



IES expands its services

With just one short year under our belt, IES already has expanded.

Our Batavia-based energy efficiency company recently formed a partnership with experienced architect Lane Allen, AIA, LEED –AP.

Allen will oversee a new division: IES Commercial

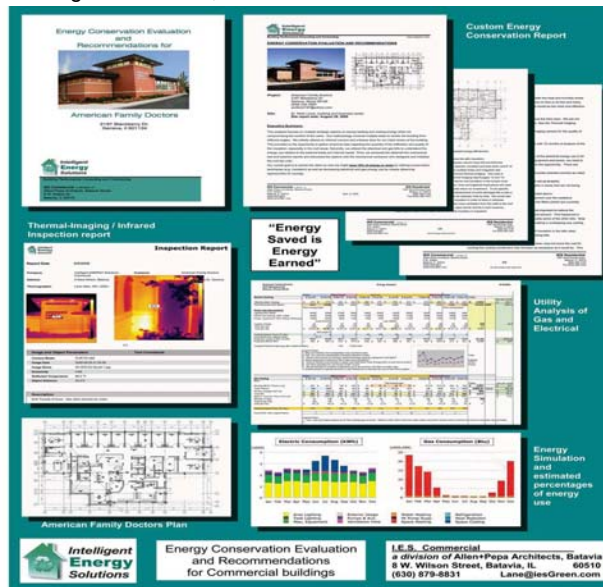
He has 30 years experience in all levels of design, engineering coordination, and

The commercial division of IES has the tools to increase a facility's energy efficiency, indoor air quality, and comfort level and also perform cost-effective repairs, install insulation, complete sealing projects, evaluate HVAC systems, install window and door replacements, and retrofit lighting.

"This is a good fit to broaden our services," said

"He's a certified LEED green-building professional, which is a perfect fit for what we're trying to achieve at IES," Botkin said.

Continued on Page 4

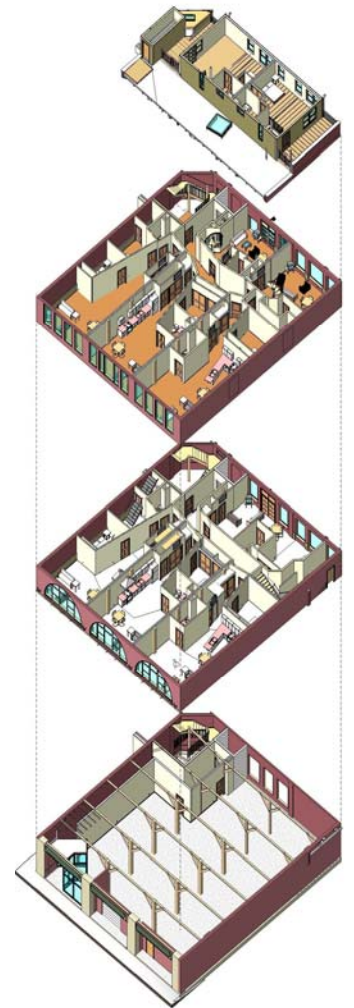


construction; his knowledge is a great asset to IES as we strive to find additional ways of conserving energy.

Allen will focus on IES's commercial projects, such as energy audits, retrofitting services, and weatherization consultations for commercial and multi-family buildings.

Tony Botkin, who will continue to oversee IES' residential projects, construction services and builder services.

Botkin says Allen is the right person to bring on-board because of his vast experience in architecture.



3-D Modeling with Revit Architectural software



Ice Damming - A problem we can solve p.3

Inside this issue:

IES assists ComEd/Honeywell with audits	2
IES offers solutions for houses of all ages	2
IES seals up special recognition	2
What to expect during an in-home visit	3
IES cracks ice-damming problem	3
Seasonal reminders	4

IES assists ComEd and Honeywell with energy audits

When Honeywell Utility Solutions needed experienced technicians to help perform air sealing work for ComEd's *Smart IdeasSM Enhanced All-Electric Home Performance Tune-Up* pilot, they knew just where to go for assistance: IES.

IES personnel supplied home energy audit diagnostic testing services, including infrared camera inspections and blower door tests. Resultant air leaks and energy-wasting conditions were then identified and remedied.

The result? A 20 to 30 percent reduction in air leakage resulting in fewer drafts and reduced energy bills.

To date, IES has helped ComEd and Honeywell improve the energy efficiency of about 30 homes. ComEd customers are satisfied with IES' performance and expertise.

Tony Botkin, IES (Left) examines infrared camera views and blower door pressure readings with George Malek, ComEd Energy Doctor, during a recent home energy audit.



IES offers energy-saving solutions for houses of all ages

Whether your house is 1 or 100 years old, IES can make it more energy-efficient this winter.

That's what we did for Wheaton resident Bonnie Wheaton.

Ms. Wheaton lives in a house built more than a century ago and was very pleased with recent improvements IES made to her home.

After performing an energy audit on her home, our crews insulated Ms. Wheaton's attic by applying spray

foam in the rafters. We also adjusted the weather stripping on her windows and doors to reduce air leakage. In addition, we foamed portions of the basement to

insulate and air seal that area of the house.

"Tony, I thought you'd like to know that although it's 11 degrees outside, it's 61 degrees in my attic. I can't believe that heat has been going out my roof for over a century. I can't wait to see what my energy usage is compared to prior years. Your guys did a great job of cleaning up, too. The attic hasn't looked so well-swept since I moved in in 1977. Thanks."

Bonnie Wheaton, Wheaton resident



IES seals up special recognition from R.A. Faganel Builders

Batavia-based R.A. Faganel Builders recently sold one of its most air-tight homes ever, thanks in large part to IES. The new home, part of the Tall Oaks subdivision in Elgin, is one of the most energy-efficient homes recently on the market.

We insulated and completed air sealing in the house, using caulking and foaming techniques. Following IES's specifications for new construction, pre-closing testing revealed that the house was one of the most air-tight ever delivered by R.A. Fa-



ganel, a company well-known for building energy-efficient homes.

IES serves as a consultant for various builders, including R.A. Faganel. We develop energy efficiency standards that R.A. Faganel uses as it builds new homes. Because R.A. Faganel abides by these standards, this builder is constructing some of the most energy-efficient homes on the market and, ultimately, saving homeowners money on energy bills.

Clients can expect thorough procedure during in-home visit

If you're noticing everything from drafty rooms to high utility bills this winter, remember that you don't need to call multiple vendors to fix your problems.

IES is a unique, single-source home performance provider. We take care of everything from home energy audits to consultations to the actual improvements needed in each home.

If you plan to contact us for a home energy audit, here's the process you can expect us to follow:

In-home site visit:

- First, we meet with you, the client, and provide an overview of the energy audit process.
- Next, you tell us about your home during an orientation as we inquire about unusual conditions and cold or drafty rooms. We also offer general recommendations and energy efficiency tips during this orientation.
- Then, we physically inspect your home, which includes assessment of the attic, basement, windows, doors, lights, and mechanical equipment. We record existing conditions and insulation levels, as well as model numbers. We also record dimensions of the home, window sizes, and site conditions.
- We then conduct combustion safety tests at combustion appliance zones, using a carbon monoxide leak detector and pressure sensing manometer to establish house depressurization limits. *Back drafting and improper ventilation are serious concerns and are a priority in establishing building tightness limits.*
- Then, we conduct the blower door

test to measure total air leakage.

- While the blower door fan is running, we view the exterior envelope of the house; using our infrared camera, we identify air infiltration and under-performing or missing insulation. We then photograph areas of concern, to be included later in the final report.

- We then conduct a duct leakage test, using Minneapolis Duct Blaster equipment, to determine total duct leakage to the exterior of the home.

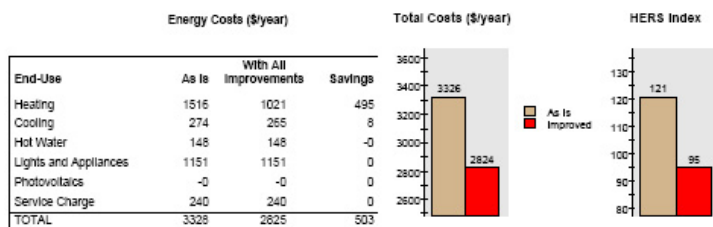
Generating report:

- The energy auditor then assembles the gathered information and inputs it into the Rem/Rate software program for additional analysis.
 - We use the Rem/Rate software to run a series of suggested improvements, which will show their impact on the energy efficiency of the home.
 - We download infrared pictures and make notes on areas of concern.
- We then assemble the site visit notes, results from the Rem/Rate software, and

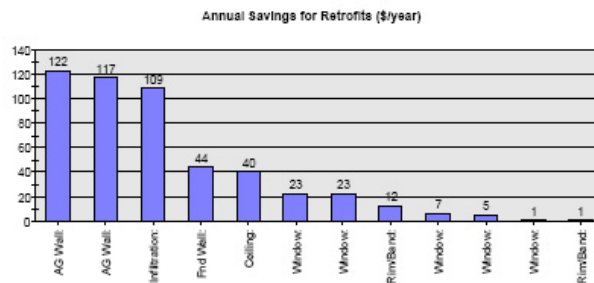
infrared photos into a final report.

Final report and implementing improvements:

- The final report, often 25+ pages, will provide a detailed listing of improvements along with realistic energy-saving calculations.
- We also can provide a proposal for implementing the improvements in a timely, professional, and cost-effective manner.
- We will conduct post-work testing to verify that the targeted improvements of the work have been achieved and to ensure that the overall health standards for the home are above expectations.



The bar chart below displays the annual energy cost savings (\$ per year) associated with the energy retrofits you choose. Some retrofits interact with one another, and the total savings offered by each can change if the package of combined retrofits changes. For example, if you increase the insulation of your home, the energy savings you can gain from installing a more efficient furnace will be less than if you only install the furnace. However, the total savings will be greater if you choose both retrofits.



IES cracks ice-damming problem, offers solutions for clients

As temperatures drop this winter, don't focus your attention solely on interior concerns within your home.

Monitor your home's exterior, as well.

Ice damming can strike roofs during winter months, when temperatures drop below freezing.

Ice dams can form when snow is on the roof, the average outside temperature is below 32 degrees, and your *house unnecessarily loses heat through the ceiling,*

causing the snow to melt and then re-freeze further down the roof.

If left untreated, a dam grows as melting snow accumulates; water, however, held by the dam backs up and stays liquid. Eventually, the water seeps into cracks in the roof covering and flows into the attic and can end up trickling through the ceiling and interior walls.

This could lead to water damage inside walls, rot, mold and, ultimately, premature

deterioration of a home's structure.

If you are experiencing ice damming problems this winter, IES has the solution.

We can use our infrared camera to detect exactly where heat loss is occurring, specific locations of ice damming problems, and locations of trapped water in the walls. With our insulation truck and experienced crew, IES can provide a quick, cost-effective solution to any ice damming problem.



Intelligent Energy Solutions, LLC

1387 Wind Energy Pass
Batavia, IL 60510

www.iesgreen.com

Phone: 1-866-496-1730

Fax: 630-389-1023

E-mail: info@iesgreen.com

IES - Your Complete Comfort and Energy Efficiency Experts



Seasonal Reminders

This winter, wave goodbye to pesky window condensation

Winter and window condensation often go hand in hand.

But long-term exposure to condensation can lead to several problems if not addressed. The finish on a window, whether it's paint or stain, will deteriorate over time. If left untreated long enough, mold growth can occur.

IES has the following tips for dealing with window condensation this winter.

Condensation or ice forms on windows because the window surface is below the dew point of the air nearest the window. As the warm and moist air of the house pass over the window, some of the moisture in the air condenses on the glass. The colder the outdoor temperature, the more likely you are to have condensation.

The use of drapes or blinds over windows can increase the condensation. If you close drapes over windows, this can cause the glass temperature and the temperature of the air between the drape and the glass to become cooler, thus providing

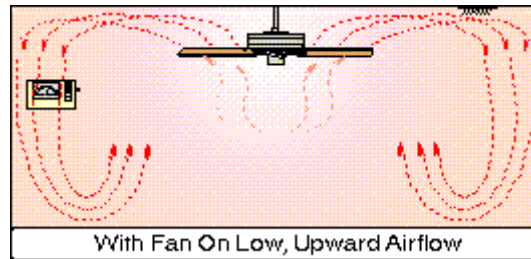
a lower dew point and more condensation.

First, turn down the humidifier. The rule of thumb for operating the humidifier is to turn it up until you begin to see condensation on the windows, and then turn it back down. Remember, as the outside air becomes colder, the lower you will need to turn the humidifier. The colder temperatures cause the furnace and humidifier to operate more frequently and produce more moisture.

Second, open or raise drapes and blinds during the day. This will allow air to pass over the glass, warming it and raising the dew point of the window. The movement of air over the glass also may help dry out any condensation that has occurred overnight. You can close the window coverings at night.

Third, operate the ceiling fans in reverse. By

running the fan to pull the air up, it will force the warm air that has accumulated toward the ceiling down the walls and over the windows. The air moving over the



windows will aid in drying out any condensation that may have developed overnight. Additionally, the air also will raise the temperature of the glass, resulting in less condensation.

Fourth, when taking showers or cooking, be sure to run the exhaust fans in these locations. The fan will provide a means of removing the over-humidified air before it has a chance to reach a cold surface and turn into condensation.

If you have a severe condensation problem in your home during the winter months, or would simply like some precise information for your situation, please contact us; we would be glad to help.

Continued from page 1

Allen and Botkin already have worked together on several projects, including on an energy audit for American Family Doctor in Geneva and an energy audit proposal for Family Harvest Church in Tinley Park.

Multi-tenant residential, senior centers, churches and large industrial lighting retrofits are ideal projects.

The new partnership will enable IES to complete thorough commercial audits throughout the Chicagoland area and offer design-build services. IES is unique in our ability to offer clients comprehensive energy efficiency services, from conceptual drawings through complete retrofit services.

Both Allen and Botkin have extensive experience in their respective fields and continue to increase their knowledge by attending various technical seminars and conferences.

Lane Allen

--LEED Accredited Professional

--Licensed architect and principal of the Batavia Studio of Allen+Pepa Architects in Batavia; this firm promotes construction methods that result in energy-efficient buildings with long-term sustainability

--Long-time advocate of planning concepts that focus on holistic development of neighborhoods and communities; has presented numerous programs to educate municipalities and the public on this subject

--Has won various awards for his work, including the 2008 Project of the Year, awarded by the American Public Works Association, for the Donovan Bridge in Batavia.



New IES web site will be unveiled in February

Look for a new and much-improved IES web site this February. Images International, a marketing, advertising, and media firm, has been working on the site for several months, assembling the many aspects of IES into an attractive and informative site.