

ID: FR103
Title: **Material Data Tracking: Learning from LEED v4 Projects**
Date: Friday, June 22, 2018
Time: 7:00 AM – 8:00 AM
LU: 1 HSW, 1 GBCI, 1 RIBA

Program Summary

When it comes to LEED v4, relying on a general contractor to tally your LEED Materials & Resources (MR) credits during construction may no longer be an option.

LEED v4 has enhanced the MR credits to include numerous new metrics. But sorting out exactly what that means for you can be a challenge. In this session, presenters will use LEED v4 case studies to illustrate a "materials action plan" process—a way to specify materials and track data to keep you and your clients better informed.

Join this conversation to learn a practical process sure to enhance your practice's ability to meet project goals with LEED v4.

Learning Objectives

- A. Review the metrics used in the LEED v4 Materials & Resources "Building Product Disclosure and Optimization" credits and how they differ from LEED v2009.
- B. Consider the role of the architect in the research and specification of sustainable materials.
- C. Relate project sustainable goals to product research resources and case study datasets.
- D. Learn to arrange products and materials by applying the "materials action plan" methodology to your own projects.

Speakers:

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Materials and Resources: Building Product Disclosure and Optimization Credits

*Be sure to check the LEEDv4 Reference Guide and Addenda for Updates! (Last updated 6/1/2018)

Environmental Product Declarations

Option 1: EPDs
20 Products (per value scale)
from at least 5 manufacturers

Product-Specific = 1/4 Product
Industry-Wide Generic = 1/2 Product
Product-Specific, 3rd-Party-Verified,
Type III = 1 Product

EPD Program Operators (3rd Party)

- UL Environment
- ICC-ES
- ASTM
- NSF
- FP Innovations
- Inst. for Envir. Research and Education
- SCS Global Services

Option 2: Optimization
50%, by cost,
of total products

Products contribute with:
Reductions below industry averages in at least 3 impact categories:

- Global Warming Potential
- Depletion of Stratospheric Ozone
- Acidification of land and water
- Eutrophication
- Formation of Smog (Tropospheric Ozone)
- Depletion of nonrenewable energy source

EPD "Nutrition" Label	
Your Building Product	
Amount per Unit	TOTAL
LCA IMPACT MEASURES	
Primary Energy (MJ)	12.4
Global Warming Potential (kg CO ₂ eq)	0.96
Ozone Depletion (kg CFC-11 eq)	1.80E-06
Acidification Potential (mol H ⁺ eq)	0.93
Eutrophication Potential (kg N eq)	6.43E-04
Photo-Oxidant Creation Potential (kg O ₃ eq)	0.121
Your Product's Ingredients: Listed Here	

Regional Multiplier (Opt. 2)

Products extracted, manufactured, and purchased within 100 miles of project site are valued at 200% of contribution cost.

Structure and Enclosure may not constitute more than 30% of the value of the compliance building products, unless calculating an alternative structure and enclosure limit.

Sourcing of Raw Materials

Option 1: Extraction Reporting
20 Products (per value scale)
from at least 5 manufacturers

Self-Declared Reports = 1/2 Product

3rd-Party-Verified, Corporate Sustainability Report (CSR) = 1 Product

Acceptable Frameworks:

- GRI
- OECD
- UN Global Compact
- ISO 26000

Option 2: Extraction Practices
25%, by cost,
of total products

Products contribute with:
Extended Producer Responsibility (Manufacturer Take-Back Programs)
Valued at 50% Cost

Bio-Based Materials (Must meet the Sustainable Agriculture Network's Sustainable Agricultural Standard)
Valued at 100% Cost

Wood Products (FSC)
Valued at 100% Cost

Materials Re-Use (Salvaged, Reused, Refurbished)
Valued at 100% Cost

Recycled Content (Post-Consumer + 1/2 Pre-Consumer)
Valued at 100% Contributing Cost

Regional Multiplier (Opt. 2)

Products extracted, manufactured, and purchased within 100 miles of project site are valued at 200% of contribution cost.

Structure and Enclosure may not constitute more than 30% of the value of the compliance building products, unless calculating an alternative structure and enclosure limit.

Material Ingredients

Option 1: Ingredient Reporting
20 Products
from at least 5 manufacturers

CASRN - 100% of Ingredients

Health Product Declaration



Cradle to Cradle v2 Basic Level
Cradle to Cradle v3 Bronze Level
GreenScreen Benchmark v1.2
Declare Product Label (1000 ppm)
UL Product Lens
C2C Material Health Certificate: Bronze or Higher
Furniture: ANSI/BIFMA 3 pts 7.5.1.3 e3-2014
Furniture: ANSI/BIFMA 3 pts 7.4.1.3 e3-2012

Option 2: Optimization
25%, by cost,
of total products

Products contribute with:
GreenScreen Benchmark v1.2
100ppm, no benchmark 1 hazards

Cradle to Cradle v2 Gold: 100% of Cost
Cradle to Cradle v2 Platinum: 150% of Cost
Cradle to Cradle v3 Silver: 100% of Cost
Cradle to Cradle v3 Gold or Platinum: 150% of Cost

Option 3: Supply Chain Optimization
25%, by cost,
of total products

Document 99% of Ingredients AND
3rd-Party Verified Supply Chain =
100% of Cost

Regional Multiplier (Opt. 2 & 3)

Products extracted, manufactured, and purchased within 100 miles of project site are valued at 200% of contribution cost.

Structure and Enclosure may not constitute more than 30% of the value of the compliance building products, unless calculating an alternative structure and enclosure limit.