

How Rubberflex 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 the community and employees. As a result, a tremendous amount of 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 Rubberflex can apply to LEED

Many interior 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.

Rubberflex sports surfacing is designed to meet the stringent criteria required to help earn points under 2 of the 6 categories of LEED. Based on these criteria, Rubberflex products can assist specifiers by potentially contributing toward earning up to 8 LEED points.

LEED Credit Areas Impacted by Flooring

| Category | Credit Title | Credit Number | # of Points Attainable | Version |
|------------------------------|---|---------------|------------------------|------------------------|
| Materials & Resources | Construction Waste Management | MR 2.1 | 1 | NC - CI - EB - Schools |
| | Construction Waste Management | MR 2.2 | 1 | NC - CI - EB - Schools |
| | Recycled Content | MR 4.1 | 1 | NC - CI - EB - Schools |
| | Recycled Content | MR 4.2 | 1 | NC - CI - EB - Schools |
| | Local/Regional Materials | MR 5.1 | 1 | NC - CI - EB - Schools |
| | Local/Regional Materials | MR 5.2 | 1 | NC - CI - EB - Schools |
| Indoor Environmental Quality | Low-Emitting Materials - Adhesives | EQ 4.1 | 1 | NC - CI - EB - Schools |
| | Low-Emitting Materials - Flooring Systems | EQ 4.3 | 1 | NC - CI - Schools |

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.

EB

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

Core/Shell

LEED for Core & Shell aids designers, builders, developers, and new building owners in implementing sustainable design for new core and shell construction.

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-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.

How Rubberflex can contribute:

Rubberflex can contribute in two ways:

- All salvages and overages can be packaged and shipped back at the owner's expense to the product manufacturer.

- Modular Elite Tiles may be packaged and shipped back at the owner's expense to the product manufacturer.

Both product scrap must be free of adhesive, dowel rods, and debris, including dirt, concrete, or asphalt. It will be reground and used in other materials the manufacturers.

Potential Strategies:

Establish goals of diversion from disposal in landfills, 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.

How Rubberflex can contribute:

Rubberflex sports surfacing is comprised of shredded and cleaned SBR tire rubber, 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.

Rubberflex Recycled Content

| Sector | Product Number | Total Recycled Content | Pre-consumer | Post-consumer |
|--------|----------------|------------------------|--------------|---------------|
| 1 | EL00 | 91% | 2% | 89% |
| | EL01 | 84% | 4% | 80% |
| | EL02 | 84% | 4% | 80% |
| | EL04 | 84% | 4% | 80% |
| | EL05 | 84% | 4% | 80% |
| | EL06 | 84% | 4% | 80% |
| | EL07 | 84% | 4% | 80% |
| | EL09 | 84% | 4% | 80% |
| | EL21 | 84% | 4% | 80% |
| | EL23 | 84% | 4% | 80% |
| | EL28 | 84% | 4% | 80% |
| | EL30 | 84% | 4% | 80% |
| | EL32 | 84% | 4% | 80% |
| | 2 | EL34 | 77% | 6% |
| EL36 | | 77% | 6% | 71% |
| EL45 | | 77% | 6% | 71% |
| EL46 | | 77% | 6% | 71% |
| EL47 | | 77% | 6% | 71% |
| EL54 | | 77% | 6% | 71% |
| EL65 | | 77% | 6% | 71% |
| EL69 | | 77% | 6% | 71% |
| EL70 | | 77% | 6% | 71% |
| EL80 | | 77% | 6% | 71% |
| EL82 | | 77% | 6% | 71% |
| EL87 | | 77% | 6% | 71% |
| 3 | EL56 | 91% | 26% | 65% |
| | EL24 | 70% | 8% | 62% |
| | EL37 | 70% | 8% | 62% |
| | EL38 | 70% | 8% | 62% |
| | EL39 | 70% | 8% | 62% |
| | EL40 | 70% | 8% | 62% |
| | EL53 | 67% | 8% | 59% |
| | EL63 | 67% | 8% | 59% |
| | EL66 | 67% | 8% | 59% |
| | EL81 | 67% | 8% | 59% |
| | EL84 | 67% | 8% | 59% |
| | EL90 | 67% | 8% | 59% |
| | EL55 | 64% | 9% | 55% |
| | EL64 | 64% | 9% | 55% |
| | EL68 | 64% | 9% | 55% |
| | EL83 | 64% | 9% | 55% |
| | EL88 | 64% | 9% | 55% |
| | EL92 | 64% | 9% | 55% |

| Sector | Product Number | Total Recycled Content | Pre-consumer | Post-consumer |
|--------------------|----------------|------------------------|--------------|---------------|
| 4 | EL51 | 50% | 12% | 38% |
| | EL52 | 50% | 12% | 38% |
| | EL67 | 50% | 12% | 38% |
| | EL86 | 50% | 12% | 38% |
| | EL89 | 50% | 12% | 38% |
| | EL43 | 23% | 19% | 4% |
| 5 | EL50 | 20% | 20% | 0% |
| | EL60 | 20% | 20% | 0% |
| | EL61 | 20% | 20% | 0% |
| | EL62 | 20% | 20% | 0% |
| | EL85 | 20% | 20% | 0% |
| EL91 | 20% | 20% | 0% | |
| Elite 1" thickness | | | | |
| Product Number | | Total Recycled Content | Pre-consumer | Post-consumer |
| EL00 | | 92% | 0% | 92% |
| EL36 | | 91% | 1% | 90% |
| EL45 | | 90% | 1% | 89% |
| EL46 | | 90% | 1% | 89% |
| EL47 | | 90% | 1% | 89% |
| EL48 | | 90% | 1% | 89% |
| EL63 | | 90% | 1% | 89% |
| EL84 | | 90% | 1% | 89% |
| EL24 | | 90% | 1% | 89% |
| EL67 | | 88% | 1% | 87% |
| EL86 | | 88% | 1% | 87% |
| EL15 | | 86% | 2% | 84% |
| EL41 | | 86% | 2% | 84% |
| EL42 | | 86% | 2% | 84% |
| EL43 | | 86% | 2% | 84% |
| EL44 | | 86% | 2% | 84% |

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 Rubberflex can contribute:

Rubberflex sports 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.

