We will always make time for the things that matter. Cooking matters.
start with **people** and all else follows.

the default is never the greenest, **safest** option.

**IF THEY WON'T TELL YOU WHAT'S IN IT, YOU PROBABLY DON'T WANT WHAT'S IN IT.**

**consult your nose** -- if it stinks, don't use it.

managing data is difficult and we are not doing a good job.

use both **carrots** (rewards, incentives, trips to Vegas?) and **sticks** (Red Lists?) to get exposure.

MATERIAL RULES (2011) - INSPIRED BY MICHAEL POLLAN’S ‘FOOD RULES’
why not the “heal us” list?

what are the unintended consequences of Red Lists?

JUST BECAUSE ALMOST ANYTHING CAN KILL YOU DOESN’T MEAN THAT BUILDING PRODUCTS SHOULD.

innovation is the opportunity for manufacturers to take more market share.

there is a product we are using today that we don’t know is making us sick.

MATERIAL RULES (2011) - INSPIRED BY MICHAEL POLLAN’S ‘FOOD RULES’
Avoid materials that are pretending to be something they are not.

Include the manufacturer in design and integrated team partnership (us + us) standards that are agile and robust.

Put PCRIs and EPDs in certification programs, with toxicity information included.

Host a ‘regenerative manufacturer’ competition with rewards.

Need for an information filter and how to compare material values (e.g., toxicity vs habitat).
If you can’t **grow it**, then you shouldn’t use it.

**embrace decay + transformation.**

USE CARBOHYDRATE-BASED MATERIALS WHEN YOU CAN.

We should be able to eat buildings.

**nature is the teacher. biomimicry for content, not just function.**

**MATERIAL RULES (2011) - INSPIRED BY MICHAEL POLLAN’S ‘FOOD RULES’**
why are healthy products "special"?

make it personal: value health more than CO₂ and energy.

QUESTION MATERIALS THAT MAKE HEALTH CLAIMS.

can we make buildings biologically active?

use the precautionary principle.

bring this discussion into design education.

MATERIAL RULES (2011) - INSPIRED BY MICHAEL POLLAN’S ‘FOOD RULES’
can your company switch to product as service?

revise the rule to read: “take only what you need.”

PAY MORE, USE LESS.

closed-loop economy.

using more should contribute to the greater good.

will saying “no” get us where we want to go?

MATERIAL RULES (2011) - INSPIRED BY MICHAEL POLLEN’S ‘FOOD RULES’
healthy + regenerative is profitable.

do we have to choose between lead time and quality/handmade/supporting local companies?

IF IT IS CHEAP, IT PROBABLY HAS HIDDEN (EXTERNALIZED) COSTS.

what you buy gets produced.

economy puts profits over “value to the world”.

create incentives, recognition and celebration for healthy products.

MATERIAL RULES (2011) - INSPIRED BY MICHAEL POLLAN’S ‘FOOD RULES’
how can we avoid the toxicity of technology?

ask what we are trying to accomplish with materials in the first place.

REGARD "SPACE AGE" MATERIALS WITH SKEPTICISM.

what will we wear in the future?

move forward by looking back.

what if all new manufacturing is "dead"?

MATERIAL RULES (2011) - INSPIRED BY MICHAEL POLLAN'S 'FOOD RULES'
CAN WE REALLY DO BETTER THAN NATURE?

LESS PROCESSED IS BETTER THAN MORE PROCESSED.

USE MATERIALS MADE WITH SUBSTANCES YOU CAN IMAGINE IN THEIR RAW OR NATURAL STATE.

MAKE IT WITH YOUR HANDS.

USE THINGS THAT CAN BE REPAIRED, NOT JUST REPLACED. (DON’T SUPPORT FORCED OBSOLESCENCE)

APPROACH MANUFACTURING AS ECOSYSTEM: THE INTERACTION OF BIOLOGICAL AND NON-BIOLOGICAL ELEMENTS IN SYSTEMS PROCESS.

MATERIAL RULES (2011) - INSPIRED BY MICHAEL POLLAN’S ‘FOOD RULES’
QUESTION THE GENERATION OF HAZARDOUS WASTE INSTEAD OF WHERE TO USE IT IN YOUR PROJECT.

educate your family first... then your clients.

make it with your hands.

be open to moving beyond “doing less bad”.

recycled content is not always better.

create a culture of “yes”.

MATERIAL RULES (2011) - INSPIRED BY MICHAEL POLLAN’S ‘FOOD RULES’
the Health Product DECLARATION is...

a consistent language for product ingredient reporting

an essential part of the materials ecosystem

a free online tool for manufacturers
Context for reporting product information

- **Product Contents** and disclosure levels
- **VOC Emission** lab testing
- **VOC Content** for wet applied products
- **Energy Use**
- **Water Use**
- **Materials Use**
- **Emissions**

**VOC Certifications**

**Life Cycle Analysis**
- e.g., embodied carbon, embodied energy, fossil fuel depletion, materials depletion, acid rain emissions

**Environmental Product Declaration** via Product Category Rules

**No Standard No Format**
Context for reporting product information
CONTINUOUS IMPROVEMENT...
START WHERE YOU ARE

Health Product Declaration
Variable disclosure levels

www.HPDcollaborative.org
INVENTORY OF INGREDIENTS AND HAZARDS - AS INFORMATION IS KNOWN

<table>
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<th>Health Product Declaration</th>
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<td>Variable disclosure levels</td>
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Health Product Declaration

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<td>Full Disclosure of Known Hazards</td>
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<tr>
<td>Full Disclosure of Intentional Ingredients</td>
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<tr>
<td>Full Disclosure of Known Hazards</td>
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</table>

Disclosure Notes

www.HPDcollaborative.org
### Health Product Declaration Hazards Summary

#### Hazards
- [ ] PBT *(Persistent and Bioaccumulative Toxic)*
- [ ] Cancer
- [ ] Gene mutation

#### Total VOC Content
- [ ] N/A
- [ ] Yes
- [ ] No

---

**INGREDIENT HAZARD SUMMARY AT A GLANCE**

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[www.HPDcollaborative.org](http://www.HPDcollaborative.org)
The HPD Standard is solely a declaration of product content and direct health hazards associated with exposure to its individual contents. It is not a full assessment of environmental impacts from the life cycle of this product. It is not an assessment of risks associated with actual use of the product. It does not address the potential health impacts of substances used or created during manufacture that do not appear in the final product as residuals, nor substances created during combustion or other degradation processes.

This Health Product Declaration was generated following the requirements of the noted Standard version and is valid for a total of three years after date of issue or three months after a substantive change of product contents occurs. Users should verify that this Health Product Declaration is compliant with the current version of the HPD Standard. Accuracy of claims made in this Health Product Declaration is the sole responsibility of the listed manufacturer and certifier (if applicable). The HPD Collaborative does not warrant the claim made herein, explicit or implicit. The HPD Standard is an "open standard" developed and managed by the HPD Collaborative nonprofit organization. For more information, visit hpdcollaborative.org.

### CONTENT IN DESCENDING ORDER OF QUANTITY

All ingredients must be assessed for health warnings against Priority Hazard Lists, regardless of disclosure level. Priority Hazard Lists and information on the GreenScreen Benchmarks can be found at www.hpdcollaborative.org/hazardlists.

<table>
<thead>
<tr>
<th>Ingredient Name</th>
<th>CAS number</th>
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</table>

Notes

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Health Product Declaration

Ingredient Inventory

www.HPDcollaborative.org

CONTEXT FOR INGREDIENT HAZARD SCREENING DATA
The HP Standard is a benchmark for achieving health and safety excellence through the implementation of specific steps and guidelines. This standard is designed to help companies ensure that their products meet or exceed industry standards for health and safety.

### Components of the HP Standard

- **Ingredient Inventory Declaration**
- **Hazard List**
- **Greenscreen Benchmark**
- **Post Consumer, PI: Post Industrial (Pre-consumer)**
- **List Translator Indicator**

#### Ingredient Inventory Declaration

The Ingredient Inventory Declaration is a comprehensive list of all ingredients used in the production of the product. Each ingredient is classified based on its potential health impact, and a score is assigned to reflect its level of risk.

#### Hazard List

The Hazard List is a list of potential hazards associated with the product, including physical, chemical, and biological hazards. Each hazard is evaluated based on its severity and likelihood of occurrence.

#### Greenscreen Benchmark

The Greenscreen Benchmark is a set of criteria used to evaluate the product's overall health and safety performance. It includes components such as ingredient safety, manufacturing processes, and product packaging.

#### Post Consumer, PI: Post Industrial (Pre-consumer)

Post Consumer and Post Industrial (Pre-consumer) products are evaluated based on their post-use fate and potential health impacts. This includes assessing the disposal methods and recycling processes to ensure minimal harm to human health and the environment.

#### List Translator Indicator

The List Translator Indicator is a tool used to interpret the results of the HP Standard, providing a clear and concise summary of the product's health and safety performance. It helps stakeholders understand the product's compliance with industry standards and make informed decisions.

The HP Standard is a dynamic and evolving framework that adapts to new research and technological advancements. It is designed to be flexible and comprehensive, ensuring that products meet the highest standards of health and safety excellence.
### Health Product Declaration

**Certifications and Compliance**

[www.HPDcollaborative.org](http://www.HPDcollaborative.org)
## Accessory Materials

This section lists all products required by warranty or recommended by the manufacturer for installation (such as adhesives, fasteners, or factory components) or for maintenance, cleaning, or operations. Refer to Health Product Declarations, published separately, for a complete view of these products. Note: This declaration is not intended to address hazards of the installation process.

<table>
<thead>
<tr>
<th>Required or recommended product</th>
<th>URL for declaration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Condition when required or recommended and/or other notes</td>
<td></td>
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</tbody>
</table>
A PLATFORM FOR COMMUNICATION:
SHARE ANY ADDITIONAL PRODUCT OR COMPANY DETAILS

Health Product Declaration
Notes

www.HPDcollaborative.org
To encourage the use of products and materials for which life-cycle information is available and that have environmentally, economically, and socially preferable life-cycle impacts. To reward project teams for selecting products for which the chemical ingredients in the product are inventoried using an accepted methodology and for selecting products verified to minimize the use and generation of harmful substances. To reward raw material manufacturers who produce products verified to have improved life-cycle impacts.
Letters of Commitment Issued by Design Firms
“We at Inpro believe Environmental Product Declarations (EPDs) and Health Product Declarations (HPDs) are the most effective tools to communicate product content and environmental impact.”
“Carnegie is a firm believer that product transparency is an essential component of sustainable design. The generation of HPDs fits seamlessly with our product development approach. We are proud to be the leading provider of HPDs in the textile industry.”
WHY DID WE PURSUE AN HPD?

1. “It was a growing interest with thought leaders and our leading customers.”

2. “It is absolutely the right thing to do.”
“3form as a company has been working for a long time to do the right thing simply because it is the right thing. HPDs give us a way to showcase these efforts in a fact-based platform outside of marketing materials, which can be construed as green washing.”
"Our biggest commitment has to be that we are willing to listen and react to industry partners that have evidence based science on these issues; and to address the issues quickly and cost effectively. We have to push forward and continue to change and evolve as good stewards of the planet and the people who occupy it. It sounds simple. But it's a difficult task."

MANUFACTURERS CHAMPIONING THE CAUSE
“While a single elevator product can easily contain over 10,000 parts, we are committed to the highest level of transparency with our customers.”

MAP: 51 companies, and counting!
“We believe it should be easy for designers and building owners to know what is in building products. This is the promise of the Health Product Declaration.”

- Mikhail Davis, Interface (2012)