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Synthetic Turf for Maximum Performance

& LEED

How A-Turf, Inc. Can
Contribute to Obtaining
LEED® v4 Credits.



www.aturf.com or call 1-888-777-6910

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Check website for updates.

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What is LEED?

What Is LEED?

LEED has driven the green building market by creating a demand for environmentally preferable building products. This helped to transform the way we think about how our buildings and communities are designed, constructed, maintained, and operated.

LEED addresses the entire building lifecycle. Building projects must satisfy prerequisites and earn points to achieve different levels of certification. Prerequisites and credits differ for each of the four rating systems. A project team must determine which rating system and category is the best fit for their project.

Rating Systems

Building Design & Construction (BD+C)

This rating system is appropriate for new construction and major renovation of these categories: New Construction, Core and Shell, Schools, Retail, Hospitality, Data Centers, Warehouses and Distribution Centers, Healthcare, Homes, and Multifamily Midrise.

Interior Design & Construction (ID+C)

This rating system is appropriate for interior spaces that are a complete interior fit-out of these categories: Commercial Interiors, Retail, and Hospitality.

Building Operations & Maintenance (O+M)

This rating system is appropriate for buildings that are undergoing improvement work with little to no construction. This system applies to these categories: Existing Buildings, Schools, Retail, Hospitality, Data Centers, and Warehouses and Distribution Centers.

Neighborhood Development (ND)

This rating system is appropriate for new land development projects or redevelopment projects containing residential uses, nonresidential uses, or a mix. This system includes these categories: Neighborhood Development Plan and Built Project.

The Benefits of LEED

Why is obtaining LEED certification beneficial? In addition to the obvious environmental benefits, certification proves to the market that a building is efficient and incorporates responsible building practices. LEED certification showcases environmental commitment and leadership to both the community and employees. As a result, positive publicity and exposure could be generated.

Green buildings have also been proven to be more economically efficient as a result of these factors:

- Increased health and safety benefits for employees or students
- Increased employee productivity and lower turnover and absenteeism
- Increased sales in retail establishments
- Reduced operating costs
- Increased building evaluation and return on investment
- Qualification for money-saving incentives, like tax rebates and zoning allowances

How A-Turf's Products can apply to LEED

Many products have the potential to contribute points to LEED; but, since credits are based on the performance of all the products involved in a particular project, there is not one stand-alone product that can guarantee LEED credits. It is the combination and the weight of each that is critical.

A-Turf's Synthetic Surfacing for athletic fields meets the stringent criteria required to help earn points under 1 of the 5 categories of LEED—Materials and Resources. The Materials and Resources category deals with the conservation, purchasing, and waste management of physical products. Based on these criteria, A-Turf products can, potentially, contribute up to 3 LEED points in BD+C, ID+C, and O+M.

BD+C, ID+C — Materials and Resources

Definition of BD+C, ID+C Credits — Materials and Resources:

Building Product Disclosure and Optimization — Sourcing of Raw Materials (possible 2 points)

Option 1: Raw Material Source and Extraction Reporting (1 point)

Use at least 20 different permanently installed products, sourced from at least five different manufacturers, that have publically released a report from their raw material suppliers, which include, raw material supplier extraction locations, a commitment to long-term ecologically responsible land use, a commitment to reducing environmental harms from extraction and/or manufacturing processes, and a commitment to meeting applicable standards or programs voluntarily that address responsible sourcing criteria. Reports from manufacturers may be self-declared (0.5 points) or a third-party verified corporate sustainability report (1 point).

AND/OR

Option 2: Leadership Extraction Practices (1 point)

Use permanently installed building products that meet at least one responsible extraction criteria:

- Extended producer responsibility
- Bio-based materials
- Certified wood products
- Materials reuse
- Recycled content

How A-Turf can Contribute:

A-Turf’s Surfacing Systems are in part comprised of shredded and cleaned SBR tire. Recycled content is defined in accordance with the International Organization for Standardization® document, ISO 14021 – Environmental labels and declarations:

- Postconsumer material – waste materials diverted from the waste stream after consumer or commercial use.
- Preconsumer material – material diverted from the waste stream during the manufacturing process. Excluded is rework, regrind, or scrap materials capable of being reclaimed within the same process that generated them.

Recycled content is the sum of postconsumer recycled content plus one-half the preconsumer recycled content, based on cost. Products meeting recycled content criteria are valued at 100 percent of their cost for the purposes of credit achievement calculation.

Potential Strategies:

Establish a project goal to utilize materials from manufacturers who disclose raw material sourcing information and/or manufacturers that utilize responsible extraction. During the design phase, specify products that meet one or more of the criteria listed in the credit requirements. Try to focus on applications that use either significant quantities of materials or small amounts of high-cost materials. During construction, track your purchases in the Materials and Resources Building Product Disclosure and Optimization calculator. Do not forget to collect relevant documentation from the manufacturer.

A-Turf Recycled Content

Product	Dimensions (mm)			Color	Recycled Content		
	Thickness	Length	Width		Total	Post-Consumer	Pre-Consumer
Rubber Infill	as specified	as specified	as specified	Black	75.0%	68.4%	6.6%
Rubber & Sand Infill	as specified	as specified	as specified	Black	42.0%	38.3%	3.7%
ShockPad	8 or 10	as specified	as specified	Black	88.88%	88.88%	0.0%

BD+C, ID+C — Materials and Resources

Definition of BD+C, ID+C Credits — Materials and Resources:

Construction and Demolition Waste Management

Option 1: Diversion (1-2 Points)

Path 1 (1 point): Divert at least 50 percent of the total construction and demolition from at least three material streams.

OR

Path 2 (2 points): Divert at least 75 percent of the total construction and demolition material from at least four material streams.

OR

Option 2: Reduction of Total Waste (2 points)

Do not generate more than 2.5 pounds of construction waste per square foot of the building's floor area.

How A-Turf can Contribute:

- All salvages and overages can be packaged and shipped back at the owner's expense to Ecore's Redeux Reclamation Program in Lancaster, PA.
- All old materials may be packaged and shipped back at the owner's expense to Ecore's Redeux Reclamation Program in Lancaster, PA.

Customers must first submit an application to have their material accepted into the program. Both product scrap and old materials must be free of excessive adhesive and foreign contaminants, including stones, wood, concrete, asphalt, etc. Materials accepted into the Redeux program will be sorted, shredded, cleaned, and ground for the next generation of flooring, underlayment, and industrial products. For more information on Ecore's Redeux program, including an application and requirements, please email redeux@ecoreintl.com or visit <http://ecoreintl.com/redeux.php>.

Potential Strategies:

The key to success for this credit is to start early to allow time for planning and coordination, identifying strategies, developing contractual agreements, and educating project teams. Be sure to integrate the contractor into the early design phase. Establish goals of diversion from disposal in landfills and incineration facilities, and adopt a construction waste management plan to achieve these goals. Goals and strategies for waste diversion should be developed as part of the construction waste management plan prerequisite.

Identify products that can be recycled or whose manufacturer offers a take back program. Consider recycling cardboard, metal, brick, rubber, concrete, plastic, clean wood, glass, gypsum wallboard, carpet, and insulation. Other strategies include source reduction, such as modular construction, reduced packaging, pre-fabrication, and diversion options. Establish infrastructure, practices, and policies, such as designating a specific area on the construction site for segregated or commingled collection of recyclable materials. Be sure to track recycling efforts throughout the construction process, keeping reports and receipts for documentation. It is also helpful to calculate diversion rates regularly so adjustments can be made to meet goals.



O+M — Materials and Resources

Definition of O+M— Materials and Resources:

Purchasing - Facility Maintenance and Renovation (possible 2 points)

Option 1: Products and Materials (1 point)

Purchase at least 50 percent, by cost, of the total maintenance and renovation materials that meet at least one of these criteria:

- Recycled content
- Wood products
- Bio-based materials
- Materials reuse
- Extended producer responsibility
- GreenScreen v1.2 Benchmark
- Cradle to Cradle Certified
- REACH Optimization
- Product Manufacturer Supply Chain Optimization
- Low emissions of VOCs
- VOC content requirements for wet-applied products
- Low emissions of formaldehyde

AND/OR

Option 2: Furniture (1 point)

Purchase at least 75%, by cost, of total furniture and furnishings that meet one or more of these criteria:

- Recycled content
- Wood products
- Bio-based materials
- Materials reuse
- Extended producer responsibility
- GreenScreen v1.2 Benchmark
- Cradle to Cradle Certified
- REACH Optimization
- Product Manufacturer Supply Chain Optimization
- Low emissions of VOCs

OR Option 3: No Alterations or Furniture Purchasing (1 point)

Make no alterations to the project space and do not purchase any furniture.

How A-Turf can Contribute:

A-Turf products can potentially contribute to two of the criterion in option 1: recycled content and extended producer responsibility.

A-Turf's Surfacing Systems are in part comprised of shredded and cleaned SBR tire rubber. For more information about recycled content, please refer to page 4 of this guide.

Ecore's extended producer responsibility program is called Redeux, under which Ecore can take back scrap and old material. For more information about the Redeux program, please see page 5.

Potential Strategies:

Review schedules for space planning or tenant fit-outs to determine whether maintenance, renovations, or furniture purchases will occur during the performance period. Determine which credit options are suitable for the project and timeline. Teams may select Option 1 and 2 simultaneously or Option 3. For option 1 and 2, evaluate purchasing patterns and determine percentage compliance. Try to swap out non-compliant items for compliant substitutes. Develop a tracking system to gather data for all purchases for the building. For option 3, verify that no facility renovation activities will be undertaken during the pre-determined performance period.

O+M — Materials and Resources

Definition of O+M — Materials and Resources:

Solid Waste Management - Facility Maintenance and Renovation (possible 2 points)

Divert at least 70 percent of the waste (by weight or volume) generated by facility maintenance and renovation activities from disposal in landfills and incinerators. Include materials and products permanently and semi-permanently installed in the project (flooring, wall coverings, etc.).

Exclude furniture and furnishings that pose human health concerns, as well as components not considered base building elements; mechanical, electrical, and plumbing components; and specialty items (such as elevators).

How A-Turf can Contribute:

All salvages, overages, and old material can be packaged and shipped back, at the owner's expense, to Ecore's Redeux Reclamation Program in Lancaster, PA. For more information about the Redeux program, please see page 5 of this guide.

Potential Strategies:

Implement the facility maintenance and renovations solid waste management policy developed in the corresponding prerequisite. As maintenance and renovation projects are scheduled, be sure to share this policy with contractors and other personnel involved in the work so waste diversion goals can be met. You may adapt your policy to better suit renovation projects as they come along. Develop a tracking system to gather data on all facility maintenance and renovations waste during the performance period.



Locally Sourced Materials

Locally Sourced Materials

For credit achievement calculation, products sourced (extracted, manufactured, purchased) within 100 miles of the project site are valued at 200 percent of their base contributing cost for these credit categories:

- BD+C, ID+C: Building Product Disclosure and Optimization - Sourcing of Raw Materials
- O+M: Purchasing - Facility Maintenance and Renovation



About A-Turf



Synthetic Turf for Maximum Performance

A-Turf, Inc. was established in 2002 as a national synthetic turf athletic fields builder. Located in Western New York, A-Turf is a part of the Ecore corporate group. Collectively, the Ecore group of companies is the largest user of scrap tire rubber in North America. More than 3.5 million tires annually are converted to a variety of rubber products and system components used in applications that range from athletic fields and playgrounds to high-rise construction and automobiles.

A-Turf, Inc. is committed to operating its businesses 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 corporate group is actively affiliated with U.S. Green Building Council, American Society of Testing Materials, and Building for Environmental and Economic Sustainability run by the U.S. National Institute of Standards and Technology.

P.O. Box 157, Williamsville, NY 14231

Phone: 716-204-0748 OR 888-777-6910 • Fax: 716-204-0189 • Email: info@aturf.com

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