

# EPDM LEED® Credit Requirements

## Obtaining a LEED Credit for Dark-Colored Membrane Roofing Assemblies

LEED is an internationally recognized green building certification system developed by the United States Green Building Council (USGBC) that provides third-party verification for metrics related to the design and construction of sustainable buildings, including: energy savings, water efficiency, CO<sub>2</sub> emissions reduction, improved indoor environmental quality, and stewardship of resources and sensitivity to their impacts.

Since its inception, LEED has awarded one credit for any building that utilizes reflective roofing materials. However, empirical studies and energy analysis tools like RoofSense and the Roof Savings Calculator (ORNL & LBNL) indicate that dark-colored roofing materials such as Carlisle's Sure-Seal® and Sure-Tough™ EPDM can help lower total energy costs, natural resource consumption, and carbon emissions in buildings located in ASHRAE® Climate Zones 4 and above.

In LEED 2009, dark-colored roofing materials may contribute to LEED credit requirements in one of the two areas listed to the right by submitting energy analysis reports documenting the energy efficiency of dark-colored membranes to your assigned LEED contact.



### ID Credit 1: Innovation in Design

*Awarded for exceptional performance above LEED requirements or innovative performance not addressed by LEED*

### RP Credit 1: Regional Priority

*Awarded for achievements that address geographically specific environmental priorities*

► Please complete the form below and submit with a RoofSense\* report or a Roof Savings Calculator\*\* Analysis when seeking justification for LEED accreditation.

Building Type: \_\_\_\_\_

Building Location: \_\_\_\_\_

ASHRAE Climate Zone: \_\_\_\_\_

Roof Membrane Type: \_\_\_\_\_

Roof R-value: \_\_\_\_\_

Energy Cost Savings: \_\_\_\_\_ less dollars \_\_\_\_\_ %

Carbon Reduction: \_\_\_\_\_ less tons \_\_\_\_\_ %

\* Values derived utilizing RoofSense, a lifecycle energy analysis software that demonstrates the potential savings in energy costs, consumption and CO<sub>2</sub> emissions related to the use of dark- and light-colored roofing materials. RoofSense is benchmarked against Carrier's Hourly Analysis Program (HAP), a computer program accepted by the USGBC for use in LEED.

\*\* The Roof Savings Calculator is a consensus-based tool built upon the DOE-2.1 engine.

OTHER LEED CREDIT OPTIONS WITH CARLISLE EPDM

Carlisle EPDM offers a number of environmentally friendly advantages beyond energy and carbon reductions. In fact, the material can contribute to LEED credit requirements in a variety of traditional means as well.

Below is a breakdown of ways in which EPDM can contribute to LEED certification for your next project.

LEED Category	LEED Credit	How to Achieve
Sustainable Sites	Credit 6.1 Stormwater Design – Quantity Control	Stormwater Retention System
Sustainable Sites	Credit 6.2 Stormwater Design – Quality Control	Stormwater Retention System
Sustainable Sites	Credit 7.2 Heat Island Effect – Roof	Sure-White™ EPDM
Materials and Resources	Credit 2 – Construction Waste Management	Recycle membrane and/or reuse ballast
Materials and Resources	Credit 3 – Materials Reuse	Reuse insulation and/or ballast
Materials and Resources	Credit 4 – Recycled Content	EPDM has up to 5% recycled content
Materials and Resources	Credit 5 – Regional Materials	Use of local material such as ballast, pavers, etc.
Indoor Environmental Quality	Credit 4.1 Low-Emitting Materials – Adhesives	Low-VOC adhesives

