

Indoor Air Quality Certification of Technology Desking Products

Ted Revis
August 27, 2009

Agenda

- Introduction to GREENGUARD Certification
- Certification Process
- Recognition of GREENGUARD Standards
- GREENGUARD and LEEDS Synergy
- Advantages to Technology Desking (Td)
- Discussion

Understanding of Td's Needs

- Increase sales and market share by offering “green” products to its customers
- Send a message to customers that Technology Desking is a “green” company and a good corporate citizen.

We believe that GREENGUARD is the best choice for Technology Desking to accomplish these objectives.

Introduction to GREENGUARD

- Industry independent, third-party certification program
- Certifying products since 2001
- Globally recognized leader in indoor air quality
- Certifies products for low non-toxic emissions
- More than 200 participating manufacturers
- More than 200,000 products certified
- Referenced standard in LEED-CI and LEED-NC for Schools (draft); CHPS; GSA; GGHC; SBIC; NAHB; states of MA and WA, City of NY; and more

Indoor Air Quality is Important

- People spend more than **90%** of their time indoors
- Children receive **72%** of environmental exposure indoors
- Thousands of chemicals and biological pollutants exist at elevated levels
- Air Pollutants are **2-5x** (sometimes 1,000x) higher than found outside

Indoor Air is typically defined as mechanically controlled air flow in enclosed spaces.

Indoor Air Pollution & Health Consequences

Diseases and conditions related to poor indoor air quality.

- Asthma and allergies
- Respiratory disease
- Irritation
- Reproductive / developmental defects
- Cancer

Mission of GREENGUARD

“To Improve Public Health and Quality of Life through Programs that Improve Indoor Air”



Why Third-Party Certification Matters

- Indoor air issues are exceedingly complex, more than most people can easily grasp
- 66% of consumers believe that poor indoor air quality impacts their health*
- Much of the consuming public do not trust manufacturers' claims, particularly relative to the environment – Greenwashing
- These trends are increasing and will not go away



* Data from Harris Interactive Research, Dec 2008

Advantages of GREENGUARD Certification

- Third-party validated product
- Reduction in product/occupant complaints
- Demonstration of social responsibility
- Product differentiation
- Environmental marketing advantages: list program, bid specifications, sole sourcing and others



The GREENGUARD Certification Process

Review of Mfg Processes

- I.D. materials & processes which contribute to chemical emissions
- Components tested to determine Certification categories

Certification Testing

- Representative product tested in each category for Certification Test
- Results reported to manufacturer & mfr. applies for GREENGUARD Certification

Certification Awarded

- GREENGUARD Certification awarded
- Products listed in the online product guide as GREENGUARD Certified

Ongoing maintenance

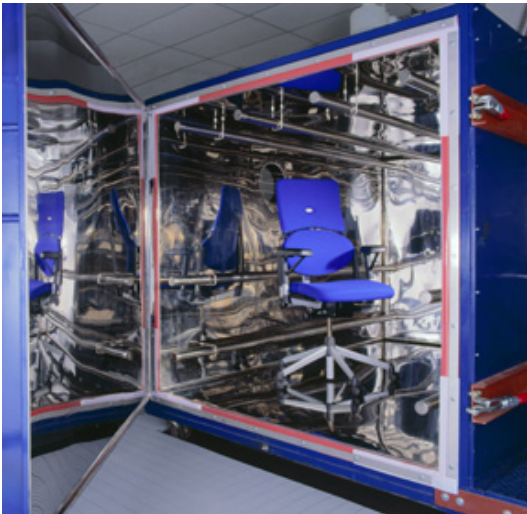
- Re-certification Annually
- Quarterly confirmation tests



GREENGUARD Certification

Voluntary Certification Program:

1. Manufacturer Contacts GREENGUARD
2. Product Profiling and Testing
3. Certification Test
4. Quarterly Monitoring and Annual Re-testing



Certification Provides:

1. Assurance that products are low emitting
2. Verification of due diligence
3. Identification of products as safe for IAQ



Achieving GREENGUARD Certification

- Extensive review of material, manufacturing processes and manufacturing locations
- Products are tested for over 10,000 potential chemicals
- Testing in state of the art stainless steel environmental chambers, following global ISO standards
- Products are certified to GREENGUARD Standards, based on comprehensive emission criteria from the EPA, Germany's Blue Angel Program, State of California and reputable public health expert agencies



GREENGUARD Certified Products Endorsed and Accepted by Key Organizations and Key Green Programs

- LEED
- GGHC
- NAHB
- CHPS
- City of San Francisco
- City of Boston
- City of Santa Monica
- City of Austin
- City of Santa Cruz
- City of New York
- National Institute of Building Sciences
- State of Washington Sustainable Schools
- Target Corporation
- EPA
- Built Green
- NSA
- Northern CA Green Home Guide
- Environmental Choice Canada
- King County, (Seattle) WA
- San Mateo County, CA
- Turner Broadcasting
- Bank of America
- GSA
- Pentagon
- United Nations
- NIBS



GREENGUARD and LEEDS Synergy

- LEEDS certifies buildings
 - Efficiency
 - External Impact on Environment
 - Indoor Air Quality of Building
- Inclusion of GREENGUARD certified products in a building allows the building to become LEEDS certified
- GREENGUARD products provide points for LEEDS certification
- GREENGUARD developed the standard for IAQ used in the LEEDS program.



LEED Building Certification



*JohnsonDiversey Global Headquarters
LEED-EB Certified
Sturtevant, Wisconsin*

- U.S. Green Building Council's (USGBC) brand for “green” ***buildings*** (not products)
- Standards and references to rate green building strategies
- 6000 registered buildings; 27,000 accredited professionals; 600 certified buildings
- Different programs – focus on LEED requirements & not a specific point
- Wood, VOC emissions, recycling



LEED Building Certification



- EQ 4.5
 - Use GREENGUARD Certified Systems Furniture and Seating in the renovation of a space will earn the project one point.



GREENGUARD Supports Consumer Demand for Green Products

- Harris Interactive research survey shows 69% of consumers prefer to buy IAQ Certified products
- Continued growth in certified manufacturers with a 52% increase from 2007 to 2008
- Based on the trends IAQ certification will become even more important to builders, companies and consumers.
- GEI provides an online resource tool for consumers to identify certified products.

Leveraging the GREENGUARD Certification

- Work with manufacturer to build their environmental message
- Establish credibility in their “green” message through third-party certification
- Drive product differentiation
- Create awareness at Retail through product placement & promotion

GREENGUARD Mark in Advertising

Sherwin Williams

New Products 2009

PRODUCTS PROGRAMS INNOVATION

ECOVISION™ LEADING THE WAY IN SUSTAINABILITY

Committed to preserving our resources and protecting the environment, Sherwin-Williams has implemented EcoVision™ – a comprehensive mission focusing on sustainable processes, products and activities. Here are just some of the steps we're taking to advance our ongoing EcoVision:

- Reducing the use of hazardous materials in our manufacturing facilities.
- Partnering with the U.S. EPA on their "Greening" and "Climate Action" projects.
- Increasing the energy efficiency of our offices, distribution centers and facilities.
- Installing energy efficient systems at new plant facilities.
- Pioneering the use of sustainable materials in our products.
- Using green inks and coatings that require less water, helping reduce our carbon footprint and reduce the use of hazardous waste.
- Introducing our "EcoSpec" designable paint to electric containers that are 100% recycled from post-consumer waste, contain no lead or mercury, and are 100% recyclable.

To find out more about our EcoVision mission, visit www.ecospec.com.

Introducing... EcoPro™ Applicators!
EcoPro is a new family of applicators that include a roller, brush and roller covers, plus a biodegradable roller tray made from recycled plastic and paper.

PRODUCTS EARN GREENGUARD® CERTIFICATION

We're proud to announce that Sherwin-Williams' Interior Latex, ProGreen™ 200 Interior Latex, ProGreen™ 200 VOC Acrylic, ProGreen™ 200 VOC Interior Latex, ProGreen™ 200 VOC Pro Seal, and ProGreen™ 200 VOC Pro Seal are now GREENGUARD® Certified. These products are now GREENGUARD® Certified for Children & Schools.

GREENGUARD®
Indoor Air Quality Certified

Sherwin Williams

Benjamin Moore

With EcoSpec® paint, every color is "green".

With virtually zero VOCs and low odor, EcoSpec® paint shows off your design sense and your common sense.

The EcoSpec® line, from Benjamin Moore, was created in response to the demand for "green" products from our community. We're proud that EcoSpec® has received both GREENGUARD® and Green Seal® certification.

And the EcoSpec® line – a primer, and three finishes – is available in thousands of colors, even green.

For more information, call 1-888-BEN-MOORE or visit www.benjaminmoore.com.

Benjamin Moore®
Paints

Benjamin Moore

HER PARENTS CHOSE
THE INSULATION CERTIFIED SAFE FOR INDOOR AIR QUALITY.
SO THEY'RE SLEEPING SOUNDLY, TOO.

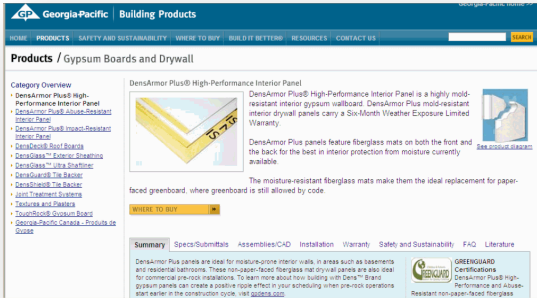
It's not surprising that people concerned about the quality of the air in their homes choose Owens Corning Pink Berge® insulation. It's certified safe for indoor air quality by the GREENGUARD® Environmental Institute. But it's also the choice of people concerned about the quality of our planet, as because Pink Berge insulation reduces energy consumption. And that reduces the production of harmful greenhouse gases. Pink Berge insulation even contains the most recycled glass of any insulation. Oh, and it saves money on energy costs. No wonder people feel more comfortable choosing Owens Corning Pink Berge insulation. For more information, call 1-800-GET-PINK or visit www.owenscorning.com.

Owens Corning®
FIBERGLASS INSULATION

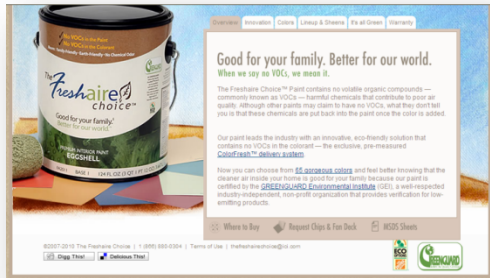
Owens Corning



GREENGUARD on the Web



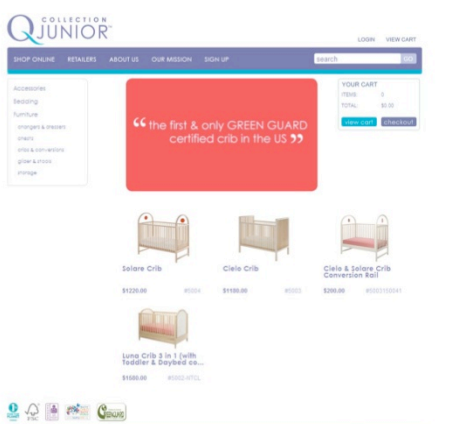
Georgia Pacific



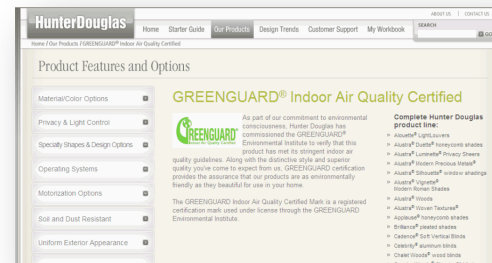
Fresh Aire



Naturepedic



Q Collection Junior



Hunter Douglas



Transforming Markets...

3Form
 AIS Tayco
 Allseating
 Amorim Revestimentos, S.A.
 Arch Wood Protection
 Artopex Wilkhahn
 Bernhardt Design
 BonaKemi
 Chairworks Manufacturing Group
 Composites USA
 Descor
 Eastman Chemical
 Edelman Leather
 Ergocentric Seating Systems
 Faus Group (DuPont)
 First Office Division of OFS Brands
 Fixtures Furniture
 Florida Tile
 Freudenberg NW
 Garrett Leather Corp.
 Geiger International
 Global Contract
 Global Total Office
 HAG

Hamilton Sorter Div. of Workstream
 Harter Industrial Insulation Group, LLC
 Haworth Asia Pacific

HBF
 Herman Miller
 Huber Wood
 Humanscale
 IDEON
 Indiana Furniture
 Inscape Alcan
 izzydesign
 Jami Richwood Industries
 Johns Manville
 Keilmauer
 Knoll, Inc
 KnollTextiles
 Krug, Inc.
 L.A.A.R.K. Wallcovering
 Laticrete
 LBI Boyd
 Loewenstein
 Logiflex
 Lonseal Okamura
 Luxe Surfaces

M.L. Campbell
 M/W International
 Marvel Group
 Mayline Group
 micronAir (Car cabin)
 Neutral Posture
 NGI Designer Glass
 Nienkamper Furniture and Accessories, Inc.
 Northern Elastomeric, Inc.
 ProFlex
 Raynor Group/ Eurotech Seating
 RJF International
 Sittris Wolf Gordon
 Spinneybeck
 Springs
 Staples Contract and Commercial, Inc.
 TSM Modular Furniture
 Trane (HVAC)
 W.F. Taylor
 Wilsonart Adhesives
 Wilsonart Flooring
 Window Fashions
 Workplace Furnishings
 Zoom Seating

- **200 Manufacturers**
- **45 Industries**
- **200,000+ Products**

GREENGUARD In The News

More than 600+ mentions in various publications in 2008

Sample of key consumer articles

CONSUMER REPORTS MARCH 2009



DNE-COAT HIRING Olympic Premium and Benjamin Moore Aura have lower VOC levels than other tested paints and did a good job in this hiding test.

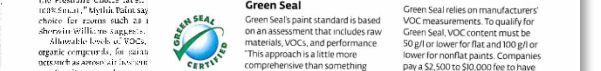
Interior paints

Our new tests reveal surprises about what paint makers claim and what you get

Interior paints

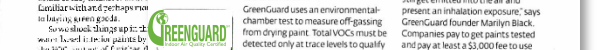
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What the green-certification labels mean



Green Seal
Green Seal's paint standards are based on an assessment that includes raw materials, VOCs, and performance. "This approach is a little more comprehensive than something that's looking at just VOC content," says Christine Crane, Green Seal's director of science and standards. But

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GreenGuard uses an environmental-chamber test to measure off-gassing from drying paint. Total VOCs must be detected only at trace levels to qualify for this certification. "You can have chemicals in paint that are exempt from current VOC regulations because they're not ozone-depleting but they

Facilitar el uso de productos que, en la mayoría de los casos, son de menor costo y que no dañan el medio ambiente. Los productos de GreenGuard son fáciles de encontrar en los puntos de venta más comunes de Ecuador.

GREENGUARD

42 **CHAMBERLAIN** **REPAIRS**

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GREENSURE

its criteria reference recognized standards, but GreenSure is self-regulated by Sherwin-Williams and covers only its products. Paints must have a VOC level of less than

50 gpl to qualify. The standards appear solid but provide less assurance than those from third-party agencies. Says Unisnoh (Japan), a Consumers Union senior scientist, the tested Sherwin-Williams new GreenSure products "are good, and Sherwin-Williams Harmony carry the certification.

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THE WALL STREET JOURNAL.

How Green is Your Gift List? -December 2008

Painting Without That Smell

- June 2008



Veranda Magazine

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SEPTEMBER 2008 BETTER HOMES AND GARDENS



Children's Health Campaign

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Marietta, Georgia 30067
1.800.427.3681
www.greenguard.org



News Release

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GREENGUARD Children & Schools Certification Program Improves Quality of Life, Environmental Soundness for Children Both at Home and at School
GREENGUARD Certified Mark on Products, Ranging from Mattresses to Flooring, Drywall to Paint, Offers Peace of Mind to Parents Seeking Solutions to Poor Indoor Air Quality and Chemical Sensitivities

MARIETTA, GA – September 4, 2008 – It may be hard to believe, but research shows the air in our homes and schools can be more toxic than the air outside. Why? Because the materials and products we use to furnish and maintain our indoor environments can release hundreds of pollutants such as formaldehyde, volatile organic compounds (VOCs), ozone and even biological allergens. The evidence is significant because statistics show that children are especially at risk as they spend roughly 65 percent of their time indoors. The GREENGUARD Environmental Institute (GEI) Children & Schools™ certification program measures and verifies that the levels of chemical emissions of products being used indoors are acceptable to the unique sensitivities of infants and children. This article was prepared for readers of MetroplexBaby.com by Mandi Joyner, GEI Communications Manager.



GREENGUARD Children & Schools Certification Program

WHAT:

The GREENGUARD Children & Schools™ certification program tests and certifies indoor products based on strict chemical emissions criteria. Products such as paints, flooring, furniture, window treatments, mattresses, cleaners and electronics are tested and verified to meet the stringent Children and Schools standard. Certified products carry the GREENGUARD Children and Schools Indoor Air Quality Certified™ mark, and they undergo periodic verification processes to remain certified. GREENGUARD Children and Schools certification provides assurance, from an independent third party, that products have been tested to identify potentially harmful chemical emissions, and that the levels are within allowable limits selected by GREENGUARD from existing recognized third party standards and guidelines.



Children Health Statistics

General Stats

- On average, children spend 85% of their time indoors; 70% at home; 15% at other indoor locations; 4% in enclosed transit; 1% in outdoor transit; 10% outdoors
- 73 million children under the age of 18 in the United States are at risk from indoor air pollution
- 14 million children living in high poverty areas in the United States are at risk from indoor air pollution
- 2.5 million children live in homes with lead-based paint
- 6.8 million children live in homes with radon
- Fetal and child development can be affected by exposure to indoor air pollutants



Manufacturers of GREENGUARD Children & Schools Certified Products

Adhesives/Sealants (10) 3M Company DuPont Henkel Consumer Adhesives Hestek Corporation ITW Plastics ITW TACC Macco Level LO Solid Source Simalta	Flooring (6 Cont) Ki Premium Flooring nora systems, Inc. Furniture (23) Arto-Bell Corporation Bedford Dryer Products Examples Fleckwood Group, Inc. Groupe Lacasse Harco Instant Seating KI MTD Seating, Inc. Nightingale Corporation Palmer Hamilton, LLC Q Collection Junior SAFCO Products Company SICO America, Inc. SliCint Seating Smith System Inc. Stylite Tekinon Versteel V/S America	Insulation/Mechanical Materials (13 Cont) BASF BioBead Insulation, LLC CertainTeed Demilec (USA) LLC Flexible Technologies Guardian Fiberglass K-Flex USA Knaf Insulation Nomaco Insulation Owens Corning Roxul Inc. Paints & Coatings (4) Alcolac Benjamin Moore Eco-Trend Corp. Sherwin Williams Surfacing (25) Acrin Surfaces, Inc. Casanstone Solid Yam Ltd. Cambria Cedian Industries Inc. Cosentino	Surfacing (25 Continued) Santa Margherita S.p.A. Panolan Seattle Industries Treppa North America Wilsonart International Wilsonart Solid Surface Textiles (2) Glen Raven Custom Fabrics Maharam Visual Display (7) Canridge Products and Equip Du-Lite Screen Company, Inc. Draper, Inc. Wall Finish (5) Draper, Inc. OMNOVA Solutions Owens Corning Panolan U.S. Vinyl Manufacturing Co. Window Treatments (11) Astenz
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- IAQ and Children
- Value of non-toxic products
- Media Kits
- Continued placement by a variety of magazines, blogs and online publications

HOME | THE SCOOP DIRECTORY & CALENDAR | METROMOM EVENTS | COMMUNITY | PARENT GUIDES | SAVINGS CARD | HAND ME DOWN | ABOUT US | CONTACT US

GREENGUARD Children & Schools Indoor Air Quality Certified

Research shows the air inside our homes and schools can be more toxic than the air outside. Why? Because the materials and products we use to furnish and maintain our indoor environments can release hundreds of pollutants such as formaldehyde, volatile organic compounds (VOCs), ozone and even biological allergens. The evidence is significant because statistics show that children are especially at risk as they spend roughly 65 percent of their time indoors. The GREENGUARD Environmental Institute (GEI) Children & Schools™ certification program measures and verifies that the levels of chemical emissions of products being used indoors are acceptable to the unique sensitivities of infants and children. This article was prepared for readers of MetroplexBaby.com by Mandi Joyner, GEI Communications Manager.

PROTECTING OUR CHILDREN FROM TOXINS IN THE AIR

The Air We Breathe • How Pollutants Affect Our Health • Improving Your Child's Air Quality

The Air We Breathe

On average people take about 23,000 breaths in any given day. Children spend about 85% of their time indoors, where the air can be as much as 100 times more polluted than outside air, which means those 23,000 breaths are extremely important.

The very materials and products we use to furnish and maintain our indoor environments can release hundreds of pollutants such as formaldehyde, volatile organic compounds (VOCs), ozone and even biological allergens into the air we breathe. These pollutants also have short- and long-term health consequences.

How Pollutants Affect Our Health

Short-term health effects


- Trigger asthma and allergy attacks
- Respiratory irritation
- Headaches
- Flu-like symptoms

Long-term health effects

- Respiratory disease

www.Metroplexbaby.com


While many parents are aware of the risks of second-hand smoke, many are not aware of the risks of indoor air pollution. A safe and healthy indoor environment is essential for children's health and well-being.


Email Newsletter to 30,000+ Architects, Designers, Specifiers and Consumers



Free Online Product Guide to Locate Low-Emitting Products



FIND PRODUCTS | **CERTIFICATION PROGRAMS** | **RESOURCES** | **ANSI** | **ABOUT GEI**

Just Certified
GREENGUARD Product Guide
Children & Schools Product Guide
Listed Products

HOME >>

WELCOME TO THE GREENGUARD PRODUCT GUIDE
The world's only guide for selecting low emitting products and materials.


Product Category: Sub-Category: Type:

Manufacturer:


QUICK PRODUCT
Keyword:

GREENGUARD Indoor Air Quality Certified® Products
Your search returned 5 products.


1



Phifer Series SW2000 SheerWeave®
Draper, Inc.
GREENGUARD Certified
Certification Status: CERTIFIED
Restrictions: NONE
Certification Period(s): 08/2006- 07/2007
[Printable GREENGUARD Certificate](#)



Phifer Series SW2100 SheerWeave® fabric
Draper, Inc.
GREENGUARD Certified
Certification Status: CERTIFIED
Restrictions: NONE
Certification Period(s): 08/2006- 07/2007
[Printable GREENGUARD Certificate](#)



Phifer Series SW2900 SheerWeave® fabric

[Close Detail](#)



Draper Window shades with Phifer Series SW2900 SheerWeave® fabric are the most effective and flexible way to receive the benefits of daylighting. Control the heat and light, and you have control over energy costs. Phifer Series SW2900, available on all Draper motorized and manual window shades, is ideal for any setting, including home, office, stores, restaurants, churches, hotels and libraries. Series SW2900 SheerWeave® specs: Fiberglass and PVC on fiberglass basketweave. Fire rating: NFPA-701. .017" thick, 11.9 oz./sq. yd., 5% open. Type Part Fabric Name Window Covering SW2910 Oyster Window Covering SW2920 Oyster/Beige Window Covering SW2930 Oyster/Pearl Gray Window Covering SW2940 Beige Window Covering SW2950 Beige/Pearl Gray Window Covering SW2960 Pearl Gray Window Covering SW2970 Charcoal Window Covering SW2980 Charcoal/Gray Window Covering SW2990 Charcoal/Chestnut

Certification No:
TXWt972111-5

GREENGUARD Certified

Certification Status: CERTIFIED

Sales Support for Td

- Sales Training available for your team
- GREENGUARD Market Outreach Support staff available for consultation, strategic partnering/joint presentations, and new CEU development.

Educational Support for Td

GREENGUARD offers AIA, IDCEC, CSI, USGBC accredited courses to architects, designers and building professionals:

- Healthy Indoor Air Quality by Design
- Clearing the Air on IAQ
- Building Blocks for Healthy Indoor Air
- Design to Prevent the Damaging Effects of Mold
- Indoor Air Quality and Healing Environments

Courses can be sponsored by manufacturers to gain access to competitive firms through education

In 2008 – 6,537 total CEU attendees. 41% were architects



Discussion

