GREEN BADGER

LEED Product Guide

A TOOL FOR GENERAL CONTRACTORS

The General Contractors Guide to
Environmental Product Declarations, Option 1
& Material Ingredient Reporting, Option 1

By Tommy Linstroth
Founder & CEO, Green Badger
www.getgreenbadger.com
Published: 03/2020

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Introduction

It wouldn't be a day ending in "Y" if someone at Green Badger didn't have a conversation with a project team that resulted in the exasperated question of "What the F@%K do I need to do to earn this credit?"

We do our best to help them figure it out by consistently engaging with teams across the country, diligently reviewing quarterly updates/addendums/CIRs (because what's the point of creating a set of rules/standards if you're not going to change them every three months), and venting/raging/problem-solving with peer groups who feel the same frustrations as the rest of us.

While we could rant daily with the many "fun challenges" that come with earning LEED certification (I think Dante wrote about dealing with LEED review comments at some point), we're taking the high road. We strive to be solution providers, and firmly believe in our motto of "Sustainability Simplified".

We believe that people want to do the right thing – they just want to know what it is, without having to slog through and figure out what to do. While this might be an overly general statement for everything in life, it tends to hold true in LEED.

Don't make me guess what paint/drywall/pipe complies. Just tell me which ones to use that earn the credit! And I think USGBC hears that.

Their effort to pre-approve products to let teams know they are compliant may help (and I know manufacturers have been begging to pay for yet another certification!). And if so, hopefully it comes sooner rather than later.

In the meantime, we've created a guide to help teams plan a strategy to earn two of the Building Product Disclosure and Optimization credits for v4 and v4.1 - Environmental Product Declarations and Material Ingredient Reporting.

These two credits are chased on nearly every project we see (and we work with many hundreds of project teams), yet they quite often pose a challenge to earn.

We're excluding the other credits from this guide. EPD Option 2 and MIR Option 2, and Sourcing of Raw Materials. Options 2 of EPD and MIR are still quite difficult to earn.

We've seen two products that have EPD Option 2 documentation, and while there are more choices for MIR Option 2, the rigmarole manufacturers and teams have to go through to demonstrate compliance makes it unpopular (at least among Green Badger users!)

Sourcing of Raw materials really comes down to recycled content and FSC wood, and, especially with the updates for v4.1) is pretty straightforward. But EPDs and MIR? We see too much finger pointing.

The general contractor gets a generic spec that says "Obtain EPDs where available," but no strategy/guidance of where to look, or a spec that calls for a product with an HPD but it costs 20% more.

That's where this guide comes in. It's a starting point for where to most easily and readily find products that meet the requirements for EPDs and MIR.

This is NOT a comprehensive list of every single product that has LEED compliant documentation. Go spend a few hundred hours going product by product through all the various databases out there if you want that.
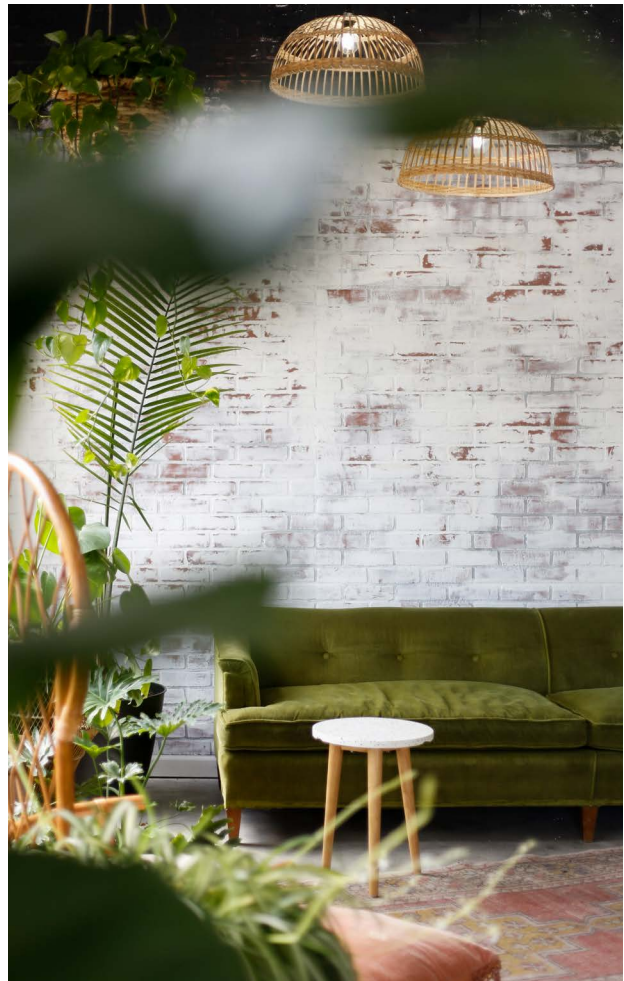
ABOUT THIS GUIDE

What this guide is is a framework of the product categories that we at Green Badger see the broadest number of manufacturers and product lines with EPDs, HPDs, Cradle to Cradle certifications, Declare labels and anything else you need to earn those two credits.

Use it as a starting point. Hopefully you can find your 20 products in these few categories quickly and easily and get on with your life. The alternative involves scouring databases, reading through 500 page submittals, and earning a PhD in chemistry to determine if a product will help you earn your certification.
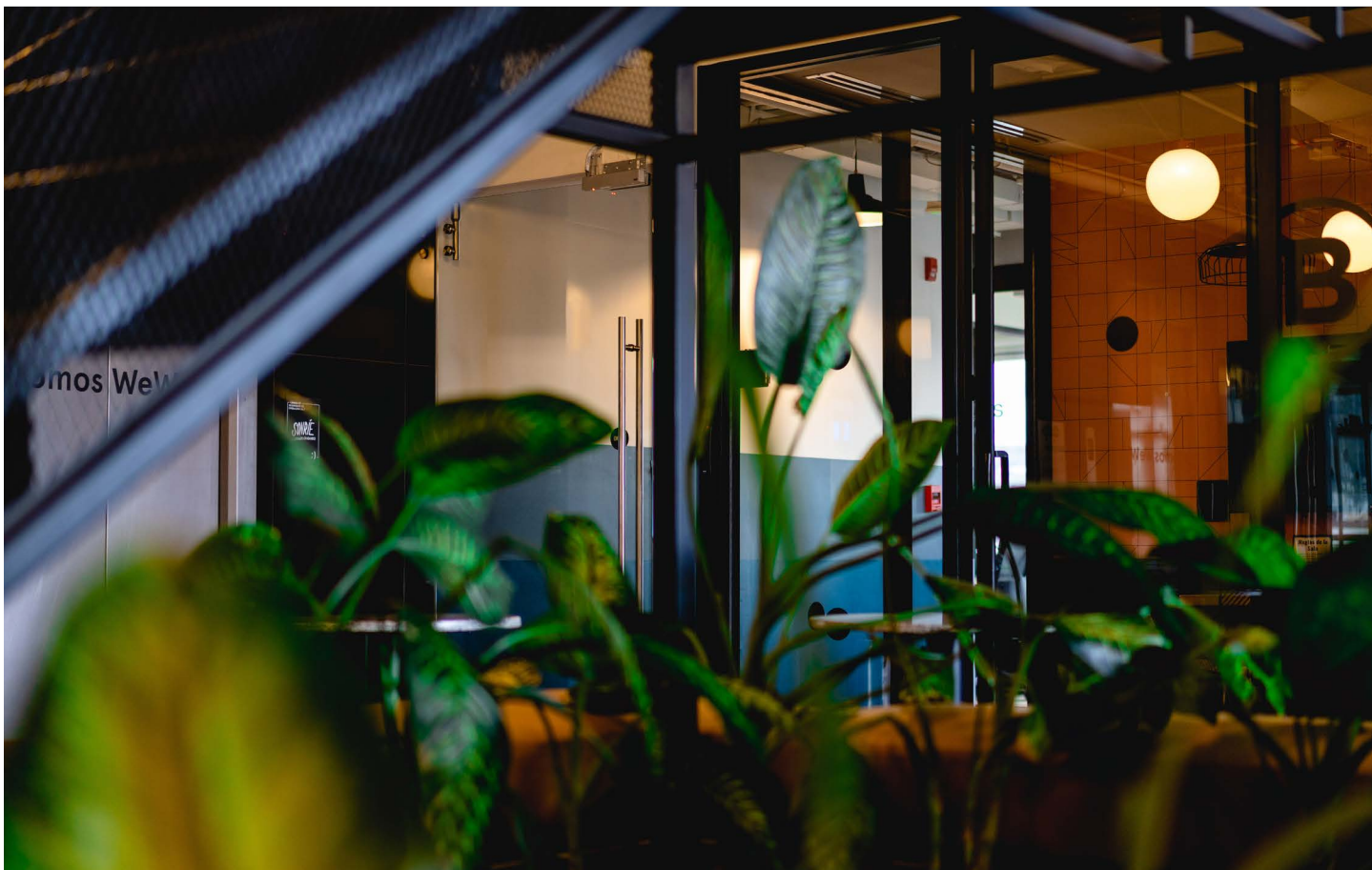
Precursor

A quick note before we get started. Do you know the differences between LEED v4 and LEED v4.1? Yes? Great! You didn't know v4.1 existed? Okay... here's what you need to know.

Green Badger unequivocally recommends that each and every project team opt into LEED v4.1 for the BPDO Material Credits (and low-emitting materials, but that's not what this guide is covering). Don't argue with the team, don't wonder if you can. Just do it. Life will be so much easier for you!

For those who don't want to take a Badger at their word, *here's the quick breakdown of why you should immediately opt into v4.1 with a short Q+A.*

QUESTION & ANSWER

Question: My project is registered as LEED v4. Can I use v4.1?
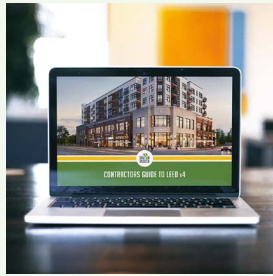
Answer: YES! Any LEED v4 project can opt into v4.1 on a credit by credit basis – no questions asked! You are eligible – the Badger guarantees it! It is not for the whole project. It is on a credit by credit basis, so if you only want to do it for the BPDO and Low Emitting Credits, you can.

Question: My project is registered as v4.1 – can I use v4.1?
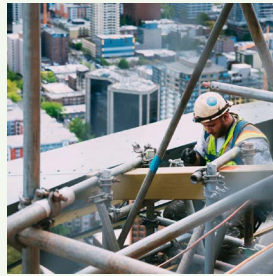
Answer: STFU

LEED v4 Webinar

Free, on-demand training video to get your project team equipped with the knowledge to tackle LEED v4.

LEED v4.1 Update

A review of all the changes to construction related credits in the new LEED v4.1 update.

VOC Products

Whlie this guide only covers BPDO materials credits, but our website has all your VOC needs covered as well.

LEED v4 PDF Guide

Don't want to watch the LEED v4 webinar? Download the PDF guide instead and read at your own convenience!

Question: What makes v4.1 better for the materials credits?

Answer: The Badger will make this as short and sweet as possible. For a more detailed answer, go to getgreenbadger.com/resources and check out the whole section dedicated to v4.1 updates.

One:
Lower thresholds for certain project types. If your project is Commercial Interiors, Core and Shell, or Warehouse, the threshold for earning EPD and MIR Option 1 drops from 20 products to 10 products - its 50% easier to get!

Two:
Most EPDs count for more. By far and away, most EPDs we see are Product Specific Externally reviewed products. This counted as 1 product under v4, but under v4.1, third-party externally review products count as 1.5 for both EPD and MIR.

We see less of those in MIR (for example,there are only 40 third party reviewed declare labels and 125 third party HPDs (as of Spring 2020), but there are thousands of EPDS.

That means you really only need 14 products, rather than 20 which is a 30% reduction in the number of compliant products neccessary for credit acheivement.

Three:
Sourcing of Raw Materials is much easier - we're not discussing strategies for this credit, but two big changes.

1. The threshold dropped from 25% to 20% making it much easier to achieve. A second point is available at 40% as well

2. The structure/enclosure cap went away. That means no limitations on structural steel, rebar, concrete, etc that crippled project teams in v4

Four:
The calculators are awesome and super user-friendly! Just kidding, the calculators are still a nightmare of Excel crap that I couldn't imagine having to use on a day to day basis.

So there you go - use v4.1. Thresholds are lower across the board, and you need fewer compliant products.

And now, onto the show!

What Makes Products Compliant with LEED v4 and v4.1?

This guide is addressing two LEED credits: Environmental Product Declarations, Option 1 & Material Ingredient Reporting, Option 1.

You need a total of 20 products that have an EPD or ingredient reporting to earn each credit (using v4.1, 10 if your project is Commercial Interiors, Core & Shell, or Warehouse) and some products count more than others.

Here's a quick overview of what compliant documentation for each credit looks like.

For a video overview, check out our Youtube channel at youtube.com/greenbadger.
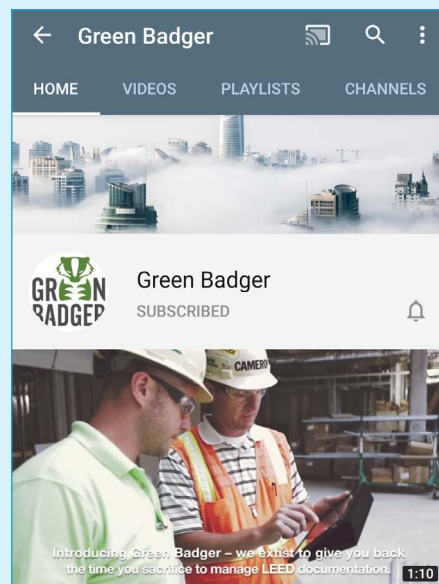
WATCH NOW:

Check out our YouTube channel for video guides on EPDs and HPDs, along with other LEED resources.

Click here to explore

Environmental Product Declarations

Environmental product declarations are independently verified reports based on life-cycle assessment (LCA) studies. The LCA studies must have been conducted according to a set of common rules ("product category rules," or PCRs) for each product category and then peer-reviewed.

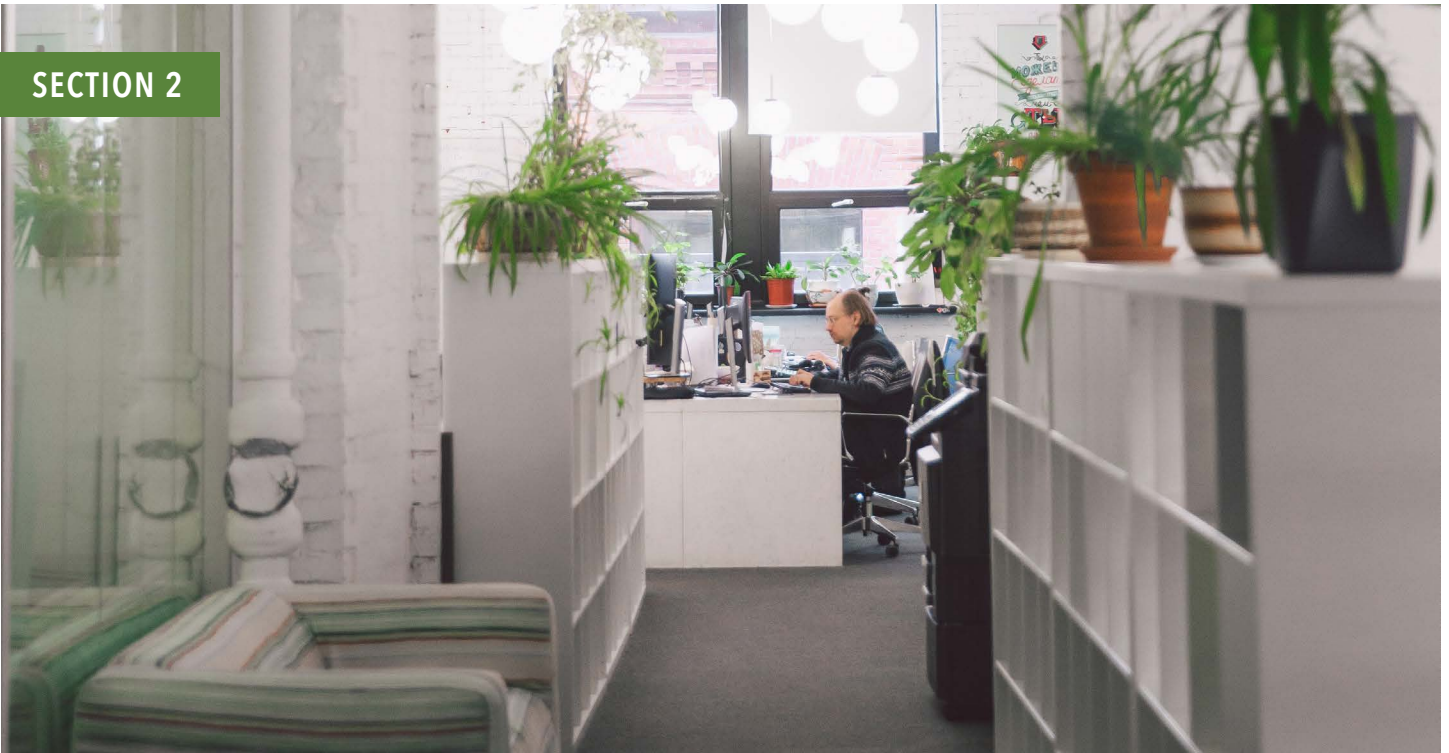EPDs are managed and created by "program operators" — organizations that ensure that the EPDs meet the various requirements. In the U.S. you'll see those from UL, SCS, ASTM or NSF, though there are a few other that are coming around.

Broadly speaking, there are 3 main types of EPDs that we come across:

Industry Wide

Product Specific Type III, Internally Reviewed

Product Specific Type III, Externally Reviewed

Environmental Product Declaration

Typical (5/8" Type X)
North American Gypsum Boards

Product Description
Type III environmental product declaration (EPD) developed according to ISO 14025 and 21930 for average 5/8" type X gypsum boards, also known as drywall, manufactured by the members of the Gypsum Association.

Declaration number: FPI/GA/01/2014
Issued May 2014
Valid until May 2019

FIGURE 1

WHAT'S THE DIFFERENCE?

Industry Wide

Industry wide EPDs are generic for certain product types of products such as Type X gypsum board or concrete. For LEED v4, it doesn't really matter who the manufacture is as long as the are a member of the association that generated the EPD.

As you can see in FIGURE 1, this EPD is from the US Gypsum Association, and anyone from North America who is a member can claim this for their product. Industry wide EPDs are only worth a ½ a product contribution under v4.

FIGURE 2

LEED v4.1 is more stringent:

For LEED v4.1, the manufacture must actually be included or listed by name in the EPD as a participant. These industry wide EPDs count as 1 full product under LEED v4.1.

Type III Product Specific

Type III Product Specific EPDs are for a very specific product from a defined manufacturer. You'll see it pretty easily. **This EPD is for Sherwin Williams PrepRite Block Filler. Nothing else, only this product.**

Internally vs. Externally Reviewed

Type III Internally and Externally Reviewed just differ in whether an outside third party reviewed the information. You'll see it checked on an EPD pretty obviously, such as the case on this EPD, where the box specifically states Externally reviewed with a check mark.

Here's an example of an EPD where the box specifically states Externally reviewed with a check mark.

How many points are they worth?

For LEED v4, internally reviewed are worth 0.75 products and externally reviewed are worth 1 product. For LEED v4.1, it is 1 for internal and 1.5 products for external.

For LEED v4, Product Specific Externally Reviewed count as 1 product, and for v4.1, they count as 1.5.

EPD's must Comply with ISO & EN

Lastly, EPDs need to demonstrate they conform to ISO 14025 and EN 15804 or ISO 21930. You don't need to know what these ISO standards mean, but your EPD needs to say they were done in accordance with them.

We've seen a whole lot out there that say they meet ISO 14025, but don't reference EN 15804 or ISO 21930. These are getting comments from USGBC, through they've still been accepting them due to "independent research with the Program Operators."

WATCH NOW:

If you'd rather get this information in a video format, check out our YouTube channel for the video Finding EPDs for LEED v4 and v4.1 where we walk you through step by step.

Click here to watch now

Material Ingredient Reporting

There are multiple types of documentation that contribute towards ingredient reporting. The three most common the Badger sees are Health Product Declarations, Declare Labels, and Cradle to Cradle certifications (or material health certificates).

Let's take a look at what each one is, and what they need to show to comply with the LEED credits.

HEALTH PRODUCT DECLARATIONS

Health Product Declarations (HPDs) provide a full disclosure of the potential chemicals of concern in products by comparing product ingredients to a set of priority "hazard" lists based on the GreenScreen for Safer Chemicals and additional lists from other government agencies.

HPD's qualify for LEED v4 and 4.1 if the end use product has a published and complete Health Product Declaration with full disclosure of known hazards in compliance with the HPD open Standard. It must demonstrate the chemical inventory of the product to at least 0.1% (1000 ppm).

Finding Compliant HPDs for LEED v4 and v4.1

WITH GREEN BADGER

GREEN BADGER TRAINING VIDEO | 4:43

WATCH NOW:

If you'd rather get this information in a video format, check out our YouTube channel for the video Finding HPDs for LEED v4 and v4.1 where we walk you through step by step.

Click here to watch now

HEALTH PRODUCT DECLARATIONS, CONT.

Not all HPDs are fully LEED v4 compliant. Fortunately, the good people at the HPD Collaborative have put together an infographic showing what needs to be in place for an HPD to count.

For LEED v4 and 4.1, HPDs count as 1 product towards the 20 required to earn the point. For v4.1, third-party verified HPDs count as 1.5 products.

Armstrong Suspension Systems Prelude by Armstrong World Industries
CLASSIFICATION: 095300
PRODUCT DESCRIPTION: Steel Suspension System

Health Product Declaration v2.1
created via: HPDC Online Builder

Section 1: Summary

Basic Method / Product Threshold

CONTENT INVENTORY

Inventory Reporting Format
○ Nested Materials Method
● Basic Method

Threshold Disclosed Per
○ Material
● Product

Threshold level
○ 100 ppm
● 1,000 ppm
○ Per GHS SDS
○ Per OSHA MSDS
○ Other

Residuals/Impurities
● Considered
○ Partially Considered
○ Not Considered

Explanation(s) provided for Residuals/Impurities?
● Yes ○ No

Are All Substances Above the Threshold Indicated:

Characterized
Percent Weight and Role Provided?
● Yes ○ No

Screened
Using Priority Hazard Lists with Results Disclosed?
● Yes ○ No

Identified
Name and Identifier Provided?
● Yes ○ No

CONTENT IN DESCENDING ORDER OF QUANTITY
Summary of product contents and results from screening individual chemical substances against HPD Priority Hazard Lists and the GreenScreen for Safer Chemicals®. The HPD does not assess whether using or handling this product will expose individuals to its chemical substances or any health risk. Refer to Section 2 for further details.

MATERIAL | SUBSTANCE | *RESIDUAL OR IMPURITY*
GREENSCREEN SCORE | HAZARD TYPE

STEEL FOR SUSPENSION SYSTEMS [GALVANIZED STEEL LT-UNK]
COATING FOR SUSPENSION SYSTEMS [TITANIUM DIOXIDE LT-1 | CAN | END]

Number of Greenscreen BM-4/BM3 contents.......... 0
Contents highest concern GreenScreen
Benchmark or List translator Score.............. LT-1
Nanomaterial............. No

INVENTORY AND SCREENING NOTES:
Residuals/impurities in select raw materials are quantitatively measured, and are displayed in the HPD when greater than 1000ppm.

VOLATILE ORGANIC COMPOUND (VOC) CONTENT
VOC Content data is not applicable for this product category.

CERTIFICATIONS AND COMPLIANCE *See Section 3 for additional listings.*
LCA: Environmental Product Declaration
Other: International Living Future Institute - Declare Label

CONSISTENCY WITH OTHER PROGRAMS

Pre-checked for LEED v4 Material Ingredients, Option 1

Third Party Verified?
○ Yes
● No

PREPARER: Self-Prepared
VERIFIER:
VERIFICATION #:

SCREENING DATE: 2017-08-23
PUBLISHED DATE: 2017-08-23
EXPIRY DATE: 2020-08-23

Armstrong Suspension Systems Prelude
www.hpd-collaborative.org

HPD v2.1 created via HPDC Builder Page 1 of 5

Annotations (left margin):

The box 1000 ppm or the more stringent 100 ppm must be selected.

Residuals/Impurities must be filled in – it cannot be blank.

If Partially Considered or Not Considered is selected: It must be explained in the Notes in section 2 of why that is the case.

It will also indicate if this HPD was third-party verified. (There aren't many that are, but if it is, then it counts for 1.5 products under LEED v4.1.

At the bottom of page 1, there needs to be a link where the HPD is available. Either from the HPD repository or the manufacturers site.

Annotations (right margin):

Characterized AND Screened must both be Yes (or Yes Ex/SC depending on HPD version).

Identified can be any of the options.

DECLARE LABELS

Declare labels are another form of material ingredient reporting that are growing in popularity. According to the International Living Future Institute, who created and administers the program, a Declare label tells you three things:

1. Where does a product come from?
2. What is it made of?
3. Where does it go at the end of its life?

Similar to HPDs, not all Declare Labels are created equally in the eyes of LEED.

Declare has been approved as a compliance pathway for the LEED v4 and v4.1 Building

Product Disclosure and Optimization Credit, Option 1. Per USGBC, Declare labels contribute toward the credit when they meet the following requirements:

Declare labels designated as Red List Free OR Declared.

Declare labels designated as LBC Compliant that demonstrate content inventory to 0.1% (1000 ppm).

Declare labels meeting those requirements count as 1 product towards earning Material Ingredient Reporting in LEED v4 and v4.1. Third-party verified Declare labels count as 1.5 products for v4.1.

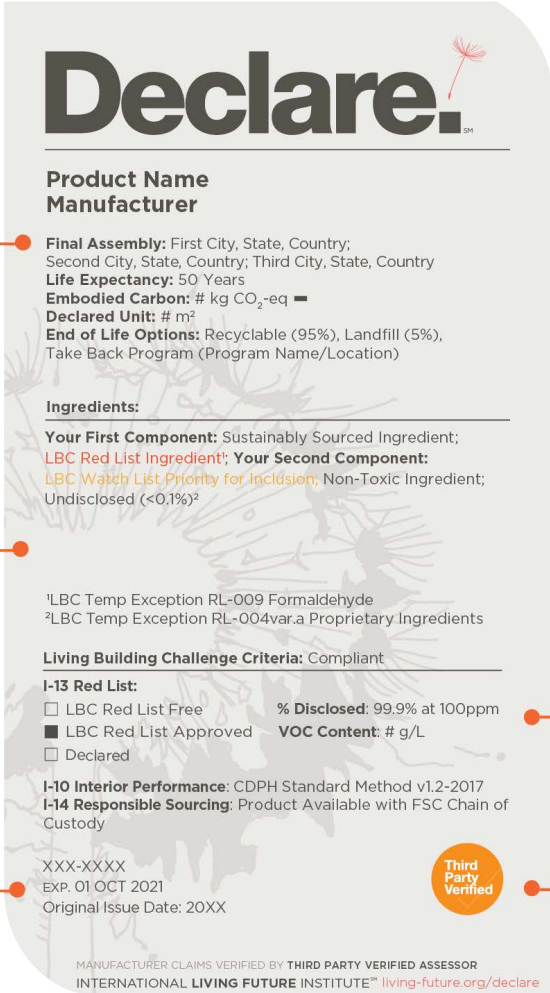**Final Assembly Locations** are collectively represented on a single label.

Embodied Carbon (optional) discloses the cradle-to-gate impacts of manufacturing the product as reported by manufacturer-specific Type III Environmental Product Declarations.

End-of-life options: take back programs; salvageable or reusable in its entirety; biodegradable/compostable (%); recyclable (%); landfill (%); hazardous waste.

Ingredients are reported by component. Ingredients without restriction appear in grey; Red List chemicals appear in dark orange; Watch List Priority for Inclusion chemicals appear in light orange.

LBC Temporary Exceptions recognize specific market limitations and provide a compliance pathway for products to obtain LBC Compliance recognition.

Declare Identifier for company and product, valid for 12 months. **Original Issue Date** indicates how long a product has been a registered product in the program.

Declare.℠

Product Name
Manufacturer

Final Assembly: First City, State, Country; Second City, State, Country; Third City, State, Country
Life Expectancy: 50 Years
Embodied Carbon: # kg CO_2-eq
Declared Unit: # m²
End of Life Options: Recyclable (95%), Landfill (5%), Take Back Program (Program Name/Location)

Ingredients:

Your First Component: Sustainably Sourced Ingredient; LBC Red List Ingredient[1]; **Your Second Component:** LBC Watch List Priority for Inclusion; Non-Toxic Ingredient; Undisclosed (<0.1%)[2]

[1]LBC Temp Exception RL-009 Formaldehyde
[2]LBC Temp Exception RL-004var.a Proprietary Ingredients

Living Building Challenge Criteria: Compliant

I-13 Red List:
☐ LBC Red List Free   **% Disclosed:** 99.9% at 100ppm
☒ LBC Red List Approved   **VOC Content:** # g/L
☐ Declared

I-10 Interior Performance: CDPH Standard Method v1.2-2017
I-14 Responsible Sourcing: Product Available with FSC Chain of Custody

XXX-XXXX
EXP. 01 OCT 2021
Original Issue Date: 20XX

Third Party Verified

MANUFACTURER CLAIMS VERIFIED BY **THIRD PARTY VERIFIED ASSESSOR**
INTERNATIONAL **LIVING FUTURE** INSTITUTE℠ living-future.org/declare

LBC Criteria Compliance demonstrates compliance with all Imperatives applicable to the selection of building products within the Living Building Challenge. If a product meets the requirements for all applicable Imperatives, the product is considered fully compliant with the Living Building Challenge, and will be noted as such on the Declare label graphic itself.

I-13 Red List requires that manufacturers disclose the ingredients and VOC content (if applicable) in their products to ensure that they are free of Red List chemicals.
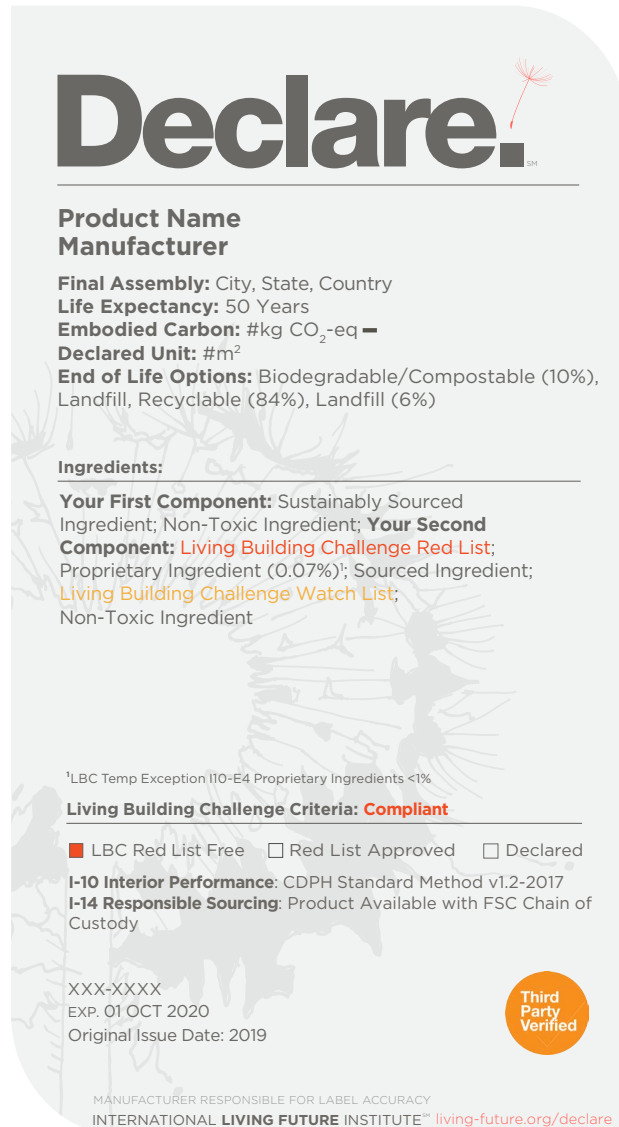
I-10 Interior Performance requires compliance with the California Department of Public Health (CDPH) Standard Method v1.1-2010 (or international equivalent) for all interior building products that have the potential to emit Volatile Organic Compounds (VOCs). The Declare label confirms a product's compliance with CDPH or an equivalent emissions standard.

I-14 Responsible Sourcing requires that manufacturers of wood products demonstrate sustainable extraction through certification with the Forest Stewardship Council, by meeting ILFI's definition of low risk or salvaged wood, or through the use of a formal LBC Exception.

Third Party Verification indicates assessment by a professional third-party assessor to ensure the accuracy of the manufacturer's supply chain, purchasing, ingredient claims, LBC compliance, and embodied carbon if reported.

Image Source: International Living Future Institute

Declare labels are self-disclosed by manufacturers, and are Third Party Verified if the sticker appears on the label.

Declare.

Product Name
Manufacturer

Final Assembly: City, State, Country
Life Expectancy: 50 Years
Embodied Carbon: #kg CO_2-eq ▬
Declared Unit: #m^2
End of Life Options: Biodegradable/Compostable (10%), Landfill, Recyclable (84%), Landfill (6%)

Ingredients:

Your First Component: Sustainably Sourced Ingredient; Non-Toxic Ingredient; **Your Second Component:** Living Building Challenge Red List; Proprietary Ingredient (0.07%)[1]; Sourced Ingredient; Living Building Challenge Watch List; Non-Toxic Ingredient

[1]LBC Temp Exception I10-E4 Proprietary Ingredients <1%

Living Building Challenge Criteria: Compliant

■ LBC Red List Free ☐ Red List Approved ☐ Declared

I-10 Interior Performance: CDPH Standard Method v1.2-2017
I-14 Responsible Sourcing: Product Available with FSC Chain of Custody

XXX-XXXX
EXP. 01 OCT 2020
Original Issue Date: 2019

Third Party Verified

MANUFACTURER RESPONSIBLE FOR LABEL ACCURACY
INTERNATIONAL **LIVING FUTURE** INSTITUTE℠ living-future.org/declare

OPTION 1
LBC Red List Free and Declared products fulfill the disclosure credit requirements.

Red List Approved products that have disclosed at least 99.9% of ingredients fulfill the disclosure credit requirements.

Undisclosed proprietary ingredients that exceed 0.1% of the disclosure are not eligible for LEED v4 credits. Calculate the total proprietary content by summing the amounts in parentheses.

v4.1: Third Party Verified labels are worth 1.5 products for credit achievement calculations.

OPTION 2 (v4.1 only)
Third Party Verified, Red List Free labels fulfill the optimization credit requirements (valued at 100% by cost).

Source: International Living Future Institute

CRADLE TO CRADLE

A third program that contributes to earning the MIR Option 1 credit is Cradle to Cradle certified products.

According to the Cradle to Cradle Institute who administers the program, products are assessed for environmental and social performance across five critical sustainability categories: material health, material reuse, renewable energy and carbon management, water stewardship, and social fairness.

A product is assigned an achievement level (Basic, Bronze, Silver, Gold, Platinum) for each category. A product's lowest category achievement also represents its overall certification level.

Products comply with MIR Option 1 if it has Material Health Certificate or is Cradle to

Cradle to Cradle Certified Product Scorecard	
MATERIAL HEALTH	Silver
MATERIAL REUTILIZATION	Silver
RENEWABLE ENERGY & CARBON MANAGEMENT	Silver
WATER STEWARDSHIP	Silver
SOCIAL FAIRNESS	Gold
OVERALL CERTIFICATION LEVEL	Silver

Image Source: Cradle to Cradle

Cradle Certified under standard version 3 or later with a Material Health achievement level at the Bronze level or higher. If it is Cradle to Cradle certified Bronze or higher, it complies, as the overall certification is based on the lowest level of achievement.

CRADLE TO CRADLE

PRODUCTS

INNOVATION

INSTITUTE

LICENSED MARKS:

CERTIFIED
cradle to cradle
SILVER

Cradle to Cradle Certified™ Silver

THE LICENSED MARKS IDENTIFIED ABOVE MAY BE LICENSED TO:

Benjamin Moore & Co.

FOR THE BELOW LISTED CERTIFIED PRODUCTS ASSOCIATED WITH THE NAME:

Ultra Spec® 500 Waterborne Interior Paint

Cradle to Cradle Products Innovation Institute

ISSUE DATE

22 June 2018

CERTIFICATION #
3568

EXPIRATION DATE

17 July 2020

LEAD ASSESSMENT BODY:
MBDC

▲MBDC

Only the following products are considered Certified Product(s) within the scope of this certification and the associated Trademark License Agreement:

Ultra Spec® 500 Waterborne Interior Paint in the following versions:
Flat, Low-Sheen, Eggshell, Semi-Gloss, Gloss, and Primer

Product packaging meets banned list requirements but has not been assessed to determine certification level.

Certified under Version 3.1 of the *Cradle to Cradle Certified™* Product Standard
Use of Licensed Marks is subject to terms and conditions of the C2CPII Trademark License Agreement and Trademark Use Guidelines.
Cradle to Cradle Certified™ is a certification mark licensed by the Cradle to Cradle Products Innovation Institute

Image Source: Cradle to Cradle

LEED Compliant Products

By now you should have already opted into LEED v4.1 for the materials credits, AND you know all the nuances of environmental product declarations and the various types of material ingredient reporting. Nice work!

Now onto the main course - where should I be looking for products that meet the LEED requirements? The Badger's about to tell you!

We'll offer a precursor beforehand: the Badger does not endorse, recommend, prefer, sponsor, etc. any of the brands and products listed. Nor is this a comprehensive list of every single product that exists with an EPD or HPD.

What follows are product categories that are found on nearly any construction project, with product types that have multiple brands and product offerings that help earn the LEED MR credits - that's it, nothing more, nothing less. If we missed a brand, sorry, let us know, we'll include it in an update.

Should you look for EPDs/HPDs in other places? Have at it!

But for an easy cheat-sheet of where the Badger would start looking to get to that magic number of 20 – read on.
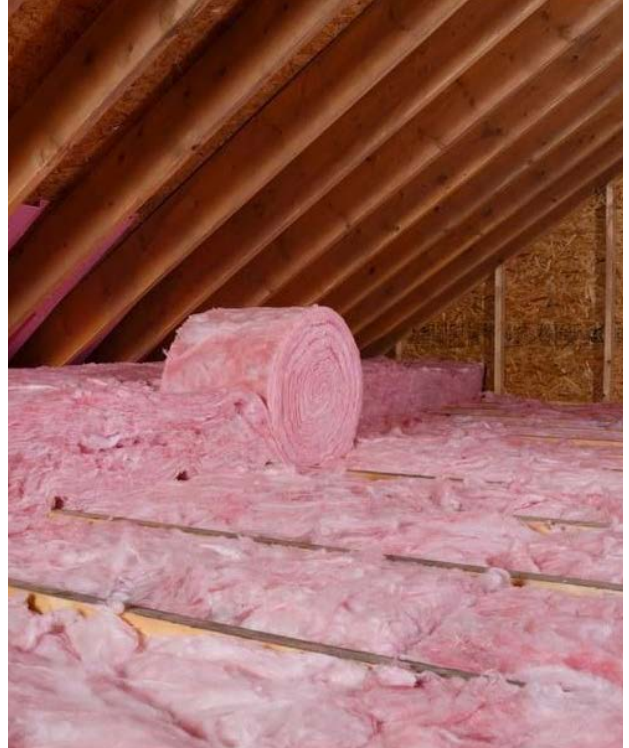
Insulation Products

Insulation, insulation, insulation! Batt, rolls, fiberglass, cellulose – the types and uses abound.

Noisey? Use acoustical insulation. Cold? Bundle up that thermal insulation. Condensating pipes? There's insulation for that! Odds are that you have at least 3 types of insulation on your project.

The good news is that there are multiple brands that offer a variety of products chock full of EPDs, HPDs and are compliant with the CDPH standard (so you don't blow your low-emitting credits).

Here's just a sample of what you'll find from Certainteed, International Cellulose Corp, Johns Manville, Knauff and Owens Corning.

Pictured: Owens Corning EcoTouch Kraft Faced Insulation

Manufacturer	Product	Compliance
Certainteed	FIBERGLASS DUCT WRAP INSULATION	EPD
	FIBERGLASS BLANKET INSULATION	EPD
	Sustainable Insulation Unfaced & Kraft Faced Batts	EPD
	Blowing Wool Fiberglass Insulation	EPD, MIR
International Cellulose Corp	K-13 Acoustical/Thermal Insulation System	SRM, MIR
	Ure-K Acoustical/Thermal Insulation System	MIR
Johns Manville	ENRGY 3®.E	MIR
	800 SERIES SPIN-GLAS®	EPD
	PERMACOTE LINACOUSTIC R-300	EPD
	1000 SERIES SPIN-GLAS	EPD
	LINACOUSTIC® RC-HP	EPD
Knauff	Knauf Insulation EcoBatt® Insulation with ECOSE® Technology Unfaced Batts	EPD, SRM, MIR
	Knauf Insulation EcoBatt® Insulation with ECOSE® Technology Faced Batts	EPD, SRM, MIR
	JetStream Ultra Blowing Wool Insulation	EPD
	Earthwool™ Redi-Klad™ 1000° Pipe Insulation with ECOSE® Technology	EPD
Owens Corning	EcoTouch Kraft Faced Insulation	EPD, SRM, MIR
	700 Series Fiberglas™ Insulation Faced	EPD, SRM, MIR
	Thermafiber® Mineral Wool Insulation	EPD, SRM, MIR
	FOAMULAR Extruded Polystyrene (XPS)Insulation	EPD, SRM, MIR
	ECOTouch Insulation Unfaced	EPD, SRM, MIR
	700 Series Fiberglas™ Insulation Unfaced	EPD, SRM, MIR
	Fiberglass Pipe Insulation	EPD, SRM, MIR
	Thermafiber UltraBatt Mineral Wool Insulation	EPD, MIR

Flooring Products

You can literally stumble into a pile of EPDs and HPDs with your flooring submittal.

Nearly every major flooring manufacturer has multiple options for you to choose from. What was the last project you were on that only had 1 type of flooring? You can find carpet (tiles and broadloom), vinyl, cove base, tile, solid surface and more – all with CDPH compliance as well.

Don't forget the adhesives! You've got a number of products that can help you there. Heck, Laticrete has over 100 HPDs in their product catalogue.

Note: While you may use 6 different carpet styles, if they are all the same underlying product, then they only count once. Styles of carpet are not different products. It would have to be a different formulation/backing to count as another product.

Pictured: Armstrong Luxury Vinyl Tile (LVT) via Armstrong.

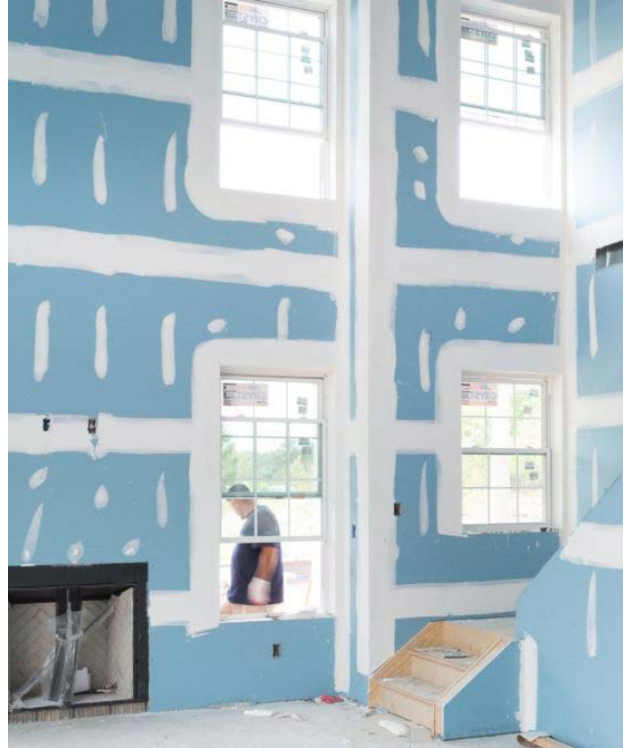| Manufacturer	Product	Compliance
American Olean	American Olean Brand Tile - El Paso TX Wall Tile Manufacturing Facility	EPD
	American Olean Brand Tile - Monterrey Mexico Floor Tile Manufacturing Facility	EPD
	American Olean Brand Tile - Muskogee NA Body Tile Manufacturing Facility	EPD
	American Olean Brand Tile - Fayette AL Quarry Tile Manufacturing Facility	EPD
	American Olean Brand Tile - Muskogee OK Super White Body Tile Manufacturing	EPD
Armstrong	Luxury Vinyl Tile (LVT)	EPD, MIR
	Vinyl Composition Tile (VCT)	EPD, MIR
	BioBased Tile	EPD, MIR
	Summit-all-in-one Hardwood Adhesive	MIR
	S-799 High Moisture Adhesive for Linoleum and Rubber Tile	MIR
Beaulieu Commercial	Nexterra Carpet Tile (Nylon 6,6 Face Fiber)	EPD, MIR
	Beaulieu Standard Broadloom (Nylon 6,6 Face Fiber)	EPD, MIR
	Level Hybrid Flooring Tile	EPD
	Level Tile with Nexterra Backing System	MIR
	Nexterra Carpet Tile (Nylon 6 Face Fiber)	EPD, MIR
Bentley Mills	AFFIXX Tile - Piece Dyed Nylon 6,6	EPD
	AFIRMA™ Hardback Tile- Piece Dyed Nylon 6,6	EPD
	AFFIXX Tile - Solution Dyed Nylon 6,6	EPD
	NexStep Piece Dyed N66	EPD, MIR
	Healthbond 2300 Adhesive	MIR

LEED Compliant Flooring Products, continued.

Manufacturer	Product	Compliance
ECORE International	UltraTile	EPD, MIR
	ECOsurfaces	EPD, MIR
	PlayGuard	EPD, MIR
	Expona Commercial Resilient Vinyl Floor Covering	EPD
	QT Sound Control	EPD, MIR
Forbo Flooring Systems	Marmoleum Tile 2.0mm and 2.5mm	EPD, SRM, MIR
	Colorex SD	EPD, SRM, MIR
	Flotex Sheet	EPD, MIR
	Marmoleum 2.0mm and 2.5mm	EPD, MIR
	Coral Duo	EPD, MIR
Interface	Modular Carpet Tile Type 6,6 Nylon with GlasBac	EPD, SRM, MIR
	Modular Carpet Tile Type 6 Nylon with GlasBacRE	EPD, SRM, MIR
	Modular Carpet Tile Type 6 Nylon with NexStep	EPD, SRM, MIR
	Modular Carpet Tile Needlefelt with Graphlar	EPD, SRM, MIR
	Modular Resilient Flooring - LVT	EPD, MIR
Laticrete	L&M EMERYTOP 400	MIR
	SPARTACOTE FLEX SB	MIR
	SPARTACOTE FLEX SB Low Gloss	MIR
	L&M FGS HARDENER PLUS	MIR
	SPARTACOTE FLEX PURE CLINICAL PLUS	MIR
Milliken	Solution Dyed Nylon 66 with Milliken ES Comfort Plus Backing	EPD, MIR
	Milliken Solution Dyed Nylon 6 with Milliken ESP Underscore Backing	EPD, MIR
	Digital Dye Injected Nylon 6 with Milliken ES Comfort Plus Backing	EPD, MIR
	Aquafil Econyl Solution Dyed Nylon 6 with Milliken ES Underscore Backing	EPD, MIR
	Milliken Continuous Dyed Nylon 66 Broadloom	EPD, MIR
Shaw Industries	EcoWorx Tile with Nylon Face Fiber	EPD, MIR
	EcoWorx PX Tile with Nylon Face Fiber	EPD, MIR
	Residential Broadloom with LifeGuard Backing System	MIR
	Classicbac® PC with NYLON Face Fiber	MIR
	Engineered Ply-Core Hardwood Flooring	MIR

Gypsum Board

You could pound a Monster energy drink and put your fist through an EPD with the options you've got in gypsum board!

You'll find the major national manufacturers here, like American Gypsum, Certainteed, National Gypsum, USG – all with tons of options. Since the uses are different, they can count as separate projects.

Type X? Of course. Fire rated Type X? You're getting warmer! Shaftliner, tile backer, mold resistant, glasmat – if you're not getting excited, go pound another Monster energy drink!

Pictured: Certainteed, Type X Gypsum Board

Manufacturer	Product	Compliance
American Gypsum	ClassicRic Gypsum Wallboard	MIR
	M-Bloc Gypsum Wallboard with Mold and Moisture Resistance	MIR
	M-Glass Glass Mat Gypsum Panels	MIR
	Exterior Soffit Gypsum Sheathing	MIR
	Exterior Gypsum Sheathing	MIR
Certainteed	Type X Gypsum Board Vancouver, British Columbia Facility	EPD, MIR
	Type X Gypsum Board, Seattle, WA Facility	EPD, MIR
	Type X Gypsum Board (MontrealFacility)	EPD, MIR
	M2TECH MOISTURE & MOLD RESISTENT GYPSUM BOARD 12.7MM (1/2") (Montreal Facility)	EPD, MIR
	Type X Gypsum Board (Toronto Facility)	EPD, MIR
National Gypsum	Gold Bond XP Fire-Shield Gypsum Boards	MIR
	Gold Bond SoundBreak XP Gypsum Boards	MIR
	Gold Bond XP Fire-Shield C Gypsum Boards	MIR
	Gold Bond Fire-Shield C Gypsum Boards	MIR
	Gold Bond Fire-Shield Gypsum Boards	MIR
USG	Sheetrock Brand EcoSmart Panels Mold Tough Firecode X	EPD, MIR
	Sheetrock Brand EcoSmart Panels Firecode 30	EPD, MIR
	Sheetrock Brand EcoSmart Panels Firecode X	EPD, MIR
	Sheetrock Brand Firecode C Panels	MIR
	Sheetrock Brand Glass-Mat Panels Mold Tough AR Firecode	MIR

Ceiling Tile & Grid

Another great product category where you know you'll have more than one option.

Rare is the project that uses one ceiling tile throughout, and if you find you're one EPD short you can always hang a different type in the mechanical room... (the Badger didn't just say that, we'd never suggest such a shameless tactic to pick up a point).

This is another case where the big manufacturers make it easy for you. You have over 100 options to pick from between Armstrong, Certainteed and USG.

Pictured: Mars ClimaPlus Healthcare

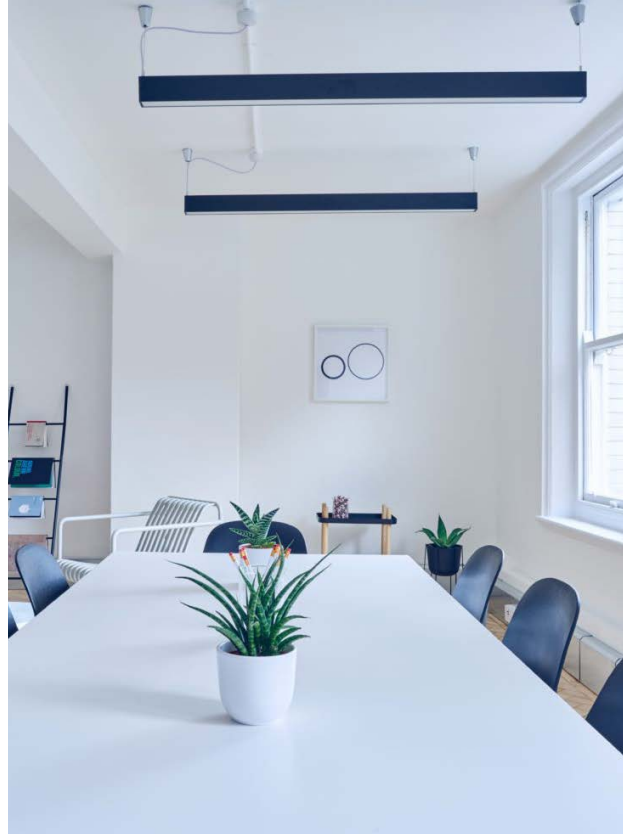| Manufacturer	Product	Compliance
Armstrong	Ultima Ceiling System	EPD, MIR
	Metalworks Snap In	EPD, MIR
	Metalworks Clip On	EPD, MIR
	Metalworks Torsion Spring	EPD, MIR
	Dune Ceiling System	EPD, MIR
	Ultima+	EPD, MIR
	Mesa Ceiling System	EPD, MIR
Certainteed	Baroque Ceiling Tile	EPD, MIR
	Cashmere Style Edge Ceiling Tile	EPD, MIR
	Protectone Cashmere Ceiling Tile	EPD, MIR
	Fine Fissured High NRC Ceiling Tile	EPD, MIR
	Sereno Fine Fissured Ceiling Tile	EPD, MIR
	Sky Ceiling Tile	EPD, MIR
	Symphony m and Rx Symphony m	EPD, MIR
USG	Mars ClimaPlus Healthcare	EPD, MIR
	Mars ClimaPlus HRC	EPD
	Mars ClimaPlus High-NRC	EPD
	Mars ClimaPlus	EPD
	RADAR™	EPD
	RADAR™ Basic	EPD, MIR
	Radar ClimaPlus High-NRC	EPD

Paint Products

If you missed the Badger blog post tying the Rolling Stones into EPDs and LEED, you can read that here.

We'll skip the recap and just note that you can get literally 25% of the EPD/HPDs you need to earn the credit from paints (closer to 37% for v4.1 EPDs, since they are all third-party verified). While each color of a paint won't count as a separate product, each sheen or type of paint will.

So when you come in with a primer, flat, eggshell, semi-gloss and gloss paint, you've got 5 products helping you out. Throw in some block fillers and direct-to-metal paints and primers and you're practically 50% of the way there!

Don't have gloss paint on your project? There's a mechanical room for that!

Manufacturer	Product	Compliance
Benjamin Moore	Ultra Spec® 500 Waterborne Interior Paint - Eggshell	EPD, MIR
	Ultra Spec® 500 Waterborne Interior Paint - Primer	EPD, MIR
	Ultra Spec® 500 Waterborne Interior Paint - Low-Sheen	EPD, MIR
	Ultra Spec® 500 Waterborne Interior Paint - Gloss	EPD, MIR
	Ultra Spec® 500 Waterborne Interior Paint - Semi-Gloss	EPD, MIR
	Ultra Spec® 500 Waterborne Interior Paint - Flat	EPD, MIR
	Natura® No-VOC Paint - Flat	EPD, MIR
	Natura® No-VOC Paint - Semi Gloss	EPD, MIR
	Natura® No-VOC Paint - Primer	EPD, MIR
	Natura® No-VOC Paint - Eggshell	EPD, MIR
Imperial Paints	ECOS Interior Matte Wall Paint Dark Base	MIR
	ECOS Interior Gloss Paint White Base	MIR
	ECOS Interior Eggshell Dark Base	MIR
	ECOS MDF Passivating Primer Paint	MIR
	ECOS Atmosphere Purifying Paint White Base	MIR
	ECOS Interior Semi-Gloss White Base	MIR
	ECOS Clear Gloss Varnish	MIR
	ECOS Interior Gloss Paint Dark Base	MIR
	ECOS Interior Semi-Gloss White Base Paint	MIR
	ECOS Electromagnetic Radiation (EMR) Shielding Paint	MIR

Manufacturer	Product	Compliance
PPG	SPEEDHIDE zero Interior Flat Latex	EPD, MIR
	SPEEDHIDE zero Interior Semi-Gloss Latex	EPD, MIR
	SPEEDHIDE Interior/Exterior Masonry Hi Fill Latex Block Filler	EPD
	SICO Ecosource - Melamine	EPD
	SICO Ecosource - Primer/Sealer	EPD
	Ultra Zero VOC by Dulux Interior Latex Paint - Eggshell	EPD
	Ultra Zero VOC by Dulux Interior Latex Paint - Primer	EPD
	PITT-GLAZE® WB1 Pre-Cat Epoxy Semi-Gloss	EPD
	SEAL GRIP Acrylic Universal Primer/Sealer	EPD
	ROMA Mineral Paints	MIR
Sherwin Williams	ProMar® 200 Zero VOC Latex paint - Flat	EPD, MIR
	ProMar® 200 Zero VOC Latex Primer	EPD, MIR
	Loxon Concrete & Masonry Primer	EPD, MIR
	PrepRite Block Filler	EPD, MIR
	Pro Industrial DTM Acrylic - Gloss	EPD
	Harmony Latex Paint - Semi-Gloss	EPD
	ProMar 400 Zero VOC - Primer	EPD
	Pro Industrial Waterborne Acrylic Dryfall - Flat	EPD
	Excello Interior Latex Odor Free	EPD
	Aqualock 8000	EPD

Ultra Spec® 500 Waterborne
Interior Paint - Eggshell

ECOS Clear Gloss Varnish

PPG SPEEDHIDE zero Interior
Flat Latex Paint

Sherwin Williams ProMar® 200
Zero VOC Latex Paint - Flat

Doors & Hardware

We're getting close to the end, so don't let the door hit you on the rear on your way out!

But do make sure you're grabbing all the EPDs and HPDs from your door and hardware submittal! We see this one overlooked A LOT – and that's a huge mistake. I haven't been on a project that hasn't had a door in it, and I'm guessing you haven't either.

All of these products serve different functions, so you can count them all. Wood doors, metal doors, door frames, hinges, handles, closers, locks, security devices – knock it out of the park here!

You'll see a lot of familiar brands, many under the Assa Abloy umbrella, but there's others as well.

Corbin Russwin IN120 Wifi Electronic Access Control Mortise Lock

Manufacturer	Product	Compliance
Arrow Lock and Door Hardware	5016N Series Door Closer	EPD
	7700 Series Swinging Door Operator	EPD
	7800 Series Swinging Door Operator	EPD
	7900 Series Swinging Door Operator	EPD
	900N Series Door Closer	EPD
Assa Abloy	Attack Resistant Opening Wood Doors	EPD
	Pemko Mortise Aluminum Heavy Duty Geared Hinge	EPD
	Sketch Door	EPD
	Markar FM300 Stainless Steel Edge Mount Countinuous Pin and Barrel Hinges	EPD
	HES 1600 Series	EPD
	Earth Door Wood Door	EPD
	Attack Resistant Hollow Metal Steel Door	EPD
	Pemko PDB411E Acoustic Automatic Door Bottom	EPD
	High Pressure Laminate Wood Door	EPD
	Pemko S773 SiliconSeal Adhesive Smoke/Fire Gasket	EPD
Corbin Russwin	IN120 Wifi Electronic Access Control Mortise Lock	EPD
	CL3300 Series Cylindrical Lock	EPD
	ED5400 SVR Exit	EPD
	IN100 Aperio Mortise Lock	EPD
	ED5000 Series Mechanical Exit Device	EPD
	CL3100 Series Vandal Resistant Lock	EPD
	ML2000 Series Mortise Lock	EPD
	ML20900 ECL Electromechanical Mortise Lock	EPD
	Access 600 RNE1	EPD
	DC8000 Series Door Closer	EPD

Manufacturer	Product	Compliance
DORMA Deutschland GmbH	BTS 80 BTS 80 EMB and RTS 80 EMB Series concealed door closers	EPD
	BTS 75 V and RTS 87 Series concealed door closers	EPD
	8600 and 8900 Series surface applied door closers	EPD
	8000 and 9000 Series exits	EPD
	RTS 85 RTS 88 and BTS 84 Series concealed door closers	EPD
Norton	Norton 7500 Series Door Closer	EPD, SRM
	5800 Series ADAEZ Door Opener	EPD
	Norton 1600 Series	EPD
	6300 Series ADAEZ Door Opener	EPD
	8000 Series Door Closer	EPD
	9300 Series Door Closer	EPD
	Norton 7700PT Series Door Closer	EPD
	Norton DC 5600 Operator	EPD
	Norton 9500 Series Door Closer	EPD
	Norton 7200 Series Door Closer	EPD
Sargent	80 Series Mechanical Exit Device	EPD
	8200 Series Electromechanical Mortise Lock	EPD
	7900 Series Mortise Lock	EPD
	Sargent Exit 80 Series 56- Electromechanical	EPD
	281 Series Door Closer	EPD
	1131 Ruen Series Door Closer	EPD
	10 Line Cylindrical Lock	EPD
	8200 Series Mortise Lock with EcoFlex	EPD
	8200 SERIES MORTISE LOCK	EPD
	Harmony Mortise Lock	EPD
Schlage	Schlage L9000 Series Lock	EPD, SRM, MIR
	L9010 Mortise Lock	EPD, MIR
	Schlage AL Series Lock	EPD
	Schlage ND Series Lock	EPD
	Schlage B5000 Series Lock	EPD
Yale	3000 Series Door Closer	EPD
	6000 SCR Exit	EPD
	Yale 4400 Series Door Closer	EPD
	51 Series Door Closer	EPD
	6000 Rim Exit	EPD

Summary

For the last time, if you haven't opted into LEED v4.1 for the materials credits, go do so immediately! Use the product categories above as a quick-start guide to finding LEED compliant products without having to go through 1000 submittals.

Heck, if the Badger was to crap out a repeatable list of products to earn the EPD and MIR Option 1 credits, it may look something like this:

1. Primer
2. Flat paint
3. Eggshell paint
4. Semigloss paint
5. Gloss paint
6. DTM Paint
7. Carpet 1
8. VCT 1
9. Thinset mortar
10. Grout
11. Wood door
12. Metal door
13. Door hinges
14. Door locks
15. Type X gypsum
16. Fire rated Type X gypsum
17. Mold-resistant gypsum
18. Tile backer
19. Ceiling tile 1
20. Ceiling tile 2
21. Thermal insulations
22. Acoustical insulation

And you're done. Lather, rinse, repeat. Heck, all those EPDs are third party verified, so you really could have stopped sooner - but don't forget there's an exemplary performance point at 40.

If all this LEED paperwork makes you feel nauseous, head to the bathroom, where you'll find dozens of options from Kohler, Sloan and Toto to pick up a few more compliant products.
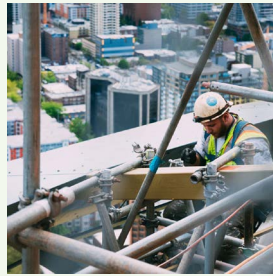
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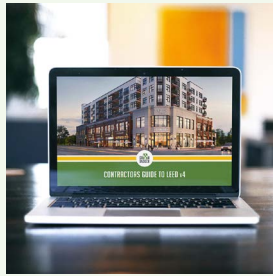
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LEED v4 Webinar

Free, on-demand training video to get your project team equipped with the knowledge to tackle LEED v4.

LEED v4.1 Update

A review of all the changes to construction related credits in the new LEED v4.1 update.

VOC Products

Whlie this guide only covers BPDO materials credits, but our website has all your VOC needs covered as well.

LEED v4 PDF Guide

Don't want to watch the LEED v4 webinar? Download the PDF guide instead and read at your own convenience!

Finding Compliant HPDs for LEED v4 and v4.1
WITH GREEN BADGER
GR__N BADGER TRAINING VIDEO   4:43

WATCH NOW:

Finding Compliant HPDs

If you'd rather get this information in a video format, check out our YouTube channel for the video Finding HPDs for LEED v4 and v4.1 where we walk you through step by step.

Click here to watch now

Finding EPDs for LEED v4 and v4.1
WITH GREEN BADGER
GR__N BADGER TRAINING VIDEO   4:18

WATCH NOW:

Finding Compliant EPDs

If you'd rather get this information in a video format, check out our YouTube channel for the video Finding HPDs for LEED v4 and v4.1 where we walk you through step by step.

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By Tommy Linstroth
Founder & CEO, Green Badger
www.getgreenbadger.com
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