mold™
& MOISTURE MANAGEMENT MAGAZINE
The Magazine for Moisture Prevention and Remediation
March-April 2007
Volume 4 | Issue 2

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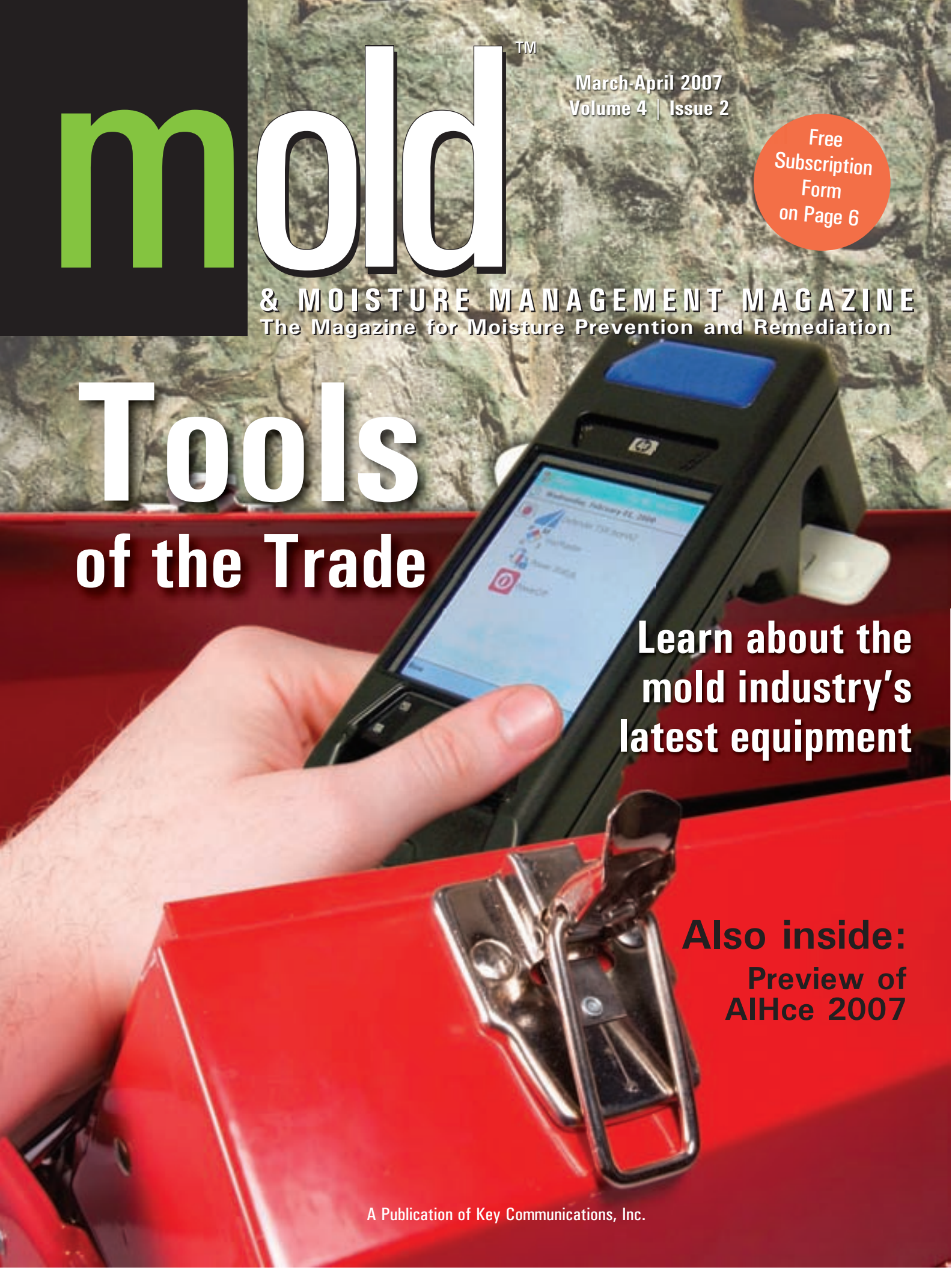
Tools of the Trade



Learn about the mold industry's latest equipment

Also inside:
Preview of AIHce 2007

A Publication of Key Communications, Inc.

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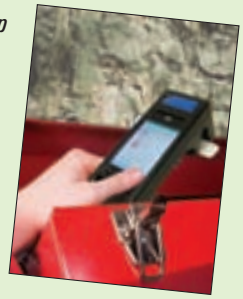
On the cover



The Defender test strip reader pictured here, from Alexeter Technologies LLC, is part of a system for on-site mold screening. Keep reading for more information on mold remediation tools–those waiting to be discovered at a trade show and those adapted in the workshop.

columns

departments

remediation

An in-depth section just for remediators, featured in every issue.

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Calling All Photos

I was watching a movie at a friend's apartment one Saturday night when water began to fall from the ceiling. I don't believe it was a scary movie that we were watching, but the first few *drip, drip, drips* of water hitting his kitchen floor were rather chilling. We got up to investigate and found a slow-moving waterfall sliding over and down his kitchen ceiling light fixture and onto the linoleum below. We immediately called maintenance.

While we waited, I tried to convince my friend that his ceiling wasn't going to collapse, that he wouldn't be electrocuted the next time he tried to turn on his light and that maintenance might in fact have some clue as to the source of the dripping. (I'll save you the suspense—the upstairs neighbor had some washing machine troubles.) When the encouragement didn't work and we still sat waiting for maintenance, listening to the water hitting the floor like impatiently tapping fingertips, I finally asked the question that had been on my mind: "Since we're waiting anyway … would it be okay if I snapped a couple of pictures for the magazine?"

Luckily, there was a knock on the door at that point. That saved me from the brunt of his laughter for finding my usual silver lining in the unfortunate water damage.

It's just as well, I figured later. My photos wouldn't have compared with some of the images I've been shown over the last couple of years by remediators eager to share their stories. They say a picture is worth a thousand words, but when I see those pictures of a thousand spots of mold decorating an otherwise white room, I'm usually left speechless. I've seen some impressive photos of the buildings (if that's the right word to describe the ruins peeking through moldy growth) that remediators have had to restore into top condition, and the pictures definitely go a long way toward describing the tough situations many of you come across.

Since I know that you have some terrific mold remediation photos that you're eager to share with your colleagues, how about sending them into **Moldmag** for a chance to have them published in a future issue? That's right, we're looking for photos of your most unique jobs, your most challenging jobs, you or your employees hard at work on the job, the most unusual problem you've run across on the job and any of the other moldy photos you most look forward to sharing with your peers. Here's the chance to show off a bit some of the work that you do.

You may send artwork via email to mheadley@moldmag.com. Files need to be PC formatted TIF or JPG files with a resolution of 300 dpi or higher. Prints are also welcome, and may be mailed to: Mold & Moisture Management magazine, P.O. Box 569, Garrisonville, VA 24663.

I look forward to hearing from you!

Megan Headley
Editor, **Moldmag**

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Readers Respond

I recently came across the article "Mold Blame Game" (*see January-February 2007* ***Moldmag****, page 18*). In this article there is the following quote by James Price, "If you have wood that's moldy … then, yes, at some point you let it dry out as much as you can, and once you're 'under roof,' you spray it with bleach."

There are several problems with this statement. First off, if there is visible mold on materials that are brought into an enclosed space, there is a likelihood that the mold spores will become aerosolized and settle on previously uncontaminated building materials. Many types of mold begin sporulating when they come under stress from such conditions.

Second, simply spraying bleach on mold may kill viable mold, however nonviable spores can be just as allergenic as viable spores and possible toxigenic reactions from any mycotoxins within the spores will typically not be rendered harmless by simply spraying with bleach. The contaminated nonporous areas should be properly cleaned. Contaminated porous materials should be removed.

In another paragraph Richard Kleiner states, "There is a phenomenon called blue stain, which some consumers think is mold [but isn't]. Both mold and blue stain affects the color of wood, but neither have an affect on the strength or durability."

When mold grows on building materials it is because there is appropriate moisture and a food source. In many cases the food source is the actual building material. The mold is basically digesting the building materials as a food source so if left untreated the strength and durability of the materials will indeed be compromised.

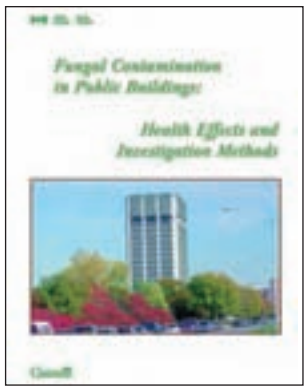
The statement and an adjoining article, "What is Blue Stain," both say that blue stain is not mold. The adjoining article says: "It's a sap stain caused by the growth of certain dark-colored fungi on the surface or interior of the wood." Fungi is mold, and perhaps the fungi on the surface that caused this condition has been removed, but has the viable fungi in the wood interior been removed, encapsulated, and/or rendered nonviable.

Paul Cochrane
Director of Public Relations
Global Prevention Services
Scottsdale, Ariz.

Canada May See Mold Guidelines

Canada has spoken up. In December 2006, Health Canada proposed a residential indoor air quality guideline for mold. The agency recommends:

- "To control humidity and diligently repair any water damage in residences to prevent mold growth; and
- To clean thoroughly any mold growing in residential buildings."



Two studies done by Health Canada on fungal contamination in buildings led the organization to the conclusion that mold in homes poses a health hazard.

In the guideline, Health Canada cites two studies it published on mold—*Fungal Contamination in Public Buildings: a Guide to Recognition and Management* and *Fungal Contamination in Public Buildings: Health Effects and Investigation Methods*—and a study published by the National Institute of Public Health of Québec in 2003 (*Les risques à la santé associés à la présence de moisissures en milieu intérieur*). The studies concluded, according to Health Canada, that

- "Exposure to indoor mold is associated with an increased prevalence of asthma-related symptoms;" and
- "In laboratory animal studies, instillation of fungal antigens and fungal cell components resulted in an inflammatory response in the lungs of rodents, while instillation of Stachbotrys chartarum spores resulted in severe biochemical and ultrastructural changes."

Fungal Contamination in Public Buildings: Health Effects and Investigation Methods also noted that several studies have found associations between the presence of mold or damp conditions and non-specific respiratory symptoms, as well as respiratory diseases such as asthma. While the document says there is no hard evidence to link mold and/or dampness to these symptoms, "a causal link is highly plausible in view of the fact that exposure to fungi in occupational environments causes allergic and toxic disease and that adverse effects of fungi have also been seen in inhalation studies using animal models." Based on these studies, Health Canada stated that mold growth in residential buildings poses a health hazard, depending on exposure and allergic sensitization.

In addition, not only does the guideline recommend cleaning any mold growing in residential buildings, it further states that the mold should be cleaned regardless of the species present. It also states that "results from tests for the presence of fungi in air cannot be used to assess risks to the health of building occupants."

The final guideline will be issued once a final decision is made by Health Canada, based on the comments currently being reviewed.

"As currently worded, the guideline may encourage people to take action to eliminate mold growing in their homes, as we state that it constitutes a health risk," said Jason Bouzanis, media relations officer for Health Canada. "On the other hand, it may discourage people to have the air in their home tested, as there is no need to test air in a home where mold growing. The guideline will have no impact on remediation practice, as it is not the Health Canada's role to tell people how to remediate moldy homes."

http://gazetteducanada.gc.ca/partI/2006/20061223/html/notice-e.html#i4

Pop Quiz

Does Your Building Paper (or Housewrap) Make the Grade?

Colin Murphy is the founder and managing partner of Trinity | ERD in Seattle. **Lonnie Haughton** is a construction codes and standards consultant with Richard Avelar & Associates in Oakland, Calif.

Section R703.2 of the International Residential Code (IRC) requires that "asphalt-saturated felt free from holes and breaks, weighing not less than 14 pounds per 100 square feet and complying with ASTM D 226 or other approved weather-resistant material, shall be applied over studs or sheathing" behind most residential siding or cladding systems. (The phrase "other approved weather-resistant material" encompasses asphalt-saturated building papers and polyolefin[1] housewraps.)

Many building professionals have only a hazy understanding, at best, of what brands of weather-resistant barrier membranes are (or are not) compliant with Section R703.2. For example, the typical inexpensive #15 roofing felt sold at many lumberyards is not manufactured with a sufficient amount of asphalt to achieve the IRC's minimum weight requirement of 14 pounds per square. Some of the cheaper #15 roofing felts may weigh as little as 8 pounds per square. The lesser the amount of asphalt used in a roofing felt or building paper, the lesser the product's ability to withstand rainwater saturation.

Further, many brands of roofing felts are manufactured only to meet the roofing performance requirements of ASTM D 4859[2], not the stricter waterproofing performance standards imposed by ASTM D 226[3], as required in Section R703.2. Typically, this information is provided by the manufacturer on the wrapper of the roll of felt. An asphalt-saturated felt that does not meet ASTM D 226 specifications and also does not weigh at least 14 pounds per square should not be installed behind a siding or cladding system. The use of a lesser quality asphalt felt can leave the builder liable if the product suffers a performance failure that leads to moisture or mold damage claims.

> "Unsupported marketing claims about the performance qualities of a particular weather-resistant barrier product that has not been listed by the ICC Evaluation Service should not be accepted by the architect, homebuilder or local building official."

Passing the Test

Alternately, a builder can use one of the asphaltic building papers or polyolefin wraps that have been tested and accepted by the ICC Evaluation Service (ICC-ES) to provide a level of weather-resistive performance that meets or exceeds the performance of good quality asphalt-saturated felts. All such approved alternate weather-resistant barrier products have been issued an evaluation report that can be downloaded without charge from the ICC-ES website at www.icces.org.

It is the shared responsibility of both the architect and the builder to confirm that a proposed building paper or wrap is compliant with Section R703.2, as demonstrated by issuance of an ICC-ES evaluation report or by an independent report of comparable testing acceptable to the local building official. Unsupported marketing claims about the performance qualities of a particular weather-resistant barrier product that has not been listed by the ICC Evaluation Service should not be accepted by the architect, homebuilder or local building official.

Note that the requirements of IRC Section R703.2 do not specifically address the complex issue of water vapor permeance (*aka* breathability) of the approved asphalt-saturated felt, building paper or polyolefin housewrap.

In many regions of North America, the primary orientation of the vapor drive through exterior walls during winter months is outward from the warm, humid interior spaces. The building code mandates that residences be designed and constructed to accommodate both exterior and interior humidity loads in such a manner that excess moisture accumulation does not occur within the building interiors or the exterior walls. The IRC does grant, however, broad leeway to the project designer to determine how best to resolve moisture loads expected in a specific building envelope design at a specific locale.

Depending on many variables, including exterior and interior

humidity and temperature conditions, the presence (or lack) of mechanical ventilation and/or air-conditioning at the building interior, the presence (or lack) of an interior vapor barrier and the overall permeability of the exterior wall assembly, the breathability of the water-resistant barrier membrane can be a critical factor in determining whether or not moisture condensation and mold growth may occur.

What's In A Perm?

The unit of measurement for water vapor permeance is the perm[4]. Some building envelope designs (and their designers) favor a water-resistant barrier with a relatively low perm rating (an approved asphalt-saturated felt, for example, has a breathability of about 5 perms). Other designers may call for the moderate vapor permeance (10-20 perms) offered by Grade D building paper and many of the polyolefin wraps or perhaps the high vapor breathability (50+ perms) afforded by some polyolefin wraps. One major spun-bonded polypropylene wrap boasts an astounding breathability of 212 perms.

It is the responsibility of both the architect and the builder to use a building paper or wrap that is compliant with IRC Section R703.2.

All of these water-resistant barrier membranes have been tested and approved by ICC-ES; however, designers and builders should not misconstrue these listings to mean these various products will provide equivalent, interchangeable performance. For example, consider the simple, but critical, differences between Grade B and Grade D building paper. The breathability of a good quality Grade D building paper exceeds 10 perms, while the permeance of a good quality Grade B building paper by the same manufacturer is less than 1 perm. In other words, as reported by its manufacturer, the breathability of the Grade B paper is so low that the product constitutes a traditional vapor barrier.

Real-World Applications

The potential effect of installing a vapor barrier under lap siding in a cold climate is seen in the photograph above, which depicts condensation of interior vapor that has occurred at the gypsum sheathing *behind* non-breathable Grade B paper during a period of cold winter weather.

The Grade B vapor barrier seen in this photograph is installed at the cold-in-winter side of the wall's insulation improperly, contrary to the requirements of IRC Section R318.1 that a "vapor retarder shall be installed on the warm-in-winter side of the insulation" except "in construction where moisture will not damage the materials" or "where the framed cavity is ventilated to allow moisture to escape."

The authors of the IRC burden the building designer with the primary responsibility for understanding how the breathability of a specific building paper or wrap may impact the overall performance of the building envelope; however, during the course of residential mold or moisture damage litigation, the key question of who actually designed the building envelope sometimes can be difficult to answer. Is it the architect who produced a generic set of plans but did not specify any particular product, or is it the builder whose purchases at the lumberyard perhaps were based solely upon availability or price, not technical performance issues.

Vapor condensation has occurred at the gypsum sheathing *behind* the Grade B building paper.

In any case, a good resource for residential architects and builders seeking to gain a better understanding of fundamental building envelope design issues is the free 88-page manual, *Durability by Design: A Guide for Residential Builders and Designers*, published by HUD (available at www.huduser.org/publications/destech/durdesign.html). m

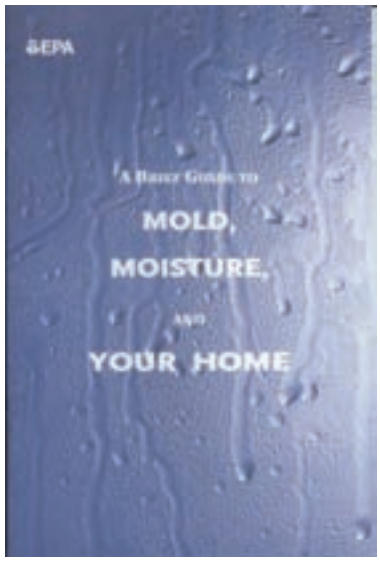
[1] Polyethylene and/or polypropylene
[2] ASTM D 4869, Standard Specification for Asphalt-Saturated Organic Felt Underlayment Used in Steep Slope Roofing, ASTM International, West Conshohocken, PA, 2005
[3] ASTM D 226, Standard Specification for Asphalt-Saturated Organic Felt Used in Roofing and Waterproofing, ASTM International, West Conshohocken, PA, 2006
[4] One perm is equal to one grain of water vapor per hour per square foot per inch of mercury vapor pressure difference.

INDUSTRY NEWS

Mold Coalition Prepares for "Mold Prevention Month"

It seems to make sense that a month known for spring showers would be dubbed "Mold Prevention Month." And that's exactly what the Responsible Solutions to Mold Coalition (RSMC) did.

RSMC's goal in naming April "Mold Prevention Month" was to launch a public education campaign that will communicate the commonsense steps that should be taken to keep buildings and homes free from mold. As an early step in its education efforts, the coalition announced its top 10 best sources of information on mold prevention during the International Builders Show in February.



The EPA's guide is one of the most-used documents about mold.

The sources coalition members recognized as offering some of the best information available on mold prevention and control include:

- *California Builder's Guide to Reducing Mold Risk,* from the California Energy Commission (www.energy.ca.gov);
- Articles on mold prevention for builders and homeowners, from Building Science Corp. (www.buildingscience.com/resources/mold);
- *Homeowners Guide to Mold*, from Reed Construction Data (www.reedconstructiondata.com);
- *Some Methods of Dealing with Mold*, from the U.S. Forest Products Laboratory (www.fpl.fs.fed.us/ahrc/mold/mold-methods.html);
- *Moisture Resistant Homes*, from the Public-Private Partnership for Advancing Housing Technology (www.pathnet.org/sp.asp?id=18574);
- *Resources for Disaster Recovery and Building Reconstruction*, from the U.S. Department of Energy (www.eere.energy.gov/buildings/disaster_recovery/dr_consumers.html);
- *Mold Internet References Available to the Public*, from the University of Minnesota Extension Service (http://www.extension.umn.edu/administrative/disasterresponse/moldrefs.htm);
- *Mold and Moisture Management in Buildings,* from the American Society of Heating, Refrigerating and Air-Conditioning Engineers (www.ashrae.org);
- *A Brief Guide to Mold, Moisture and Your Home,* from the U.S. Environmental Protection Agency (www.epa.gov/mold/moldguide.html); and
- *A Brief Guide to Mold in the Workplace*, from the U.S. Department of Labor/Occupational Safety and Health Administration (www.osha.gov/dts/shib/shib101003.html).

"What we tried to do with this list is to put in one place 10 comprehensive, reliable and accessible sources of information on mold prevention," said Mike Poellinger, chairperson of RSMC. "These information sources cover virtually every situation in which mold becomes an issue, including new construction or remodeling; commercial buildings or homes; eradication of mold once it has already started; and preventing mold from returning."

While the websites do offer information on remediation, the group puts the focus on mold prevention.

"Controlling moisture in buildings is not only necessary but it is also achievable through education and understanding some fundamental building principles," said Frank Nunes, vice chairperson of RSMC. "Some in our industry believe that water intrusion is inevitable and therefore mold-resistant products are the answer. This is simply not the case. While mold-resistant products can play an important role, dry buildings and homes are achievable through careful design, construction and maintenance."

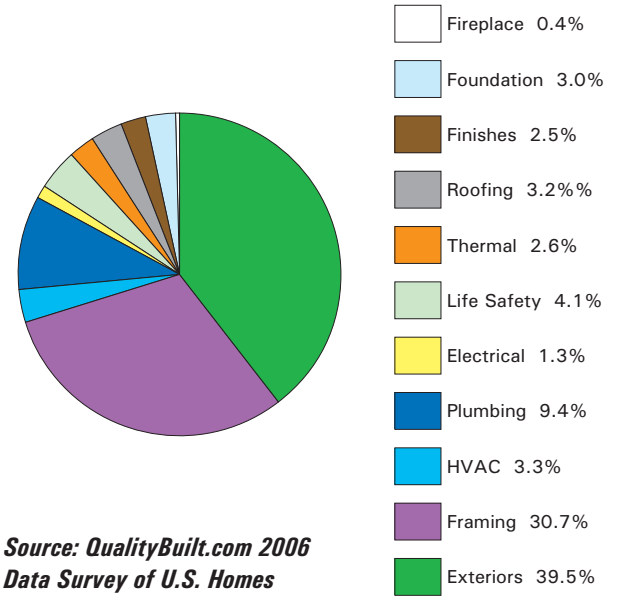
Poellinger added, "What's encouraging about these various information sources is they support one fundamental message: if you control moisture, you'll control mold. That has been at the heart of what we've communicated over the past year. Mold prevention starts with good design, encompasses sound building practices and continues with maintenance of the building or home."

COMPANY NEWS

Quality Built Tracks Defects in New Construction

Of the top 100 construction flaws for both single-family and multi-family projects, 73 percent involved either a building code requirement or installation standard, according to a survey of builders from Quality Built of San Diego. The 27 percent of remaining problems, totaling $909,990,400 in risk value, involved high-risk quality issues that can lead to a construction claim or performance complaint. Examples included installing building paper without splices under window openings, maintaining separa-

The Percentage of Corrected Risk for Single-Family Homes in 2006 on Quality Built Projects



Source: QualityBuilt.com 2006 Data Survey of U.S. Homes

tion of landscaping from building footings and window sill support.

This news comes from Quality Built's second survey of builder data reflecting construction quality and builder performance on new home construction. The company, which is a risk management firm providing inspections and quality assurance services to homebuilders and commercial developers, collected information on 73,359 completed units across the United States between January 1 and December 31, 2006. It sought information on the most common construction defects—several of which lead to water intrusion problems—in single-family, multi-family and mid-rise/high-rise homes. The results of the survey were announced by Stan Luhr, chief executive officer, at the International Builders Show (IBS) in February.

The three predominant construction risks in single-family homes were building envelope issues, framing/structural issues and plumbing, according to the survey results. Specific installation flaws included improper application of the exterior weather barrier (building paper), missing waterproofing on horizontal framing and defects involving wood-framed walls and top plates. Problems associated with building paper or housewrap installation are linked to framing practices in the West, where open-stud construction is common. The lack of continuous sheathing to support the exterior weather barrier and its associated flashing leads to gaps, tears and holes in the system, which can allow water intrusion. In the western desert climates, high winds often tear the window flashings, requiring repair prior to installation of exterior cladding.

The average corrected risk totaled $6,560 per home, up 30 percent over 2005. The reason for the increase in construction anomalies is unknown, but, according to the survey, may be due in part to a decrease in the quality of construction labor and the concurrent increase in construction complexity.

"Builders need to think like manufacturers," Luhr said. He elaborated that the construction process becomes like an assembly line, with each subcontractor addressing a single aspect of the finished product. Since the complexity of buildings requires coordination between trades—and since it's in the areas requiring coordination where moisture intrusion defects are likely to occur—builders need to ensure a quality end product by treating subcontractors like employees. Builders can train subcontractors on expected building performance, to prevent many of the defects tracked in the company's most recent survey, including water intrusion problems.

In addition, Luhr said manufacturers need to gear products toward an unqualified workforce, by providing redundant, easy-to-install products.

"We will continue to see a big increase in the number of manufacturers providing training for installing their products," added Luhr.

The beginning of this trend could be noted at IBS, as several manufacturers were introducing training programs for products, in addition to accessories in order to offer a complete system of water intrusion protection.

www.qualitybuilt.com

MERGERS AND ACQUISITIONS

CSI and Rohm and Haas Joint Venture Begins Treating Wood

Viance, of Charlotte, N.C., commenced operation in January 2007. The new business brings together the wood biocides business of Rohm and Haas and the wood protection chemicals business of Chemical Specialties Inc., a subsidiary of Rockwood Holdings, to provide a range of wood treatment technologies and

continued on page 13

DRYWALL IS A MAJOR PORTION OF ANY BUILDING. SHOULDN'T IT BE MOISTURE AND MOLD RESISTANT?

Traditional drywall has paper on both sides. And mold eats paper. So insist on DensArmor Plus® paperless drywall instead. Its ingenious glass-mat facings resist moisture and mold better than regular paper-faced drywall. Plus, DensArmor Plus offers a three-month exposure warranty against moisture damage during construction. And it has superior fire and abuse resistance when compared to regular paper-faced drywall. All of which helps preserve your long-term investment. To learn more, visit www.densarmorplus.com.

By removing the paper, we've reduced the chances for mold.

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services to the global wood treatment industry.

In addition to a pipeline of new products, Viance offers products that repel water and prevent decay.

"Viance combines the strengths of two wood treatment leaders to create a new technology-driven company that will bring the next generation of preservation technologies to the wood industry, enabling our customers to deliver wood products that provide long-lasting protection and improved long-term appearance," said Steve Ainscough, president and chief executive officer of Viance. "In fact, later this year we expect to introduce the next generation of preservatives."

www.treatedwood.com

SPOTTED

Water Damage Contributes to Building's Collapse

Water damage contributed to the much publicized collapse of an Elks Lodge in Clinton, Mo., which killed one person and injured several others, according to a report from the National Institute of Standards and Technology (NIST). The building, which dates to the 1880s, collapsed in June 2006.

Engineers with NIST, a federal research agency responsible for investigating structural failures, visited the site within days of the collapse. They concluded that "moisture led to significant deterioration of the lime-based mortar joints."

The reconnaissance report released by NIST stated: "Photographs taken after removal of the floor debris showed that (1) a large portion of the west wall had disintegrated into individual loose bricks, (2) many bricks either cracked or broke into smaller pieces and (3) the lower portion of the west brick wall was wet due to exposure to moisture, which would have caused deterioration of the lime-based mortar joints."

The base of the west wall of the Elks Lodge in Clinton, Mo., shows signs of wetness and cracks.

The engineers determined that the deterioration of the mortar joints meant that individual bricks in contact with the floor joists were carrying the floor joist loads. That in turn led to cracking of the bricks, and of the entire wall.

"The failure of the west wall resulted in loss of the support for the floors, which ultimately led to the collapse of the entire Elks Lodge building," stated the report.

According to an Associated Press article, a Clinton spokesperson said plans call for the demolition of two buildings that housed the lodge on their upper floors and a clothing and law firm on their first floors, as well as several nearby shops. m

NEW HIRES

Boelter and Yates Grows with New Consultants

Boelter and Yates Inc., consultants for environmental health and safety headquartered in Park Ridge, Ill., announced the addition of three senior consultants.

Clifford W. Davis

Clifford W. Davis, AIA, CSI joined the firm as a senior forensic architect within the Building Technologies group. Davis is a registered architect, licensed in the state of Illinois, with more than 15 years of experience. He specializes in the investigation and solution of building component failure and moisture intrusion, as well as building codes and construction management.

James J. Young

James J. Young joined the firm as senior environmental consultant for environmental health and safety services. Young is a certified industrial hygienist (CIH) and certified safety professional with more than 15 years of experience. He is an expert in indoor environmental quality, regulated building materials, safety audits, employee exposure monitoring and training.

Jeffrey A. Overby

Jeffrey A. Overby joined the firm as project consultant for environmental health and safety services. Overby is a CIH with more than 20 years of experience. He has extensive experience in program development and implementation within heavy industries and is an expert in federal, state and local regulations affecting environmental and occupational health and safety.

Valéron Names New Sales and Marketing Manager

Tresa Banks

Houston-based Valéron Strength Films announced that **Tresa Banks** has joined the company as sales and marketing manager for the Vortec™ line of drainage barriers.

Banks has more than 17 years of experience in the building products industry, with eleven years developing various engineering polymers markets and more than eight years enhancing the built environment; this includes architectural space planning, building science consulting and marketing sustainable design practices. Banks also developed a series of continuing education programs and successfully launched a "Train-the-Trainer" program for the sales and marketing teams of many product manufacturers, having educated/trained more than 7,000 architects/designers, manufacturers and end-user companies with these programs.

Banks holds degrees in architecture from Illinois Institute of Technology and Polymer Science from Northern Illinois University.

PROMOTIONS

Paul Davis Restoration Promotes Marshall

Kathy Marshall

Paul Davis Restoration Inc., headquartered in Jacksonville, Fla., promoted **Kathy Marshall** to assistant vice president of sales. In her newly-appointed position, Marshall will be responsible for calling on senior level insurance company professionals.

Marshall served previously as the company's regional marketing manager in the western U.S. She has worked for the company since 1999, and received several certifications with the Institute of Inspection, Cleaning and Restoration Certification.

Marshall graduated from California Coast University in Santa Ana, Calif. She is a native of California and currently resides in the Long Beach area.

Sostram Names Tim Zech Chief Operating Officer

Tim Zech

Tim Zech has been promoted to chief operating officer of the Roswell, Ga.-based Sostram Corp. Zech, who assumed general manager responsibilities for the company in July 2005, has been affiliated with parent company Sipcam Agro USA Inc. since 1996. In his new position, he will continue to manage the Sostram U.S. and international industrial biocide business and will oversee ongoing development and marketing of the company's mold prevention, remediation and environmental care products.

Prior to his Sostram affiliation, Zech held sales, marketing and business manager positions within the agricultural and turf and ornamental divisions of Sipcam Agro USA. He holds a bachelor of science degree in agriculture from the University of Georgia.

Munters Moisture Control Names Naughton Sales Manager

Munters Moisture Control Services (MCS) in Glendale Heights, Ill., a division of Munters AB, named **Steve Naughton** southeast regional sales manager. Naughton will oversee the growth and management of the company's disaster restoration and industrial dehumidification offerings in the Southeast region, including Alabama, Florida, Georgia, Tennessee, North and South Carolina and Virginia. His primary responsibilities include new market development, customer service assurance, profit and loss accounta-

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VIRGINIA: State Sees Record Award for Mold Personal Injury Trial

A Richmond, Va., circuit court jury awarded a state record amount of $780,000 to a family that alleged injury resulting from exposure to mold, according to an article from *Lawyers Weekly Inc*. Thomas and Rose Odaris said that mold in their Norfolk, Va., apartment caused them and their young daughter to suffer from a variety of symptoms including headaches, coughing, runny noses, respiratory problems and fatigue.

According to the article, the couple complained to apartment manager Morton G. Thalhimer Inc. in October 2002, when they noticed water damage and mold growth on their apartment ceiling. Maintenance staff attempted to remove the mold on two occasions, installing a dehumidifier on the second attempt, but the mold continued to reappear. The plaintiffs alleged the problem continued because maintenance staff made no attempts to correct the source of the water damage. In December 2002, the family moved out of the apartment and, ultimately, sued the apartment manager for negligence and the apartment owner for violating the state's Landlord-Tenant Act, *Lawyers Weekly* reported.

During the trial, the defendants argued that there was no scientific evidence available that the mold in the apartment led to the health problems. According to the article the plaintiff's lawyer, David Bailey of Environmental Law Group PLLC, responded to these claims with photos of the mold in the apartment and the testimony of his clients, industrial hygienist Chris Chapman, who examined the apartment after the family moved out, and toxicologist Richard Lipsey, who told the jury that the health problems from which the Odarises suffered were attributable to mold exposure.

MINNESOTA: Real Estate Cos. Battle Over Construction Defects

Following its purchase of two high-rise luxury apartments in Minneapolis, Crescent Heights Acquisition Inc. of Florida sued Sentinel Real Estate Corp. of New York City for allegedly concealing the buildings' need for more than $4 million in repairs stemming from defective window flashing.

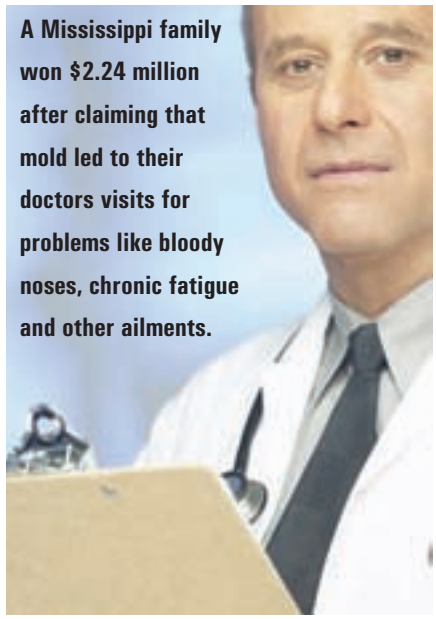
According to an article in Minnesota's *Star Tribune*, the lawsuit, which was filed in October in Hennepin County District Court, alleges that the defendants discovered the water damage in 2003 during an exterior inspection and attempted to sell the property without spending the millions of dollars needed for repairs.

Crescent Heights agreed to buy the buildings for $42.8 million in November 2004, according to the *Tribune*. Following exterior inspections of the buildings, Crescent Heights lowered its purchase price to $41.6 million to make repairs. The sale was completed at the end of March 2005. Following the sale, renters began to contact Crescent Heights about its plans to repair leaks in the walls and around windows during the process of converting the apartments to condominiums, according to the article.

The *Tribune* reported that the Minnesota buildings' owner has begun the first phase of an exterior repair project, with an estimated price tag of $1.9 million.

MISSISSIPPI: Family Awarded $2.24 Million in Lawsuit Against Builder

A family in Hinds County, Miss., was awarded $2.24 million in its lawsuit against a homebuilder accused of construction defects leading to mold growth.



A Mississippi family won $2.24 million after claiming that mold led to their doctors visits for problems like bloody noses, chronic fatigue and other ailments.

According to an article in Mississippi's *Clarion Ledger*, William and Donna Mathews sued their builder, Julia A. Harrison, as well as her three companies for defects in the design and the construction of their home's foundation. The family lived in the home from March 1996 to October 2003. During that time, the *Ledger* reported, Donna Mathews and one of the couple's three sons suffered from bloody noses, chronic fatigue, chronic diarrhea and migraines. These health problems were attributed to mold after its discovery in 2003 when Harrison was brought in to make repairs to the home.

In early October, the defendants moved to dismiss the case due to the fact that they were not granted full access to the plaintiff's medical

records, according to the article. The defense claimed that Donna Mathews had sought treatment from Dr. Ritchie Shoemaker of Maryland for symptoms that he said stemmed from mold exposure. Shoemaker claimed to have cured Donna Mathews of those symptoms by prescribing a pill that lowers cholesterol. In March 2006 Donna Mathews visited a local physician for relief from the same symptoms. According to the article, the local doctor's records showed that Donna Mathews denied having any prior medical problems and made no reference to mold. This led the defense to claim she suffered from those symptoms for reasons unrelated. However, the judge ultimately ruled in favor of the plaintiff.

NORTH CAROLINA: UNC Board Settles Litigation

The University of North Carolina (UNC) board of governors agreed to settle for $1.5 million its claims against the architect and contractors who constructed two dormitories that North Carolina Central University (NCCU) closed and renovated because of mold infestation.

The widespread mold growth was discovered in two NCCU residence halls in 2003. Experts retained by the board determined that several construction and design errors contributed to the mold problem.

The board of governors alleged that the architect failed to inspect the buildings adequately during construction. Other state agencies also had roles in approving the design of the buildings and inspecting them during construction. The steps that NCCU took in attempting to correct construction problems made it difficult to trace the moisture to the original construction, according to information from the university.

Because the mold infestation was not discovered until several years after the residence halls were completed, the time that lapsed before suits were filed posed a potential barrier to full recovery.

As then required by state law, these two dormitories were constructed using multi-prime contracting, which means that no one contractor is responsible for the quality of the whole building. Given the number of contractors and subcontractors involved in the construction and the litigation—three prime contractors, the architect and 15 subcontractors—the school found it difficult to apportion responsibility for the development of the mold. Since then, state law has been amended—at the request of public entities—to allow UNC and other public entities to use single-prime contracting on its construction projects, resulting in a single responsible contractor.

Defining AIHce 2007

AIHA and ACGIH's Annual Event Sails into Philadelphia

Industrial Hygienists (IH): 1. Scientists and engineers committed to protecting the health and safety of people in the workplace and the community. 2. Professionals dedicated to the health and well-being of workers (*Source: AIHA*).

Industrial Hygiene: The science of keeping people safe at work and in their communities (*Source: AIHA*).

Philadelphia: City of Brotherly Love; the largest city in Pennsylvania, located in the southeastern part of the state on the Delaware River; site of Independence Hall where the Declaration of Independence and the Constitution were signed (*Source: wordnet.princeton.edu*).

AIHce: The American Industrial Hygiene Conference and Expo is the annual event co-sponsored by the American Industrial Hygiene Association (AIHA) and the American Conference of Governmental Industrial Hygienists (ACGIH), where industrial hygienists and occupational and environmental healthy and safety (OEHS) professionals can find information on the latest products, learn about the topics of importance to their industry and network with their peers, all in one place.

This year's conference is set to take place at the Pennsylvania Convention Center in Philadelphia on June 2–7, 2007. In a city of great history, the industrial hygiene community will come together to discuss the future of their industry. From seminars, to networking, to tons of new products,

AIHce Seminars

If you just make it for the expo, make sure to take time for the mold-related educational opportunities taking place during the show:

RT 202: Interpreting Fungal Sampling Data for IEQ Investigations *Monday, 10:30 a.m. – 12:30 p.m.*

RT 216: Successful Mold Remediation: Challenges and Barriers *Tuesday, 10:30 a.m. – 12:30 p.m.*

PO 113: Fungal Air Sampling Data Interpretations *Tuesday, 2 p.m. – 5:20 p.m.*

RT 244: FEMA's Approach to Assessing Buildings and Mold Issues — Katrina and Rita *Wednesday, 5 p.m. – 7:30 p.m.*

PO126: Microbial & Allergen General Topics *Wednesday, 5 p.m. – 8 p.m.*

Or, take advantage of having all this knowledge in one great location, and come early for the professional development courses:

PDC 120: Mold, Moisture, and the Science Within the Building Envelope *Saturday, 8 a.m. – 5 p.m.*

PDC 502: Advanced Biological Sampling Techniques and Laboratory Analysis for Indoor Environment Quality Investigation — Mold, Bacteria, Allergens and All Others *Sunday, 8 a.m. – Noon*

PDC 705: Prevention, Determination, and Remediation of Biological Contamination in Indoor Environments: The 2005 Field Guide *Saturday and Sunday, 8 a.m. – 5 p.m.*

Exhibit Hall Hours

Monday, June 4	**9 a.m. – 5:30 p.m.**
Tuesday, June 5	**9 a.m. – 3 p.m.**
Wednesday, June 6	**9 a.m. – 1:30 p.m.**

the conference will offer plenty of ways to learn about how IH's take on the problem of mold.

AIHce has added a host of new programming to the 2007 conference schedule. Highlights planned for the conference include 59 new roundtable discussions on a variety of topics and 25 new professional development courses. Attendees can even join small group discussions over lunch. National Institute for Occupational Safety and Health (NIOSH) industry sector/research-to-practice exchange discussions will be held Tuesday, June 5, in the expo and facilitated by NIOSH researchers and technical staff. Tech Talks will be held Wednesday, June 6, in the expo and facilitated by technical committee representatives. Each day attendees can find a seminar on mold, with opportunities to learn more about investigation, remediation and health issues.

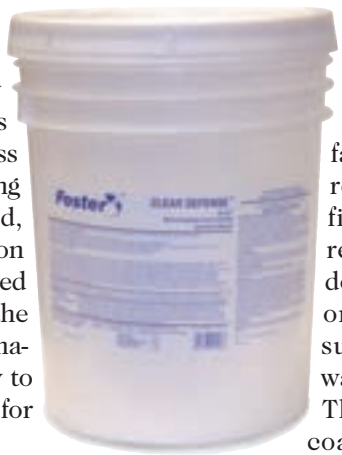
In addition, more than 300 exhibitors will be on the show floor ready to answer questions about their products and discuss industry trends. If you're looking for another reason to attend, we've collected information on just a few of the mold-related products to be exhibited at the show. For more product information, come to the show (stop by to see us in booth 1226) or look for the next issue of **Moldmag.**

Expo Product Preview

Booth #626: Foster Clears the Way for New Product

The multi-purpose clear coating Clear Defense™ 40-55™, from Arlington Heights, Ill.-based Foster®, was designed to protect the aesthetics of exterior and interior surfaces of residential, commercial and industrial properties by resisting the growth of mold, mildew and algae on its surface.

Formulated with EPA-registered additives, the coating exhibits zero mold growth when tested under test method ASTM D5590. The coating also includes a durable acrylic polymer, which forms a hard film over a variety of surfaces. The mar-resistant, satin finish coating resists dirt and does not yellow or blush from sunlight and water exposure. The easy-to-use coating can be applied by brush, sprayer or roller, and dries in one hour.



www.fosterproducts.com

Booth #1526: GrayWolf Senses Need for New Particle Counter

GrayWolf Sensing Solutions in Trumbull, Conn., introduced a new portable, six-channel particle counter, supplied with exclusive data transfer and graphing software. Automated report generation software is also available, as well as interface to mobile PCs to assist in on-site documentation of particle count surveys.

The PC-GW3016 displays both cumulative and differential particle count data on its easy-to-read 3.8-inch touch screen. The handheld, 2.2-pound meter is capable of logging 3,000 sets of

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measurements on-board, or a virtually unlimited number of readings when interfaced to a mobile PC. The tool displays six size ranges simultaneously.

The PC-GW3016 may be used as a stand-alone display unit and datalogger to record the six particle size channels, and optionally to measure percent relative humidity and temperature with the available PC-GW6-RHCF plug-in probe.

➡ **www.wolfsense.com**

Booth #334: Alexeter Creates System for Fungi Collection and Testing

If you want rapid, on-site mold screening, you may want to check out the new IAQ PRO™ System from Alexeter Technologies LLC in Wheeling, Ill.

Utilizing direct swabs or an automated high-volume air concentrator, the one-step Bio-Detect immunoassays characterize common molds in 30 minutes or less. According to the company, the system utilizes the same rugged technology that has been employed for more than five years for environmental screening of biological warfare threats by emergency responders.

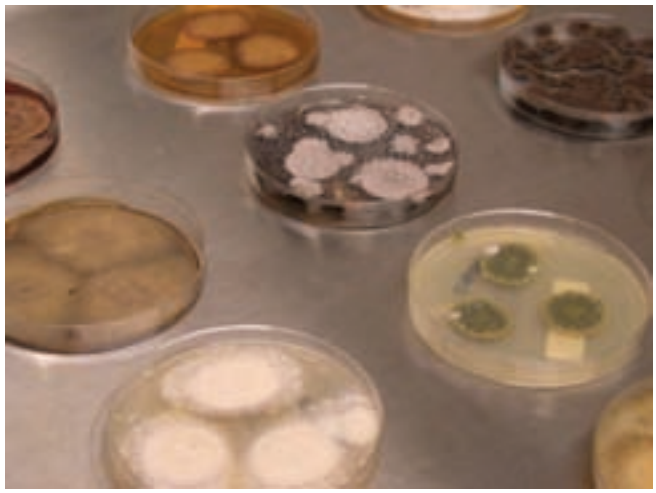
The company's Defender TSR (test strip reader) offers objective semi-quantitative results and custom printed reports. The units have full wireless capabilities and provide embedded RFID-data tracking on each disposable test cartridge, ensuring chain-of custody protection.

For airborne collection, Alexeter offers the BioCapture 650®, an advanced particle collection device that concentrates airborne particulates in the 0.5 to 10 micron range into an aqueous buffer that is compatible with most laboratory analyses.

➡ **www.alexeter.com**

Booth #1422: DataChem Lends Its Services to IHs

DataChem Laboratories Inc. (DCL), headquartered in Salt Lake City, provides analytical services to assist with microbial detection and removal efforts. DCL is EMPAT-accredited by the American Industrial Hygiene Association and offers mycological, endotoxin, and bacterial analyses, including microbial culture techniques, spectrophotometry, microscopy and GC/MS methodology, on a variety of sample matrices. Services include spore trap, bulk, swab, soil and tape lift identification; culture plate impactor analysis; LAL endotoxin testing; heterotrophic plate counting; anaerobe culture isolation; and biolog bacterial identification. The company says that it offers the services of an experienced microbiologist and mycology professionals, and clearances are prioritized on next day turnaround times.



➡ **www.datachem.com**

Booth #1046: Tiger-Vac Traps Molds

The HEPA vacuums from Tiger-Vac Inc. in Dania, Fla., offer an efficient and effective way to trap and retain particles down to and including 0.3 microns. The multi-stage filtration systems with graduated filters trap and retain particles from the largest size down to 0.3 or up to 0.12 microns.

The HEPA vacuums are offered in electric, pneumatic, portable and stationary. The company also offers a wide variety of hoses, tools and accessories. The filters are tested in accordance with IEST RP-CC001.3.H14 method as per EN 1822.

➡ **www.tiger-vac.com**

Booth #439: Check Out Delmhorst's New Product Addition

The three-in-one meter TotalCheck, from Delmhorst Instrument Co. in Towaco, N.J., was

designed for home inspectors and indoor air quality specialists. The meter integrates pin and pin-less technologies and a thermo-hygrometer. The thermo-hygrometer calculates GPP and dew point, and measures temperature and relative humidity (RH). The RH sensor is removable and conforms to the ASTM-F2170 standard for concrete testing.

The meter also features full onscreen reading recall with date and time stamp, job grouping, infrared linkage to a PC or laptop, easy-to-navigate menu options and a customizable auto-shut off.

➡ **www.delmhorst.com**

Booth #801: SKC Traps Spores with VersaTrap® Cassette

Capture mold and bacterial spores and other particles with Eighty Four, Pa.-based SKC's VersaTrap spore trap cassettes. VersaTrap operates at flows from 5 to 30 liters per minute provided by a bioaerosol sampling pump such as the QuickTake® 15 or QuickTake 30. The VersaTrap slit inlet focuses particles toward a clear glass slide coated with a fully-optimized sticky substrate. Targeted size particles are effectively held in a well-defined rectangular footprint that provides for accurate analysis using standard equipment, according to the company. Slides are easily removed from the cassette and positioning notches and flat edges are designed for easy reading. Each slide is encased in a SureSeal leak-free cassette to ensure sample integrity. Each cassette contains a unique serial numbers for sample traceability.

➡ **www.skcinc.com**

The Remediator's Toolbox

Mold Remediators Spotlight the Tools They Want and Turn to First

Megan Headley is the editor of **Moldmag**.

For the builder, it might be a particular hammer, used so often that the handle is worn, that is the most important tool on the jobsite. Or, it may be the latest piece of equipment that sets one builder apart from others. For the mold remediator, it may be one grinder that he relies upon for every job that helps him thoroughly clean a space. Or it may be the high-tech piece of equipment that everyone at the trade shows is talking about that the contractor uses to speed and improve the remediation job.

We at **Moldmag** have told mold remediators about the tools manufacturers are offering—but wanted to know about the tools remediators are actually using to improve their work. We called several remediators at random—and were ultimately impressed by the interest in the latest technology, the importance of the basic tools of the trade and the ingenuity in adapting tools that set the professionals apart from their competition.

Finding the Tools for Finding the Mold

There's nothing like the latest technology to set a person apart from the competition. But the most talked about tools generally require plenty of research and a big up-front investment.

"I look at a lot of the new technology and I've been doing a lot of research," says John Coppolino, chief executive officer of Mold Control Solutions in Port Matilda, Pa.

The tool that has grabbed Coppolino's eye is an infrared camera. This handy tool, which is gaining in popularity, helps professionals quickly pinpoint the source of a moisture intrusion problem by allowing them to see the temperature of a surface, as well as areas of dissimilar temperatures that might indicate a problem.

"To some extent it is great in a quick scan," Coppolino says. However, he adds, "I believe people try to make it sound like the last word in finding things."

Blair Dean, president of ASAP Water and Mold in Lawrenceville, Ga., agrees. "We don't have anything super fancy that we use," Dean says.

There was one device that piqued his interest, though.

"Dr. Victor Dejesus out of Georgia [Tech] was working on a mold detection device that works like a stud finder," (*see January-March 2005 **Moldmag**, page 43*) Dean says. "That would be a very novel idea, very useful in the industry."

Maybe someday there will be a "mold radar" out there, but in the meantime, other remediators rely only on the basic tools to find where the water is hiding.

Until he is swayed by the infrared camera, "the Protimeter Surveymaster" is the tool of choice for Coppolino. "People have been using them for years to check the moisture content in logs," he says.

The moisture meter uses noninvasive radio frequency to search material for moisture. It also features two probes to measure moisture content. However, even this basic tool is something that Coppolino adapted.

"I actually worked in forestry for quite a few years, and we used a lot of protimeters for measuring the moisture content of logs and such," Coppolino says. When he moved to work on construction, and then mold remediation, the tool moved with him.

Remediation Bells and Whistles

The tools of choice for cleanup seem to be those with all of the bells and whistles—and results.

Blasting—whether with dry ice or soda—was in the forefront of several remediators' minds.

"I guess I'm intrigued by the soda blasting, and dry ice blasting," Dean says.

Mike Smith, president of The Mold Hunter Inc. in Denver, N.C., is also intrigued with the technology, and is just waiting for a push to make the purchase.

"I've got my eye on either getting a soda blaster or a dry ice blaster … we just haven't had enough big jobs to cost-justify it at this point," Smith says. "All we're looking for now are some good, big, steady jobs to cost-justify it."

When considering investing in blasting equipment, Smith says the "periphery," like the cost of added materials such as compressors, media, transportation and other materials, concerns him.

"I think certainly the dry ice blasting equipment has proven to be very effective for structural wood remediation," says Steve Silicato, REM, CIE, vice president of Marcor in Hunt Valley, Md. "We've adapted the abrasive blasting technology for mold remediation."

Silicato notes that there are a variety of blasting media available, including dry ice, baking soda and even sponge.

Fred Rodriguez, CMR, president of Remediation Group Inc. in Alpharetta, Ga., is also a proponent of ice blasting.

"We've got an ice blasting machine, and that seems to do a great job as far as cleaning the wood surfaces," Rodriguez says. "If there's a lot of framing involved that's got visible mold growth, it makes sense for us to do it."

Dry ice blasting helped Rodriguez quickly cover large wood surfaces. "It gets into all the cracks and crevices, so it's very precise," he says.

The company was motivated to purchase the machine in 2006 when it opened up an office in New Orleans. According to Rodriguez, New Orleans provides a perfect application for dry ice blasting, since many of the houses are completely gutted, leaving the wood framing exposed.

Otherwise, the company uses traditional tools like orbital sanders or wire brushing for effective source removal. "At the end of the day it's about source removal," Rodriguez says.

Infared cameras, the latest tool for finding water damage, piqued the interest of many mold remediators.

Dry ice blasting is also the tool of choice for Gary Gilman, CMRS, chief executive officer of SteamMaster in Minturn, Colo. His company began using their dry ice blasting system on attics, and then moved to use it on crawlspaces.

"I found it to be, far and away, the most effective tool," Gilman says. "It significantly cuts down on the amount of man hours than if you were going to hand sand or wire brush, and it allows you to reach places you wouldn't be able to reach by hand."

Alliance Environmental in Azusa, Calif., invested in a heat treatment process to kill mold. The full-service environmental firm began to offer mold remediation in the late 1990s when it became a growing concern. In the beginning, the company would tear out the affected areas to ensure all mold was removed. Lately, it began to use the ThermaPureHeat® process from E-Therm of Ventura, Calif., which uses heat to destroy mold, in com-

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Victor Griffith of Breathe Easy Mold Remediation Inc. created this tenting system to create a high negative air pressure in a building, which he says prevents spore levels from rising rapidly during mold removal.

bination with filtration to remove the contaminants.

"As entrepreneurs, we had to find a new way to save customers money and differentiate our business at the same time," says Joe McLean, chief executive officer of Alliance.

One of the short-term benefits the company discovered was the ability to market a distinct differentiator. McLean says that even if customers didn't use the new service right away, by offering it as an alternative the company was creating opportunities to meet new customers and present all of its services.

Alliance Environmental finds the biggest demand for ThermaPureHeat for water-damaged kitchens or bathrooms.

"ThermaPureHeat is much more cost effective than pulling all the base cabinets, removing the granite countertops, destroying the kitchen and losing its use for three or four months," McLean says. "We go in, cut out a little drywall, heat the area, clean the area and within a couple days customers have full use of their room."

Alliance Environmental found that by offering ThermaPureHeat, in addition to other tools, customers know they have options in how the remediation is handled.

No Magic Fix for Mold

While there are many products available to benefit remediators, no tool does the job on its own. Each piece of equipment designed to improve the remediation job requires the work and commitment of a thorough contractor.

"So often our customers want you to pull out the magic wand or the magic juice that you can spray on it and make it go away. Or they want you to be able to look at the mold and be able to tell if it's toxic or not," says Mike Smith, president of The Mold Hunter Inc. in Denver, N.C.

Fred Rodriguez, CMR, president of Remediation Group Inc. in Alpharetta, Ga., agrees. "There's a misconception that there's … a silver bullet chemical," he says.

There clearly is no magic fix to mold, and in reality there is no one tool that can do it alone. Smith notes, "I trust all of my tools and equipment."

Certainly there are a variety of tools available. They may each have their strong points in helping remediators to perform their work to the best of their ability, but it is not the equipment or technology that makes a remediation successful. It is the skill and training of the contractor that leads to a well-done remediation.

"I think a tremendous amount of it is just experiences as far as knowing building materials and knowing how they act and what's going on outside," says John Coppolino, chief executive officer of Mold Control Solutions in Port Matilda, Pa.

"We're successful through making sure our people are trained in recognizing potential mold in an area and using the guidelines that are in place," says Rodriguez.

Blair Dean, president of ASAP Water and Mold in Lawrenceville, Ga., gives the final credit to the most valuable part of his remediation jobs: "the workers, the guys who go deep in the crawlspace and do the hard work … they're much more valuable than people think," he says.

Creating New Tools

Sure, there are lots of exciting new tools out there—but there are still some jobs that could be made easier with a piece of equipment that just doesn't exist yet. It's not surprising to learn that many members of the growing mold remediation industry have adapted tools to create something they need to improve their job.

Victor Griffith, owner of Breathe Easy Mold Remediation Inc. of Bradenton, Fla., created a tool to improve the way he cleans severely contaminated buildings.

Griffith recalls that he had been remediating a home where nearly ¾ of the inside had to be cleaned or removed. He tested the home three times and each time came back with a high count for stachybotrys spores. Since Griffith also owns a tent fumigation company for exterminating termites, he began to consider whether tenting the home might help prevent the mold contaminants from spreading.

"I said, 'Well if I can create a high negative air pressure for this house that would do it,'" he says.

And, Giffith was proven correct. Now, in heavily mold-contaminated structures, he uses tenting to create a high negative air pressure by sealing the entire structure of a house

"We put these 65-mil tarps over the entire structure … and pin them together with steel clamps," he says.

Griffith says that this process

swaps the air out of the house in less than one minute, "so it's cleaning it up at an extremely high rate while you're in there working on it."

Griffith says this equipment "most certainly has" improved the way he remediates mold. "Not only that, it's one of these things you can pass along to the customer too," he says. "To build containments in the inside of a home where ¾ of a home has to come out can take 26 hours building containments," Griffith says. "We can do one of these in about four hours."

Steve Thompson, president of Accurate Mold Remediation in Comstock Park, Mich., also adapted his own system.

"We have done something that is a little unique that has improved the way we work," Thompson says. "We've retrofitted all of our HEPA air scrubbers with UVC lights."

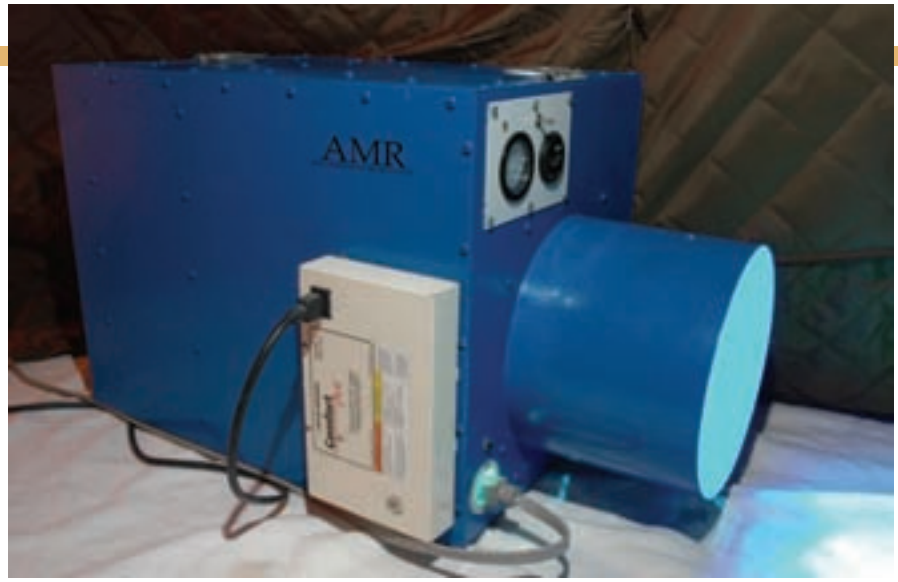
Thompson said that installing UV lights on heating and cooling systems led the company towards using this technology for remediation jobs. The UV lights are added to the outbound stage of the air scrubber, and Thompson says that the addition improved validation testing for the company.

By using the UVC lights to help remove any trace of mold, there is no need to "fog with toxic chemicals," Thompson says. "The air scrubber becomes a very natural means of doing that without having to poison [the environment]."

Thompson says that he believes other companies have added UV to their air scrubbers, and that at least one company is manufacturing air scrubbers in this way.

Ken McCartney, founder of Mold Free Home VA LLC in Stafford, Va., says that he is working on "a demo tool" to help make his job easier.

"I'm in the process of designing a new tool to pull the drywall down off of ceilings," McCartney says. "Something similar to what the fire department uses, but I want to use something kind of like a hoe … and you can stick it up between the floor joists."



Although Steve Thompson of Accurate Mold Remediation says some manufacturers are adding UV lights to HEPA air scrubbers, he made this addition to his own equipment.

McCartney finds himself often working on houses that have sat empty for long periods of time and accumulated mold, leading to massive removal efforts.

"I've found the need," says McCartney. He jokes, "I guess I pull a lot of ceilings down."

Smith says that he too has made efforts to adapt the tools he has at hand.

"I have tried to adapt a couple of things to make them work [for remediations], but really have not been successful," recalls Smith.

"I tried to hook up a HEPA vacuum to a palm sander to keep the dust from escaping," he says. "It did work and it did improve it, but in reality the sander was way, way too slow. What we've started using now is a wire brush on a grinder to remove anything off of the wood and that seems to work pretty well."

Back to Basics

While neat gadgets abound, it is the basic—often overlooked—tools that are particularly necessary for a successful job. Simple tools are necessary to help remediators get to the areas that need to be repaired.

"We like to use the RotoZip for cutting wallboard because that helps avoid the hazards that you might encounter inside of a wall cavity … demolishing and avoiding those potential hidden conduits or water lines," Silicato says.

The RotoZip spiral saw systems, offered by Robert Bosch Tool Corp., were created by a drywall contractor to save time and money for drywall installation. They are now easing the job of drywall removal, according to Silicato.

Since Marcor also offers services for remediating asbestos and lead, Silicato has found overlap in some of the basic tools used for the different tasks.

"There's so many synergies in our work practices … from personal protective equipment to the negative air filtration machines to the detailed cleaning," Silicato says.

One overlap that Silicato says has surprised him a bit is the use of coatings.

"I guess some of the aspects of the sanitizing and disinfecting agents out there that owners and/or consultants specify in lieu of removing porous building material—I am surprised by the usefulness and the application of those chemicals but they are a tool where if it's applicable, it's useful," Silicato says.

Researchers Offer Tips to Keep Homes Tight and Dry

It's often said that there are more mold problems these days because homes are built tight for energy efficiency. Whether that is the reason there is increased awareness of mold problems or not, a seminar on *Moisture Management in Energy-Efficient Buildings* presented during the American Society of Heating, Refrigerating and Air-Conditioning Engineers' Winter Meeting in January in Dallas, offered some suggestions for keeping homes both efficient and dry.

During the session, Neil Leslie of the Gas Technology Institute presented a *Laboratory Evaluation of Residential Window Installation Methods in Stucco Wall Assemblies.*

"I wanted to provide experimental evidence of moisture loading," Leslie said.

He presented information on a series of water spray tests of a unit that consisted of a flanged vinyl window installed in a stucco wall. In each installation, only a single layer of weather-resistant barrier (WRB) was applied, to provide understanding of "what was going on" with drainage, although Leslie cautioned that two layers of WRB typically should be applied. As the researchers found out, a double layer is important, as one layer becomes a sacrificial layer for the bond break. While one sequence of installations applied the WRB following the manufacturer's instructions, in another sequence the researchers installed the WRB in reverse shiplap.

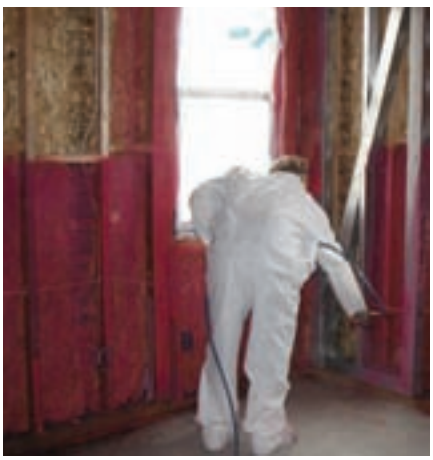


Photo courtesy of the California Energy Commission

Using mold-resistant products was one suggestion this ASHRAE presentation had for keeping buildings energy-efficient while keeping mold remediators out.

The first installation challenged the WRB prior to applying the stucco. The researchers found that the perforated WRB leaked with or without the stucco. "Water just went through it," Leslie said.

The researchers also found that the 2-ply building paper became ineffective when applied reverse shiplap.

The next installation tested the stucco with caulk around the window unit. The researchers found that the stucco cladding and the caulked frame provided a full seal, and was effective even with the WRB applied in reverse shiplap.

The third installation featured a ⅛-inch hole in the window frame to simulate a line crack. The fourth installation included the ⅛-inch hole as well as plugged weep holes since, as Leslie noted, "sometimes in the field they will be plugged with stucco."

Even while preparing for the worst by planting holes in the window frame, the researchers discovered that bulk water also flowed through unexpected stucco flaws.

The final installation used foam sealant applied to the reveal.

For the final tests, as leaks did occur, the researchers found that the sill pan proved to be useful—but water had to be able to drain down to it.

"Integrating the sill pan with WRB is a critical element," Leslie said.

Leslie added, "We believe an air space (between stucco and WRB) is required for optimal gravity drainage."

Douglas Kosar of the University of Illinois, also examined testing of stucco wall systems since, as he told his audience, stucco siding dominates the West, with its use nearly tripling in the last 10-15 years. Kosar presented information on *Evaluating Stucco Wall Systems Using Hygrothermal Modeling,* having studied with Christine Walker of the University of Illinois how stucco held up under moisture, using one hygrothermal modeling tool.

"The modeling tools haven't quite caught up to the real world yet," Kosar said.

His study tested the three stucco-clad wall systems, the traditional 3-coat stucco, "one-coat" stucco and EIFS. It also looked at the nature of the paper used beneath the stucco, including building paper, low-permeance housewrap and high-permeance housewrap. The researchers monitored the moisture content and surface conditions (temperature and relative humidity) of OSB to determine how "healthy" each wall surface was, since, Kosar said, OSB is most vulnerable to decay and mold. The study was driven with a weather software tool that looked at 16 California climate zones, although Kosar focused on the Mt. Shasta climate zone, the most adverse.

The wall featuring 3-coat stucco applied over two layers of building paper over OSB in front of cellulose insulation was found to perform the best. The worst performing model, Kosar said, was a wall with 3-coat stucco applied over one layer of building paper and one layer of low-permeance house-

Photo courtesy of the California Energy Commission

Lew Harriman offered suggestions from the *Builders Guide* for keeping water away from buildings, keeping it out of buildings—such as by simplifying roofs to lessen risk—and keeping mold from growing when the water does get in.

wrap over OSB.

However, Kosar added, "When we look at the results … you'll see that was only a modest variation between any of the wall systems."

Within each of the stucco-clad wall systems studied, the selection of building paper and housewrap had the least effect on the moisture intrusion, Kosar said.

During his presentation *Mold Risk Reduction Strategies for Builders,* Lew Harriman of Mason-Grant Co., asked the big question: "So research was done—does it matter?"

To help apply this research to "the real world," Harriman and Leslie were tasked with creating a guide for builders. Harriman said the goal was to ensure "when you're making energy improvements in buildings that you don't inadvertently grow mold."

His goal with the builder's guide was to teach builders and designers about the moisture-control measures they can take to create the biggest impact for the lowest cost. Harriman said that builders and developers should first figure out how to keep water away from the building in the first place, then keep water out of the building when it gets near and finally limit mold growth when the water does get in.

Harriman listed several suggestions for how the developer can keep water away from buildings, since, he said, that is "the person who sets the perpetual mold risk." Proper site grading was one such concern, as was site consideration. He noted that many water problems in California occur because houses are built close together on hillsides, so the water drains into the next house. He also suggested avoiding below-grade walls and making roof line decisions that favor water exclusion, such as small overhangs that can greatly reduce the water load on walls. To involve the builder, he suggested developers offer progress payments to builders to provide constant checks for proper waterproofing.

Harriman offered design tips for the next step—keeping water out. "The designer then takes the perpetual mold risk left by the developer and tries to mitigate this," he said.

Suggestions included minimizing valleys and dormers and connections where water can enter, installing kickout flashing where necessary, using sill pan flashing at windows and installing those two layers of housewrap that Leslie recommended. Harriman also recommended using breathable interior finishes and moisture-tolerant materials in wet areas.

Next, Harriman said, the builder's responsibility is to limit mold growth when water does eventually get in.

"The builder really controls the final risk as to whether any of these measures either reduces or increases mold risk," he said.

Harriman offered suggestions such as storing materials in a dry location and even considering measuring moisture content of materials or using construction drying services when appropriate. The main point he made, however, was for supervision—"so it's installed the way the builder wants it and the designer intended it."

Harriman added that the homeowner controls the ongoing mold risk. He recommended owners be offered tips such as using highly permeable paint for exterior stucco, using exhaust fans and drying out wet materials to keep their homes at peak performance.

"You're not going to prevent mold in buildings … you can reduce the probability," he said. "Reducing risk economically and culturally is more practical than eliminating risk."

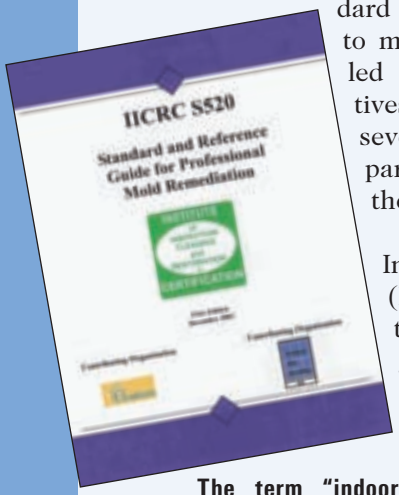
http://www.gastechnology.org/moldresearch or www.moldmag.com

INDUSTRY NEWS

IICRC Develops Consensus for IEP Designation

The Institute of Inspection, Cleaning and Restoration Certification (IICRC) S520 Standards Revision Consensus Committee decided to maintain the term "indoor environmental professional" and "IEP" in S520, but will not retain trademarks on those terms. The organization met in late 2006 to build industry consensus and develop a plan regarding the use of the term and its abbreviation in the IICRC S520 *Standard and Reference Guide for Professional Mold Remediation*.

The use of a trademarked term in the upcoming standard has been a cause of concern to members of the industry, and led IICRC to invite representatives from the industry as well as several trade organizations to participate in a discussion on the use of the term.



The term "indoor environmental professional," used throughout the S520, will not be a new certification.

Robert Baker, president of the Indoor Air Quality Association (IAQA), explained that the term IEP had been coined as a generic description to cover the variety of professionals capable of consulting on IAQ investigations or providing guidance for remediators.

"Although statements were made by various IICRC staffers that the purpose of obtaining the trademarks was to prevent someone from inappropriately awarding a certification for an IEP, IICRC did not make any formal announcement of such an intention," Baker said. "Rather, there was a page on the IICRC website that described the training and experience for such a designation (later removed) and there was wide speculation that IICRC either planned to offer such a certification or establish a registry of persons qualified to be an IEP. The IAQA board decided that for the same organization that developed an industry standard to also determine who is qualified to utilize that standard held the potential for a conflict of interest and potentially could complicate qualification of the S520 under the ANSI process."

Aaron Trippler, director of government affairs for the American Industrial Hygiene Association (AIHA), said that AIHA had also hoped the IEP term would be used only as a generic term and not a specific title, and similarly opposed the trademarking.

"AIHA's major concern with the IEP was the fact that this standard was creating a new non-accredited title with no way to verify the qualifications and experience level of those who would use the title," he said.

IICRC representatives held an open discussion during which they listened to the concerns of representatives from organizations such as IAQA and AIHA, among several others, regarding use of the term, related certifications, designation and trademarking, according to a news release from the institute.

FINANCIAL

Fraud Finding Forces PDGE to Take Charge

After discovering fraudulent activities undertaken by one or more former employees at its Seattle office, PDG Environmental Inc. (PDGE), headquartered in Pittsburgh, expects to record an extraordinary charge to fiscal 2007 third quarter earnings of $1.4 million.

Upon the discovery, the company retained legal counsel and pursued insurance payments and other means of recovery for such losses.

The company has determined that the employee fraud resulted in the recording of excess contract revenue of $0.3 million in the three months ended January 31, 2006, $0.4 million in the three months ended April 30, 2006 and $0.3 million in the three months ended July 31, 2006, and that net income was overstated by $0.18 million in the three months ended January 31, 2006, by $0.24 million in the three months ended April 30, 2006 and by $0.25 million in the three months ended July 31, 2006. These amounts do not include potential recoveries from insurance or other sources.

"In the interest of maintaining transparency and open communication with the investment community, we have disclosed this development and the associated financial impact as soon as it was discovered and we were able to determine a reasonable range to bracket the third quarter charge," said John Regan, chairperson and chief executive officer. "We were able to discover this incident through our internal control procedures, which alerted us to the issues. We are confident that the fraudulent activities, while serious, are isolated. In our 22-year history, this is the first significant occasion of employee theft/fraud."

www.pdge.com

Following a meeting of the S520 Standards Revision Consensus Committee, a seven-point plan was drafted. The seven points include IICRC's goals to:

- Retain the term "IEP" in the S520 and keep the IEP Chapter in the document;
- Enter into a memorandum of understanding with IEP stakeholders, agreeing to defend against third parties attempting to trademark the IEP terminology;
- Not retain trademarks on the terms "indoor environmental professional" or "IEP;"
- Include language in S520 that negates the ability to trademark the terms and the ability of anyone to use the terminology as a designation or certification. This language is intended to remove any economic incentive associated with use of the terminology;
- Oppose the listing of specific designations or certifications in the S520 that are deemed equivalent to the definition of an IEP;
- Develop written clarification to specify the qualifications necessary for a competent IEP, for use by remediators and IICRC registrants when selecting and engaging the services of an IEP. This language would not be inserted in the S520, and is designed only to provide supplemental internal IICRC guidance for those needing the services of an IEP; and
- Have the agreement be approved by the IICRC, and thereafter communicated to the IEP stakeholders.

According to information from the organization, IICRC will immediately move to implement the plan into the new revision of the S520, where necessary, and in all workings surrounding the mold remediation document.

"We were pleased they decided not to move forward with the trademark and to de-emphasize the IEP by not 'capitalizing' the term in the standard. This reduces the impact of the title as a new term and make it more generic," Trippler said. He added, "AIHA will wait and see what is included in the final proposal."

MERGERS AND ACQUISITIONS

Environmental Service Professionals Acquires National Professional Services

Pacific Environmental Sampling Inc., a wholly-owned subsidiary of Environmental Service Professionals Inc. (ESP) of Palm Springs, Calif., acquired National Professional Services Inc. (NPS) as part of its growth through acquisition strategy. NPS develops training programs and technology-based solutions for the indoor air quality industry.

"Given its ability to address moisture and mold issues across multiple industry segments, NPS software and training will become key ingredients in building our company," said Ed Torres, chairperson and chief executive officer of ESP. "The NPS training curriculum and software is a comprehensive solution which will enable ESP to achieve its mission of blending the home inspection and mold inspection industries through our CEHI program."

➡ **www.espusa.net**

ONLINE

IAQ Pros Find a New Forum

Want to find out about indoor air quality, mold, moisture intrusion and other indoor air quality (IAQ) issues? Check out the IAQ Forum, at www.iaqforum.net, a new Internet discussion forum.

A new indoor air quality website provides a place for interaction among IAQ professionals and the general public.

Jeffrey Deuitch, who is a microbiologist, and a frequent contributor to industry publications on science and technical issues, created the forum to allow interaction between concerned individuals and those who have expertise in a wide variety of disciplines. It is intended for use by the general public, IAQ professionals and other professionals who are impacted by IAQ issues. While many of these issues are covered in assorted websites, the forum allows a single location for interaction and information related to IAQ issues.

Specific discussion topics within the forum include mold, building inspections and design, assessment, remediation, health and IAQ, building envelope issues, HVAC, legal issues and others. There is also an "Ask The Microbiologist" section that allows people to ask questions related to fungal, bacterial, viral and other organisms to a professional microbiologist.

➡ **www.iaqforum.net**

TESTING

Relle Smartens Up With Two New Products

Relle IAQ Solutions LLC in Gretna, La., introduced a real-time data logging sampler and cassette for IAQ sampling of up to 24 hours.

The IAQ sampling system addresses the need to collect long-term air samples for IAQ investigations while data logging various real-time environmental conditions. The smart sampler and smart cassette system consist of specially designed filter cassettes with an optional attached electronic memory chip and an advanced air sampling pump that data logs environmental conditions while the sample is being run. The multifunction system provides accuracy, high collection efficiencies, multiple analytical methods and reliable real-time data correlation.

www.relleinc.com

Examinair® Kit Aims to Ease Mold Sampling

Environmental Monitoring Systems (EMS) in Charleston, S.C., in conjunction with QLab, SanAir Technologies and My Healthy Home, introduced a "do it yourself" allergen and mold test kit, the Examinair.

The kit includes a sampling pump that automatically collects the proper volume of air with the push of a button. The air samples are drawn into Micro 5 air monitoring cassettes, and are then sent to an accredited laboratory for analysis. User-friendly instructions and a prepaid shipping label are provided. In addition, the customer receives a full analysis report from the accredited laboratory and a 20-minute phone consultation with an indoor air quality professional about air quality concerns and result interpretation.

Examinair allows the client to collect three indoor air samples and one baseline outdoor sample, in a total of 20 minutes. The testing procedures are designed to limit cross contamination with all pumps being calibrated and examined prior to shipping. Analysis uses the spore counting methodology.

www.examinair.net

ANTIMICROBIALS

Concrobium Remediates Mold Without Harmful Chemicals

Concrobium Mold Control™, from Siamons International in Toronto, is an EPA-registered product, designed to remove mold without harmful chemicals. The patented product is 100-percent natural, which, according to the company, makes it a safe, effective solution for users and for the environment.

Concrobium works as it dries, forming an invisible,

Fluke 975 AirMeter Combines Five Instruments in One

Fluke Corp. in Everett, Wash., introduced its 975 AirMeter™ test tool. The rugged, handheld instrument simultaneously measures, logs and displays temperature (wet bulb and dew point), humidity, carbon dioxide and carbon monoxide levels on a bright, backlit display. It also includes airflow and velocity capability using the optional air velocity probe.

The tool captures min/max/average on all measured and calculated readings, displays readings in both metric and standard units and features a multi-language user interface. The instrument allows users to set threshold alarms, and has a 25,000-record capacity for continuous logging and 99-record capacity for discrete logging. Data can be downloaded to a personal computer via a USB interface.

www.fluke.com

antimicrobial coating that encapsulates and eliminates mold and fungal spores. The odorless, colorless coating remains on surfaces to provide continuous protection against mold and mildew growth. The product requires no special handling or isolation time, and can be used on virtually any surface. The product can also be safely fogged to treat entire rooms or inaccessible spaces, such as wall cavities and crawlspaces.

www.concrobium.com

Sporicidin Cleans Up

Sporicidin International in Rockville, Md., introduced its Enzyme Mold Cleaner. The product is a blend of three biodegradable enzymes in a highly concentrated formulation that the company says goes to work quickly to dissolve, deodorize and remove mold, mildew and other organic contaminates. It was created to reduce the time and effort needed to clean surfaces.

According to information from the company, the product is environmentally safe and user-friendly. It can be poured down the drain and the container discarded in regular trash. It is available in a 32-ounce bottle; one bottle makes 16 gallons of fully effective product.

www.sporicidin.com

Pegasus Acquires Rights to Mold Remove System

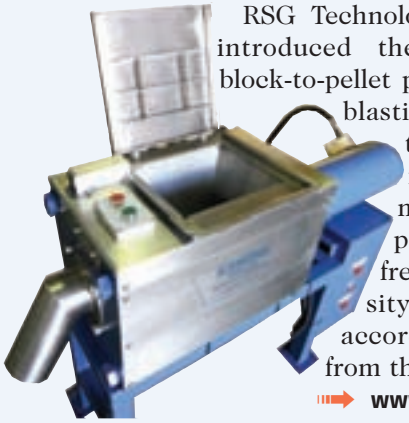
Pegasus Pharmaceuticals in Palm Beach Gardens, Fla., acquired the worldwide marketing rights to the Mold Remove System (MRS). MRS is a multi-component mold control system which removes mold infestation, cleans and disinfects surfaces and prevents future mold growth. It consists of a combination of non-toxic, biodegradable ingredients and, according to the company, may be utilized safely in any environment.

The company says that the MRS product performed well in a series of independent laboratory tests performed recently by ECA Inc. ECA tested the product on two pieces of drywall material treated with stachybotrys chartarum, aspergillus sp. and penicillum sp. Both surfaces were kept in high humidity conditions of 80-90 percent at +4° Centigrade. After initial growth of mold, one of the surfaces was treated with MRS. After 60 days, the untreated surface exhibited typical mold growth on approximately 80 percent of the surface, while no mold growth was observed on the treated drywall surface.

www.pegasusbiosciences.com

TOOLS AND EQUIPMENT

RSG Presses Its New Pellet-Maker



RSG Technologies in Dover, N.H., introduced the ICEsonic ISP100 block-to-pellet press to allow dry ice blasting users to create their own pellets. The machine is able to make up to 220 pounds per hour of fresh, ⅛-inch high-density blasting pellets, according to information from the company.

www.rsg-technologies.com

Video Inspection System Peeks into Moldy Ducts

Rotobrush® International LLC in Grapevine, Texas, launched the i2Cam™ marketing video inspection system. The 1-inch digital, lighted, color camera with 7-inch LCD monitor goes anywhere to allow contractors to perform video air duct inspections. The battery-operated system has a 12-foot cord, comes in a carrying case with adjustable strap and has an optional digital video recorder to capture and save the inspection.

www.rotobrush.com

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DEHUMIDIFIERS AND DRYERS

New Dehumidifiers Heat Things Up

The Dryvex™ R110 and R55 commercial dehumidifiers from Ground Heaters Inc. in Spring Lake, Mich., were designed to provide fast-drying solutions for the construction and restoration industries.

The R110 features an airflow rate of 471 cfm and has a drying capacity of up to 229 pints per day at 90 percent relative humidity (RH) and a temperature of 90° F. The 138-pound unit features a sturdy handle and roller wheels. The smaller R55 features an airflow rate of 294 cfm based on conditions of 60 percent RH and a temperature of 80° F.

Desired room humidity levels can be set via a remote Humidistat control box. Once the RH level is set on the control box, the unit will cycle on and off as needed. A condensate pump system runs automatically as water drains into a collection pan and runs into the pump system every 6-10 minutes.

➡ **www.groundheaters.com**

Air Quest Systems Introduces Desiccant Dehumidifier

Air Quest Systems Inc. in Kiln, Miss., introduced its 1200 commercial desiccant dehumidifier to the water damage and restoration market.

The unit features a new weather-resistant design and Hi-Lo handles for easy lifting.

It features 900 process cfm in a 240 volt single phase unit with user selectable 25 or 40 amp draw; using 240 volt power for the dehumidifier leaves all the outlets available for more air movers, according to information from the company. Dual 8-inch process outlets allow users to run dry air to interiors as well as attics

or crawlspaces. External filters and fuses allow for simple maintenance. For sensitive jobs, the unit is quiet with constant run or the humidistat control switch. The unit has no dampers, and is internally balanced. The user needs only to hook up duct and start drying.

➡ **www.4dryair.com**

Water Out® Convectant® Drying Gets Listed on Xactimate®

Water Out Drying Corp. of Jackson, N.J., reports that its Convectant drying process has been included in Xactimate® property insurance-estimating software. Convectant drying uses the manipulation of temperature, air movement and vapor pressure to create the conditions for evaporation. The drying process offers rapid drying and restoration of property to pre-loss conditions by exchanging the interior moisture-laden air with fresh, clean, outside air, with minimal tear-out and reconstruction required.

➡ **www.waterout.com** m

MARKETPLACE

SERVICES

CONSULTING SERVICES

MOISTURE CONTROL SERVICES

People

continued from page 15

bility and employee management.

Prior to joining Munters, Naughton was vice president of business development for Ark-Mark Inc. Naughton earned a bachelor's of science in general engineering from the United States Military Academy in West Point, N.Y., and a master's of business administration from Boston University.

AMG Names New VP of Sales

American Mold Guard in San Juan Capistrano, Calif., announced that **Robert Bayer** has joined the company as corporate vice president of sales. Bayer, who has more than 15 years of experience in national sales, will oversee national sales and build upon sales momentum within existing regions. He will also be responsible for the company's planned expansion in the Pacific Northwest, Southeast and Northeast.

Bayer held several senior level sales and marketing positions where he focused on increasing company revenue and building performance-driven sales teams. According to the company, Bayer has extensive sales training and support experience.

Briefly ...

Gary Gilman, president and owner of SteamMaster Restoration and Cleaning Inc. of Vail, Colo., has been awarded the American Indoor Air Quality Council mold remediation supervisor (CMRS) certification. According to information from the company, this designation recognizes Gilman's knowledge and field experience.

Advertiser Index

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15	Armacell LLC	800/866-5638	919/304-3720	www.armacell.com
17	EZ Breathe	888/822-7328	330/468-3231	www.ezbreathe.com
38	Fluke Corp.	800/760-4523	425/446-5116	www.fluke.com
3	Foster Specialty Construction Brands	800/231-9541	800/942-6856	www.fosterproducts.com
12-13	Georgia-Pacific Corp.	800/284-5347	404/230-5624	www.gp.com
1	Humidex Atlantic	866/486-4339	516/204-8118	www.humidexatlantic.com
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32	Mortar Net USA Ltd.	800/664-6638	219/939-3877	www.mortarnet.com
33	Siamons International	866/811-4148	416/674-9300	www.concrobium.com
21	Synthetic Surfaces Inc.	908/233-6803	908/233-6844	www.nordot.com
5	ThermaPureHeat	888/432-8665	805/649-1314	www.thermapure.com
37	VaporFree	615/867-0422	615/217-4826	www.vaporfree.com

Calendar 2007

May 3-5, 2007
Connections Conference and Exhibition
Hilton Clearwater Beach Resort.
Clearwater Beach, Fla.
Sponsored by Connections Events Inc.
Contact: 888/881-1001.

May 3-5, 2007
AIA National Convention and Design Exposition
Henry B. Gonzalez Convention Center.
San Antonio, Texas.
Sponsored by the Architects Institute of America (AIA).
Contact: AIA at 202/626-7300.

May 30-June 1, 2007
PCBC 2007
Moscone Center.
San Francisco.
Sponsored by the California Building Industry Association.
Contact: PCBC at 800/956-7469.

June 2-7, 2007
AIHce 2007
Pennsylvania Convention Center.
Philadelphia.
Sponsored by the American Industrial Hygiene Association.
Contact: Claire Davis at 703/846-0753.

June 18-21, 2007
NEHA Annual Conference
Tropicana Atlantic City Casino and Resort.
Atlantic City, N.J.
Sponsored by the National Environmental Health Association (NEHA).
Contact: Toni Roland at 303/756-9090.

June 19-21, 2007
Disaster Restoration Contractor's Conference and Trade Show
Doubletree International Plaza Hotel.
Toronto.
Organized by DRC Services Ltd.
Contact: DRC at 905/564-8218.

June 23-27, 2007
ASHRAE Summer Meeting
TBA.
Long Beach, Calif.
Sponsored by the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE).
Contact: Judy Marshall at 404/636-8400.

July 12-14, 2007
2007 Southeast Builders Conference (SEBC)
Orange County Convention Center.
Orlando, Fla.
Sponsored by the Florida Home Builders Association.
Contact: SEBC at 800/261-9447.

September 12-14, 2007
Connections Convention and Trade Show
Las Vegas Hilton.
Las Vegas.
Sponsored by Connections Events Inc.
Contact: Connections Events at 888/881-1001.

Politicians Face Water Damage Problems

While it is debatable whether federal government will regulate the mold industry, several politicians have been forced to address the issue of water damage in recent weeks. **Moldmag** gathered a couple stories from the consumer press that demonstrate how the topics of mold and water damage have worked their way into political discourse.

The Massachusetts House Suffers Water Damage

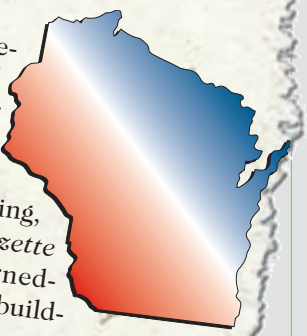
Six Massachusetts lawmakers went to work on water damage issues one morning in January when they found their offices soaking wet, the result of a burst water pipe.

According to an article in the *Boston Herald Reporter*, the State House superintendent Neil Kilpeck attributed the problem to a cooling fan failure, which left a portion of the ceiling pipes unheated during a freeze. The low temperatures caused the attic pipe to burst, leaving tens of thousands of dollars of damage in the historic building, according to an article in The *Boston Herald*.

Reps. Stephen Canessa, Linda Forry, Michael Moran, Joseph Driscoll and Christopher Speranzo and House Majority Whip Lida Harkins were forced to relocate to other State House offices for about three weeks, while carpets and office equipment were replaced and repairs were made to carpet, plaster and paint, according to the *Reporter*.

Kilpeck told the *Reporter* that the Bureau of State Office Buildings had already begun a project to update the heating and cooling systems in the building, complete with remote sensors to monitor the air temperatures; the system is expected to prevent such future occurrences.

A Mold Grows in Washington



Doctor and U.S. Representative-elect Steve Kagen (D-Wis.) tried on another hat in December 2006: that of mold inspector. During a tour of his new office in the Longworth House Office Building, the Green Bay, Wis., *Press-Gazette* reported that the allergist-turned-politician inspected mold in the building's basement.

A December 6, 2006, article in *The Hill*, a D.C. newspaper covering Congress, alerted the Congressman to the potential problem. *The Hill* noted that the Architect of the Capitol had been alerted to the building's basement mold, which had developed due to moisture from Capitol Power Plant utility tunnels, in October. According to the paper, a remediation contractor had been hired to remove the mold.

Before the pros came in, representatives from the Architect of the Capitol fitted Kagen with a respirator and let him take a look. The *Press-Gazette* reported that Kagen was curious to see the mold, having already heard of workers having problems with asthma, allergies and sinus irritation.

"The good news is that it's been adequately contained, so that it looks like it won't be an issue," Kagen told the paper after the inspection. m

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