LEED® Certification Contribution

The Leadership in Energy and Environmental Design (LEED) Green Building Rating System™ is the nationally accepted benchmark for the design construction, and operation of high performance green buildings. LEED promotes a whole-building approach to sustainability by recognizing performance in seven key areas of human and environmental health: sustainable sites, water efficiency, energy and atmosphere, materials and resources, indoor environmental quality, innovation in design and regional priority credits.

CECO DOOR in Milan, TN manufactures doors and frames from steel, one of the most recycled materials in North America. Each door is then put through rigorous life cycle testing that allows our door solutions to qualify for tornado and hurricane certification standards for strength and durability. The sustainable thinking that goes into each door allows it a long service life with cradle-to-cradle considerations taken into account.

CECO DOOR can help to achieve prerequisites and accumulate points in the following categories and credit areas of LEED.

Left: Nationals Park is the nation's first major professional stadium to become LEED Silver Certified by the U.S. Green Building Council. The project incorporates a variety of sustainable design elements including building materials containing a minimum of 10 percent recycled content. Over 700 doors and frames manufactured by CECO DOOR helped achieve LEED Silver status on this project.

Energy and Atmosphere (EA)

EA Prerequisite 2
Minimum Energy Performance

Establish the minimum level of energy efficiency for the proposed building and systems to reduce environmental and economic impacts associated with excessive energy use.

CECO DOOR offers superior thermal efficient openings that can help save 10% or more in improved energy efficiency. CECO DOOR steel doors and frames are tested in operable conditions using ASTM E1363 & E283. The Trio-E door from CECO DOOR has the lowest U value of any steel stiffened door currently on the market.

EA Credit 1
Optimize Energy Performance

Achieve increasing levels of energy performance beyond the prerequisite standard to reduce environmental and economic impacts associated with excessive energy use.

CECO DOOR offers superior thermal efficient openings that can help save 10% or more in improved energy efficiency. CECO DOOR products are tested in operable conditions using ASTM E1363 & E283. The Trio-E door from CECO DOOR has the lowest U value of any steel stiffened door currently on the market.
Extend the lifecycle of existing building stock, conserve resources, retain cultural resources, reduce waste and reduce environmental impacts of new buildings as they relate to materials manufacturing and transport. **Longevity and durability of CECO DOOR steel doors and frames should allow re-use on LEED projects and help in the ability of obtaining this credit.**

**MR Credit 4**

**Recycled Content**

Increase demand for building products that use recycled content materials, thereby reducing impacts resulting from extraction and processing of virgin materials. Materials with recycled content such that the sum of post consumer recycled content plus 1/2 of the preconsumer content constitutes at least 10% or 20%, based on cost, of the total value of the materials in the project. The recycled content value of a material assembly is determined by weight. The recycled fraction of the assembly is then multiplied by the cost of assembly to determine the recycled content value.

Post-consumer material is a waste material generated by households or by commercial, industrial and institutional facilities as end-users of the product, which can no longer be used for its intended purpose. Post-industrial (Pre-Consumer) recycled content are scraps that are left over during industrial or manufacturing processes and which are recycled and reused.

<table>
<thead>
<tr>
<th>CECO DOOR Product</th>
<th>Post-Consumer Recycled Content</th>
<th>Pre-Consumer Recycled Content</th>
<th>Total Recycled Content Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frames</td>
<td>63.9*</td>
<td>10*</td>
<td>68.9</td>
</tr>
<tr>
<td>Medallion, Armorshield, Fuego, ThruLite, RestrictDor, Trio HF Doors, STC Doors</td>
<td>63.9*</td>
<td>10*</td>
<td>68.9</td>
</tr>
<tr>
<td>Regent/Omega, Legion/ UltraDor, Imperial/Versadoor, Trio-E, Trio HU Doors</td>
<td>62.1*</td>
<td>9.7*</td>
<td>66.9</td>
</tr>
<tr>
<td>FRP Aluminum Frame</td>
<td>0</td>
<td>35</td>
<td>17.5</td>
</tr>
<tr>
<td>FRP Door</td>
<td>0</td>
<td>8.6</td>
<td>4.3</td>
</tr>
</tbody>
</table>

* Recycled content based on CECO DOOR average steel usage

**MR Credit 5**

**Regional Material**

Increase demand for building materials and products that are extracted and manufactured within the region, thereby supporting the use of indigenous resources and reducing the environmental impacts resulting from transportation. 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% or 20%, based on cost, of the total materials value.

<table>
<thead>
<tr>
<th>Program</th>
<th>Checklist</th>
<th>Credit</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>LEED CI</td>
<td>Materials and Resources</td>
<td>Regional Materials MR 5</td>
<td>Use a minimum of 20% of the combined value of construction materials and products that are manufactured* regionally within a radius of 500 miles.</td>
</tr>
<tr>
<td>LEED NC</td>
<td>Materials and Resources</td>
<td>Regional Materials MR 5 10% or 20%</td>
<td>Use building materials or products extracted,** harvested,** recovered,** processed,** and manufactured* within 500 miles of the project site.</td>
</tr>
</tbody>
</table>

* Manufactured refers to the final assembly of components in Milan, TN. (Medallion, Armorshield, Fuego, RestrictDor and ThruLite doors are manufactured in Valle Hermoso, Mexico.)
** Steel is traced to point of recovery at the mill. 80% of steel used by Ceco Door comes from Decatur AL, 35609. The remaining 20% comes from Columbus MS, 39701.
To encourage the use of products and materials for which life cycle information is available and that have environmentally, economically, and socially preferable life cycle impacts. To reward project teams for selecting products verified to have been extracted or sourced in a responsible manner. Option 2. leadership extraction practices (1 point). Use products that meet at least one of the responsible extraction criteria below for at least 25%, by cost, of the total value of permanently installed building products in the project. Extended producer responsibility. Products purchased from a manufacturer (producer) that participates in an extended producer responsibility program or is directly responsible for extended producer responsibility. Products meeting extended producer responsibility criteria are valued at 50% of their cost for the purposes of credit achievement calculation. CECO DOOR participates in an extended producer responsibility recycling program through the Steel Recycling Institute. Learn more at: www.assaabloydss.com/sustainability.

MR Credit 61 (Pilot Credit)
Material Disclosure and Assessment Environmental Product Declaration (EDPs)

To encourage the use of products and materials for which life-cycle information is available and that have environmentally, economically, and socially preferable life-cycle impacts. To reward project teams for selecting products from manufacturers who have verified environmental life-cycle. Products from CECO DOOR have product-specific type III EPDs certified in accordance with ISO 14025 and EN 15804.

MR Credit 76 (Pilot Credit)
Material Ingredients Reporting

Use at least 20 different permanently installed products from at least five different manufacturers that use any of the following programs to demonstrate the chemical inventory of the product to at least 0.1% (1000 ppm). Health Product Declaration. The end use product has a published, complete Health Product Declaration with full disclosure of known hazards in compliance with the Health Product Declaration open standard. Products from CECO DOOR have published, complete HPDs with full disclosure of known hazards.

MR Credit 77 (Pilot Credit)
Material Ingredient Optimization

To reward project teams for selecting products verified to minimize the use and generation of harmful substances. To reward raw material manufacturers who produce products verified to have improved life-cycle impacts. CECO DOOR steel doors and frames are third party certified and document fully inventoried ingredients via Health Product Declaration (free of Benchmark 1 Greenscreen chemicals). Use products that document their material ingredient optimization using the paths below for at least 25%, by cost, of the total value of permanently installed products in the project. GreenScreen v1.2 Benchmark. Products that have fully inventoried chemical ingredients to 100 ppm that have no Benchmark 1 hazards: If any ingredients are assessed with the GreenScreen List Translator, value these products at 100% of cost. If all ingredients are have undergone a full GreenScreen Assessment, value these products at 150% of cost. Products from CECO DOOR have published, complete HPDs that have undergone a full GreenScreen Assessment.
Indoor Environmental Quality (IEQ)

IEQ Credit 3.2
Construction Indoor Air Quality Management Plan – Before Occupancy

To reduce indoor air quality (IAQ) problems resulting from construction or renovation to promote the comfort and well-being of construction workers and building occupants. Project teams specify interior doors meeting GREENGUARD Gold testing will assist with IEQ 3.2 compliance.

IEQ Credit 4.1 & 4.2
Low-Emitting Materials
Adhesives and Sealants, Paints and Coatings

Reduce the quantity of indoor air contaminants that are odorous, irritating and/or harmful to the comfort and well-being of installers and occupants. This credit only applies to materials applied within the weatherproofing system however, CECO DOOR offers solutions including pre-finished door openings and pre-installed glazing. This allows LEED projects to avoid applying materials on site.

IEQ Credit 4.6
Low-Emitting Materials - Ceiling & Wall Systems

Reduce the quantity of indoor air contaminants that are odorous, irritating and/or harmful to the comfort and well-being of installers and occupants. All gypsum board, insulation, acoustical ceiling systems and wall coverings (including doors) installed in the building interior must meet the testing CA 01350. Requires GREENGUARD Indoor Air Quality certification or equivalent. Products from CECO DOOR are certifed to GREENGUARD Gold.

IEQ Credit 8.1 & 8.2
Daylight & Views

To provide building occupants with a connection between indoor spaces and the outdoors through the introduction of daylight and views into the regularly occupied areas of the building. Adding glazing and sidelights to CECO DOOR steel doors and frames will assist projects in achieving this LEED credit.
**IEQ Credit 9**
Enhanced Acoustical Performance

(LEED NC can earn Innovation credits for Enhanced Acoustical Performance)

To provide classrooms that facilitates better teacher-to-student and student-to-student communications through effective acoustical design. Design the building shell, classroom partitions and other core learning space partitions to meet the Sound Transmission Class (STC) requirements of ANSI Standard S12.60-2002, Acoustical Performance Criteria, Design Requirements and Guidelines for Schools, except windows, which must meet an STC rating of at least 35. **CECO DOOR offers a wide range of STC door solutions that meet ANSI Standard S12.20-2002 and can help LEED projects gain credit for Enhanced Acoustical Performance.**

**LEED EBOM Specific Credits**

**MR Credit 3**
Sustainable Purchasing-Facility Alterations and Additions

Reduce the environmental and air quality impacts of the materials acquired for use in the upgrade of buildings. Maintain a sustainable purchasing program covering materials for facility renovations, demolitions, refits and new construction additions. **CECO DOOR steel doors and frames can help Sustainable purchasing programs meet many of the requirements to obtain this credit.**

**MR Credit 9**
Solid Waste Management-Facility Alterations and Additions

To divert construction and demolition debris from disposal to landfills and incineration facilities. Redirect recyclable recovered resources back to the manufacturing process and reusable materials to appropriate sites. **Many products from CECO DOOR can be recycled (in the case of our metal products, potentially infinitely) and reused. We strive to make durable sustainable products that can assist projects in attaining this credit.**
For further information, please contact your CECO DOOR Sales Representative at 1-888-264-7474 or refer to our website: www.cecodoor.com

For more information about ASSA ABLOY products and practices that are helping the environment visit: www.assaabloydss.com/sustainability