

## ENVIRONMENTAL PRODUCT DECLARATION

# COLORSTRAND NYLON ON ECOFLEX™ NXT

MOHAWK GROUP  
PREMIUM MODULAR BACKING SYSTEM



### EcoFlex NXT

Designed to be environmentally proactive, our innovative carpet tile takes your spaces to a higher standard of sustainability.



Sustainability is a core value for Mohawk. In addition to being the largest flooring manufacturer in the world, Mohawk is unique among other flooring manufacturers in that we produce every component of the carpet: fiber, yarn, carpet cushion, and carpet backing. Our culture drives us to seek innovation and efficiency throughout the life cycle of our products, thus reducing our consumption of water, energy, and raw materials. Mohawk also has the most diverse recycling programs in the industry. Through our nation-wide network of partners, we recycle post-consumer carpet and fiber which is subsequently repurposed in the manufacture of other products. Additionally, Mohawk is the nation's largest recycler of plastic bottles which are processed and spun into carpet and backing at our own facilities. Through third-party verification, Mohawk embraces transparency for the benefit of both itself and its customer.

For more information visit:  
[mohawkgroup.com](http://mohawkgroup.com)



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**EcoFlex™ NXT**  
Commercial Modular Floor Covering



According to ISO 14025,  
EN 15804 and ISO 21930:2017

EPD PROGRAM AND PROGRAM OPERATOR NAME, ADDRESS, LOGO, AND WEBSITE	UL Solutions 333 Pfingstn Rd, Northbrook IL, 60062 <a href="http://www.ul.com">www.ul.com</a> <a href="http://www.spot.ul.com">www.spot.ul.com</a>
GENERAL PROGRAM INSTRUCTIONS AND VERSION NUMBER	UL Solutions Program Operator Rules v. 2.7 2022
MANUFACTURER NAME AND ADDRESS	Mohawk Industries, Inc. 160 Industrial Blvd., Calhoun, GA 30701
DECLARATION NUMBER	4792152434.101.1
DECLARED PRODUCT & FUNCTIONAL UNIT OR DECLARED UNIT	ColorStrand on EcoFlex™ NXT Functional Unit = 1 m <sup>2</sup>
REFERENCE PCR AND VERSION NUMBER	PCR for Building-Related Products and Services – Part A: Calculation Rules for LCA and Requirements, (UL Environment, V4), Part B: Flooring EPD Requirements UL 10010-7 v2.0 September 2018
DESCRIPTION OF PRODUCT APPLICATION/USE	Modular Carpet Tiles Floor Covering
PRODUCT RSL DESCRIPTION (IF APPL.)	15 Years
MARKETS OF APPLICABILITY	North America
DATE OF ISSUE	June 17 <sup>th</sup> , 2026
PERIOD OF VALIDITY	5 Years
EPD TYPE	Product-specific
RANGE OF DATASET VARIABILITY	N/A
EPD SCOPE	Cradle to Grave
YEAR(S) OF REPORTED PRIMARY DATA	2022
LCA SOFTWARE & VERSION NUMBER	Sphera LCA for Experts (fka GaBi) 2023.02
LCI DATABASE(S) & VERSION NUMBER	Sphera Managed LCA Content (fka GaBi) 2023.02
LCIA METHODOLOGY & VERSION NUMBER	CML 2001-Jan 2016 and TRACI 2.1

The PCR review was conducted by:	UL Solutions
	PCR Review Panel
	<a href="mailto:epd@ul.com">epd@ul.com</a>
This declaration was independently verified in accordance with ISO 14025: 2006. <input type="checkbox"/> INTERNAL <input type="checkbox"/> EXTERNAL	Cooper McCollum, UL Solutions 
	Mohawk Industries, Inc.
This life cycle assessment was conducted in accordance with ISO 14044 and the reference PCR by:	
This life cycle assessment was independently verified in accordance with ISO 14044 and the reference PCR by:	Beth Cassese, Horizon LCA 

## 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. When comparing EPDs created using this PCR, variations and deviations are possible. Example of variations: Different LCA software and background LCI datasets may lead to different results for upstream or downstream of the life cycle stages declared.

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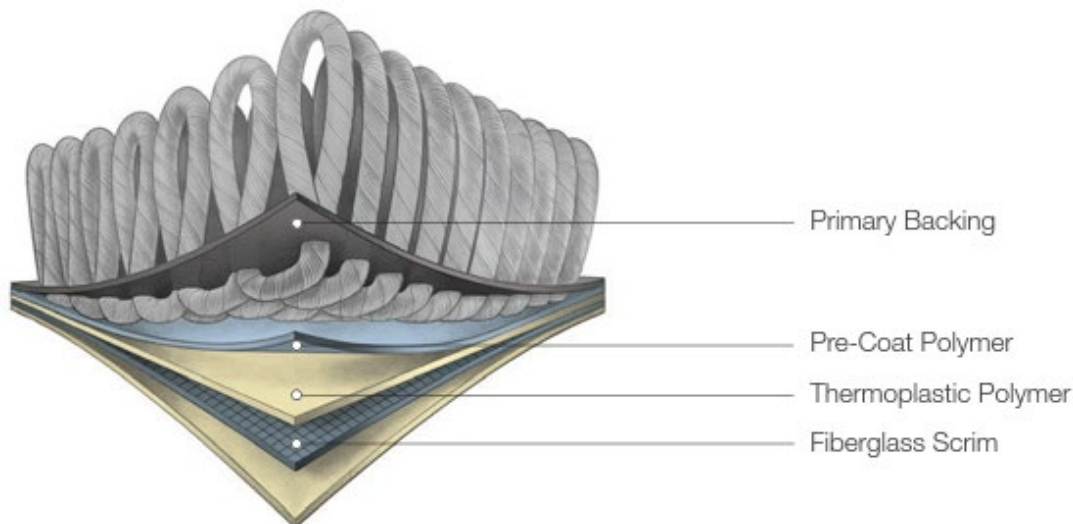
## 1. Product Definition and Information

### 1.1. Description of Company/Organization

Mohawk is a leading manufacturer of carpet, wood, laminate, and luxury vinyl tile flooring that began in 1878. Mohawk is committed to growing in ways that are environmentally sound, socially responsible, and make sense for their stakeholders. The Mohawk Group strives to design and manufacture innovative products with reduced environmental and social impacts. As part of the world's largest flooring manufacturer, Mohawk feels a profound sense of responsibility to advance their shared mission of a more sustainable future.

### 1.2. Product Description

#### Product Identification



EcoFlex™ NXT is a modular carpet tile consisting of a nylon face fiber tufted into a primary backing; pre-coated with an acrylate polymer to lock the tufts into place; back coated with polyolefin polymer and fiberglass scrim for stability.

Due to a range of face weights offered with this product, a face weight of 21 oz/yd<sup>2</sup> (712 g/m<sup>2</sup>) was used, which is the highest volume sold for this product line. This face weight is presented for the impacts. This EPD is specific to the product weight of 3.17 kg/m<sup>2</sup> total weight.

#### Product Specification

This product is covered by UNSPSC code 30161700 and CSI Masterformat code 09 60 00 – Flooring.

The product declared in this document complies with the following testing standards: TARR Rating-Severe, Flammability-ASTM E648 Class 1 – Glue Down, Static Propensity-AATC 134 under 3.5 KV, Smoke Density-ASTM E662 less than 450.

Comparison of the environmental performance of construction works and construction products using EPD information shall be based on the product's use and impacts at the construction works level. In general, EPDs may not be used for comparability purposes when not considered in a construction works context. Given this PCR ensures products meet



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the same functional requirements, comparability is permissible provided the information given for such comparison is transparent and the limitations of comparability explained.

## 1.3. Application

EcoFlex NXT products are designed to be used in commercial applications such as health care, education, hospitality, and retail. The product can also be used residentially if desired.

## 1.4. Declaration of Methodological Framework

This LCA is a cradle-to-grave study. This EPD covers the entire life cycle of the product from cradle to grave (modules A1-D) excluding modules for which there are no inputs/outputs. A summary of the life cycle stages can be found in Table 5.

The reference service life is 15 years and is only applicable if all manufacturing guidelines are followed regarding site-selection, installation, and maintenance.

The cut-off criteria are described in Section 2.4 and allocation procedures are described in Section 2.8. No known flows are deliberately excluded from this EPD.

## 1.5. Technical Requirements

The following technical data describe the product undergoing life cycle assessment.

Table 1. Technical Data

NAME	VALUE	UNIT
Yarn Type	Nylon	-
Primary Backing Type	Polyester	-
Secondary Backing Type	Polyolefin	-
CRI Rating	Heavy	2.5 Moderate, 3.0 Heavy, 3.5 Severe
Total Thickness	6.86	mm
Product Weight	3170	g/m <sup>2</sup>
Surface Pile Thickness	2.24	mm
Surface Pile Weight	712	g/m <sup>2</sup>

## 1.6. Properties of Declared Product as Delivered

EcoFlex NXT modular carpet tiles come in sizes of 24"x24", 12"x36", and 24"x48". The tiles are stacked and a cardboard wrapping is placed around the stack to protect the product. These boxes are then stacked on pallets and wrapped for shipment.



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## 1.7. Material Composition

The materials that make up the product are indicated in Table 2

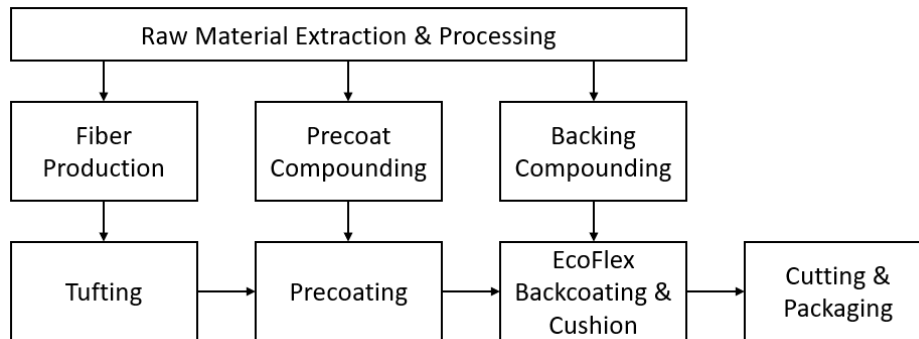
Table 2. Material Composition

COMPONENT	MATERIAL	MASS %
Face Fiber	Nylon	23%
Primary Backing Type	Polyester Polypropylene	3%
Coating	Butadiene-Acrylate Calcium Carbonate Polyolefin	72%
Scrim	Fiberglass	2%

## 1.8. Manufacturing

EcoFlex NXT products are manufactured in Glasgow, VA. Nylon fiber is tufted into primary backing, a latex precoat is applied, then a secondary coating is adhered to the back with a fiberglass scrim. These sheets are then cut into tiles, packaged, and loaded into trucks for shipment to customers.

### Flow Diagram



## 1.9. Packaging

Packaging utilized in the shipment of the product is described in Table 3.

Table 3. Packaging

PACKAGING TYPE	MATERIAL	AMOUNT (KG/M <sup>2</sup> )	DISPOSAL PATHWAY
Wood Pallet	Wood	0.107	Landfill
Cardboard Box	Corrugate	0.010	Landfill / Recycling / Incineration
Plastic Wrap	Polyethylene Film	0.001	Landfill / Recycling / Incineration



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## 1.10. Transportation

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Transport of raw materials from supplier to the manufacturing facility by truck or ship is included in the model, but only an average has been listed here due to simplicity.

An average shipping distance from manufacturing location to the customer was assumed to be 500 miles (805 kilometers) by a Class 8 truck.

## 1.11. Product Installation

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Carpet installation requires site testing and conditioning for moisture, alkalinity, and proper preparation of the floor. This EPD assumes installation using FlexLok Tabs.

While installation equipment is required to install the flooring product, it is not included in the study as these are multi-use tools and the impacts per declared unit is considered negligible. All waste generated during installation, including packaging waste, is assumed to be disposed in a landfill.

Detailed installation instructions can be found at: [www.mohawkgroup.com/resources/installation-guides](http://www.mohawkgroup.com/resources/installation-guides)

## 1.12. Use

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Carpet should be cleaned in accordance with the product warranty instructions including vacuuming and extraction cleaning. The frequency is dependent upon the expected foot traffic and local conditions. It is recommended to vacuum once per week and deep clean once per year. The Reference Service Life (RSL) is 15 years.

Carpet products are traditionally not repaired or refurbished. If a single carpet tile gets stained or damaged, it can be removed and replaced with a new tile, assuming the correct installation method was used per the manufacturer's instructions.

Indoor emissions during use have been evaluated and certified by Green Label Plus. No health concerns are present during the normal use of the flooring.

## 1.13. Reference Service Life and Estimated Building Service Life

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The service life of carpet will vary depending on the amount of floor traffic and the type and frequency of maintenance. The level of maintenance is also dependent on the actual use and desired appearance of the floor. For this product the Reference Service Life (RSL) is 15 years. This means that the product will meet its functional requirements for an average of 15 years before replacement. The RSL is based off Mohawk's product warranty and carpet testing and is in line with the industry wide assumption that commercial office carpet tiles are replaced every 15 years. The estimated building service life is 75 years, as specified by the PCR.

## 1.14. Reuse, Recycling, and Energy Recovery

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Mohawk will take back and recycle used carpet via the ReCover program. Through this program, Mohawk works with a national network of carpet recyclers to ensure used carpet stays out of the landfill. Learn more about the program at <https://www.mohawkrecover.com/commercial>.

## 1.15. Disposal

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For this study, it is assumed that at the end of the useful life of the product, 100% is disposed through landfill, 0% is recycled, and 0% is incinerated.



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## 1.16. Further Information

Additional information on this product can be found at [www.mohawkgroup.com](http://www.mohawkgroup.com).

## 2. Life Cycle Assessment Background Information

### 2.1. Functional or Declared Unit

Per the PCR, the functional unit is 1 m<sup>2</sup> of floor covering over the reference service life of 15 years, as indicated in Table 4.

Table 4. Functional Unit

NAME	VALUE	UNIT
Functional Unit	1 m <sup>2</sup>	-
Mass	3.17	kg

### 2.2. System Boundary

This EPD is considered cradle-to-grave. The following modules are included and summarized in Table 5:

Table 5. System Boundary

MODULE NAME	DESCRIPTION	SUMMARY OF INCLUDED ELEMENTS
A1	Product Stage: Raw Material Supply	Raw Material sourcing and processing as defined by secondary data
A2	Product Stage: Transport	Shipping from supplier to manufacturing site. Fuel use requirements estimated based on product weights and estimated distance
A3	Product Stage: Manufacturing	Energy, water and material inputs required for manufacturing products from raw materials. Packaging materials and manufacturing waste are included as well
A4	Construction Process Stage: Transport	Shipping from manufacturing site to project site. Fuel use requirements estimated based on product weights and mapped distance
A5	Construction Process Stage: Installation	Installation adhesives, installation waste and packaging material waste
B1	Use Stage: Use	Use of the product
B2	Use Stage: Maintenance	Cleaning energy, water, and materials, including refinishing the product
B3	Use Stage: Repair	The product is not expected to require repair over its lifetime
B4	Use Stage: 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	Use Stage: Refurbishment	The product is not expected to require refurbishment over its lifetime
B6	Use Stage: Operational Energy Use	There is no operational energy use associated with the use of the product
B7	Use Stage: Operational Water Use	There is no operational water use associated with the use of the product
C1	EOL: De-construction Demolition	Demolition of the product is accomplished using hand tools with no associated emissions and negligible impacts

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C2	EOL: Transport	Shipping from project site to landfill. Fuel use requirements estimated based on product weight and mapped distance
C3	EOL: Waste Processing	Waste processing not required. All waste can be processed as is
C4	EOL: Disposal	Assumes all products are sent to landfill. Landfill impacts modeled based on secondary data

## 2.3. Estimates and Assumptions

All estimates and assumptions are within the requirements of ISO 14040/44. The majority of the estimations are within the primary data. The primary data was collected as annual totals including all utility usage and production information. For the LCA, the utility usage information was divided by the production to create an energy and water use per square meter. As there are different products produced at this facility, it is assumed all products are using the same amount of energy and water. A weighted average of product weight based on one year of sales data is used.

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, recommended maintenance is presented based on guidelines from the Carpet & Rug Institute: carpet-rug.org.

Transportation distances to installation and disposal were assumed to be 500 and 100 miles (805 and 161 kilometers), respectively.

## 2.4. Cut-off Criteria

All inputs in which data was available were included. Material inputs greater than 1% (based on total mass of the final product) were included within the scope of analysis. Material inputs less than 1% were included if sufficient data was available to warrant inclusion and/or the material input was thought to have significant environmental impact. Cumulative excluded material inputs and environmental impacts are less than 5% based on total weight of the functional unit.

## 2.5. Data Sources

Primary data were collected by facility personnel and from utility bills during calendar year 2022. Whenever available, supplier data was used for raw materials used in the production process. When primary data did not exist, secondary data for raw material production was utilized from GaBi 2023 Database.

## 2.6. Data Quality

### Temporal Coverage

The primary data provided by the manufacturer represent all information for calendar year 2022. Using this data meets the PCR requirements. Time coverage of this data is considered very good.

### Geographical Coverage

The geographical scope of the manufacturing portion of the life cycle is Glasgow, VA. All primary data were collected from the manufacturer. The geographic coverage of primary data is considered very good. Proxy datasets were used as needed for raw material inputs to address lack of data for a specific material or geographic region.



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## Technological Coverage

Primary data provided by the manufacturer is specific to the technology that Mohawk uses in manufacturing their product. It is site-specific and considered of good quality.

## Completeness

The data included in this EPD is considered complete. No know flows above 1% were excluded and the sum of all excluded flows total less than 5%, whether evaluated by mass, energy, or potential environmental impact.

### 2.7. Period under Review

The period under review is calendar year 2022.

### 2.8. Allocation

General principles of allocation were based on ISO 14040/44. Where possible, allocation was avoided. When allocation was necessary it was done for manufacturing utilities and waste by process. At sites where multiple processes take place, allocation of utilities was provided based on sub-metered data. Recycled content is calculated using mass balance.

No co- or by-product allocation was necessary during the manufacturing, use or end of life. In the case of secondary raw materials (i.e., recycled Nylon 6), only burdens from the point of recovery forward were considered (cut-off approach). The primary production of recycled materials was outside the system boundary.

## 3. Life Cycle Assessment Scenarios

Table 6. Transport to the building site (A4)

NAME	VALUE	UNIT
Fuel type	Diesel	
Liters of fuel	42	l/100km
Vehicle type	Truck – Heavy Heavy-duty Diesel/ 53,333 lb (8 b) payload	
Transport distance	800	km
Capacity utilization (including empty runs, mass based)	68	%
Gross density of products transported	175.75	kg/m <sup>3</sup>
Capacity utilization volume factor (factor: =1 or <1 or ≥ 1 for compressed or nested packaging products)	=1	-

Table 7. Installation into the building (A5)

NAME	VALUE	UNIT
Ancillary materials (Adhesive)	0.01	kg
Net freshwater consumption	0	m <sup>3</sup>
Electricity consumption	0	kWh
Other energy carriers	0	MJ



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Product loss per functional unit	0.02	kg
Waste materials at the construction site before waste processing, generated by product installation	0.13	kg
Output materials resulting from on-site waste processing	0	kg
Mass of packaging waste to Landfill (Wood)	1.07E-01	kg
Mass of packaging waste to Incineration (Wood)	0.00E+00	kg
Mass of packaging waste to Recycling (Wood)	0.00E+00	kg
Mass of packaging waste to Landfill (Paper)	2.09E-03	kg
Mass of packaging waste to Incineration (Paper)	5.23E-04	kg
Mass of packaging waste to Recycling (Paper)	7.85E-03	kg
Mass of packaging waste to Landfill (Plastic)	9.30E-04	kg
Mass of packaging waste to Incineration (Plastic)	2.32E-04	kg
Mass of packaging waste to Recycling (Plastic)	2.05E-04	kg
Biogenic carbon contained in packaging	0.103	kg CO <sub>2</sub>
Direct emissions to ambient air, soil and water	0	kg
VOC content	N/A	µg/m <sup>3</sup>

**Table 8. Reference Service Life**

NAME	VALUE	UNIT
RSL	15	years
Declared product properties (at the gate) and finishes, etc.	Solution-dyed nylon, PVC free backing	
Design application parameters (if instructed by the manufacturer, including references to the appropriate practices and application codes)	Interior use in commercial environments with high traffic level	
An assumed quality of work, when installed in accordance with the manufacturer's instructions	Install according to manufacturers instructions found at <a href="http://www.mohawkgroup.com/technical-resources/installation">www.mohawkgroup.com/technical-resources/installation</a> .	
Outdoor environment, (if relevant for outdoor applications), e.g. weathering, pollutants, UV and wind exposure, building orientation, shading, temperature	Not applicable	
Indoor environment, (if relevant for indoor applications), e.g. temperature, moisture, chemical exposure.	Interior, climate controlled (typical commercial building conditions)	
Use conditions, e.g. frequency of use, mechanical exposure	Foot traffic (high), rolling loads (chairs, carts)	
Maintenance, e.g. required frequency, type and quality of replacement components	Vacuuming once per week and deep clean once per year	

**Table 9. Maintenance (B2)**

NAME	VALUE	UNIT
Maintenance Cycle Vacuum	3,900	Cycles / ESL
Maintenance Cycle Deep Clean	75	Cycles / ESL
Net freshwater consumption specified by water source and fate (disposed to sewer)	2.65E-05	m <sup>3</sup>
Ancillary materials specified by type (cleaning agent)	0.007	kg/m <sup>2</sup>



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Other resources	-	kg
Vacuum Energy Input	1.75	kWh/m <sup>2</sup>
Other energy carriers specified by type	-	kWh
Power output of equipment	1.4	kW
Waste materials from maintenance	-	kg
Direct emissions to ambient air, soil and water	-	kg
Further assumptions for scenario development	Vacuuming once per week, deep cleaning once per year	

**Table 10. Replacement (B4)**

NAME	VALUE	UNIT
Reference Service Life	15	Years
Replacement Cycle	4	(ESL/RSL)-1
Energy input	-	kWh
Net freshwater consumption	-	m <sup>3</sup>
Ancillary materials	-	kg
Replacement of worn parts	-	kg
Direct emissions to ambient air, soil, and water	0	kg
Further assumptions for scenario development	-	As appropriate

**Table 11. End of life (C1-C4)**

NAME		VALUE	UNIT
Assumptions for scenario development	Product disposed of either with underlying floor or manually removed via scraping		
Collection process	Collected separately	0	kg
	Collected with mixed construction waste	3.17	kg
Recovery	Reuse	0	kg
	Recycling	0	kg
	Landfill	3.17	kg
	Incineration	0	kg
	Incineration with energy recovery	-	kg
	Energy conversion efficiency rate	-	
Disposal	Product or material for final deposition	3.17	kg
Removals of biogenic carbon (excluding packaging)		-	kg CO <sub>2</sub>



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## 4. Life Cycle Assessment Results

Table 12. Description of the system boundary modules

The LCA scope is cradle-to-grave. Note that modules B1, B3, B5-B7, C1, and C3 have no environmental impacts and are excluded from results tables to improve readability. Module D is excluded from this analysis.

(X = Included; MND = Module Not Declared)

	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
Cradle-to-Grave	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	MND

### 4.1. Life Cycle Impact Assessment Results

Table 13. North American Impact Assessment Results

TRACI v2.1	A1-A3	A4	A5	B2	B4	C2	C4
GWP 100 [kg CO <sub>2</sub> eq]	8.72E+00	2.09E-01	1.74E-01	6.52E+00	3.68E+01	4.05E-02	6.65E-02
ODP [kg CFC-11 eq]	9.23E-09	5.42E-16	5.54E-11	6.79E-13	3.71E-08	1.05E-16	3.26E-15
AP [kg SO <sub>2</sub> eq]	1.59E-02	9.67E-04	7.60E-04	9.35E-03	7.24E-02	1.14E-04	3.52E-04
EP [kg N eq]	1.56E-03	8.57E-05	1.54E-04	7.98E-04	8.34E-03	1.19E-05	2.77E-04
SFP [kg O <sub>3</sub> eq]	2.64E-01	2.24E-02	4.90E-03	1.27E-01	1.20E+00	2.60E-03	6.41E-03
ADP <sub>fossil</sub> [MJ, LHV]	2.48E+01	3.91E-01	2.81E-01	7.23E+00	1.03E+02	7.60E-02	1.33E-01

GWP 100 = Global Warming Potential; ODP = Ozone Depletion Potential; AP = Acidification Potential; EP = Eutrophication Potential; SFP = Smog Formation Potential; ADP<sub>fossil</sub> = Abiotic Depletion Potential (Fossil)

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



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advances in their development. However, the EPD users shall not use additional measures for comparative purposes.

Table 14. EU Impact Assessment Results

CML v4.2	A1-A3	A4	A5	B2	B4	C2	C4
GWP 100 [kg CO <sub>2</sub> eq]	8.80E+00	2.10E-01	1.85E-01	6.56E+00	3.72E+01	4.07E-02	6.70E-02
ODP [kg CFC-11 eq]	8.50E-09	3.03E-14	5.12E-11	3.78E-11	3.42E-08	5.89E-15	1.82E-13
AP [kg SO <sub>2</sub> eq]	1.37E-02	7.01E-04	4.03E-04	8.85E-03	6.07E-02	8.36E-05	3.31E-04
EP [kg PO <sub>4</sub> <sup>-3</sup> eq]	2.34E-03	2.05E-04	2.32E-04	9.58E-04	1.27E-02	2.59E-05	3.60E-04
POCP [kg ethene eq]	2.73E-03	-2.60E-	1.00E-04	6.77E-04	1.03E-02	-2.91E-05	2.49E-05
ADP <sub>element</sub> [kg Sb-eq]	1.07E-05	1.54E-08	1.51E-07	6.32E-07	4.36E-05	3.00E-09	1.99E-08
ADP <sub>fossil</sub> [MJ, LHV]	1.86E+02	2.93E+00	2.10E+00	8.26E+01	7.71E+02	5.70E-01	1.03E+00

GWP 100 = Global Warming Potential; ODP = Ozone Depletion Potential; AP = Acidification Potential; EP = Eutrophication Potential; POCP = Photochemical Oxidant Creation Potential; ADP<sub>element</sub> = Abiotic Depletion Potential (elements); ADP<sub>fossil</sub> = Abiotic Depletion Potential (Fossil)

## 4.2. Life Cycle Inventory Results

Table 15. Resource Use

Parameter	A1-A3	A4	A5	B2	B4	C2	C4
RPRE [MJ, LHV]	1.51E+01	1.18E-01	2.80E-01	2.67E+01	6.26E+01	2.29E-02	1.24E-01
RPRM [MJ, LHV]	3.74E-03	0.00E+00	2.24E-05	0.00E+00	1.51E-02	0.00E+00	0.00E+00
NRPRE [MJ, LHV]	1.50E+02	2.95E+00	1.68E+00	1.13E+02	6.25E+02	5.75E-01	1.06E+00
NRPRM [MJ, LHV]	5.43E+01	0.00E+00	5.65E-01	0.00E+00	2.20E+02	0.00E+00	0.00E+00
SM [kg]	1.75E+00	0.00E+00	1.05E-02	0.00E+00	7.03E+00	0.00E+00	0.00E+00
RSF [MJ, LHV]	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NRSF [MJ, LHV]	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
RE [MJ]	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
FW [m <sup>3</sup> ]	3.80E-02	4.03E-04	6.17E-04	4.59E-02	1.57E-01	7.85E-05	1.31E-04

RPRE = Renewable primary resources used as energy carrier (fuel); RPRM = Renewable primary resources with energy content used as material; NRPRE = Non-renewable primary resources used as an energy carrier (fuel); NRPRM = Non-renewable primary resources with energy content used as material; SM = Secondary materials; RSF = Renewable secondary fuels; NRSF = Non-renewable secondary fuels; RE=Recovered energy; FW = Use of net freshwater resources



# ENVIRONMENTAL PRODUCT DECLARATION



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According to ISO 14025,  
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**Table 106. Output Flows and Waste Categories**

Parameter	A1-A3	A4	A5	B2	B4	C2	C4
HWD [kg]	2.44E-06	8.49E-12	1.47E-08	-1.37E-09	9.82E-06	1.65E-12	2.65E-11
NHWD [kg]	7.54E-01	2.57E-04	9.62E-02	3.86E-02	1.61E+01	5.00E-05	3.16E+00
HLRW [kg]	7.79E-06	1.00E-08	6.30E-08	1.31E-05	3.15E-05	1.95E-09	1.31E-08
ILLRW [kg]	6.52E-03	8.46E-06	5.36E-05	1.09E-02	2.64E-02	1.65E-06	1.17E-05
CRU [kg]	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MR [kg]	3.37E-02	0.00E+00	8.26E-03	0.00E+00	1.68E-01	0.00E+00	0.00E+00
MER [kg]	2.41E-03	0.00E+00	7.70E-04	0.00E+00	1.27E-02	0.00E+00	0.00E+00
EEE [MJ, LHV]	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
EET [MJ, LHV]	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; HLRW = High-level radioactive waste; ILLRW = Intermediate- & low-level radioactive waste; CRU = Components for reuse; MR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported energy, electrical; EET = Exported energy, thermal

## 5. LCA Interpretation

The analysis results represent cradle-to-grave environmental performance of EcoFlex NXT modular carpet products. The top three contributors to each impact category are shown in Table 17.

**Table 17. Highest Contributions by Impact Category**

Impact Category	CONTRIBUTORS		
	LARGEST	2ND	3RD
Global Warming Potential, GWP	A1-A3	B2	A4
Ozone Depletion Potential, ODP	A1-A3	B2	C4
Acidification Potential, AP	A1-A3	B2	C4
Eutrophication Potential, EP	A1-A3	C4	B2
Depletion of abiotic resources – fossil fuels, ADPf	A1-A3	B2	C4

The production section (A1-3) was the largest contributor in most of the five impact categories considered. The production of raw materials represents a substantial fraction of the life cycle impacts. Maintenance (B2) was the second highest contributor for many of the five impact categories. If the maintenance of the product was considered for the reference service life, it would be expected to have a much larger impact.

As a total, Raw Material Supply & Transport and Product Manufacturing (A1-3) represent the largest contributor by life stage. Within the raw materials, the nylon face fiber has a very large contribution to the environmental impacts even though it represents roughly 25% of the total mass of the product. Maintenance (B2) has the second largest impact overall, followed by Transport to Site (A4) and Disposal (C4).



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According to ISO 14025,  
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## 6. Additional Environmental Information

### 6.1. Environment and Health During Manufacturing

All substances with hazardous and toxic properties that can be of concern for human health and/or the environment have been identified, if present in the product, and declared according to normative requirements in standards or regulations applicable in the market for which the EPD is valid, even if the given process unit is under the cut-off criterion. More information on the manufacturer's sustainability and environmental programs, including a corporate sustainability report, can be found online at [mohawkgroup.com](http://mohawkgroup.com).

### 6.2. Environment and Health During Installation

All recommended personal protective equipment (PPE) should be utilized during installation, as indicated on the SDS and installation guidelines, found online at [mohawkgroup.com/technical-resources/installation](http://mohawkgroup.com/technical-resources/installation).

### 6.3. Extraordinary Effects

#### Fire

NAME	VALUE
Radiant panel (ASTM E-648)	Class 1
Smoke density (ASTM E-662)	<450

#### Water

Should the product become flooded, the water should be removed through means of extraction and drying and the product should behave as originally intended. There are no environmental impacts associated with the product being flooded.

#### Mechanical Destruction

If the product is mechanically destroyed, it should be disposed of using standard procedures and replaced in a timely manner.

### 6.4. Environmental Activities and Certifications

All environmental activities and certificates can be found at [mohawkgroup.com](http://mohawkgroup.com).

EcoFlex NXT with nylon face fiber is Living Product Challenge (LPC) Petal certified by the International Living Future Institute (ILFI) under version 2.0. The products achieve Net Positive Carbon via LPC, meaning it goes beyond just carbon-neutral manufacturing. Mohawk expands the net positive carbon impact to cover all commercial platforms through their Beyond Carbon Neutral (BCN) campaign. Each year, Mohawk retires the equivalent of 105% of the cradle-to-gate GWP to cover all sales of the certified products. This is third-party verified by ILFI annually. The resulting GWP is shown in Table 17. More information on LPC can be found at [www.mohawkgroup.com](http://www.mohawkgroup.com).





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According to ISO 14025,  
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## 7. References

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ISO 14025	ISO 14025:2011-10 Environmental labels and declarations – Type III environmental declarations – Principles and procedures
ISO 14040	ISO 14040:2006/Amd.1:2020 Environmental management – Life cycle assessment – Principles and framework
ISO 14044	ISO 14044:2006/Amd.1:2017/Amd.2:2020 Environmental management – Life cycle assessment – Requirements and guidelines
ISO 21930	ISO 21930:2017 Sustainability in buildings and civil engineering works – Core rules for environmental product declarations of construction products and services
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