

Remodelers and Contractors



We'll change the way you think about



The Icynene Insulation System[®]
Healthier, Quieter, More Energy Efficient[®]



How can you overcome the challenge of employing sustainable upgrades that add more than just resale value to your clients' homes – on-budget and on-schedule?

Icynene® – The only insulation system that works with you and your remodeling projects

The Icynene Insulation System® offers remodelers and home improvers an effective way to upgrade the performance of an existing structure like no conventional insulation can. Areas and shapes that would be difficult or impossible to insulate with conventional insulation present no challenge for Icynene®. As a soft-foam insulation and air barrier system, Icynene® expands to fill all gaps and crevices that compromise airtightness, creating a perfect seal for upgraded performance and comfort.

In its spray form, Icynene® is ideal for renovation projects where the interior surfaces of walls, ceilings, and floors are exposed. The material is sprayed-in-place and permanently adheres to the construction material to control air leakage, especially in those problem areas like crawlspaces, rim joists and around doors and windows.

Icynene®'s pour fill formula is perfect for restoration projects because it eliminates the need for gutting or tearing down existing walls. Through tiny pre-drilled holes, Icynene® is poured-in-place and gently rises to perfectly fill and seal the enclosed cavity.

Not only does Icynene® work as an insulation, it also works as an air barrier system to deliver optimal airtightness *in just one step*. As a remodeler, you will experience a streamlined construction process, reduced scheduling challenges, decreased costs and unlimited design possibilities. For your clients, this one-step air-sealing process creates fewer disruptions to their routine and ensures increased long-term satisfaction.

Air Leakage – The Major Culprit in Home Invasions

Typically, older homes insulated with conventional insulation experience wasteful amounts of air changes each hour. Icynene® softly expands to conform to the shape of the structure and provide a continuous, protective barrier, leaving no cracks or crevices susceptible to air infiltration.

What's So Important About Minimizing Air Leakage?
By minimizing air leakage, Icynene® eliminates unnecessary energy consumption to deliver a consistent indoor temperature, improved indoor air quality and reduced airborne noise originating from outside and adjacent rooms.



Not only is air leakage the chief cause of moisture buildup in a home, it also leads to a host of other problems. Thermal performance, health issues, noise control, and structural soundness are all negatively affected by air leakage.

Consider these alarming facts:

- Air leakage accounts for 99% of moisture movement in a structure, which can result in mold growth and adverse health effects for occupants (*Source: Canada Mortgage and Housing Corporation*)
- Air leakage can account for as much as 40% of a structure's energy loss (*Source: Energy Star®*)
- 40% of households contain at least one member who suffers from asthma or allergies (*Source: American Lung Association*)

Clearly, controlling air leakage is key to maintaining a healthy home, as well as healthy occupants. Insulation that fails to prevent air leakage fails to do its job. Period.

The Best Way to Control Air Leakage? Create a Complete Seal

Conventional insulation leaves gaps and seams where air can move through the building envelope. However, a complete insulation and air barrier system such as The Icynene Insulation System® can effectively minimize air leakage by sealing the building envelope. Icynene® produces a uniform, seamless barrier to ensure optimal airtightness.



Icynene® is the First Step in the Right Direction

Before beginning a remodeling project, you should also consider the impact on whole-house performance. Any change made to an existing home must be properly integrated into the building envelope and the systems within it. Icynene® delivers high-performance results because it works well with other building components and makes it easy to incorporate Green upgrades without losing sight of the home as a whole system.

An Icynene®-insulated home delivers the kind of benefits your clients are looking for:

1. Improved Indoor Air Quality (IAQ)

With asthma rates on the rise, homeowners take comfort in knowing that Icynene® is a Green material that improves the quality of the indoor air they breathe. As the only insulation with the Enviroidesic™ certification, Icynene® reduces random air leakage and limits the penetration of outdoor allergens and pollutants. It is the ideal base for a healthy structure and is recommended for construction for people with hypersensitivities.

Because Icynene® is 100% water-blown, formaldehyde-free and contains no HCFCs, HFAs, HFCs, HCs or VOCs, it has been the insulation of choice for many of the American Lung Association's "Health Houses" to help inhabitants breathe easier.

Effective Moisture Management

Icynene® delivers advanced moisture management by forming an air-seal to minimize air movement and accompanying moisture. By minimizing moisture transport through the building envelope, Icynene® helps to prevent condensation and the potential for mold growth within the walls and ceilings. Even if Icynene® gets wet (through a roof leak, for instance), the material doesn't wick water. Icynene®'s open-celled structure allows it to remain unaffected by wetting and drying so that it can continue to operate at peak performance levels. Water simply drains right

Healthier

through Icynene® by gravity, making it easy to detect the location of the leak.

2. Increased Sound Control

Traffic, neighborhood activities, and plumbing runs can be the sources of annoying sounds –the unwanted noises that can invade living spaces, hindering comfort and enjoyment. These sounds most commonly travel through the air.

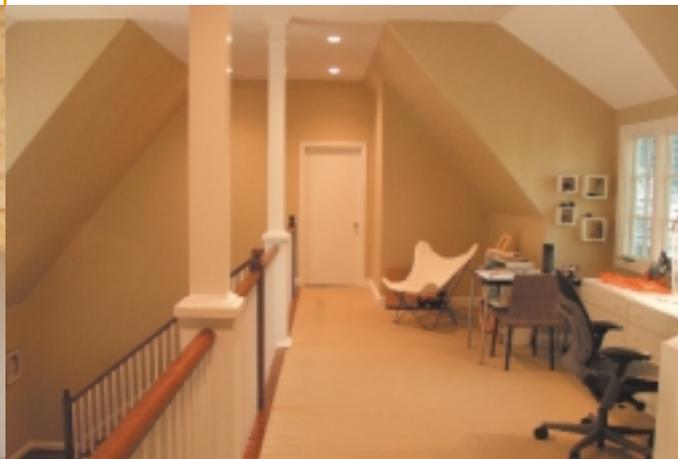
By sealing the building envelope, Icynene® effectively minimizes airborne sounds. Icynene® is perfect for dampening noises from plumbing runs, roads, home theaters and playrooms.

Quieter

3. Maximum Energy Conservation

With Icynene®, energy costs are reduced by up to 50% versus conventional insulation. And the savings don't stop there. Eliminating random air leakage allows Icynene® homes to maintain the same heating and cooling performance with smaller, less expensive HVAC equipment. Labor and materials normally required to achieve a properly sealed building envelope are no longer necessary. With less time and money, you can offer your clients lower energy costs and enable them to qualify for an energy efficient mortgage.

More Energy Efficient





Prepare Yourself for the Remodeling Boom

Eighty percent of homeowners have stated in a recent NAHB survey that they would pay a premium for an environmentally-friendly home. This is partially due to the fact that homeowners are able to recover as much as 90% of the cost of home improvements and, when selling, Green upgrades contribute to higher home resale values.

Home improvement activity is expected to see even further gains because of a new wave of homeowners – the "Aging-in-place" remodeling segment. 'Aging-in-place' – a term used to describe the trend for aging homeowners who remain in their homes longer – will have a major impact on the remodeling business.

A staggering 80% of Americans 55 years or older own their own homes and many intend to stay put even

once the kids have moved out. This presents a new opportunity for remodelers. Not only are baby boomers healthier and wealthier than previous generations at their age, they want their homes to reflect their active, independent and upscale lifestyles. And Icynene® makes it possible for remodelers to offer quality and innovation coupled with a healthier, more comfortable indoor environment.

The Icynene Insulation System® Supports Your Reputation and Your Business

Conventional insulation just doesn't cut it anymore. It pays to have a reputation for delivering consistent, high-quality projects and the sure path to referral leads is to deliver a great product wrapped in exceptional service. Icynene® is a product that will add value to your remodeling projects, your reputation, and your

business growth potential. Because Icynene® promotes durability, safety, convenience and style, it is the insulation of choice for high-profile projects like Southface's EarthCraft House™, IBACOS' The New American Home®, model reMODEL, and the American Lung Association's Health House® program – all of which have used Icynene® and have documented its contribution to environmental stewardship, energy savings and better quality buildings.

Add Value to Your Business with Icynene®

Icynene® is a remodeling investment that pays back in several ways. Just like a new kitchen or bathroom, the Icynene® installation adds more than just resale value to a home. Icynene® improves the livability of the home and allows homeowners to realize cost savings on their first bill after the installation of Icynene®.

Icynene® also pays off in health benefits by keeping pollutants, pollen, allergens, dust and soot outside. Thanks to Icynene®'s superior acoustic performance, street noise from traffic and machinery is also kept outside.

Why Is Icynene® the Right Choice For Your Clients?

- Up to 50% monthly energy savings
- Improved indoor air quality
- Increased comfort - draft-free; moisture management
- Enhanced sound control
- Higher home resale value
- No shrinking, sagging or settling

Don't compromise your reputation. Choose Icynene® for ultimate client satisfaction.



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To request a free copy of Icynene's Earthcraft House™ Renovation case study call 1-800-758-7325, or you can download this and other case studies from Icynene.com



Icynene is proud to be certified by Envirodesic™ and to be a member of the U.S. Green Building Council.



The Icynene Insulation System® is featured in

- **model reMODEL** renovation showcase homes
- **Award-winning EarthCraft House™** renovation
- **Bob Vila's dotCOM dreamHOME**
- **American Lung Association** – Health House® National Demonstration Home (Florida, Washington, Oregon, Iowa, Michigan, and Minnesota)

Product Approvals

- ICC (BOCA, SBCCI, ICBO), CCMC, ITS/Warnock Hersey

Affiliations

- NAHB, NCHI, AIBD, AIA CEU Provider, EEBA

Technical Data

- | | |
|------------------------------------|--|
| • Density (ASTM D 1622) | 0.5 lb/ cf |
| • Thermal Performance (ASTM C 518) | R-3.6 per inch |
| • Air Permeance (ASTM E 283) | 0.0049L/s-m ² @75 Pa for 5.25" |
| • Flame Spread (ASTM E 84) | <20 |
| • Smoke Development (ASTM E 84) | <400 |
| • Fuel Contribution (ASTM E 84) | zero |
| • Oxygen Index (ASTM D 2863) | 23 |
| • Vapor Permeance (ASTM E 96) | 10 perms or 565 ng/(Pa.s.m ²) @ 5" thick |
| • STC (ASTM E 90) | 37 2"x4" wood stud wall assembly |
| • NRC (ASTM C 423) | 70 2"x4" wood stud wall assembly |

Product Testing

- ASTM E 119/ CAN4-S101-M89: 1 hour fire rated wall assemblies
- ASTM E 119: 1 hour fire rated floor ceiling assemblies

- Icynene® is not a food source for mold based on testing by Texas Tech University
- Icynene® meets ALA Health House®, EarthCraft™ and Energy Star® energy efficiency standards
- Icynene® is the only insulation certified by the Envirosesic™ Certification Program as a building material that promotes Maximum Indoor Air Quality™ and sustainability
- Icynene® contains no HCFCs, HFAs, HFCs, HCs, formaldehyde or VOCs
- Icynene® does not cause corrosion

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For more information, visit Icynene.com or call us at 1-800-758-7325

