

LEED PERFORMANCE RATING PROGRAM

TECHNICAL BULLETIN

HIGHLIGHTS:

- Leadership in Energy and Environmental Design (LEED) was created by the U.S. Green Building Council (USGBC) to improve building design principles by increasing overall energy efficiency through conservation and preservation.
- LEED for New Construction requires a minimum Solar Reflectance Index (SRI) of 78 for low-sloped roofing ($\leq 2:12$), and at least 29 for steep-sloped roofing ($> 2:12$), as calculated according to ASTM E1980.
- LEED for Existing Buildings requires a minimum emissivity rating of .90 when tested in accordance with ASTM E408.
- UNITED COATINGS' **Diathon**, **Elastuff 102**, **Kymax**, **Roof Mate**, **Roofshield**, and **Sunshield** elastomeric roof coatings meet these requirements.

WHAT IS LEED?

The LEED program sets a national standard for achieving high-performance, energy-efficient, and economically viable buildings that incorporate sustainable design principles. The Green Building Rating System, launched in March of 2000, offers opportunities to earn points toward LEED certification in five key areas of human and environmental health, including sustainable site development, water savings, energy efficiency, materials selection, and indoor environmental quality. Additional points can be earned for exceptional performance under a special Innovation in Design category. Although LEED establishes performance criteria for individual buildings, it does not certify products or companies. LEED projects demonstrate commitment to environmental and social responsibility, and can qualify for tax rebates, zoning allowances, and other incentives.

ROOF REQUIREMENTS:

The intent of the LEED roofing program is to reduce heat islands (thermal gradient differences between developed and undeveloped areas), thereby minimizing the impact on microclimate, human and wildlife habitat, and resource consumption. LEED Option 1 mandates the use of Energy Star compliant and high emissivity roofing products over a minimum of 75% of the roof surface. Results and records of quarterly inspections are to be provided to confirm that the rating is being maintained.

The LEED program uses a point system to evaluate overall building performance in six categories, each with a different point potential. When the entire project checklist is complete and all points are compiled, the total may establish one of four levels of certification: Certified (26-32 points); Silver (33-38 points); Gold (39-51 points); or Platinum (52-69 points). Category requirements will vary by city or location; for example, certain municipalities require that most city-owned, new construction projects obtain LEED "Silver" certification or better.

To obtain the roofing credit, a LEED Letter Template, signed by the Architect, Civil Engineer or other responsible party, must be forwarded to the USGBC. It provides proof that the building plan and roofing materials comply with Energy Star requirements and meet the minimum emissivity or SRI standards. Contact the USGBC at www.usgbc.org for details and to view the on-line registration form.

QUALIFYING COATINGS:

The table below lists some of UNITED COATINGS' products that meet LEED requirements.

ROOFING MATERIAL	SRI	ENERGY STAR REFLECTANCE	ASTM E408 EMITTANCE
LEED Minimum Requirements	≥78	0.65	0.90
ACRON WHITE	101	0.81	0.95
DIATHON® WHITE	107	0.85	0.94
DIATHON® HT WHITE	103	0.82	0.95
ELASTUFF 102 WHITE	101	0.81	0.94
KYMAX® WHITE	110	0.87	0.94
ROOF MATE WHITE	107	0.85	0.94
ROOF MATE HT WHITE	103	0.82	0.95
ROOFSHIELD® WHITE	101	0.81	0.95
SUNSHIELD WHITE	100	0.80	0.94

For information about UNITED COATINGS, visit our website at <http://www.unitedcoatings.com> or call (800) 541-4383/(509) 926-7143.

For a list of Energy Star rated products, visit www.energystar.gov.

To view the latest Cool Roof Rating Council Directory of Rated Products, visit www.coolroofs.org.