

HEALTHY BUILDING NETWORK

It all starts here





It all starts with people and where we build our lives.



When our buildings get healthier so will we.

Our well-being begins where we live our lives—in schools and offices, in sports stadiums and shopping malls, in the places where we give birth, eat, sleep, wake and celebrate. The health of our buildings directly affects our own health. So that's where we focus our work.

The EPA estimates that people spend up to 90% of their time in buildings. People once could safely assume that buildings were healthy because they used natural materials—wood, stone, brick or adobe. Now we build almost entirely with materials that are synthetic, chemically processed or treated. Designers, builders and building owners often don't know what building materials are made from and only learn about health concerns after a project is completed. The Healthy Building Network (HBN) is changing this.

Every construction project is a new opportunity to make buildings healthier. In the United States alone, over 300 million people live, work, and play in five million commercial buildings. As the U.S. economy grows, the number of building projects increases. In 2012, commercial square footage grew by 17%, a number that translated into more than \$50 billion in revenue for the construction industry. Increasingly, buildings are being judged on how well they contribute to people's health and well-being. We're helping the building industry learn how to make buildings healthy, and we're confident that in the near future, when it comes to building, people's health will come first.

The Healthy Building Effect



Healthy Organizations

- Fullfilled lives
 with richer
 Raised productivity
 - Better results

Planet

Healthy

Communities

Robust local economy

Rising real estate

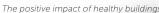
Invigorated community spirit

Greater public health and safety

Longer life expectancies

Healthy

- Cleaner air and
- Natural biodiversity
 - Nutritious and safe food
 - Betterenvironments for learning





relationships

MILESTONE

We Started Where Children Play Every Day

Impact: Our first campaign reduced the use of arsenic in pressure-treated wood by 20,000 tons per year.

HBN's first victory helped close a gaping toxic loophole, virtually eliminating the largest source of arsenic exposure to most Americans—pressure-treated wood, the kind of wood used in playground equipment. As a result of our campaign, the EPA stepped up regulations and manufacturers reduced the use of arsenic by 80%—that's 20,000 tons less of this toxic compound in our environment every year.

Well-being starts when we know what we're building with.

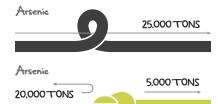


The materials we build with can affect our well-being as much as the food we eat, the water we drink and the air we breathe. For the most part, we can't see the toxic chemicals that leak into our indoor air. But talk to a construction worker and ask him if he's ever gotten sick from working with building products. For many, the answer will be yes. Or talk to a physician who treats patients with respiratory or environmental illnesses about the source of those problems.

Long considered a carcinogen, the chemical formaldehyde is still used throughout the world in building products such as particleboard and fabric. But in the U.S., formaldehyde use has been dramatically reduced. HBN helped to establish the nation's most stringent restrictions on formaldehyde emissions from composite wood products, an effort that's reduced manufacturing emissions from 100 tons to less than 20 tons per year. These chemical reductions have benefited not only the occupants of buildings, but also the people who work in and live near the fencelines of factories where building products are made.

Most chemicals used in building products are not tested for their impact on human health. We may assume everyday building products won't harm us, but we still can't reliably know that they won't. HBN is changing this.





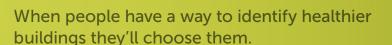
Most uses of arsenic were outlawed, except for its use in pressure treated wood. HBN's work with the EPA helped close this loophole.

HBN's research in chemical toxicity has changed not just the industry, but also the lives of people affected by the manufacture of toxic products as well as the consumers of those products.

PATRICK BISCHEL, PRESIDENT AT NORTHERN CROSSARM CO., INC. / ROCKY MOUNTAIN

WOOD PROTECTION

Healthy environments start when people can make healthy choices.



We spend billions on organic foods, safer cleaning products and healthier cosmetics, because when people have a choice they choose healthy. HBN is making sure that people have the same kinds of healthy choices when they build.

For years, the chemical composition of most building products—from concrete to carpet—has been kept secret. Not even the manufacturer always knows that hazardous ingredients are present. Without full disclosure it has been virtually impossible for anyone—builders, architects, specifiers and building owners—to know which building products contain materials that are potentially harmful.

Now there's a tool that enables people to make healthier, more informed choices—HBN's Pharos Project. The Pharos Project database maintains indepth, independent analyses and information relating to building products and over 35,000 chemicals evaluated against 70 authoritative hazard lists. It provides a web-based materials evaluation tool that helps building owners avoid chemical hazards. Leading manufacturers are using the tool to reduce their use of hazardous materials.

We're constantly expanding and updating this online information and making it available to decision-makers. Hundreds of HBN subscribers now rely on the Pharos Project to give them the information they need about building materials and their impact on human health.

Companies spend millions managing business risk. By using HBN's Pharos Project, decision-makers can reduce business risk by identifying products with suspect chemicals, avoiding hazardous products known or thought to impact health and substituting healthier choices. The upshot: the market chooses healthier alternatives and everyone benefits, including the fenceline communities that feel the toxic fallout first.

¹As of January 2015. HBN's Pharos Project is continuously expanding and updating its chemical, material and building product libraries to provide the most comprehensive public reference on the healthfulness of building products.

We are 100% committed to building healthful work environments and contributing to the healthfulness of the communities in which we work. HBN's Pharos Project helps us make this commitment a reality.

GEORGE SALAH, FORMER DIRECTOR OF REAL ESTATE AND WORKPLACE SERVICES, GOOGLE INC.

Pharos Project

SIMPLE COLOR CODING TO IDENTIFY HEALTH HAZARDS

Tery High High Medium Potential Low Very Low Concern Concern Concern Concern

Pharos evaluates building materials so companies like Google can choose to build with healthy materials, creating environments that support their employees' healthy lifestyles.

MILESTONE

We Started Where People Work

Impact: By collaborating with major employers, we are pioneering how to make workplaces healthier.

In 2010, Google asked us to collaborate using the Pharos Project, so they could evaluate and select the materials they build with. Working together, we're showing Google how to efficiently evaluate the healthfulness of materials in large-scale, commercial development. Employers everywhere will be able to use the Pharos Project to find, choose and manage products that provide more healthful workplaces for their employees.

Healthy building guidelines based on HBN's work give us confidence that our facilities are places where our patients can thrive.

KATHY GERWIG, VICE PRESIDENT OF

EMPLOYEE SAFETY, HEALTH AND WELLNESS, KAISER PERMANENTE









We're reaching critical mass, with more global decision-makers making healthier building products a priority.

It's becoming more and more clear that we need to balance priorities so that protecting human health is always a primary consideration. Developing the tools and knowledge to make this happen is HBN's priority.

Beginning in 2002, HBN co-led the creation of the first healthy building toolkit for hospitals: The Green Guide for Health Care™. The irony of trying to heal people in unhealthful buildings is obvious. This groundbreaking best practices toolkit helped inform the development of the U.S. Green Building Council's LEED® for healthcare green building program,² which continues to provide the healthcare industry with tools to make sure hospitals and other healthcare facilities are sustainable and built with healthier materials

In 2012, HBN initiated the first global, industry-wide open standard for the disclosure of chemical and health-related hazards—the Health Product Declaration® (HPD)—inspiring a growing number of companies to select the products of manufacturers who fully disclose chemical contents and health hazard information.

In 2014, HBN took the lead in creating a global data commons for the exchange of information on toxic chemicals within the research community. We want everyone to have access to the most current information available—quickly, efficiently and cost-effectively.

The HPD was recognized with the 2013 Innovation Award by the American Society of Interior Designers and cited in LEED Version 4, the leading standard for green building certification.

²LEED® for Building Design and Construction: Healthcare.

MILESTONE

We Started Where People Go To Get Better

Impact: Millions of patients are already benefiting from healthy building guidelines.

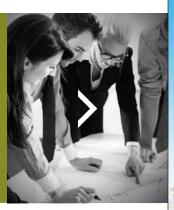
Today, over 55 million square feet of healthcare facilities have been designed or renovated using the Green Guide and the LEED for Healthcare standard that it inspired. The pioneering strategies for avoiding toxics use in the Green Guide that we helped create are enabling the significant avoidance of toxic materials in healthcare buildings today. And the day is in sight when an oncology unit will be built without carcinogens, and an infant care unit will be built without asthmagens and toxics that can harm early development.

Standards for the Healthcare Industry



Having standards for healthcare facilities increases a patient's chances of getting well.

Environmental justice starts with powerful social action.



Commercial buying power can bring about rapid change on a large scale.

We began our environmental justice work in the fenceline communities where levels of cancer and asthma are highest. The health of a building affects not just its occupants, but also those who work and live where toxic chemicals are created—and where they end up. By bringing an awareness of fenceline communities into the boardroom, we can accelerate large-scale change and eliminate these health hazards for everyone.

HBN's Healthy Building Roundtable, a forum of major real estate owners, is enabling influential decision-makers to discover healthier building choices they can deploy today. They're positioned to deploy them on a scale—millions of square feet per year—that will speed the cost parity needed to make healthy choices, healthy buildings and healthy communities the norm within the next decade. The collective purchasing power of this forum will reduce the use of toxic products, encouraging manufacturers to find superior alternatives.

An expanding network of people across the country understands the profound difference that healthy building choices and practices will make for our communities. Using market-based campaigns, we're creating new incentives for manufacturers to make healthier products. And with growing economies of scale, cost-effective solutions are emerging. HBN is working to create a future where building with healthy materials is no longer a vision, but a reality.

NYC is lighting the way for building owners everywhere. In Manhattan, real estate firms representing more than 30 million square feet of new development are committing to constructing the world's healthiest commercial buildings.

What makes HBN different is that they have leading edge solutions that are not just ideas; we can put them into practice now. Their tools and know-how are helping us to make New York City a role model for healthy building—a profound legacy for the city I love.

AMANDA KAMINSKY,
SUSTAINABLE CONSTRUCTION MANAGER,
THE DURST ORGANIZATION

Accelerating Economies of Scale

Number of Healthy Building



Cost of Healthy Products

The faster the cost of healthy building materials goes down, the faster healthy buildings will go up.

MILESTONE

We Started Where Commercial Real Estate Is Built On A Large Scale

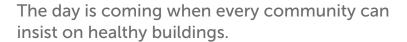
Impact: By bringing together the country's most influential urban developers, we can improve the health of communities everywhere.

Our NYC Roundtable brings HBN's leading-edge practice information directly to the senior executives of commercial real estate companies. Roundtable participants, including the city's largest commercial developers, are piloting a replicable model that can be implemented across a variety of building types in other cities.

ON TRACK TO MAKE PEOPLE'S HEALTH A TOP PRIORITY







The building industry's use of toxic materials will continue to decrease as the support for healthy building initiatives grows. Our campaigns successfully pressured manufacturers to stop treating wood with arsenic and to limit the use of formaldehyde. Now we've built the tools and systems that enable us to know the healthfulness of any building product. HBN's investigative research is dedicated to revealing the contents of building materials so that healthier choices become clear. Using these tools, major commercial developers are partnering with us to implement toxic avoidance at scale. We're putting science and knowledge to work.

Every day we get closer to a building industry that makes people's health a top priority.

We all come to understand: nothing matters more than our health, and our health starts where we work and live. When we are healthy, we are more effective in our lives and in building our communities. We've enlisted a diverse network of change-makers to transform the building industry. Today, the building industry is more open, more sustainable and more accountable. When people's health is a top priority, buildings and communities everywhere will get healthier.







HBN helps pass landmark toxic chemical arsenic-treated wood in building products.



2007













2010



HEALTH



2013



2015

DESTINATION: A WORLD OF HEALTHY COMMUNITIES

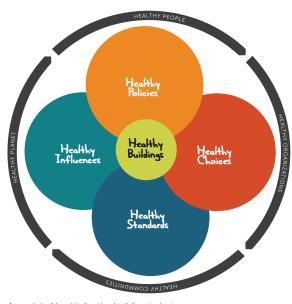


At the front lines of a new movement.

We're making people's health a top priority in the building industry.

The HBN leadership team first came together in the early 1990s as Greenpeace campaigners concerned about the growing effects of toxics in the environment. In 2000, we founded HBN when we recognized an unprecedented opportunity to work with a new generation of building industry leaders. These leaders share our values and are committed to transforming the building industry so that it can contribute positively to the health of our communities and people.

HBN is bringing the healthfulness of buildings out of the shadows and into the light, engaging everyone from manufacturers to architects to building owners. We're learning together how to use the latest technology and materials to improve health. People's health is closer than ever to being a top priority for the building industry—and with your support, we can reach this goal.



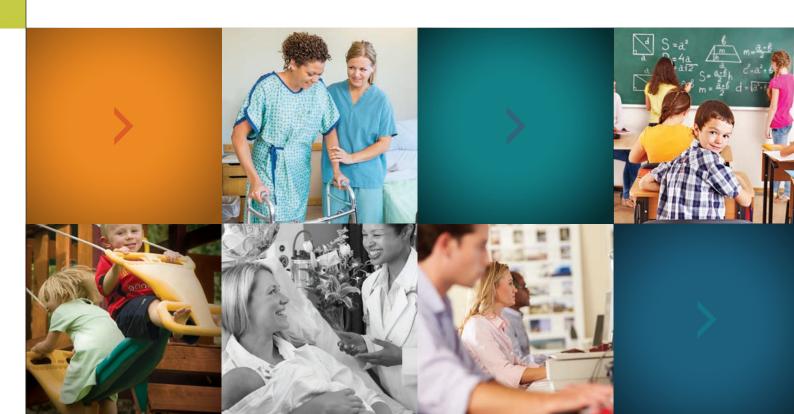
A model of health for the building industry.



It's already started.

The next wave of healthy building transformation starts with you.

We are working towards the day when our buildings are healthy. Many who will help bring this transformation about are already onboard. Join them. Join us. By supporting HBN's initiatives you are helping to build healthy communities everywhere.





HBN is an award-winning environmental health organization.

Our kudos include: Environmental Champion, 2004 Interiors and Sources Magazine; Outstanding Achievement Award 2009 US EPA Region 9; 2012 USGBC Leadership in Advocacy Award.

Healthy Building Network

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