

# **SURFACE**AMERICA®

## **Masters in Recreational Surfacing**

Playground Surfacing • Gymnasium Flooring • Fitness Flooring  
Specialty Surfacing • Trail & Pathway Surfacing

**LEED**



How Surface America Can  
Contribute To Obtaining  
LEED® Credits

July 2011

---

[www.surfaceamerica.com](http://www.surfaceamerica.com) or call 1-800-999-0555

---

## **Table of Contents**

- 3**     What is LEED?  
          Overview
  
- 4-5**    How Surface America Can Apply to LEED
  
- 6**     LEED-NC: Materials and Resources  
          Construction Waste Management
  
- 7-9**    LEED-NC: Materials and Resources  
          Recycled Content
  
- 10**    LEED-NC: Materials and Resources  
          Local/Regional Materials
  
- 11-12** LEED-NC: Indoor Environmental Quality  
          Low-Emitting Materials
  
- 13**    Floor Score Certification
  
- 14**    LEED-EB: Materials and Resources  
          Sustainable Cleaning Products and Materials
  
- 15**    LEED 2009 Credit Alignment  
          The Key Differences and Similarities of  
          LEED Rating Systems

# What is LEED?

---

## Overview

Recycled rubber is a growing category for playground surfacing within the flooring industry and continues to increase in popularity as a practical solution for playground applications. The easy installation, durability, and vast variety of color options available by Surface America is ideal for playground surfacing and rooftop applications.

The demand for recycled rubber flooring is increasing due to its many positive environmental attributes. The high recycled content and low-VOC emissions and life cycle costs make it an environmentally sensitive choice for a variety of playground and rooftop applications. These benefits also enable it to potentially contribute points towards LEED certification. Surface America's Playground Surfacing, Gymnasium Flooring, Fitness Flooring and Specialty Surfacing Systems are designed to meet the stringent criteria required to help earn points in 2 of the 6 categories of LEED. Based on these criteria, Surface America products can assist specifiers by potentially contributing up to 7 LEED-NC/CI and 12 LEED-EB points.

## What is LEED?

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.

There are currently 5 versions of LEED available:

- LEED for New Construction and Major Renovations (LEED-NC) is designed to guide and distinguish high-performance commercial and institutional projects.
- LEED for Existing Buildings: Operations & Maintenance (LEED-EB) provides a benchmark for building owners and operators to measure operations, improvements, and maintenance.

- LEED for Commercial Interiors (LEED-CI) is a benchmark for the tenant improvement market that gives the power to make sustainable choices to tenants and designers.
- LEED for Core & Shell aids designers, builders, developers, and new building owners in implementing sustainable design for new core and shell construction.
- LEED for Schools recognizes the unique nature of the design and construction of K-12 schools. Based on the LEED for New Construction rating system, it addresses issues such as classroom acoustics, master planning, mold prevention, and environmental site assessment.

The LEED rating system defines the requirements, by category (listed above), needed to achieve points under each area. 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: LEED Certified, LEED Silver, LEED Gold or LEED Platinum.

In the past nine years, over 1,753 projects have attained LEED certification and over 14,390 projects are registered and undergoing the LEED certification process. It is estimated that by 2010, approximately 10% of commercial construction starts are expected to be green and the green building products market is projected to be worth \$30-\$40 billion annually. Every business day, \$464 million worth of construction registers with LEED, clearly illustrating the increasing popularity of environmentally sustainable building practices.

This document outlines the specific requirements under LEED-NC, with a comparison of the key similarities and differences of all current rating systems.

# How Surface America Can Apply to LEED

---

## 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 your community and your 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 the following factors:

- Increased health and safety benefits of employees or students
- Increased employee productivity, and lower turnover and absenteeism
- Reduced operating costs
- Increased sales in retail establishments
- Increased building evaluation and return on investment

## How Surface America 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 you will obtain LEED credits. It is the combination and the weight of each that is critical.

Surface America products are designed to meet the stringent criteria required to help earn points under 2 of the 6 categories of LEED. Based on these criteria, Surface America products can assist specifiers by potentially contributing toward earning up to 7 LEED points in new construction and commercial interiors and 12 LEED points in existing buildings.

# How Surface America Can Apply to LEED (continued)

## LEED Credit areas Impacted by Flooring – NC 2.2 and CI 2.0

\*Note: The following chart is from LEED NC2.2 and CI 2.0. This will be updated accordingly for LEED 2012

| Category                     | Credit Title                           | Credit Number | Points Attainable |
|------------------------------|--|---------------|-------------------|
| Materials & Resources        | Construction Waste Management – 50-75% | MR 2.1-2.2    | 1-2               |
|                              | Recycled Content – 10-20%              | MR 4.1-4.2    | 1-2               |
|                              | Local/Regional Materials – 50-75%      | MR 5.1-5.2    | 1-2               |
| Indoor Environmental Quality | Low-Emitting Materials - Adhesive      | EQ 4.1        | 1                 |

### NC

LEED for New Construction and Major Renovations is designed to guide and distinguish high performance commercial and institutional projects.

### CI

LEED for Commercial Interiors is a benchmark for the tenant improvement market that gives the power to make sustainable choices to tenants and designers.

## LEED Credit areas Impacted by Flooring – Existing Building 2.0

\*Note: The following chart is from LEED EB 2.0. This will be updated accordingly for LEED 2012

| Category              | Credit Title  | Credit Number | Points Attainable |
|-----------------------|---|---------------|-------------------|
| Materials & Resources | Construction, Demolition and Renovation Waste Management – 50-75% | MR 2.1-2.2    | 1-2               |
|                       | Optimized Use of Alternative Materials - 10-50%                   | MR 2.1-2.5    | 5                 |
|                       | Optimized Use of IAQ Compliant Products – 45-90%                  | MR 3.1-3.2    | 1-2               |
|                       | Sustainable Cleaning Products and Materials 30-90%                | MR 4.1-4.3    | 1-3               |

### EB

LEED for Existing Buildings: Operations & Maintenance provides a benchmark for building owners and operators to measure operations, improvements, and maintenance.

### Schools

LEED for Schools recognizes the unique nature of the design and construction of K-12 schools. Based on the LEED for New Construction rating system, it addresses issues such as classroom acoustics, master planning, mold prevention, and environmental site assessment.

## LEED Credit areas Impacted by Flooring – Schools 2009

\*Note: The following chart is from LEED Schools 2009. This will be updated accordingly for LEED 2012

| Category                     | Credit Title                                    | Credit Number | Points Attainable |
|------------------------------|---|---------------|-------------------|
| Materials & Resources        | Construction Waste Management – 50-75%          | MR 2          | 1-2               |
|                              | Recycled Content                                | MR 4          | 1-2               |
|                              | Low-Emitting Materials – Adhesives and Sealants | IEQ 4.1       | 1                 |
| Indoor Environmental Quality | Low-Emitting Materials – Flooring Systems       | IEQ 4.3       | 1                 |

# LEED-NC: Materials and Resources

---

## Construction Waste Management

### 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.

### Definition of LEED-EB Credits

#### MR 1.1 & MR1.2:

MR 1.1 ... (1 point)

- Divert at least 50% of construction, demolition and land-clearing waste from landfill and incineration disposal.

MR 1.2 ... (1 point in addition to MR 2.1)

- Divert at least 75% of construction, demolition and land-clearing waste from landfill and incineration disposal.

## How Surface America can contribute:

- All Surface America selvages and overages can be packaged and shipped back at the owner's expense to ECORE's Redeux Reclamation Program in Lancaster, PA.
- Modular PlayBound tiles, UltraTile, and DuraTile may be packaged and shipped back at the owner's expense to ECORE's Redeux Reclamation Program in Lancaster, PA.
- All old Surface America 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 recycled rubber flooring, underlayment and industrial products.

For more information on ECORE's Redeux program, including application and requirements, please email [redeux@ecoreintl.com](mailto:redeux@ecoreintl.com) or visit our website at [www.ecoreintl.com](http://www.ecoreintl.com).

## Potential Strategies:

Establish goals of diversion from disposal in landfills and incineration facilities and adopt a construction waste management plan to achieve these goals. Consider recycling cardboard, metal, brick, rubber, mineral fiber panel, 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.

# LEED-NC: Materials and Resources

---

## Recycled Content

### 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.

### Definition of LEED-EB Credits

#### MR 2.1 - MR 2.5:

Maintain a sustainable purchasing program covering at least office paper, office equipment, furniture, furnishings and building materials for use in the building and on the site. A template calculator will be provided for LEED for Existing Buildings MR Credit 2.1–2.5. One point (up to a maximum of five) will be awarded for each 10% of total purchases over the performance period (on a dollar basis) that achieves at least one of the following sustainability criteria:

- Contains at least 70% salvaged material from off site or outside the organization.
- Contains at least 70% salvaged from on site through an internal organization materials & equipment reuse program.

- Contains at least 10% post-consumer or 20% post-industrial material.
- Contains at least 50% rapidly renewable materials.
- Is Forest Stewardship Council (FSC) certified wood.
- Contains at least 50% materials harvested and processed or extracted and processed within 500 miles of the project.

Note: In calculating the percentage of purchases over the performance period conforming to the requirements, each purchase can only receive credit against a single requirement (i.e., a purchase that contains both 10% post-consumer recycled content and is harvested within 500 miles of the project counts only once in this calculation).

### How Surface America can contribute:

Surface America's Surfacing and Flooring Systems are comprised of shredded and cleaned SBR tire rubber and colorful EPDM flecks. 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.

# LEED-NC: Materials and Resources (continued)

## Surface America's Recycled Content

| Product                | Dimensions (mm) |              |              | Color         | Recycled Content |               |              |       |
|------------------------|-----------------|--------------|--------------|---------------|------------------|---------------|--------------|-------|
|                        | Thickness       | Length       | Width        |               | Total            | Post-Consumer | Pre-Consumer |       |
| <b>Poured-in-Place</b> | as specified    | as specified | as specified | standard EPDM | <b>67.34%</b>    | <b>61.44%</b> | <b>5.90%</b> |       |
| Tile                   | FX43            | 43           | 1000         | 500           | Black            | 90.48%        | 90.48%       | 0.00% |
|                        | FX43            | 43           | 1000         | 500           | Green            | 89.04%        | 89.04%       | 0.00% |
|                        | FX43            | 43           | 1000         | 500           | Red              | 89.41%        | 88.41%       | 0.00% |
|                        | FX60            | 60           | 1000         | 500           | Black            | 89.68%        | 89.68%       | 0.00% |
|                        | FX60            | 60           | 1000         | 500           | Gray             | 89.38%        | 89.38%       | 0.00% |
|                        | FX60            | 60           | 1000         | 500           | Green            | 87.87%        | 87.87%       | 0.00% |
|                        | FX60            | 60           | 1000         | 500           | Red              | 88.77%        | 88.77%       | 0.00% |
|                        | FX85            | 85           | 1000         | 500           | Black            | 75.83%        | 75.83%       | 0.00% |
|                        | FX85            | 85           | 1000         | 500           | Green            | 89.39%        | 89.39%       | 0.00% |
|                        | FX85            | 85           | 1000         | 500           | Red              | 89.87%        | 89.87%       | 0.00% |
|                        | FX100           | 100          | 1000         | 500           | Black            | 90.76%        | 90.76%       | 0.00% |
|                        | FX100           | 100          | 1000         | 500           | Green            | 89.68%        | 89.68%       | 0.00% |
| FX100                  | 100             | 1000         | 500          | Red           | 90.13%           | 90.13%        | 0.00%        |       |
| Accessories            | ADA Ramp        | 43           | 533.4        | 1000          | Black            | 91.53%        | 91.53%       | 0.00% |
|                        | ADA Ramp        | 43           | 533.4        | 1000          | Red              | 88.35%        | 89.35%       | 0.00% |
|                        | ADA Ramp        | 60           | 723.9        | 1000          | Black            | 91.99%        | 91.99%       | 0.00% |
|                        | ADA Ramp        | 60           | 723.9        | 1000          | Green            | 86.83%        | 86.83%       | 0.00% |
|                        | ADA Ramp        | 60           | 723.9        | 1000          | Red              | 86.83%        | 86.83%       | 0.00% |
|                        | ADA Ramp        | 85           | 1028.7       | 1000          | Red              | 90.10%        | 90.10%       | 0.00% |
|                        | ADA Transition  | 43           | 533.4        | 203           | Red              | 87.87%        | 87.87%       | 0.00% |
|                        | ADA Transition  | 60           | 723.9        | 203           | Black            | 92.01%        | 92.01%       | 0.00% |
|                        | ADA Transition  | 60           | 723.9        | 203           | Red              | 86.63%        | 86.63%       | 0.00% |
|                        | Bev Edge        | 43           | 1000         | 300           | Black            | 92.20%        | 92.20%       | 0.00% |
|                        | Bev Edge        | 43           | 1000         | 300           | Gray             | 90.18%        | 90.18%       | 0.00% |
|                        | Bev Edge        | 43           | 1000         | 300           | Green            | 88.57%        | 89.57%       | 0.00% |
|                        | Bev Edge        | 43           | 1000         | 300           | Red              | 90.18%        | 90.18%       | 0.00% |
|                        | Bev Edge        | 60           | 1000         | 300           | Black            | 90.93%        | 90.93%       | 0.00% |
|                        | Bev Edge        | 60           | 1000         | 300           | Gray             | 86.53%        | 86.53%       | 0.00% |
|                        | Bev Edge        | 60           | 1000         | 300           | Green            | 86.53%        | 86.53%       | 0.00% |
|                        | Bev Edge        | 60           | 1000         | 300           | Red              | 86.53%        | 86.53%       | 0.00% |
|                        | Bev Edge        | 85           | 1000         | 300           | Red              | 87.99%        | 87.99%       | 0.00% |
|                        | Corner          | 43           | 300          | 300           | Black            | 92.13%        | 92.13%       | 0.00% |
|                        | Corner          | 43           | 300          | 300           | Red              | 89.89%        | 89.89%       | 0.00% |
| Corner                 | 60              | 445          | 445          | Black         | 92.06%           | 92.06%        | 0.00%        |       |
| Corner                 | 60              | 445          | 445          | Red           | 89.58%           | 89.58%        | 0.00%        |       |
| Corner                 | 85              | 654          | 654          | Red           | 89.37%           | 89.37%        | 0.00%        |       |
| TurfTop™ (Infill)      | as specified    | as specified | as specified | Black         | 100.00%          | 100.00%       | 0.00%        |       |
| UltraTie™              | 63.5            | 609.6        | 609.6        | Grape Ape     | 86.06%           | 84.82%        | 1.24%        |       |
|                        | 63.5            | 609.6        | 609.6        | Cherry Blast  | 86.06%           | 84.82%        | 1.24%        |       |
|                        | 63.5            | 609.6        | 609.6        | Blueberry Pie | 86.06%           | 84.82%        | 1.24%        |       |
|                        | 63.5            | 609.6        | 609.6        | Sour Apple    | 86.06%           | 84.82%        | 1.24%        |       |
|                        | 63.5            | 609.6        | 609.6        | Orange Aide   | 86.06%           | 84.82%        | 1.24%        |       |
|                        | 63.5            | 609.6        | 609.6        | Rock Candy    | 86.06%           | 84.82%        | 1.24%        |       |
|                        | 63.5            | 609.6        | 609.6        | Caramel Corn  | 86.06%           | 84.82%        | 1.24%        |       |
|                        | 63.5            | 609.6        | 609.6        | Midnight      | 90.16%           | 90.16%        | 0.00%        |       |
|                        | 63.5            | 609.6        | 609.6        | Rain Drops    | 89.42%           | 89.04%        | 0.38%        |       |
|                        | 63.5            | 609.6        | 609.6        | Zappy Zebra   | 89.30%           | 89.04%        | 0.26%        |       |
|                        | 63.5            | 609.6        | 609.6        | River Rapids  | 89.26%           | 88.99%        | 0.27%        |       |
|                        | 63.5            | 609.6        | 609.6        | Red Rover     | 89.30%           | 89.04%        | 0.26%        |       |
|                        | 63.5            | 609.6        | 609.6        | Fire Flies    | 89.30%           | 89.04%        | 0.26%        |       |
|                        | 63.5            | 609.6        | 609.6        | Cheetah Gold  | 89.28%           | 89.02%        | 0.26%        |       |
|                        | 63.5            | 609.6        | 609.6        | Butterflies   | 88.84%           | 88.45%        | 0.39%        |       |
|                        | Pigmented Tile  | 63.5         | 609.6        | 609.6         | Black            | 90.18%        | 90.18%       | 0.00% |
|                        |                 | 63.5         | 609.6        | 609.6         | Gray             | 90.08%        | 90.06%       | 0.00% |
|                        |                 | 63.5         | 609.6        | 609.6         | Red              | 89.12%        | 89.12%       | 0.00% |
| 63.5                   |                 | 609.6        | 609.6        | Green         | 86.09%           | 86.09%        | 0.00%        |       |
| 95.25                  |                 | 609.6        | 609.6        | Black         | 90.20%           | 90.20%        | 0.00%        |       |
| 95.25                  | 609.6           | 609.6        | Gray         | 90.00%        | 90.00%           | 0.00%         |              |       |
| 95.25                  | 609.6           | 609.6        | Red          | 84.82%        | 84.82%           | 0.00%         |              |       |
| 95.25                  | 609.6           | 609.6        | Green        | 87.56%        | 87.56%           | 0.00%         |              |       |

# LEED-NC: Materials and Resources (continued)

## Surface America's Recycled Content

| Product    | Dimensions (mm)        |              |               | Color                   | Recycled Content |               |              |        |
|------------|------------------------|--------------|---------------|-------------------------|------------------|---------------|--------------|--------|
|            | Thickness              | Length       | Width         |                         | Total            | Post-Consumer | Pre-Consumer |        |
| TuffRoll™  | 6, 9 or 12             | as specified | 1219          | 10% Blue                | 84.09%           | 82.03%        | 2.06%        |        |
|            | 6, 9 or 12             | as specified | 1219          | 20% Blue                | 77.22%           | 73.10%        | 4.12%        |        |
|            | 6, 9 or 12             | as specified | 1219          | 10% Teal                | 84.09%           | 82.03%        | 2.06%        |        |
|            | 6, 9 or 12             | as specified | 1219          | 20% Teal                | 77.22%           | 73.10%        | 4.12%        |        |
|            | 6, 9 or 12             | as specified | 1219          | Black                   | 91.00%           | 91.00%        | 0.00%        |        |
|            | 6, 9 or 12             | as specified | 1219          | 10% Bright Red          | 84.09%           | 82.03%        | 2.06%        |        |
|            | 6, 9 or 12             | as specified | 1219          | 20% Bright Red          | 77.22%           | 73.10%        | 4.12%        |        |
|            | 6, 9 or 12             | as specified | 1219          | 10% Gray                | 84.09%           | 82.03%        | 2.06%        |        |
|            | 6, 9 or 12             | as specified | 1219          | 20% Gray                | 77.22%           | 73.10%        | 4.12%        |        |
|            | 6, 9 or 12             | as specified | 1219          | 10% Blue/Gray           | 84.09%           | 82.03%        | 2.06%        |        |
| 6, 9 or 12 | as specified           | 1219         | 20% Blue/Gray | 77.22%                  | 73.10%           | 4.12%         |              |        |
| DuraTile™  | 15                     | 610          | 610           | Green, Red              | 89.45%           | 89.45%        | 0.00%        |        |
|            | 15                     | 1000         | 500           | Black, Gray, Green, Red | 90.01%           | 90.01%        | 0.00%        |        |
|            | 30                     | 1000         | 500           | Red                     | 90.01%           | 90.01%        | 0.00%        |        |
|            | 43                     | 610          | 610           | Gray                    | 89.61%           | 89.61%        | 0.00%        |        |
|            | 43                     | 1000         | 500           | Green                   | 87.80%           | 87.80%        | 0.00%        |        |
| DuraPaver™ | 21.5                   | 1000         | 500           | Black, Gray, Green, Red | 87.80%           | 87.80%        | 0.00%        |        |
|            | 43                     | 1000         | 500           | Black, Gray, Green, Red | 87.80%           | 87.80%        | 0.00%        |        |
| EverTop™   | as specified           | as specified | as specified  | standard EPDM           | 20.50%           | 0.00%         | 20.50%       |        |
| Underlay   | 4735                   | 12           | as specified  | 1219.2                  | standard         | 85.70%        | 35.10%       | 50.57% |
|            | ElastoFloor™ 8015H     | 7            | as specified  | 1219.2                  | standard         | 86.60%        | 86.60%       | 0.00%  |
|            | AmeriTile™ -Pad 6510LC | 3            | as specified  | as specified            | standard         | 91.50%        | 91.50%       | 0.00%  |

# LEED-NC: Materials and Resources

## Local/Regional Materials

### Definition of LEED-NC Credits

#### MR 5.1 & MR 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 Surface America can contribute:

Surface America 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 you qualify for this credit, please call 800-999-0555 for a complete listing of areas within a 500 mile radius.

# LEED-NC: Indoor Environmental Quality

---

## Low-Emitting Materials

### 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.

### Definition of LEED-EB Credits EQ 3.1 - EQ 3.2:

Optimize use of air quality compliant materials inside the building to reduce the emissions from materials used in the building. Points are awarded for the existence of product purchasing policies for the building and site addressing the requirements of this credit and documentation of purchasing during the performance period in conformance with those policies, as described below. Subsequent re-certification is tied to both polices and purchasing performance, as described below. At a minimum, these policies must include the following product groups: paint and coatings, adhesives, sealants, carpet, composite panels, and agrifiber products. The building materials covered include any building materials covered by a.-e. listed below that are used for improvements, including upgrades, retrofits, renovations or modifications, inside the building.

One point shall be awarded, up to a maximum of 2 points, for each 45% of annual purchases calculated on a cost basis that conform to one of the following sustainability criteria:

- a. Adhesives and sealants with a VOC content less than the current VOC content limits of South Coast Air Quality Management District (SCAQMD) Rule #1168, or sealants used as fillers that meet or exceed the requirements of the Bay Area Air Quality Management District Regulation 8, Rule 51.

OR

- b. Paints and coatings with VOC emissions that do not exceed the VOC and chemical component limits of Green Seal's Standard GS-11 requirements.

OR

- c. Carpet that meets the requirements of the CRI Green Label Plus Carpet Testing Program.

OR

- d. Carpet cushion that meets the requirements of the CRI Green Label Testing Program.

OR

- e. Composite panels and agrifiber products that contain no added urea-formaldehyde resins.

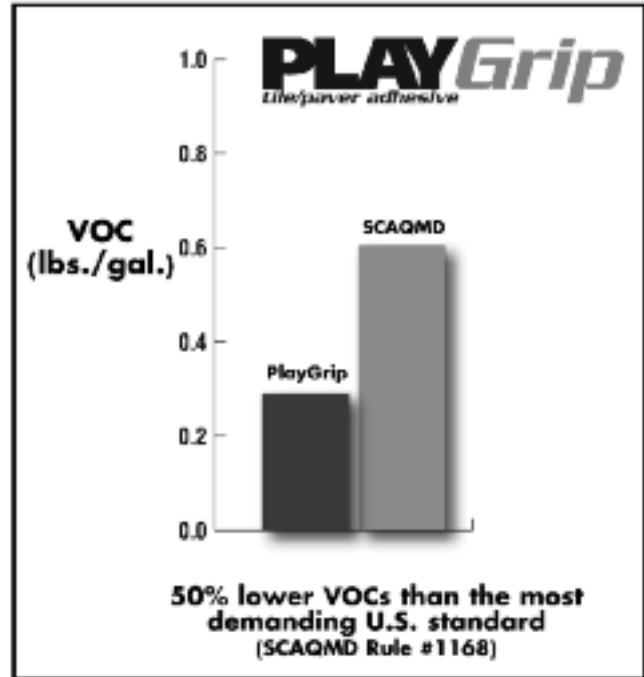
### How Surface America can contribute:

PlayGrip, used for unitary tile installations, 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 Surface America Surfacing and Flooring Systems.

### 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. Review product cut sheets, MSDS sheets, signed attestations or other official literature from the manufacturer clearly identifying the VOC contents or compliance with referenced standards.



# Floor Score Certification

---

## Definition of LEED-NC Credit

### EQ 4.3:

#### EQ 4.3

- All flooring must comply with the following as applicable to the project scope.

All hard surface flooring must be certified as compliant with the FloorScore standard by an independent third-party. Flooring products covered by FloorScore include vinyl, linoleum, laminate flooring, wood flooring, ceramic flooring, rubber flooring, wall base, and associated sundries. OR All flooring products will meet the testing and product requirements of the California Department of Public Health Standard Practice for The Testing Of Volatile Organic Emissions From Various Sources Using Small-Scale Environmental Chambers, including 2004 Addenda.

### Potential Strategies:

Clearly specify requirements for product testing and/or certification in the construction documents. Select products that are FloorScore certified or for which testing has been done by qualified independent laboratories in accordance with the appropriate requirements.

### How PlayBound can contribute:

Indoor applications of PlayBound Playground Safety Surfacing have earned FloorScore certification. The FloorScore program was developed by the Resilient Floor Covering Institute (RFCI) in conjunction with Scientific Certification Systems (SCS), which tests and certifies flooring, as well as flooring adhesive products and certifies production facilities for compliance with rigorous indoor air quality emission requirements. Individual volatile organic compounds (VOC's) are evaluated using health-based specifications.

## PlayBound is FloorScore Certified

PlayBound Playground Safety Surfacing has earned FloorScore certification for indoor applications. The FloorScore program was developed by the Resilient Floor Covering Institute (RFCI) in conjunction with Scientific Certification Systems (SCS), which tests and certifies flooring as well as flooring adhesive products, and certifies production facilities for compliance with rigorous indoor air quality emission requirements. Individual volatile organic compounds (VOCs) are evaluated using health-based specifications. Flooring and adhesives that earn FloorScore certification qualify for use in high performance schools and office buildings. Products bearing the FloorScore label meet the indoor air emissions criteria and meet the Collaborative for High Performance Schools (CHPS) criteria (Section 01350) for indoor air quality in classrooms as described in the State of California's Department of Health Services Standard Practice.

# LEED-EB: Materials and Resources

---

## Sustainable Cleaning Products and Materials

### Definition of LEED-EB Credit EQ 4.1-4.3:

MR 4.1 ... (1 point)

Implement sustainable purchasing for cleaning materials and products, disposable janitorial paper products and trash bags. Cleaning product and material purchases include building purchases for use by in house staff or used by outsourced service providers. Calculate the percentage of the total sustainable material and product purchases that meet at least one of the specified sustainability criteria. The percentage of the total sustainable cleaning product and material purchases determine the number of points earned up to a total of 3 points. One point will be awarded for each 30% of the total annual purchases of these products (on a cost basis) that meet one of the following sustainability criteria:

- Cleaning products that meet the Green Seal GS-37 standard if applicable, OR if GS-37 is not applicable (e.g., for products such as carpet cleaners, floor finishes or strippers), use products that comply with the California Code of Regulations maximum allowable VOC levels.
- Disposable janitorial paper products and trash bags that meet the minimum requirements of U.S. EPA's Comprehensive Procurement Guidelines.

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

- Purchase sustainable cleaning materials and products an additional 30% beyond MR 4.1 (60% total)

MR 4.3 ... (1 point in addition to MR 4.2)

- Purchase sustainable cleaning materials and products an additional 30% beyond MR 4.2 (90% total)

### How PlayBound can contribute:

PlayBound recommends ECORE's Green Solutions line of cleaners and strippers for use on all products.

- E-Cleaner, a low foam floor cleaner, meets the Green Seal GS-37 standard.
- E-strip, floor stripper, complies with the California Code of Regulations maximum allowable VOC levels.

### Potential Strategies:

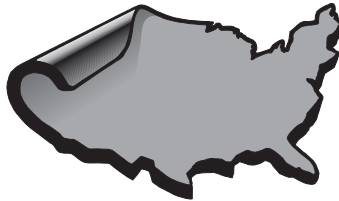
When purchasing materials or supplies, specify that they must meet one or more of the specified sustainability criteria.

# The Key Differences and Similarities of LEED Rating Systems

LEED 2009 is a new version of the rating system that delivers against key environmental and human health impacts, and puts in place a transparent framework for weighting credits accordingly, based on the best available science. LEED 2009 consists of credit alignment and harmonization; transparent environmental and

human impact credit weighting; regionalization; and a predictable development cycle. The organizational structure now being used to manage LEED makes many of the credits congruent across all rating systems. The following chart outlines the similarities and differences between the various LEED rating systems.

| LEED - New Construction 2009 (NC)  | LEED - Commercial Interiors 2009 (CI)  | LEED - Existing Buildings 2009 (EB)   |
|--|--|---|
| <b>General</b>   |  |   |
| Applies to whole buildings   | Applies to tenant Improvements of new or existing office space   | Applies to facility management policies and measured performance  |
| <b>Materials and Resources</b>   |  |   |
| <b>MR Credit 2: Construction Waste Management - 1-2 pts.</b><br><b>1 point</b> - 50% of construction debris diverted from landfills<br><b>1 additional point</b> - 75% of construction debris diverted from landfills  | <b>MR Credit 2: Construction Waste Management - 1-2 pts.</b><br>Same requirements as LEED-NC Credit MR 2   | <b>MR Credit 3: Sustainable Purchasing - Facility Alterations and Additions - 1 pt</b><br>50% of total purchases achieving at least one of the criteria on the sustainability list during the performance period<br>Points may be earned through at least one of the following criteria:<br>- Purchases contain at least 10% post consumer and/ or 20% post industrial material<br>- Adhesives meet VOC content limits of South Coast Air Quality Management District |
| <b>MR Credit 4: Recycled Content - 1-2 pts.</b><br><b>1 point</b> - 10% of total project materials, by cost, contain recycled content (post + 1/2 pre-consumer)<br><b>1 additional point</b> - 20% of total project materials, by cost, contain recycled content (post + 1/2 pre-consumer)   | <b>MR Credit 4: Recycled Content - 1-2 pts.</b><br>Same requirements as LEED-NC MR Credit 4  |   |
| <b>MR Credit 5: Regional Materials - 1-2 pts.</b><br><b>1 point</b> - 10% of building materials or products used are extracted, harvested, recovered or manufactured within 500 miles of the project site<br><b>1 additional point</b> - 20% of building materials or products used are extracted, harvested, recovered or manufactured within 500 miles of the project site   | <b>MR Credit 5: Regional Materials - 1-2 pt.</b><br><b>1 point</b> - Option 1: 20% minimum of construction and Division 12 (Furniture) materials and products used are manufactured within 500 miles of the project site<br><b>1 additional point - Or - Option 2:</b> Meet requirements of option 1 and 10% minimum of construction and Division 12 (Furniture) materials used are extracted, harvested, recovered or manufactured within 500 miles of the project site | <b>MR Credit 9: Solid Waste Management - Facility Alterations and Additions - 1 pt</b><br>Divert 70% of waste by volume generated by facility alteration and additions from disposal to landfills and incineration facilities   |
| <b>Indoor Environmental Quality</b>  |  |   |
| <b>IEQ 4.1: Low Emitting Materials: Adhesives and Sealants - 1 pt.</b><br>Adhesives meet VOC limits for South Coast Air Quality Management District (SCAQMD)   | <b>EQ 4.1: Low Emitting Materials: Adhesives and Sealants - 1 pt.</b><br>Same requirements as LEED-NC IEQ Credit 4.1   | <b>IEQ Credit 3.3 Green Cleaning - Purchase of Sustainable Cleaning Products and Materials - 1 pt.</b><br>30% of total purchases of cleaning materials and products must meet at least one of the sustainable criteria list<br>Points may be earned through the following criteria:<br>- Green Seal Certification   |
| <b>IEQ 4.3: Low Emitting Materials: Flooring Systems - 1 pt.</b><br><b>Option 1:</b> All hard surface flooring must meet the requirements of the FloorScore standard<br><b>Or - Option 2:</b> All interior flooring elements must meet the testing and product requirements of the California Department of Health Services Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers, including 2004 Addenda. | <b>EQ 4.3: Low Emitting Materials: Flooring Systems - 1 pt.</b><br>Same requirements as LEED-NC IEQ Credit 4.3   |   |



# **SURFACE**AMERICA®

## **Resilient Surfacing from Recycled Materials**

Surface America, Inc., the playground surfacing leader, was founded in 1993. Located in Western New York, Surface America is 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.

Surface America, 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, ASTM International, and Building for Environmental and Economic Sustainability run by the US National Institute of Standards and Technology.

---

Playground Surfacing • Gymnasium Flooring • Fitness Flooring  
Specialty Surfacing • Trail & Pathway Surfacing

**1-800-999-0555 • Fax: 716-632-8324 • 716-632-8413**  
**Email: [surface@surfam.com](mailto:surface@surfam.com) • [www.surfaceamerica.com](http://www.surfaceamerica.com)**  
**P.O. Box 157, Williamsville, New York 14231**

---



©2008 All designs are copyrighted by ECORE Intl. Printed on recycled paper in the U.S.A.

Surface America is a registered trademark of Surface America, Inc.

UltraTile, AmeriTile, ElastoFloor, DuraPaver, DuraTile, PlayBound, EverTop, TurfTop and TuffRoll are trademarks of Surface America, Inc.

LEED is a registered trademark of the U.S. Green Building Council.

Green Building Rating System is a trademark of the U.S. Green Building Council.

International Organization for Standardization is a registered trademark of ISO.