

Safer Product Selection For Health & Environmental Justice

Roberto Valle Kinloch, HBN's HomeFree Manager

March 1, 2023





All people and the planet thrive when the environment is free of toxic chemicals.



Sustainable Built Environment

Energy
Water
Carbon
Location
O&M

Products &
Toxic
Chemicals





Current approaches to safer material selection

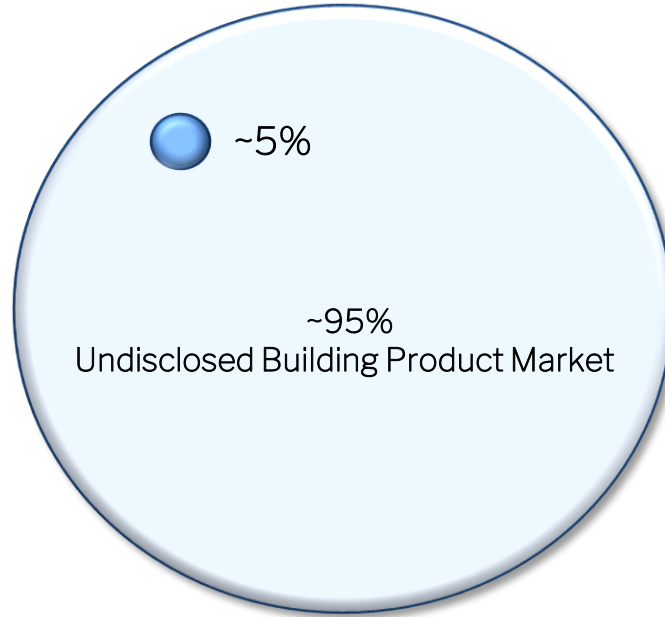


Red Lists



Product Transparency & Hazard Avoidance

How do you make an ***informed decision*** when the product you want is not yet disclosed?





*Informed*TM

HBN's preemptive modeling tool that reveals material health ranking.

Best in Class

Better

Good

Reduce

Eliminate

Worst in Class



Actionable Guidance Built upon the Science

Packages rigorous material health analysis into digestible information.

Simple Color Ranking System

Let's you know what product types to avoid and what to prefer.

Tangible Connection to Impacts

Helps you visualize the potential health impacts of decisions.



Project



Organization / Portfolio



Policy

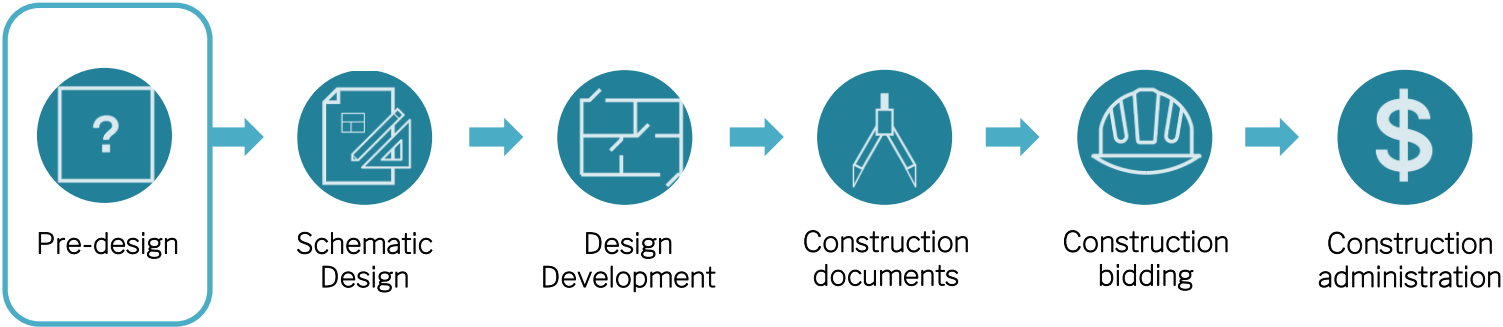
Project Level | Phases of Design, Building Typology, and Project Size

Pre-Design

- ✓ Materials modeling
 - ✓ + opportunities for sustainability
 - ✓ Stakeholder alignment & buy-in
- Residential Education Culture

Construction Administration

- ✓ Value Engineering
 - ✓ Defend product choices
 - ✓ Engage contractors and suppliers
- Commercial Assembly Public spaces Industrial



Project Level | Case Studies



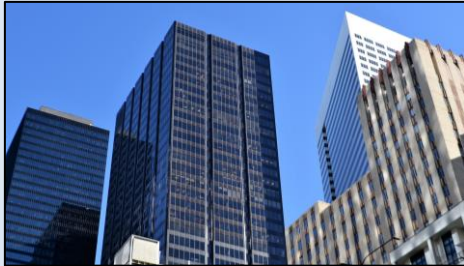
Type: Residential Multifamily Affordable

Size: +70,000 sqft

Construction completed

- Linoleum
- Unfaced fiberglass insulation
- Low VOC APE-free paint

- ✗ Several hundreds of PVC avoided
**compared against carpet tile with PVC backing*
- ✗ Isocyanates and HFRs
**compared against Spray Polyurethan Foam*
- ✗ Hundreds of pounds endocrine disruptors
**compared against non-APE free paint*



Type: Mixed-use Commercial

Size: +600,000 sqft (multi-phase)

Currently under construction

- ✓ Carpet reduction
- ✓ Avoid vinyl wall covering
- ✓ Avoid recycled tire crumb rubber

- ✗ Potentially avoid several thousands of PVC
- ✗ Carcinogens and developmental toxicants

Baseline



Project level

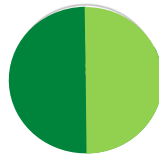
- ✓ Goal setting
- ✓ Benchmarks

Product level

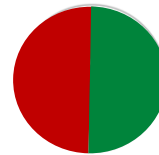
- ✓ Hotspots
- ✓ Prioritization



Flooring



Paint



Drywall



Integrative Design

Operations, Maintenance
+ Resident Engagement



Location +
Neighborhood Fabric

Healthy Living
Environment



Site Improvements

Materials



Water Conservation

Energy Efficiency



Integrative Design

- ✓ Project Priorities
- ✓ Stakeholder education and alignment
- ✓ Accountability
- ✓ Health Action Plan



- ✓ Material health is **central to Sustainability** efforts
- ✓ Consider impacts across the **product lifecycle**
- ✓ **Think** materials **modeling**
- ✓ Empower users to make **informed, safer decisions**

Thank You

Roberto Valle, rvalle@healthybuilding.net
HomeFree Manager