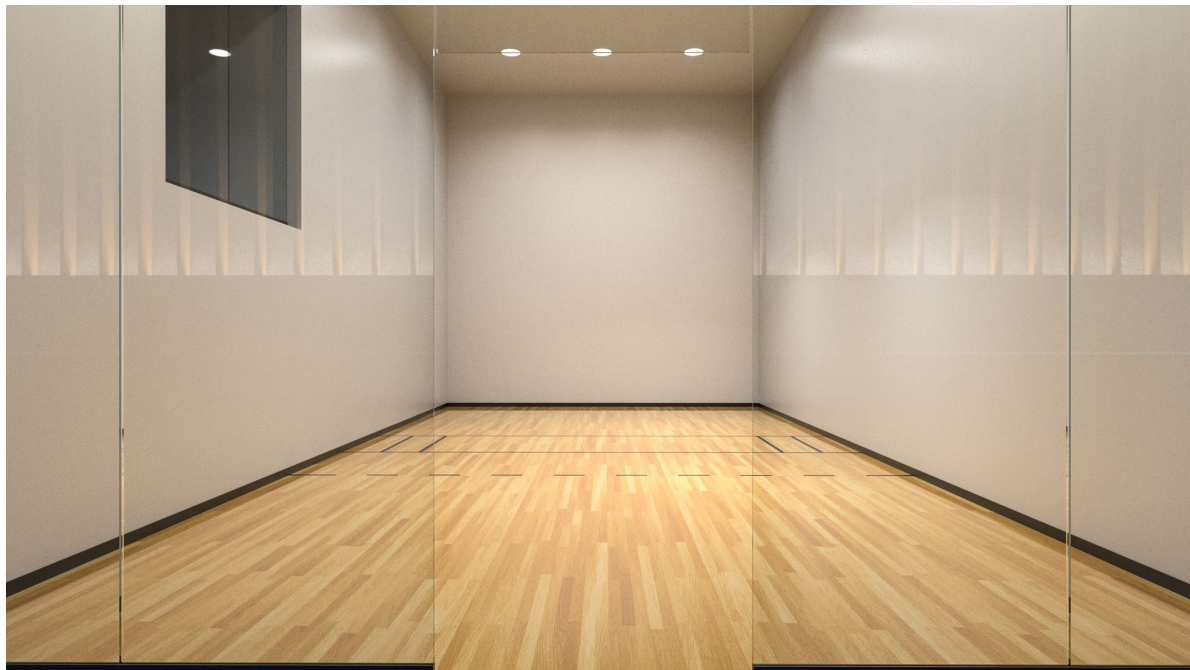
7. Additional Environmental Information

7.1 ENVIRONMENT AND HEALTH DURING INSTALLATION

The PLAE Exceed flooring products meet the requirements of FloorScore® CDPH/EHLB Standard Method v1.2-2017 (California Section 01350)

7.2 ENVIRONMENTAL ACTIVITIES AND CERTIFICATIONS

For more information on PLAE' certifications and environmental initiatives please view the website at www.plae.us



8. References

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