



## HOW DURASEIN PRODUCTS CAN CONTRIBUTE TO LEED CERTIFICATION

### What is LEED?

The acronym LEED stands for **Leadership in Energy and Environmental Design**. Developed by the U.S. Green Building Council (USGBC), LEED is an internationally recognized green building certification system, providing third-party verification that a building or community was designed and built using strategies aimed at improving performance across all the metrics that contribute to a sustainable, healthy environment: energy savings, water efficiency, CO<sub>2</sub> emissions reduction, improved indoor environmental quality, stewardship of resources and sensitivity to their impacts.

LEED is a voluntary certification program that can be applied to any building type and any building lifecycle phase. It promotes a whole-building approach to sustainability by recognizing performance in key areas:

- Sustainable Sites
- Water Efficiency
- Energy & Atmosphere
- Materials & Resources
- Indoor Environmental Quality
- Locations & Linkages
- Awareness & Education
- Innovation in Design
- Regional Priority

Projects that seek LEED Certification register with the USGBC and utilize a design process that is guided by a particular Rating System pertinent to that particular project. Some examples of the LEED Rating Systems are:

- New Construction and Major Renovations
- Core and Shell
- Commercial Interiors
- Existing Buildings: Operation and Maintenance

In each Rating System, LEED points are awarded on a 100-point scale, and credits are weighted to reflect their potential environmental impacts. Additionally, 10 bonus credits are available, four of which address regionally specific environmental issues. A project must satisfy all prerequisites and earn a minimum number of points to be certified. The level of Certification (Certified, Silver, Gold or Platinum) attained by the project is dependent on the number of points earned by the project. There are pre-determined credit categories under each Rating System consisting of topics including Water Efficiency, Energy and Atmosphere, Materials and Resources and others. Specific credits are included in each major category. Each credit has a specific Intent, Requirements and Potential Technologies & Strategies description along with an indication of the number of points available under that specific credit. As a project meets the Requirements of the credit, it earns the allowable point(s) for that credit.

It is important to note that neither specific products nor services are certified by the USGBC or LEED. Products may have attributes that contribute to the attainment of points, but the product itself does not actually earn points.

### **LEED & Durasein® Products**

In the Durasein® family of products, there are several credits that are pertinent. The primary area in which surfacing materials have an impact is Materials & Resources (MR). Durasein surfaces may contribute to the requirements of the following LEED 2009 credits:

#### **MR Credit 1.2: Building Reuse – Maintain Interior Nonstructural Elements (1 Point)**

In order to earn this point, the project must use existing nonstructural elements in at least 50% of the completed building.

#### **MR Credit 3: Materials Reuse (1-2 Points)**

In order to earn points in this credit, the project must use salvaged, refurbished or reused materials for at least 5% (1 point) or 10% (2 points) of the total value of materials on the project.

#### **MR Credit 4: Recycled Content (1-2 Points)**

In order to earn points in this credit, the project must use materials with recycled content such that the sum of postconsumer recycled content plus ½ of the preconsumer content constitutes 10% (1 point) or 20% (2 points) of the total value of materials used on the project.

#### **MR Credit 5: Regional Materials (1-2 Points)**

In order to earn points in this credit, the project must use building materials or products that have been extracted, harvested or recovered, as well as manufactured within 500 miles of the project site. Fabricators (manufacturers) located within 500 miles of the project site may be able to contribute a portion of the cost of installed products to this credit.

The use of low-emitting adhesives can also contribute to the Indoor Environmental Quality (IEQ) area through:

IEQ Credit 4.1: Low-Emitting Materials – Adhesives and Sealants (1 Point)

In order to achieve this point, all adhesives and sealants on a project must comply with South Coast Air Quality Management District (SCAQMD) Rule #1168 which sets specific VOC limits.

In addition, as a Greenguard & Greenguard Gold Certified product, Durasein® can contribute to credit for Innovation in Design (ID) under:

ID Credit 1: Innovation in Design (1-5 Points)

In addition to the traditional areas available for credits, LEED 2009 provides for the opportunity to achieve points for exceptional performance through potential credits for Innovation in Design. The project design team will create project-specific initiatives that exhibit exemplary performance or innovative approaches to sustainable design. Examples of ID credits that have been approved include topics such as:

- Furniture – Low Emitting
  - Furniture – GREENGUARD Certified
  - Furniture – Sustainably Manufactured
- .....

LEED V4

LEED v4 is the newest version of the world's premier benchmark for high-performance green buildings. This version is bolder, more specialized, and designed for an improved user experience.

Here's why LEED v4 is better:

- Includes a focus on materials that goes beyond how much is used to get a better understanding of what's in the materials we spec for our buildings and the effect those components have on human health and the environment
- Takes a more performance-based approach to indoor environmental quality to ensure improved occupant comfort
- Brings the benefits of smart grid thinking to the forefront with a credit that rewards projects for participating in demand response programs
- Provides a clearer picture of water efficiency by evaluating total building water use

Currently, the USGBC allows buildings to be certified under either LEED 2009 or LEED V4. In the Durasein® family of products, there are several credits in LEED V4 that are pertinent. The primary areas in which surfacing materials have an impact are Materials & Resources (MR) and Indoor Environmental Quality (EQ). Durasein® surfaces may contribute to the requirements of the following LEED 2009 credits:

MR CREDIT: BUILDING LIFE-CYCLE IMPACT REDUCTION

Option 4. Whole-Building Life-Cycle Assessment (3 points)

MR CREDIT: BUILDING PRODUCT DISCLOSURE AND OPTIMIZATION—ENVIRONMENTAL PRODUCT DECLARATIONS

Option 1. Environmental Product Declaration (EPD) (1 point)

Option 2. Multi-Attribute Optimization (1 point)

MR CREDIT: BUILDING PRODUCT DISCLOSURE AND OPTIMIZATION –SOURCING OF RAW MATERIALS

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

Option 2. Leadership Extraction Practices (1 point)

(Recycled content. 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% of their cost for the purposes of credit achievement calculation)

MR CREDIT: BUILDING PRODUCT DISCLOSURE AND OPTIMIZATION –MATERIAL INGREDIENTS

Option 1. Material Ingredient Reporting (1 point)

Option 2: Material Ingredient Optimization (1 point)

Option 3: Product Manufacturer Supply Chain Optimization (1 point)

MR CREDIT: FURNITURE AND MEDICAL FURNISHINGS (1-2 points)

Option 1. Minimal Chemical Content

Option 2. Testing and Modeling of Chemical Content

Option 3: Multi-Attribute Assessment of Products

MR CREDIT: DESIGN FOR FLEXIBILITY (Healthcare) (1 point)

EQ CREDIT: LOW-EMITTING MATERIALS (1-3 points)

Option 1. Product Category Calculations

Option 2. Budget Calculation Method

IN CREDIT: INNOVATION

Option 1. Innovation (1 point)