

INVISION

J+J FLOORING GROUP

Environmental Product Declaration

eKo[®] Modular Backing



As a smaller, highly integrated, privately-owned manufacturer, J+J Flooring Group has the flexibility to easily monitor and modify our footprint while pursuing innovative sustainable practices. As a company we believe that products should be evaluated holistically using a multi-attribute approach, rather than focusing on single product attributes or certifications. With conservation as the core of our sustainability initiatives, we've developed aggressive goals on energy and emissions reduction, water conservation, recycled content and waste minimization.



INVISION

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ENVIRONMENTAL PRODUCT DECLARATION VERIFICATION

EPD INFORMATION

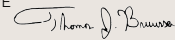
PROGRAM OPERATOR **NSF International**

DECLARATION HOLDER **J+J Flooring Group** 818 J&J Drive, Dalton GA 30722 PO Box 1287

PRODUCT	DATE OF ISSUE	PERIOD OF VALIDITY	DECLARATION NUMBER
eKo [®]	June 7, 2013	5 years	EPD10002

This EPD was independently verified by NSF International in accordance with ISO 14025:

SIGNATURE OF REPRESENTATIVE



Internal

External

NAME OF REPRESENTATIVE
Thomas J. Bruursema

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SIGNATURE OF REPRESENTATIVE



This life cycle assessment was independently verified by in accordance with ISO 14044 and the reference PCR:

NAME OF REPRESENTATIVE
Jack Geibig

CONTACT INFORMATION FOR REPRESENTATIVE
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LCA INFORMATION

Basis LCA

TITLE OF LCA

J&J Industries Inc. LCA Report: Fiscal year 2012

DATE OF ISSUE
May 2013

LCA Preparer

NAME OF PREPARER
Brad McAllister

ORGANIZATION OF PREPARER
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This life cycle assessment was critically reviewed in accordance with ISO 14044 by:

NAME OF CRITICAL REVIEWER
Jack Geibig

ORGANIZATION OF REVIEWER
Ecoform

CONTACT INFORMATION FOR REVIEWER
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PCR INFORMATION

PROGRAM OPERATOR

NSF International

REFERENCE PCR

Flooring: Carpet, Resilient, Laminate, Ceramic, Wood

DATE OF ISSUE

May 22, 2012

PCR review was conducted by:

NAME OF CHAIR
Dr. Michael Overcash

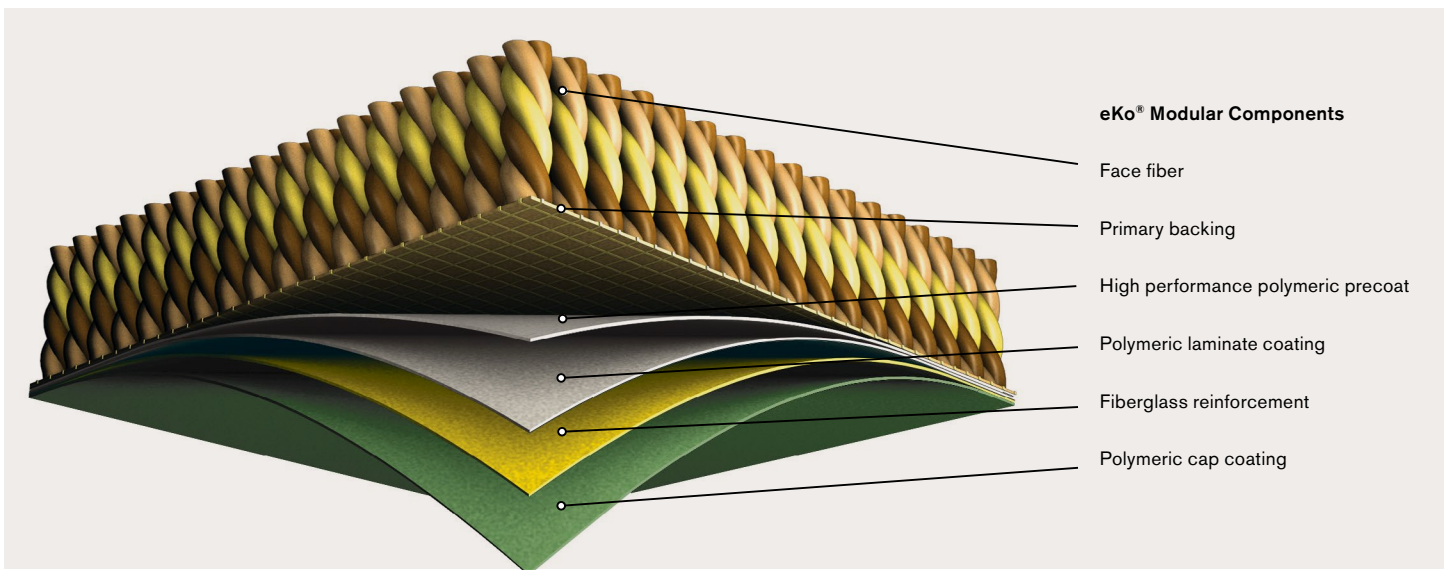
ORGANIZATION OF CHAIR
Environmental Clarity

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eKo[®]

PRODUCT DESCRIPTION

Carpet tile with polyethylene based backing chemistry. Carpet face composition may include either Nylon 6,6 or Nylon 6 fibers that have been dyed using beck dyeing, space dyeing and/or solution dyeing techniques. Product contains both pre-consumer and post-consumer recycled content. Product is manufactured at plants in Dalton and Calhoun, Georgia.



Applicability

Product is intended for use as a soft floor covering in medium-to-high traffic commercial applications.

PRODUCT CHARACTERISTICS

Type of manufacture	Modular Carpet Tile	
Yarn type	Nylon (either 6 or 6.6), 19-32 oz/yd ²	
Additional characteristics per NSF/ANSI 140	Fully Recyclable	
Sustainable certifications	Certified Platinum to NSF/ANSI 140 BREEAM Certification	
VOC emissions test method	Green Label Plus (GLP)	
CRI- TARR rating	≤ 3.5	
CHARACTERISTICS	NOMINAL VALUE	UNIT
Total thickness	4.88 – 6.32 (0.192 - 0.249)	mm (inch)
Product weight	2765 - 3575 (99-128)	g/m ² (oz/yd ²)
Surface pile thickness	2.51 – 5.33 (0.099 – 0.210)	mm (inch)
Number of tufts or loops /dm ²	6.45 – 10.06 (100 - 156)	dm ² (in ²)
Surface pile weight	531 - 894 (19 -32)	g/m ² (oz/yd ²)
Pile fiber composition	100% N6 or 100% N6.6	%
Secondary backing	PE eKo® backing	Thermoplastic

List of Product Standards

TEST	RESULT
AATCC2 Test Method 134-2011 Electrostatic Propensity of Carpets (Normative value ≤ 3.5 KV)	≤ .7 KV
AATCC2 Test Method 16-2004 Colorfastness to Light (minimum grade 4 at 40 AFU)	Met minimum grade 4 at 40 AFU
ASTM6 E648 Standard Test Method for Critical Radiant Flux of Floor-Covering Systems Using a Radiant Heat Energy Source	Class 1, > 0.45
ASTM6 E662 Standard Test Method for Specific Optical Density of Smoke Generated by Solid Materials	< 450
ASTM6 D5252 Standard Practice for the Operation of the Hexapod Tumble Drum Tester	3.5
ASTM6 D7330 Standard Test Method for Assessment of Surface Appearance Change in Pile Floor Coverings Using Standard Reference Scales	3.5
ISO14 2551/ ASTM6 Dimensional Stability (Modular Tiles Only)	.0062" (Machine Directional), .0037" (cross Directional)

MATERIAL CONTENT

COMPONENT	MATERIAL	MASS %	AVAILABILITY			ORIGIN OF RAW MATERIALS
			RENEWABLE	NON-RENEWABLE	RECYCLED	
Pile Material	Nylon 6	14.7%		Fossil resource, limited		US
	Nylon 6,6	6.9%		80% Fossil resource, limited	20% Recycled content	US
Primary Backing	PET	3%		Fossil resource, limited		US
Precoat	Styrene-butadiene Polymer	14%		Fossil resource, limited		US
	Calcium Carbonate			Mineral, abundant		US
	ATH			Mineral, limited		US
Coated Backing	Polyethylene Copolymer	59%		Fossil resource, limited		US
	Coal Fly Ash				Industrial byproduct, abundant	US
	Glass Cullet				Mineral, abundant	US
Stabilizing Layer	Woven / Non Woven Glass	2.4%		Mineral, abundant		US

Production of main materials

Nylon 6,6: A synthetic fossil based polymer synthesised by polycondensation of hexamethylenediamine and adipic acid.

Nylon 6: A synthetic fossil based polymer synthesized by ring opening polymerization of caprolactam.

Polyethylene Terephthalate (PET): A synthetic fossil based polymer produced from ethylene glycol and dimethyl terephthalate or terephthalic acid.

Styrene-Butadiene Polymer: Class of synthetic rubber that is derived from styrene and butadiene.

Calcium Carbonate: A common substance found in rocks in all parts of the world, primarily extracted through mining or quarrying.

Aluminum hydroxide: Inorganic mineral substance manufactured by dissolving bauxite in sodium hydroxide at temperatures up to 270°C

Polyethylene Copolymer Resin: Class of synthetic fossil based polymers produced from the polymerization of ethylene.

Coal Fly Ash: A by-product generated in combustion, specifically in the generation of energy from coal.

Glass Cullet: Finely ground recycled glass from Post-consumer sources such as bottles.

Woven / Non-Woven Glass: Glass fibers in sheet form. Produced primarily from the mining and processing of silica.

LIFE CYCLE ASSESSMENT STAGES AND REPORTED EPD INFORMATION

Sourcing/Extraction (Raw Material Acquisition) Stage

The exact route will vary based on each individual raw material's specific supply chain. In general, a material begins via extraction from the Earth or from pre- or post-consumer recycled feedstock and moves through a series of processing steps prior to being received at a manufacturing facility. Processing may include the addition or removal of supplemental materials and/or by-products. A series of transportation steps are required to move intermediate goods between facilities. Transportation modes may include truck, rail, sea freight and/or air.



Manufacturing Stage

The manufacturing process involves first extruding nylon raw material into fiber (1), and then processing the fiber into yarn (2). Once the yarn is manufactured, the next steps in the manufacturing process include tufting the yarn onto the primary backing (3), followed by dyeing as needed (4). After the intermediate goods are colored as specified, then they are finished (5), cut into modular tiles (6) and finally packaged for final shipment (7).



HEALTH, SAFETY, AND ENVIRONMENTAL ASPECTS DURING PRODUCTION

- ISO14001 Environmental Management System
- Compliance with local, state and federal regulations relating to the environment and workplace safety
- Part of corporate Design for Environment program of J+J Flooring Group
- Meets requirements within the Public Health and Environment section of NSF140
- Corporate workplace safety program
- Utilization of LEAN manufacturing principles for the reduction of waste during production

PRODUCTION WASTE

J+J Flooring Group strives to reduce all production waste through increased efficiency and utilization of raw materials. Any remaining waste that is generated is reclaimed and reused in the manufacturing process or sent to recycling partners. J+J Flooring Group has a strategic goal to be landfill free by 2020.

Delivery and installation stage

DELIVERY

J+J Flooring Group is provided to both the domestic and international marketplace. Domestic shipments are typically completed by truck, whereas international shipments utilize ocean freight and truck. The delivery distance to each job site is project specific and J+J Flooring Group requests that customers contact their sales representative for details regarding delivery options.

INSTALLATION

Installation of carpet can be accomplished through two methods, including the use of J+J Flooring Group's Tile Tabs® or the eKoTac® Aqueous Adhesive. Full instructions regarding installation of carpet are provided in the J+J Flooring Group's Carpet Installation handbook located at:

<http://www.jj-invision.com/pages/technical-carpet-installation-maintenance>

HEALTH, SAFETY AND ENVIRONMENTAL ASPECTS DURING INSTALLATION

Adhesives used during installation meet the requirements of California South Coast Air Quality Management District Rule #1168 or are in accordance with the emissions requirements in California Department of Public Health Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers, Version 1.1, February 2010 (also known as CA 01350 or may be referenced as Floor-Score or Green Label Plus approved).

The MSDS's for installation adhesives can be viewed at:

<http://www.jj-invision.com/pages/premium-carpet-adhesive>

INSTALLATION WASTE

Packaging waste generated during the installation phase can be recycled with local recycling options. For more details regarding J+J Flooring Group's Carpet Reclamation program, please call **1.800.241.4586** or visit:

<http://www.jj-invision.com/pages/Carpet-Reclamation/>

PACKAGING

Prior to shipping, carpet tiles are protected in plastic bags and packaged in cardboard boxes that contain recycled content. Boxes are stacked and shipped on wooden pallets. The boxes are secured to the pallet with thin film plastic wrap (LLDPE). All materials are recyclable through local recycling options.

Use Stage

USE OF THE FLOOR COVERING

The reference service life of J+J Flooring Group carpet is 15 years, although J&J's carpet may be replaced sooner due to changes in fashion. We are proud to offer to the market a limited lifetime warranty on most of our products.

CLEANING AND MAINTENANCE

The LCA was modeled with the following cleaning and maintenance assumptions::

LEVEL OF USE	CLEANING PROCESS	CLEANING FREQUENCY (TIMES / YEAR)	CONSUMPTION OF ENERGY AND RESOURCES
Commercial	Vacuum Cleaning	4 times / week	Electrical Energy
	Rinse Cleaning	2 times / year	Electrical Energy, Water
	Deep Cleaning (extraction)	2 times / year	Electrical Energy, Water, cleaning agent.

STRUCTURAL DAMAGE

Carpet should not be installed until all structural damage has been adequately repaired and determined to be code compliant.

End of Life Stage**RECYCLE, REUSE, OR REPURPOSE**

It is recommended that customers utilize J+J Flooring Group's carpet reclamation program for the recycling of J+J Flooring Group carpet. To initiate the carpet reclamation process, please call **1.800.241.4586** or visit:

<http://www.jj-invision.com/pages/Carpet-Reclamation/>

DISPOSAL

Recycling of J+J Flooring Group's carpet is recommended. However, carpet can be disposed of in municipal landfills or sent to waste-to-energy facilities (subject to local regulations). To maintain a conservative LCA approach, end of life options included landfill disposal, waste-to-energy, and reclamation/recycling. Rates of each option were based on research and public reporting of the Carpet America Recovery Effort (CARE).

LIFE CYCLE ASSESSMENT (LCA)**General**

A cradle-to-grave life cycle assessment (LCA) was conducted in accordance to the ISO14040/14044 series of standards. Additionally, external third parties critically reviewed the LCA study. The LCA assessed the Sourcing/Extraction, Manufacturing Delivery and Installation, Use, and End-of-life stages of the product's life cycle.

Description of the functional unit

The functional unit is 1 square meter of carpet. The service life of the carpet is 15 years.

Cut-off criteria

Excluded materials met the following criteria:

- Less than 1% of the total mass of the final product
- Less than 1% of the total energy flows
- Total excluded materials did not exceed 5% of final product.
- Were identified as not having disproportionately high environmental impact.

Allocation

Background data used in the LCA model may contain some allocation. Primary data for J+J Flooring Group production was not allocated.

Background data

The LCA was modeled using the GaBi 6 software platform. Background data was typically sourced from PE International datasets, although some data from PlasticsEurope and the USLCI database were utilized when appropriate PE datasets were not available.

Data quality

Time Related Coverage: All gate-to-gate manufacturing data was sourced from J+J Flooring Group's most recently completed fiscal year. The time coverage of background data is adopted from the specific datasets utilized in the model. Priority was given to the most up-to-date dataset available at the time the model was created. No background data is more than 10 years old.

Geographical Coverage: All gate-to-gate manufacturing data are specific to J+J Flooring Group's locations and have been verified through third-party certification programs. The Geographical Coverage background data is adopted through the use of the specific datasets utilized in the model. In general, domestic data were preferred, however the absence of US specific data required some international data to be utilized.

Technology coverage: Data utilized in the model represent the most current technology.

System boundaries

The LCA of 1 M² of J+J Flooring Group's carpet includes:

- Sourcing/Extraction Stage
- Manufacturing Stage
- Delivery and Installation Stage
- Use Stage
- End of Life Stage



Notes on use stage

Carpet manufactured by J+J Flooring Group carries a limited lifetime warranty. While the actual lifetime of the carpet is contingent on several factors, including changing style preference and building traffic, J+J Flooring Group has assumed a 15 year service life in the LCA model. Results are presented for a single year of use, as well as for a 60-year reference service life of a building.

Results of Assessment

LIFE CYCLE INVENTORY ANALYSIS

Face Fiber Weight	15 OZ / SY	23 OZ / SY	37 OZ / SY
Primary Energy - Non-Renewable (MJ)	200.09	245.76	325.67
Lignite (%)	0.62%	0.65%	0.67%
Mineral Coal (%)	12.08%	11.76%	11.43%
Natural Gas (%)	46.07%	43.71%	41.16%
Oil (%)	35.44%	38.20%	41.18%
Nuclear (%)	5.79%	5.68%	5.56%
Primary Energy - Renewable (MJ)	28.25	38.62	56.77
Hydropower (%)	3.89%	3.48%	3.12%
Windpower (%)	89.15%	90.72%	92.09%
Solar Energy (Solar Power, Biomass) (%)	6.43%	5.32%	4.36%
Geothermics (%)	0.53%	0.48%	0.44%
Secondary Fuels (MJ)	0	0	0
Non-Renewable Material Sources (kg)	6.87	8.32	10.85
Output Flows			
Non-Hazardous Waste (kg)	6.48	7.91	10.4
Hazardous Waste (kg)	0	0	0

LIFE CYCLE IMPACT ASSESSMENT

CML2001 - NOV. 2010 RESULTS

Table A

The Flooring: Carpet, Resilient, Laminate, Ceramic, Wood PCR is currently under expert review. It is expected that this review will conclude that *Table A: Life Cycle Impacts for a One Year Use Stage* will no longer be necessary in future EPDs. The absence of Table A in this EPD is recognized by NSF as an appropriate deviation from the PCR.

Table B

Life Cycle Stage Impacts for a Building Life of 60 Years

Face Fiber Weight: 23 oz / SY		Units	TOTAL		SOURCING		MANUFACTURE		DELIVERY & INSTALLATION		USE		END OF LIFE	
CML IMPACT CATEGORIES														
Global Warming (GWP)	kg CO ₂ eq.		84.6	100%	40.1	47%	8.49	10%	2.67	3%	30.8	36%	2.48	3%
Acidification (AP)	kg SO ₂ eq.		0.258	100%	0.0947	38%	0.0427	17%	0.0072	3%	0.1110	43%	0.0001	0%
Ozone Depletion (ODP)	kg CFC-11 eq.		7.82E-07	100%	5.17E-08	7%	7.018E-07	92%	1.64E-10	0%	1.23E-08	1.57%	3.88E-10	.05%
Smog (POCP)	kg C ₂ H ₄ eq.		0.0226	100%	0.0132	58%	0.0024	11%	-0.0006	-3%	0.0073	32%	0.0003	1%
Eutrophication (NP)	kg PO ₄ eq.		0.0243	100%	0.0132	54%	0.0022	9%	0.0014	6%	0.0055	23%	0.0021	8%
Abiotic Depletion (ADP)	kg SB eq.		8.19E-05	100%	6.95E-05	85%	9.10E-06	11%	1.02E-06	1%	2.29E-06	3%	-1.65E-08	0%

Breakdown of Use Stage Impacts

	TOTAL %	ANNUAL ACTIVITIES	INTERMITTENT ACTIVITIES
Global Warming	100%	100%	0%
Acidification	100%	100%	0%
Ozone Depletion	100%	100%	0%
Smog	100%	100%	0%
Eutrophication	100%	100%	0%
Abiotic Depletion	100%	100%	0%

Results for Low, Medium, and High Face Weight

		Units	15 OZ / SY	23 OZ / SY	37 OZ / SY
CML IMPACT CATEGORIES					
Global Warming (GWP)	kg CO ₂ eq.		72.6	84.6	105
Acidification (AP)	kg SO ₂ eq.		0.2280	.02580	0.3110
Ozone Depletion (ODP)	kg CFC-11 eq.		6.49E-07	7.82E-07	1.02E-06
Smog (POCP)	kg C ₂ H ₄ eq.		0.0194	0.0226	0.0282
Eutrophication (NP)	kg PO ₄ eq.		0.0203	0.0243	0.0314
Abiotic Depletion (ADP)	kg SB eq.		7.47E-05	8.195E-05	9.47E-06

TRACI RESULTS

Table A

The Flooring: Carpet, Resilient, Laminate, Ceramic, Wood PCR is currently under expert review. It is expected that this review will conclude that *Table A: Life Cycle Impacts for a One Year Use Stage* will no longer be necessary in future EPDs. The absence of Table A in this EPD is recognized by NSF as an appropriate deviation from the PCR.

Table B

		Life Cycle Stage Impacts for a Building Life of 60 Years											
Face Fiber Weight: 23 oz / SY	Units	TOTAL		SOURCING		MANUFACTURE		DELIVERY & INSTALLATION		USE		END OF LIFE	
TRACI IMPACT CATEGORIES													
Global Warming (GWP)	kg CO ₂ eq.	83.6	100%	40.1	48%	8.66	3%	2.6	3%	30.9	37%	1.42	2%
Acidification (AP)	kg SO ₂ eq.	0.252	100%	0.100	40%	0.040	17%	0.009	3%	0.103	41%	0.000	0%
Ozone Depletion (ODP)	kg CFC-11 eq.	8.53E-07	100%	5.17E-08	7%	7.82E-07	92%	1.64E-10	0%	1.30E-08	2%	4.23E-10	.05%
Smog (POCP)	kg C ₂ H ₄ eq.	3.090	100%	0.670	54%	0.381	12%	0.171	6%	0.840	27%	0.023	1%
Eutrophication (NP)	kg PO ₄ eq.	0.050	100%	0.041	54%	0.001	3%	0.002	4%	0.004	9%	0.001	2%

Breakdown of Use Stage Impacts

	TOTAL %	ANNUAL ACTIVITIES	INTERMITTENT ACTIVITIES
Global Warming	100%	100%	0%
Acidification	100%	100%	0%
Ozone Depletion	100%	100%	0%
Smog	100%	100%	0%
Eutrophication	100%	100%	0%

Results for Low, Medium, and High Face Weight

		Units	15 OZ / SY	23 OZ / SY	37 OZ / SY
TRACI IMPACT CATEGORIES					
Global Warming (GWP)	kg CO ₂ eq.		71.8	83.6	104
Acidification (AP)	kg SO ₂ eq.		0.221	0.252	0.306
Ozone Depletion (ODP)	kg CFC-11 eq.		7.07E-07	8.53E-07	1.11E-06
Smog (POCP)	kg C ₂ H ₄ eq.		2.61	3.09	3.93
Eutrophication (NP)	kg PO ₄ eq.		0.037	0.050	0.072

ADDITIONAL ENVIRONMENTAL INFORMATION

- NSF 140 Platinum Certification
- BREEAM Certification
- CRI Green Label Plus Certification
- Available post-consumer reclamation options.
- J+J Flooring Group operates under an all inclusive Environmental Action (EnAct®) Program whereby all associate and corporate environmental activities are measure and improved.
- J+J Flooring Group offers sample returns under its R4 Program, a subset of J&J's EnAct efforts.
- J+J Flooring Group proudly offers to the market an annual, transparent Sustainable Progress Report. Please see the following website for more details: <http://www.jj-invision.com/pages/sustainability-report>

eKo Back Modular Tile, Life Cycle Impacts for a Building Life of 60 Years Across Available Face Weights

CML IMPACT CATEGORIES		OZ / SQUARE YARD	15	16	17	18	19	20	21	22	23	24	25	26
Global Warming (GWP)	kg CO ₂ eq.		72.6	74.1	75.6	77.1	78.6	80.1	81.6	83.1	84.6	86	87.5	89
Acidification (AP)	kg SO ₂ eq.		0.228	0.232	0.235	0.239	0.243	0.247	0.251	0.254	0.258	0.262	0.266	0.269
Ozone Depletion (ODP)	kg CFC-11 eq.		6.49E-07	6.65E-07	6.82E-07	6.99E-07	7.15E-07	7.32E-07	7.49E-07	7.65E-07	7.82E-07	7.99E-07	8.15E-07	8.32E-07
Smog (POCP)	kg C ₂ H ₄ eq.		0.019	0.020	0.020	0.021	0.021	0.021	0.022	0.022	0.023	0.023	0.023	0.024
Eutrophication (NP)	kg PO ₄ eq.		0.020	0.021	0.021	0.022	0.022	0.023	0.023	0.024	0.024	0.025	0.025	0.026
Abiotic Depletion (ADP)	kg SB eq.		7.47E-05	7.56E-05	7.65E-05	7.74E-05	7.83E-05	7.92E-05	8.01E-05	8.10E-05	8.19E-05	8.28E-05	8.38E-05	8.47E-05
Primary Energy - Non-Renewable	MJ		200.09	205.8	211.51	217.22	222.92	228.63	234.34	240.05	245.76	251.47	257.17	262.88
Primary Energy - Renewable	MJ		28.25	29.54	30.84	21.14	33.43	34.73	36.03	37.32	38.62	39.92	41.21	42.51
Secondary Fuels	MJ		0	0	0	0	0	0	0	0	0	0	0	0
Non-Renewable Material Sources	KG		6.87	7.06	7.24	7.42	7.6	7.78	7.96	8.14	8.32	8.5	8.68	8.86
Non-Hazardous Waste	KG		6.48	6.66	6.84	7.02	7.19	7.37	7.55	7.73	7.91	8.08	8.26	8.44
Hazardous Waste	KG		0	0	0	0	0	0	0	0	0	0	0	0

CML IMPACT CATEGORIES		OZ / SQUARE YARD	27	28	29	30	31	32	33	34	35	36	37
Global Warming (GWP)	kg CO ₂ eq.		90.5	92	93.5	95	96.5	98	99.4	101	102	104	105
Acidification (AP)	kg SO ₂ eq.		0.273	0.277	0.281	0.285	0.288	0.292	0.296	0.3	3.03	0.307	0.311
Ozone Depletion (ODP)	kg CFC-11 eq.		8.49E-07	8.65E-07	8.82E-07	8.99E-07	9.15E-07	9.32E-07	9.49E-07	9.65E-07	9.82E-07	9.99E-07	1.02E-06
Smog (POCP)	kg C ₂ H ₄ eq.		0.024	0.025	0.025	0.025	0.026	0.026	0.027	0.027	0.027	0.028	0.028
Eutrophication (NP)	kg PO ₄ eq.		0.026	0.027	0.027	0.028	0.028	0.029	0.029	0.030	0.030	0.031	0.031
Abiotic Depletion (ADP)	kg SB eq.		8.56E-05	8.65E-05	8.74E-05	8.83E-05	8.92E-05	9.01E-05	9.10E-05	9.19E-05	9.28E-05	9.37E-05	9.47E-05
Primary Energy - Non-Renewable	MJ		268.59	274.3	280.01	285.71	291.42	297.13	302.84	308.55	314.26	319.96	325.67
Primary Energy - Renewable	MJ		43.81	45.1	46.4	9.59	48.99	50.29	51.59	52.88	54.18	55.48	56.77
Secondary Fuels	MJ		0	0	0	0	0	0	0	0	0	0	0
Non-Renewable Material Sources	KG		9.04	9.22	9.4	9.59	9.77	9.95	10.13	10.31	10.49	10.67	10.85
Non-Hazardous Waste	KG		8.62	8.8	8.97	9.15	9.33	9.51	9.69	9.86	10.04	10.22	104
Hazardous Waste	KG		0	0	0	0	0	0	0	0	0	0	0