

ULTIMATE GUIDE TO LEED V4 & V4.1

MRc4 Option 1:

Material Ingredient Reporting

A Resource Guide for General Contractors

BY GREEN BADGER FOUNDER & CEO, TOMMY LINSTROTH



Earning MRc4 Option 1 Material Ingredient Reporting in LEED v4.1

Have you ever wondered what's really inside some of those products you are using inside of your building? No? Me neither! But hey, someone smarter than me decided that you should be informed of what exactly is hanging on your walls or under your feet, and that is what this credit is all about. This credit is going to sound a lot like Green Badger's guidance on EPDs.

Most products still do not have documentation to comply with this credit - in fact, prescreened/verified for LEED products total less than 3,000. These are predominantly Health Product Declarations, but both Cradle to Cradle and Declare are growing (more on all of those in a bit).

HPDs - 2,044 Prescreened for LEED v4

Cradle to Cradle - 418 products

Material Health Certificates - 226 products

Declare Labels - Approximately 350 products that show alignment with LEED

That said, products with compliant documentation are abundant when you know where to look for them.



BY TOMMY LINSTROTH,
GREEN BADGER FOUNDER & CEO
LEED FELLOW

REQUIREMENTS



Requirements for MRc4 Option 1 for LEED v4.1

1 Point

1 Point: For most LEED BD+C Projects: 20 products with qualifying material ingredient reports that demonstrate the chemical inventory of the product to at least 0.1% (1000 ppm).

1 Point

1 Point: For Commercial Interiors, Core and Shell, and Warehouse projects, 10 products with qualifying environmental product declarations.

Exemplary Performance Point: 40 products (20 for CI, C&S, Warehouse)

There are nine compliance options that USGBC lists (for the entire list, click [here](#)), but since we're pretty pragmatic Badger's, we'll only focus on the options that you'll actually see in the marketplace. They were alluded to earlier, but they are:



Health Product Declaration. The end use product has a published and complete Health Product Declaration with full disclosure of known hazards in compliance with the Health Product Declaration open Standard.

Cradle to Cradle. Product has Material Health Certificate or is Cradle to Cradle Certified™ under standard version 3 or later with a Material Health achievement level at the Bronze level or higher.

Declare. The Declare product label must 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).

These documents show you what's in a product - but is anyone actually reviewing chemical components and making product selections based on them? No one we know. Just having an HPD does not mean a product is any healthier than another - it is simply a detailed list of what is inside something. You can use that chemistry degree you keep in your back pocket to make those decisions.



What is a Health Product Declaration?

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 Green-Screen 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).

Not all HPDs are fully LEED v4 compliant. Here's what you need to be on the lookout for: The big one, make sure that the Threshold Level is either 100 ppm or 1000 ppm – that is a must. Important

note! 100 ppm is MORE stringent than 1000 ppm - we've seen LEED reviewer comments stating that an HPD wasn't compliant because 100 ppm was checked, not 1000 ppm. BOTH OPTIONS COUNT, AND 100 ppm is MORE stringent!

Second, make sure the YES box is checked for substances being Characterized and Screened. Finally, check the bottom of page 1 and see if it is 3rd party verified (there's only about 100 that are) and that it hasn't expired.

HPDs count as 1 product towards the 20 required to earn the point and third-party verified HPDs count as 1.5 products, though as of 10/29/20, there are only 160 products (120 of which have been prechecked for LEED compliance).

<h1>Armstrong Suspension Systems Prelude by Armstrong World Industries</h1> <p>CLASSIFICATION: 095300 PRODUCT DESCRIPTION: Steel Suspension System</p>		<h2>Health Product Declaration v2.1</h2> <p>created via: HPDC Online Builder</p>					
Section 1: Summary		Basic Method / Product Threshold					
<h3>CONTENT INVENTORY</h3> <table border="1"> <tr> <td> Inventory Reporting Format <input checked="" type="radio"/> Nested Materials Method <input type="radio"/> Basic Method </td> <td> Threshold level <input type="radio"/> 100 ppm <input checked="" type="radio"/> 1,000 ppm <input type="radio"/> Per GHS SDS <input type="radio"/> Per OSHA MSDS <input type="radio"/> Other </td> <td> Residuals/Impurities <input checked="" type="radio"/> Considered <input type="radio"/> Partially Considered <input type="radio"/> Not Considered Explanation(s) provided for Residuals/Impurities? <input checked="" type="radio"/> Yes <input type="radio"/> No </td> <td> Are All Substances Above the Threshold Indicated: Characterized Percent Weight and Role Provided? <input checked="" type="radio"/> Yes <input type="radio"/> No Screened Using Priority Hazard Lists with Results Disclosed? <input checked="" type="radio"/> Yes <input type="radio"/> No Identified Name and Identifier Provided? <input checked="" type="radio"/> Yes <input type="radio"/> No </td> </tr> </table>				Inventory Reporting Format <input checked="" type="radio"/> Nested Materials Method <input type="radio"/> Basic Method	Threshold level <input type="radio"/> 100 ppm <input checked="" type="radio"/> 1,000 ppm <input type="radio"/> Per GHS SDS <input type="radio"/> Per OSHA MSDS <input type="radio"/> Other	Residuals/Impurities <input checked="" type="radio"/> Considered <input type="radio"/> Partially Considered <input type="radio"/> Not Considered Explanation(s) provided for Residuals/Impurities? <input checked="" type="radio"/> Yes <input type="radio"/> No	Are All Substances Above the Threshold Indicated: Characterized Percent Weight and Role Provided? <input checked="" type="radio"/> Yes <input type="radio"/> No Screened Using Priority Hazard Lists with Results Disclosed? <input checked="" type="radio"/> Yes <input type="radio"/> No Identified Name and Identifier Provided? <input checked="" type="radio"/> Yes <input type="radio"/> No
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<h3>CONTENT IN DESCENDING ORDER OF QUANTITY</h3> <p>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.</p> <p>MATERIAL SUBSTANCE RESIDUAL OR IMPURITY GREENSCREEN SCORE HAZARD TYPE</p> <p>STEEL FOR SUSPENSION SYSTEMS [GALVANIZED STEEL LT-UNK] COATING FOR SUSPENSION SYSTEMS [TITANIUM DIOXIDE LT-1] CAN END </p>							
<h3>VOLATILE ORGANIC COMPOUND (VOC) CONTENT</h3> <p>VOC Content data is not applicable for this product category.</p>		<h3>CERTIFICATIONS AND COMPLIANCE</h3> <p>See Section 3 for additional listings. LCA: Environmental Product Declaration Other: International Living Future Institute - Declare Label</p>					
<h3>CONSISTENCY WITH OTHER PROGRAMS</h3> <p>Pre-checked for LEED v4 Material Ingredients, Option 1</p>							
Third Party Verified?	PREPARER: Self-Prepared VERIFIER: VERIFICATION #:	SCREENING DATE: 2017-08-23 PUBLISHED DATE: 2017-08-23 EXPIRY DATE: 2020-08-23					

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

Identified can be any of the options.

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.

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 CO₂-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: **Your Second Component:**
LBC Watch List Priority for Inclusion: Non-Toxic Ingredient; Undisclosed (<0.1%)²

¹LBC Temp Exception RL-009 Formaldehyde
²LBC 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

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

Third Party Verified

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.

What are Declare labels?

Next up are 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.

Per USGBC, Declare labels contribute toward the credit when they meet the following requirements:

- Declare labels designated as Red List Free OR Declared, and are very clearly marked if they are also third-party reviewed.

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.

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 CO₂-eq —

Declared Unit: #m²

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%); Sourced Ingredient;
Living Building Challenge Watch List;
Non-Toxic Ingredient

¹LBC 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

What is a Cradle to Cradle or Material Health Certificate?

Last up, Cradle to Cradle – both C2C certified and C2C material health certificates – both count the same. 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 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.

Even better, C2C is considered third-party verified, so any C2C product will count for 1.5 products towards your goal in v4.1.

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 TO CRADLE
PRODUCTS
INNOVATION
INSTITUTE

LICENSED MARKS:



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



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

STRATEGIES



Strategies for Achieving MRc4 Opt 1 in LEED v4.1

Now that you know what types of material ingredient reports are available, and what each needs to have to qualify for LEED, let's figure out where these products live.

Similar to EPDs, I'm sure the team has already pre-identified all of these products, so you don't even have to worry about it, right? Oh yea, that's right, they did not....

Here's where to go (and it's the same strategies we recommend for EPDs, so if you've memorized that, this may be a bit redundant).

Where to find 20 products that have LEED Compliant Material Ingredient Reporting

Green Badger recommends focusing on 6 different submittals, and it is where you'll find boatloads of MIR. Here's where to start.

1. *Insulation*
2. *Flooring*
3. *Gypsum board*
4. *Ceiling tile*
5. *Paint*
6. *Doors and hardware*

Why? Because each category has multiple manufactures with lots of options – you're not pigeonholed into sole sourcing, and you've got these products on every single construction project.

I'll offer a precursor before I go into the details. Neither I nor Green Badger 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. It's simply some guidance on product categories to get your points without banging your head into a wall.

1. Insulation

Noisy? 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 if not more. All the big players are here – Owens Corning, Johns Manville, Knauff, Certainteed – plus a lot of options including thermal, acoustic, batt, spray, faced, unfaced.



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

2. Flooring Products

Next, we suggest the Flooring category. There are a ton of options for carpet, VCT, and ceramic tile. All the brands that show up – Armstrong, Shaw, Interface, Milliken – come with EPDs and HPDs. Don't forget the adhesives! Laticrete alone has over 100 products with HPDs, plus WF Taylor, XL brands, and others.



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
Knauff	AFFIX Tile - Piece Dyed Nylon 6,6	EPD
	AFIRMA™ Hardback Tile- Piece Dyed Nylon 6,6	EPD
	AFFIX Tile - Solution Dyed Nylon 6,6	EPD
	NexStep Piece Dyed N66	EPD, MIR
	Healthbond 2300 Adhesive	MIR

Flooring Products

Manufacturer	Product	Compliance
ECORE International	UltraTile	EPD
	ECOsurfaces	EPD
	PlayGuard	EPD
	Expona Commercial Resilient Vinyl Floor Covering	EPD, MIR
	QT Sound Control	
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

3. Gypsum Board

The next category we suggest is Gypsum Board. The big players are here too, including National Gypsum, USG, Certainteed, and American.

Gypsum board is another category with a wide variety of products like Type X, Fire Rated, Mold Resistant, GlasMat, Tile Backerboard, Shaftliner, abuse resistant – the list goes on and on! And they all count as separate products.



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 (Montreal Facility)	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

4. Ceiling Tile & Grid

Armstrong, Certainteed and USG all have multiple options, and when was the last time you had a project that just used 1 single ceiling tile throughout? And if you need to, you can always hang a different tile in the mechanical room! I didn't just say that, I'd never suggest such a shameless tactic to pick up a point!



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

5. Paint Products

All the big manufacturers show up with compliant products in the paint category. What's great

is that each sheen of paint counts as a product, so that means if you're using Sherwin Williams Promar 200 zero VOC paint, you can count the primer, flat, eggshell, semi-gloss, and gloss paints all as unique products! Throw in block fillers and direct to metals and you're nearly halfway there.



Manufacturer	Product	Compliance
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
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
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

6. Doors & Hardware

Finally, we've arrived at the doors and hardware category.

There are a ton of options here from doors and frames to kickplates, gaskets, locks and closing devices. This one always slips through the cracks, but you could knock out half of your EPDs here.



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 Continuous 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
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

6. Doors & Hardware

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

MORE BEST PRACTICES

For Material Ingredient Reporting



1. Utilize Green Badger!

Sort of goes without saying but using your Green Badger project license makes this all so easy, so automated, and so headache free.



2. Roadmap as early as possible with the architects.

We are seeing more and more architects detail out products to go for, but when they don't, get on the same page and have a joint strategy to make sure you're on the path to success.



3. Use a LEED materials cover sheet for your subcontractors.

Making them fill this out solves a number of problems - it helps you nail down material cost in a clean manner, requires the sub to put some thought into LEED attributes, and gives you a way to cross check the backup documentation.



4. Always double-check your Material Ingredient Reporting

Double check the MIR to make sure they detail what you need as you learned earlier. For HPDs make sure the whole declaration is provided, not just the first page, and that either 100ppm or 1000ppm are checked.



5. Create a LEED MIR folder

If you're not using Green Badger, go ahead and create a LEED MIR folder - you've got to submit ALL of them to USGBC, so having them in one folder you can zip up and upload at the end will make life a lot better come submission time.

Recapping the Strategy Roadmap

So there you go – hit up these submittals and I'm confident you'll have completed your requirements for EPDs and Ingredient reporting for Options 1 without having to get in fistfights with the architect, subcontractors or anyone else.

- Start your efforts with insulation, flooring, gypsum board, ceiling tiles, paint and doors/hardware
- Check the finish schedule early and often, and if possible, review with the architect to roadmap product selection
- Get to 20 products quickly, and you can change the acronym MIR from material ingredient reporting to Mostly Ingesting Rum.

Summary for MRc4 Option 1

How to earn 1 point:

- Make sure you are using LEED v4.1!
- Roadmap early with the design team
- Focus on insulation, flooring, gypsum board, ceiling tile, paints and doors/hardware
- Verify and log your MIRs into a folder for easy submission to USGBC

Summary of Strategies



Insulation, flooring, gypsum board, ceiling tiles, paint, and doors/hardware



Roadmap the finish schedule with the architect



Get to 20 products quickly!