



Aiming for LEED® certification? You know where you want to go. How will you get there?

True green requires daylighting. Daylighting that's high-performance, energy-efficient and cost-effective requires innovation. Where will you find it? At Duo-Gard. Designers are asking: How can we include more daylighting for more sustainability and achieve LEED points while eliminating costly solar heat gain and glare? Duo-Gard has provided innovative answers in translucent daylighting technology since 1984.

True green requires alternative transportation. Transportation that encourages mass transit and biking requires innovation. Where will you find it? At Duo-Gard. Customized solutions support the trend and help achieve LEED certification. Bike shelters and bus shelters make a statement about a community's commitment to its residents. Duo-Gard specializes in these.

Earning LEED v3 Credits with Duo-Gard's Collaboration in Translucent Daylighting and Alternative Transportation

Sustainable Sites (SS)

SS Credit 4.2 Alternative Transportation – Bicycle Storage and Changing Rooms 1-2 points

Provide secure bicycle racks and/or storage: Our custom and standard bike shelters, racks and accessories provide functional, aesthetic solutions that can integrate solar and LED advances. We also provide bus shelters and special purpose outdoor structures.

SS Credit 7.1 Heat Island Effect – Nonroof

1 point

Provide architectural devices or structures with a solar reflective index (SRI) of at least 29. Duo-Gard's translucent canopies, walkways and special structures can be engineered for this requirement.

SS Credit 7.1 Heat Island Effect – Roof

1 point

Use materials with SRI 29 steep-sloped or SRI 78 low-sloped roofs for minimum of 75% of the surface: Duo-Gard's translucent roof systems can be engineered for this requirement.

SS Credit 8 Light Pollution Reduction

1 point

Minimize trespass of interior lighting to the outside: Duo-Gard's translucent skylights, walls both interior and exterior, ceilings and accents are engineered to diffuse direct-beam light with no additional shielding.

Energy and Atmosphere (EA)

EA Prerequisite 2 Minimum Energy Performance

Required

Improve the building's performance by 10% for new construction or 5% for major renovations using ANSI/ASHRAE/IESNA Standard 90.1-2007: Duo-Gard's high-performance systems are custom-engineered to achieve some of the industry's highest insulating values with highest diffused light transmission, while significantly reducing solar heat gain and winter heat loss, resulting in exceptional savings.

EA Credit 1 Optimize Energy Performance

1-21 points

Improve energy efficiency for the whole building project by 8% - 48% beyond the prerequisite standard, depending on the type of construction: Duo-Gard's systems offer the options of double-glazing, Solar Block coating, LED strategies and Nanogel® insulating aerogel to enhance the high performance of today's multiwall polycarbonates. We can custom engineer to achieve your design's energy objectives.

EA Credit 2 On-Site Renewable Energy

1-7 points

Encourage increasing levels of on-site renewable energy from 1% -13% of annual energy costs: Duo-Gard's daylighting systems can include advancing technology in building-integrated photovoltaics (BIPV).

Materials and Resources (MR)

MR Credit 1 & 1.1 Building Reuse – Maintain Existing Walls, Floors & Roof 1-5 points

Maintain existing building structure and envelope: Overglazing systems from Duo-Gard enable you to cover existing walls, windows and skylights without demolition and without sacrificing diffused daylight as you increase energy efficiency and update appearances.

MR Credit 4 Recycled Content 1-2 points

Use materials with 10% or 20% post-consumer + ½ pre-consumer recycled content: Our multiwall polycarbonates contain 20% - 40% pre-consumer recycled content on request. Both our polycarbonates and aluminum materials are completely recyclable, as is the Nanogel insulating aerogel, which is C2C Certified.

MR Credit 5 Regional Materials 1-2 points

Use minimum 10%-20% of materials extracted, harvested, recovered or manufactured within 500 miles of the site:

Our systems are all manufactured in Canton MI. These states are within the required radius: Arkansas, Connecticut, Illinois, Indiana, Kentucky, Massachusetts, Michigan, Minnesota, Missouri, New Hampshire, New Jersey, New York, North Carolina, Ohio, Pennsylvania, South Dakota, Vermont, Virginia, West Virginia and Wisconsin.

Indoor Environmental Quality (IEQ)

IEQ Prerequisite 2 Environmental Tobacco Smoke (ETS) Control Required

Prevent or eliminate exposure from environmental tobacco smoke: Duo-Gard pioneered the smoking shelter in 1990 as a solution suiting both smokers and nonsmokers by providing a designated area. We remain a leader in standard and custom styles, sizes, options that comply with the “25 feet from entrances...” requirement.

IEQ Credit 2 Increased Ventilation 1 point

Include additional ventilation from outdoor air: Daylighting systems from Duo-Gard are custom design/build and can integrate several types of operable sections that provide ventilation.

IEQ Credit 6.2 Controllability of Systems – Thermal Comfort 1 point

Provide individual temperature control or operable windows for 50% of the occupants: Duo-Gard’s translucent daylighting systems can be engineered with a variety of operable sections to ensure individual comfort.

IEQ Credit 7.1 Thermal Comfort – Design 1 point

Create a comfortable thermal environment for occupants: Duo-Gard’s high-performance daylighting integrates the industry’s widest array of translucent polycarbonates for high diffused light transmission without glare and solar heat gain. This is coupled with our proprietary, gasketed structural framing that ensures minimal heat loss/heat gain for the lowest U-values.

IEQ Credit 8.1 Daylight and Views – Daylight 1-3 points

Provide daylighting for 75% of regularly occupied spaces. Gain another point for 90%: Achieve your desired level of diffused daylight without glare or solar heat gain or the need for any type of additional shading with the Duo-Gard system designed and engineered for your specific project requirements.

IEQ Credit 8.2 Daylight and Views – Views 1 point

Provide outside views for 90% of regularly occupied spaces: Visibility sections – as well as ventilating sections – can easily be integrated into Duo-Gard’s custom systems.

Innovation in Design (ID)

ID Credit 1 Innovation in Design 1-5 points

Recognize exemplary performance that goes beyond LEED’s requirements and/or achieves innovative performance in other Green Building categories: New options such as Nanogel® insulating aerogel, 3S Solar Block coating, BIPV panels can help. Collaborating with Duo-Gard’s team of designers, engineers and fabricators can result in exemplary performance that gains additional LEED points and in innovations that achieve ID credits. Our consulting approach to each project enables us to provide insight and make recommendations that contribute to efficiency, aesthetics, performance – and LEED certification for your project.

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