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PlayGuard[®]

PLAYGROUND SAFETY SURFACING

& **LEED**

*How PlayGuard Playground Safety Surfacing
Can Contribute To Obtaining
LEED[®] Credits*



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The Leadership in Energy and Environmental Design (LEED®) Green Building Rating System™ represents the U.S. Green Building Council's effort to provide a national standard for what constitutes a "green building." It is utilized as a design guideline and certification tool for architects and designers seeking to develop high-performance, sustainable buildings.

LEED Version 2.2 is an updated version of the rating system for New Construction and Major Renovations (LEED-NC). It is designed to guide and distinguish high-performance commercial and institutional projects with a focus on office buildings.

The rating system defines the requirements, by category, to achieve each prerequisite and voluntary point. Projects earn one or more points toward certification by meeting or exceeding each credit's technical requirements. Points compute to a final score that relates to one of four possible levels of certification.

PlayGuard® Playground Safety Surfacing systems are designed to meet stringent criteria required to earn points under 2 out of the 6 categories of LEED-NC. Based on this criteria, PlayGuard products can assist architects and designers in obtaining up to 7 points toward LEED certification.

LEED-NC Credit Areas Impacted by Flooring

Category	Credit Title	Credit Number	Number of Points Attainable
Materials & Resources	Construction Waste Management	MR 2.1	1
	Construction Waste Management	MR 2.2	1
	Recycled Content	MR 4.1	1
	Recycled Content	MR 4.2	1
	Local/Regional Materials	MR 5.1	1
	Local/Regional Materials	MR 5.2	1
Indoor Environmental Quality	Low-Emitting Materials	EQ 4.1	1

Definition of LEED-NC

Credits MR 2.1 & MR 2.2:

MR 2.1 ... (1 point)

- Recycle and/or salvage at least 50% of non-hazardous construction and demolition debris. Develop and implement a construction waste management plan that, at a minimum, identifies the materials to be diverted from disposal and whether the materials will be sorted on-site or commingled. Calculations can be done by weight or volume but must be consistent throughout.

MR 2.2 ... (1 point in addition to MR 2.1)

- Recycle and salvage an additional 25% beyond MR 2.1 (75% total) of non-hazardous construction and demolition debris.

How PlayGuard Can Contribute:

PlayGuard can contribute in two ways:

- All selvages and overages can be packaged and shipped back at the owner's expense to E CORE in Lancaster, PA (product manufacturer).
- Modular PlayGuard tiles, both 2-1/2" and 3-3/4" may be packaged and shipped back at the owner's expense to E CORE in Lancaster, PA.

Both product scrap and PlayGuard tiles must be free of adhesive, dowel rods and debris, including dirt, concrete or asphalt. It will be reground and used in other materials E CORE manufactures.

For more information on E CORE's reclamation program, please call 1-800-322-1923.

Potential Strategies:

Establish goals of diversion from disposal in landfills and incinerators and adopt a construction waste management plan to achieve these goals. Consider recycling cardboard, metal, brick, rubber, acoustical tile, concrete, plastic, clean wood, glass, gypsum wallboard, carpet and insulation. Designate a specific area on the construction site for segregated or commingled collection of recyclable materials, and track recycling efforts through the construction process.

Definition of LEED-NC Credits MR 4.1 & MR 4.2:

MR 4.1 ... (1 point)

- Use materials with recycled content such that the sum of post-consumer recycled content plus one half (the value of) the pre-consumer content constitutes at least 10% of the total value of the materials in the project.
- The value of the recycled content portion of a material or furnishing shall be determined by dividing the weight of recycled content in the item by the total weight of all material in the item, then multiplying the resulting percentage by the total value of the item.

MR 4.2 ... (1 point in addition to MR 4.1)

- Use materials with recycled content such that the sum of post-consumer recycled content plus one half (the value of) the pre-consumer content constitutes at least 20% of the total value of the materials in the project.

How PlayGuard Can Contribute:

PlayGuard Playground Safety Surfacing is comprised of shredded and cleaned SBR tire rubber (100% post-consumer waste) and colorful EPDM flecks (30% pre-consumer waste). The result is a polymerically bound floor with very high-recycled content.

Recycled content is defined in accordance with the International Organization for Standardization® document, ISO 14021 – Environmental labels and declarations:

- Post-consumer material – waste materials diverted from the waste stream after consumer or commercial use.
- Pre-consumer material – materials diverted from the waste stream during the manufacturing process. Excluded is regrind, rework or scrap.

Potential Strategies:

Establish a project goal for recycled content materials and identify material suppliers that can achieve this goal. During construction, ensure that the specified recycled content materials are installed and quantify the total percentage of recycled content materials installed.

PlayGuard Recycled Content

Tiles	Color Line	Thickness	Product Number	Total Percent Recycled	Pre-Consumer Content	Post-Consumer Content
	Pigmented	2-1/2"	PG40	90.18	———	90.18
			PG41	90.06	———	90.06
			PG42	89.12	———	89.12
			PG43	88.09	———	88.09
		3-3/4"	PG40	90.20	———	90.20
			PG41	90.00	———	90.00
			PG42	87.82	———	87.82
			PG43	87.56	———	87.56
	Safari Ultra	2-1/2"	PG50	90.16	———	90.16
PG51			89.30	0.26	89.04	
PG52			89.30	0.26	89.04	
PG53			89.26	0.27	88.99	
PG54			89.30	0.26	89.04	
PG55			89.30	0.26	89.04	
PG56			89.28	0.26	89.02	
PG57			88.85	0.39	88.45	
4-1/4"		PG50	91.84	———	91.84	
		PG51	91.38	0.14	91.24	
		PG52	91.38	0.14	91.24	
		PG53	91.36	0.14	91.21	
		PG54	91.38	0.14	91.24	
		PG55	91.38	0.14	91.24	
Carnival	2-1/2"	PG60	86.06	1.24	84.82	
		PG61	86.06	1.24	84.82	
		PG62	86.06	1.24	84.82	
		PG63	86.06	1.24	84.82	
		PG64	86.06	1.24	84.82	
		PG65	86.06	1.24	84.82	
	4-1/4"	PG60	89.63	0.67	88.96	
		PG61	89.63	0.67	88.96	
		PG62	89.63	0.67	88.96	
		PG63	89.63	0.67	88.96	
		PG64	89.63	0.67	88.96	
		PG65	89.63	0.67	88.96	
		PG66	89.63	0.67	88.96	

LEED-NC: Materials and Resources

Local/Regional Materials

Definition of LEED-NC Credits MR 5.1 & 5.2:

MR 5.1 ... (1 point)

- Use building materials or products that have been extracted, harvested or recovered, as well as manufactured, within 500 miles of the project site for a minimum of 10% (based on cost) of the total material value. If only a fraction of a product or material is extracted/harvested/recovered and manufactured locally, then only that percentage (by weight) shall contribute to the regional value.

MR 5.2 ... (1 point in addition to MR 5.1)

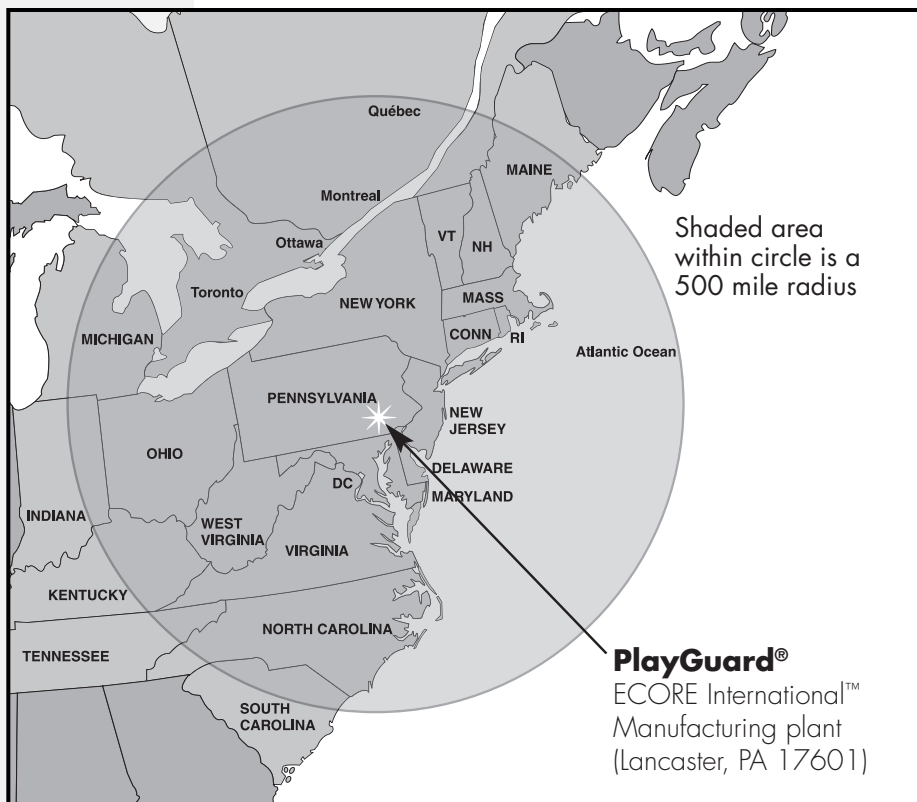
- Same as above but with a minimum of 20% of the total material value.

How PlayGuard Can Contribute:

PlayGuard Playground Safety Surfacing systems are manufactured in Lancaster, PA. All product components, including both SBR and EPDM rubber are manufactured on-site.

Potential Strategies:

Establish a project goal for locally sourced materials and identify materials and material suppliers that can achieve this goal. During construction, ensure that the specified local materials are installed and quantify the total percentage of local materials installed.



To determine if PlayGuard qualifies for this credit, please call 1-800-851-4746 for a complete listing of areas within a 500 mile radius.

Definition of LEED-NC Credit EQ 4.1:

EQ 4.1 ... (1 point)

- Adhesives and sealants must be lower than the current VOC content limits of South Coast Air Quality Management District (SCAQMD) Rule #1168.

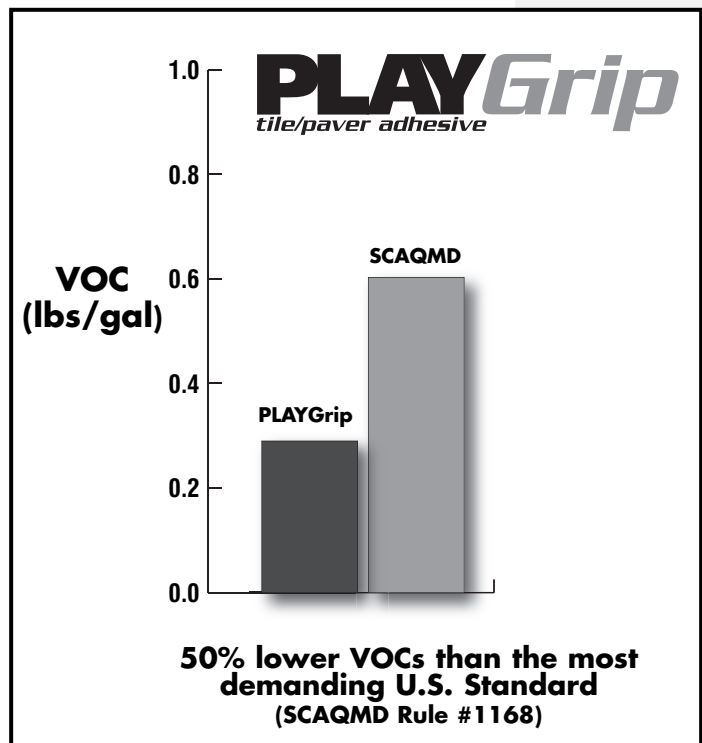
Potential Strategies:

Specify low-VOC materials in construction documents. Ensure that VOC limits are clearly stated in each section where adhesives and sealants are used.

How PlayGuard Can Contribute:

PLAYGrip is a low-VOC, one component urethane adhesive that delivers 50% lower VOCs than the most demanding standard (SCAQMD Rule #1168).

PLAYGrip is a moisture cured, non-sag, permanently elastic adhesive that has excellent adhesion to elastomers, concrete and wood, and is engineered for indoor and outdoor applications. It offers excellent trowelability, superior tack properties and is formulated specifically for use with PlayGuard Playground Safety Surfacing.



LEED-CI & LEED-EB: Two New Rating Systems

Key Differences Between LEED-NC, LEED-CI & LEED-EB

In November 2004, the USGBC released two additional ratings systems (LEED-CI and LEED-EB) to accompany LEED-NC. All three programs are part of a comprehensive suite of LEED® green building rating tools the USGBC has developed to promote green design, construction and operations practices in buildings nationwide.

LEED for Commercial Interiors (LEED-CI) addresses the specifics of tenant spaces in office, retail and institutional buildings.

LEED for Existing Buildings (LEED-EB) addresses the sustainable operation of existing buildings, and covers building operations and systems upgrades in existing buildings where the majority of interior or exterior surfaces remain unchanged.

LEED-NC	LEED-CI	LEED-EB
<i>General</i>		
Applies to whole buildings	Applies to tenant improvements of new or existing office space	Applies to facility management policies and measured performance
<i>Materials and Resources</i>		
MR 2: 1 point if 50% of construction debris is diverted from landfills; 2 points for 75%	MR 2: Same as NC	MRc2 offers points for green purchasing, including building materials, at a rate of 1 point for each 10% of confirming purchases. Points may be earned by specifying PlayGuard through the following criteria: <ul style="list-style-type: none"> • Materials contain at least 10% post-consumer or 20% pre-consumer material • Contains at least 50% materials harvested and processed or extracted and processed within 500 miles of the project
MR 4: 1 point if 10% of all materials contain recycled content; 2 points for 20%	MR 4: Same as NC	
MR 5: 1 point for using 10% of the materials that are extracted, harvested or recovered, as well as manufactured within 500 miles of project site; 2 points for 20%	MR 5.1: 1 point for using 20% of building materials that are manufactured within a 500 mile radius	
	MR 5.2: 1 additional point for using 10% of locally manufactured materials that are extracted or harvested within a 500 mile radius	
<i>Indoor Environmental Quality</i>		
EQ 4.1: 1 point for using adhesives and sealants that meet SCAQMD	EQ 4.1: Same as NC; 1 point for using adhesives and sealants that meet SCAQMD and aerosol adhesives that meet Green Seal Standard GS-36	MRc3 provides up to 2 points for using low-emitting materials. One point may be obtained for each 45% of annual purchases calculated on a dollar value that conform to the same categories as NC (including using adhesives with a VOC content less than SCAQMD).

For complete LEED credit information please refer to www.USGBC.org.



ECORE, the manufacturer of PlayGuard, was founded in 1989. Located in Lancaster, PA, ECORE is the largest user of scrap tire rubber in North America and annually recycles over 80 million pounds of scrap tire rubber, helping conserve more than 1 million barrels of oil to make viable solutions for the commercial, consumer and industrial markets.

ECORE is committed to operating its business and facilities in a manner that uses resources wisely and protects the quality of the environment and the health and safety of associates, families and community.

The company is actively affiliated with the U.S. Green Building Council, American Society of Testing Materials, and Building for Environmental and Economic Sustainability run by the US National Institute of Standards and Technology.

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For more information on PlayGuard Playground Safety Surfacing,
call **1-800-851-4746** or visit **www.playguardsurfacing.com**.

Manufactured by ECORE International

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