

LEED v4, Updated Green Building Standard

NSF Sustainability can help your products qualify for the newest MR credits.

Each new version of LEED tries to improve on the last and embrace new opportunities and trends in the building industry. A key area of focus for LEED v4 is greater information transparency and reporting for building product materials and components. Changes in the rating system represent opportunity for manufacturers who address the new requirements and prepare their products to meet the new LEED v4 criteria. Building projects can start using the new standard after it officially launches at Greenbuild 2013.

NSF Can Help

NSF Sustainability testing, certification and verification services are aligned with the new LEED criteria. We can help you gain preferred supplier status based on your product's ability to meet the new criteria.

LEED v4 BD+C New MR Credits

Transparency and Reporting. The Materials and Resources (MRc) section includes new credits to incentivize product manufacturers to report product content information. Project teams are rewarded for selecting products with verified reduced environmental life cycle impacts. NSF can help your products meet these new credits. Let's review the new MR credits:

MR CREDIT: BUILDING PRODUCT DISCLOSURE AND OPTIMIZATION—ENVIRONMENTAL PRODUCT

DECLARATIONS. One path for compliance to this credit is Environmental Product Declarations (EPDs). An EPD is the report compiled from a life cycle assessment (LCA) developed according to the rules put forth in the product category rule (PCR). The PCR is mandatory for the development of EPDs and defines the scope and data to include in the LCA and EPD.

Manufacturers can also make a product specific declaration including a critically reviewed life-cycle assessment. For industries where no PCR exists, this path can also qualify your products to meet the credit.

OPTION 1. Use at least 20 different permanently installed products sourced from at least five different manufacturers that meet one of the disclosure criteria below. Three types of reports can be used to meet the criteria:

A. Product-specific declaration, publicly available with a critically reviewed life-cycle assessment conforming to ISO 14044 (valued as 1/4 of a product - this is the "no PCR" option)

B. Industry-wide (generic) Type III EPD third-party validated (valued as 1/2 of a product)

C. Product-specific Type III EPD third-party validated (valued as one full product)

A. NSF Sustainability can critically review life-cycle assessments and product specific declarations. We can review LCAs from any source. For a more turn-key solution, NSF has partnered with Sustainable Minds (SM) on transparency reports. NSF critically reviews the transparency reports that present the LCA information in an easy to understand format.

B &C: NSF can also third-party validate your industry-wide or product specific EPD to an existing PCR. If no PCRs exist for your products, we can help your organization or your industry create PCRs and then validate the resulting EPDs. To view NSF validated EPDs and view NSF developed PCRs, visit www.nsf.org.

OPTION 2. Multi-Attribute Optimization. Use products that comply with the specified criteria for 50%, by cost, of the total value of permanently installed products in the project.

Third party certified products that demonstrate impact reduction below industry average in at least three of the specified impact categories are valued at 100% of their cost for credit achievement calculations.

Certification to some NSF/ANSI Multi-attribute Sustainability Assessment Standards may help you meet this criteria. LCA data required for NSF/ANSI standards can help establish organizational data for comparison to industry data. Contact NSF at sustainability@nsf.org to find out if your NSF/ANSI certified products could potentially fulfill this criteria.

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

OPTION 2. Leadership Extraction Practices. Use products that meet at least one of the responsible extraction criteria (listed in the LEED v4 guidebook under this credit) for at least 25%, by cost, of the total value of permanently installed building products in the project.

Recycled content is one of the responsible extraction criteria. NSF Sustainability can third-party verify the recycled content of your products or materials.

MR CREDIT: BUILDING PRODUCT DISCLOSURE AND OPTIMIZATION - MATERIAL INGREDIENTS To encourage the use of products and materials for which life-cycle information is available as well as reward project teams for selecting products for which the chemical ingredients in the product are inventoried using an accepted methodology. Ultimate goal is to minimize the use and generation of harmful substances.

OPTION 1. Material Ingredient Reporting. Use at least 20 different permanently installed products from at least five different manufacturers and demonstrate the chemical inventory of the product to at least 0.1% (1000 ppm).

NSF Sustainability can aid you with several of the compliance paths for this credit (described below):

MANUFACTURER INVENTORY. The manufacturer has published a complete content inventory for the product following these guidelines:

- A publicly available inventory of all ingredients identified by name and Chemical Abstract Service Registration Number (CASRN)
- Materials defined as trade secret or intellectual property may withhold the name and/or CASRN but must disclose role, amount and GreenScreen™ benchmark, as defined in GreenScreen v1.2.
- Health Product Declaration (HPD). 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.



- NSF can assist your organization in obtaining ingredient inventories for materials and products from your suppliers and identifying the CASRNs
- NSF can provide GreenScreen reviews for your materials and products
- We can also third-party validate your Health Product Declarations (HPDs).

NSF can help your organization meet these criteria by following the most cost and resource effective path of disclosure for your materials and products.

OPTION 2: Material Ingredient Optimization. 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 have undergone a full GreenScreen Assessment, value these products at 150% of cost.



NSF International provides GreenScreen List translator and full assessment services. We can also third-party validate your Health Product Declaration (HPDs). Trust NSF to provide your organization a full platform of chemical disclosure services so you can choose the best declaration path for your products.

MR CREDIT: FURNITURE AND MEDICAL FURNISHINGS This credit applies to Healthcare only

OPTION 2. Testing and Modeling of Chemical Content. All components of a furniture or medical furnishing assembly, including textiles, finishes, and dyes, must contain less than 100 parts per million (ppm) of at least two of the five chemicals or materials listed in Option 1.

New furniture or medical furnishing assemblies must be in accordance with ANSI/BIFMA Standard Method M7.1–2011. Comply with ANSI/BIFMA e3-2010 Furniture Sustainability Standard, Sections 7.6.1 and 7.6.2, using either the concentration modeling approach or the emissions factor approach. Model the test results using the open plan, private office, or seating scenario in ANSI/BIFMA M7.1, as appropriate.

NSF testing services can verify chemical content and supply air quality testing to the ANSI/BIFMA Standard Method M7.1-2011. NSF can also bundle services to reduce cost and turnaround time.

OPTION 3: Multi-Attribute Assessment of Products. Use products that meet at least one of the criteria below. Each product can receive credit for each criterion met. The scope of any environmental product declaration (EPD) must be at least cradle to gate.

- Product-specific declaration, publicly available with a critically reviewed life-cycle assessment conforming to ISO 14044 (valued as 1/4 of a product)
- Industry-wide (generic) Type III EPD third-party validated (valued as 1/2 of a product)
- Product-specific Type III EPD third-party validated (valued as one full product)

NSF Sustainability can critically review life-cycle assessments and product specific declarations. We can review LCAs from any source. For a more turn-key solution, NSF has partnered with Sustainable Minds (SM) on transparency reports. NSF critically reviews the transparency reports that present the LCA information in an easy to understand format.

NSF can also third-party validate your industry-wide or product specific EPD to an existing PCR. If no PCRs exist for your products, we can help your organization or your industry create PCRs and then validate the resulting EPDs. To view completed EPDs or to view completed PCRs, visit the NSF website at www.nsf.org

MR PILOT CREDIT 80 ENVIRONMENTALLY PREFERABLE INTERIOR FINISHES AND

FURNISHINGS Includes product third party certified to multi-attribute sustainability standards where the product attributes on which the certification has been granted are publically disclosed.

Use at least 5 different third party certified products which account for at least 50% of the total interior finishes and furnishing materials by cost. LEED approved 3rd party certifications:

ANSI/BIFMA e3 - 2012 Furniture Sustainability Standard

- Level 1 certified products contribute 25% of the total product cost
- Level 2 certified products contribute 50% of the total product cost
- Level 3 certified products contribute 100% of the total product cost

NSF Sustainability is an approved certification body for the ANSI/BIFMA e3 standard. NSF has unmatched expertise in this standard because we partnered with BIFMA to write the e3 standard. Let us help you get your products certified.

Make NSF Sustainability your partner in realizing the sales potential from meeting LEED requirements for certified product, verified EPD reports, critically reviewed LCAs and chemical reviews and reporting.

To find out more about our extensive service offerings related to LEED and the new LEED v4, call 734-476-2543 or e-mail sustainability@nsf.org .



