

Sustainable and Healthy Materials Action Packet

18 November 2019

THIS GUIDE

We welcome and encourage you to adapt each of these three documents (Materials Library Entry Criteria, Staff Onboarding Guide, and Architectural Samples Donation Guide) to the needs of your organization or practice. We hope that you will also share them. The more we work together to improve the building products industry, the better it will be for our planet and its inhabitants.

We welcome your feedback! Please send comments, suggestions, or questions to: generativeimpacts@msrdesign.com

Materials Library Entry Criteria

To align our projects and practice with the sustainable and healthy building materials movement, we communicate our intentions to building products sales representatives and manufacturers using this one-page handout, which contains three categories of action:

1. What We Require: Transparency

A growing number of architecture firms and client organizations are requesting transparency on the composition of building products. We look for an HPD or Declare label to be considered for our library.

2. What We Avoid: Harmful Ingredients

Constructing a building completely free of harmful chemicals may not yet be easily achieved currently, but that day is coming quickly. We are helping to lead the way.

3. How We Rank Products

We support manufacturers that are leading market transformation holistically. We give a green sticker to products that are both less hazardous to human health (Red List Free or no Benchmark 1) and account for embodied carbon.

Staff Onboarding guide

We want our entire staff to understand what it means to use better materials.

100 Level: Fast Track Learning

For everyone, including firm leadership and project managers. Includes mostly videos.

200 Level: Materials Concepts

For strategic thinking on projects.

300 Level: Specifying Products

Provides tools, databases, and articles to build your case for better products.

400 Level: Advanced Learning

Offers chemistry deep dive.

Architectural Samples donation guide

We worked with Twin Cities ReStore, a branch of Habitat for Humanity, to develop a set of guidelines for donating certain samples (after first attempting to return them to the manufacturer). We recommend contacting your local ReStore to see whether a similar donation or pickup arrangement may be possible and to help them develop their own set of guidelines for architectural sample donations.

Materials Library Entry Criteria

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Having signed the AIA 2050 Materials Pledge, MSR Design has made a commitment to:

- Support **Human Health** by preferring products that foster life throughout their life cycles and seeking to eliminate the use of hazardous substances.
- Support **Climate Health** by preferring products that reduce carbon emissions and sequester more carbon than emitted.
- Support **Ecosystem Health** by preferring products that regenerate the natural air, water, and biological cycles of life through thoughtful supply chain management and restorative company practices.
- Support **Social Health and Equity** by preferring products from manufacturers that secure human rights in their own operations and in their supply chains and provide positive impacts for their workers and the communities where they operate.
- Support a **Circular Economy** by reusing buildings and materials and designing for materials efficiency, long life, and perpetual cycling.
- Continue asking for **Transparency** and better products.
- Continuously **Improve and Update** our specifications and procurement processes to require transparent and optimized products.
- **Collaborate and Share** best practices, tools, and education.

1. WHAT WE REQUIRE: TRANSPARENCY

All products on our shelves require transparent documentation of composition through one of the following formats:

[Health Product Declaration \(HPD\)](#)

An affordable option for manufacturers; includes listing in HPD Repository

[Declare Label](#)

Includes listing in popular designer-facing Declare Database

2. WHAT WE AVOID: HARMFUL INGREDIENTS

- [Antimicrobials](#)
- [Stain repellants and other PFAS](#)
- [Bisphenols and phthalates](#)
- [Flame retardants](#)
- VOCs*
- Formaldehyde*
- PVC*

*Not possible to eliminate certain chemistries yet? Talk to us.

We support manufacturers that demonstrate commitment to transforming the building product market and creating a healthier, more equitable industry for people, society, and the environment.



If a product meets the entry criteria at left, it may qualify for an additional green or yellow sticker in our library.

3. HOW WE RANK PRODUCTS

Green Sticker

- [Living Building Challenge Red List FREE](#) or free of [GreenScreen Benchmark 1](#)

and

- Carries either a valid, third-party verified environmental certification or [Environmental Product Declaration](#)

Yellow Sticker

- [LBC Compliant](#), defined as a small percentage of proprietary-but-Red List Free ingredients, according to the manufacturer's word

or

- Third-party environmental certifications unavailable; no Environmental Product Declaration

Not Stickered

- Meets entry criteria with no additional certifications

Questions? We value our relationship with you. What are the most sustainable, healthy materials you offer? Let's start a conversation.

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100 Level: Fast Track Learning

AIA 2050 MATERIALS PLEDGE

Architecture firms that have committed to asking manufacturers for transparency and prefer products that support human, climate, ecosystem, and social health.

Six Classes of Chemicals of Concern (two minutes each)

A series of brief videos on the major classes of chemicals we are looking to remove from production and use.

1. PFAS

<https://www.sixclasses.org/videos/pfas>

2. Antimicrobials

<https://www.sixclasses.org/videos/antimicrobials>

3. Flame Retardants

<https://www.sixclasses.org/videos/flame-retardants>

4. Bisphenols and Phthalates

<https://www.sixclasses.org/videos/bisphenols-phthalates>

5. Mercury, Arsenic, Cadmium, Lead

<https://www.sixclasses.org/videos/certain-metals>

6. Specific Solvents

<https://www.sixclasses.org/videos/some-solvents>

Carbon Drawdown Now! (75 minutes; 50 minutes at 1.5x speed)

Northeast Sustainable Energy Association (NESEA) Building Energy Boston 2019 Keynote on the critical importance of accounting for embodied carbon right now.

<http://nesea.org/buildingenergy-boston-2019-keynote-session>

200 Level: Materials Concepts

MATERIALS LIBRARY ENTRY CRITERIA

Review and familiarize yourself with our Material Library Entry Criteria handout.

HomeFree Transformation Targets (Using HomeFree)

HomeFree, by Healthy Building Network (free)

<https://homefree.healthybuilding.net/products>

DESIGN FOR EMBODIED CARBON

Carbon Smart Materials Palette (free)

<https://materialspalette.org>

Embodied carbon calculation

- EC3 (launched November 2019)
<https://buildingtransparency.org>
- Tally
<https://choosetally.com>
- Athena
<http://www.athenasmi.org/our-software-data/impact-estimator>
- One Click LCA
<https://www.oneclicklca.com>

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300 Level: Specifying Products

PRODUCT DATABASES

Declare (free)

<https://living-future.org/declare>

Material Bank (free)

Filter and order product samples by certification

<https://www.materialbank.com>

Origin Database (free)

<https://www.origin.build/#/>

Red2Green Products Database (subscription)

<https://materiallybetter.com>

QUICK SEARCH TRANSPARENCY DOCUMENTATION

1. HPD Public Repository (free)

<https://www.hpd-collaborative.org/hpd-public-repository>

2. Mindful Materials (free)

<https://mindfulmaterials.origin.build/#/shared/materials>

3. Sustainable Minds Transparency Catalog (free)

All HPDs and all EPDs in North America with MasterFormat filtering

<https://www.transparencycatalog.com>

REFERENCES

Ecolabel Index (free basic access)

What's a good ecolabel? Find out whether a label is independent and third-party verified

<http://www.ecolabelindex.com/ecolabels>

BuildingGreen.com (membership)

In-depth articles on high performance buildings and materials

<https://www.buildinggreen.com>

Green Building Advisor (free basic access)

Detailed advice on high performance buildings and products

<https://www.greenbuildingadvisor.com>

Healthy Building Network (free)

In-depth research reports and general chemical expertise

<https://healthybuilding.net>

HPD Collaborative, Resources tab (free)

<https://www.hpd-collaborative.org>

Latest on Materials Transparency Reporting: HPD v2.2 (free)

<https://vimeo.com/334555684>

Harvard For Health webpage (free)

<https://forhealth.org>

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BEST PRACTICES IMPLEMENTATION GUIDES

AIA COTE Toolkit: Design for Resources (free)

The COTE toolkit provides many awesome resources

<https://www.aia.org/showcases/6082636-design-for-resources>

Living Building Challenge Materials Petal Handbook (membership)

<https://living-future.org/lbc>

LEED v4 MR: Building Products Disclosure + Optimization (free)

- Environmental Products Declarations

<https://www.usgbc.org/node/12022789?return=/credits/new-construction/v4.1>

- Sourcing of Raw Materials

<https://www.usgbc.org/node/12022828?return=/credits/new-construction/v4.1>

- Material Ingredients

<https://www.usgbc.org/node/12022829?return=/credits/new-construction/v4.1>

400 Level: Advanced learning

CHEMICAL LOOKUP

The Red List (free)

Updated Red List from Living Building Challenge

<https://living-future.org/declare/declare-about/red-list>

Pharos + Chemical Hazard Data Commons (free)

Look up chemicals to understand their hazard indicators

<https://pharosproject.net>

Green Screen List Translator System (free)

Understand the “list of lists” approach to quickly identify chemicals of high concern. Chemicals identified as Benchmark 1 etc., based on international hazard lists.

<https://www.greenscreenchemicals.org/learn/greenscreen-list-translator>

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Further Reading

Ensia Magazine

A solutions-focused nonprofit media outlet reporting on our changing planet.

<https://ensia.com>

Project Drawdown

Project Drawdown is a world-class research organization that reviews, analyses, and identifies the most viable global climate solutions, and shares these findings with the world.

<https://drawdown.org>

Materials and Practice: AIA Guides

- [AIA Materials Transparency + Risk for Architects](#)
AIA white paper
- [AIA How Material Transparency Affects your Practice](#)
Understand the importance of transparency in materials
- [AIA Materials Matter Article Series](#)
Impacts of materials, summary articles

GOT ARCHITECTURAL + INTERIOR DESIGN PRODUCT SAMPLES?

UP-CYCLE THEM!

ReStore

Twin Cities Habitat for Humanity

Twin Cities ReStore sells donated building and project supplies for DIY projects and uses the proceeds to support Habitat for Humanity building projects in Minnesota. Architecture and interior design firms throw away a lot of product samples every month because they cannot be returned to the manufacturer.

- Note: Some manufacturers request that their samples be returned to the product representative, or offer a prepaid return box. Returns should always be a first priority.
- Drop-off locations: 510 County Road D W, New Brighton, MN 55112 2700 Minnehaha Ave S, Minneapolis, MN 55406
- Drop-off hours: Tuesday - Friday 10AM-5PM, Saturday 10AM-3PM
- Email: restore@tchabitat.org
- Phone: 612-588-3820
- Schedule a pickup: Donations can be brought to a drop-off location or ReStore offers a free pick-up service: [restore.tchabitat.org/donate](https://www.restore.tchabitat.org/donate)
- Donatables: Stack larger items neatly; sort and box smaller items into similar categories. ReStore can deliver tote bins to your office to be filled and picked up in the same week, please phone or email to arrange.

Donation Guidelines: Architectural Samples*

Brick	Loose brick & blocks, dirt free and not broken No brick samples mounted to sample boards
Door hardware	Door and other hardware can be used in Habitat projects, even if it is mounted to sample boards.
Flooring	Carpet tiles of all sizes and styles No laminate, resilient flooring or wood flooring pieces
Furniture (used office furniture)	ReStore does not accept or sell office furniture. Instead please contact Furnish Office & Home: http://www.furnishofficeandhome.org/
Glass	Loose glass tile, glass block, glass panels No insulated glass units (IGUs) or window glass samples. No mirrors except small and framed.
Solid surface	Pieces of polished solid surface in different colors, especially in matched sizes and attractive display boxes
Stone	Loose stone facing & blocks, dirt free and not broken No stone samples mounted to sample boards.
Textiles	Contact ReStore regarding large pieces of fabric No textile memos
Tile	Loose ceramic tile of different sizes and colors, not broken or chipped
Wall panels	Plastic or other material wall and partition panels larger than coaster-size, especially in matched sizes and attractive display boxes
Wood	Limited to interesting or attractive wood pieces 8"x8" or larger (i.e. something you could picture using in an art project). Matched coaster-size pieces may be acceptable. No siding, trim, really big pieces, lumber
Random odds and ends / small pieces	Interesting and attractive samples that you could imagine using in an arts & crafts project, coaster-size at minimum, preferably 8"x8" or larger. Especially when there are multiples of a similar size, and attractive display packaging such as decorative boxes, bins or baskets. No fasteners, foam, binders, books, paint chips, laminate chips, acoustic tile, insulation, or assemblies.

*See general donation guidelines for any category not listed in this chart.