

# WHY ICYNENE®?



**Healthier** insulation solutions using water-blown technology

**Quieter** indoor environment to improve quality of life

**More Energy Efficient** for reduced operating costs and superior savings



Icynene is installed in adherence with local building codes. Once applied, finished appearance may vary from photo shown.

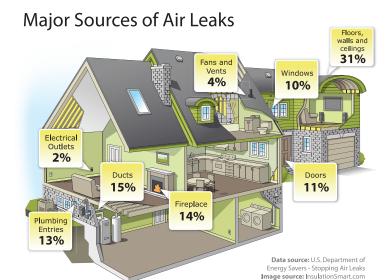
Icynene spray foam insulation is available in an array of formulations to suit individual project goals and needs. Regardless of the Icynene product you choose, rest assured you will be working with key advancements in spray foam insulation as all products feature the following suite of benefits:

- verified as an air barrier
- 100% water-blown technology
- a blowing agent with the lowest Global Warming Potential (GWP)<sup>1</sup> value of 1
- free from PBDEs (Polybrominated Diphenyl Ethers)
- Low Emitting Materials (LEM) as per CHPS EQ 2.2 Section 01350

Icynene insulation and air barrier products can be sprayed into walls, ceilings, floors, crawlspaces, and attics to deliver superior insulating and airsealing results. Ideal for wood or steel framing, Icynene products adhere to a variety of substrates and in various conditions.

#### **Take Control of Air Movement**

Air leakage can contribute to as much as 50% of a building's energy loss, according to the Department of Energy. And building science experts recognize that controlling air leakage, complemented by a reasonable R-value level, will have a greater impact on energy conservation than R-value alone. Icynene's Light Density and Medium Density insulation options are all classified as air barriers to help stop air leaks and achieve key green building goals such as saving energy, controlling airborne moisture, enhancing durability, and adding comfort.



#### **Energy Efficiency**

Icynene's suite of products helps reduce energy costs by up to 50% versus conventional, airpermeable insulation. By assuming two tasks – thermal insulation and air barrier – Icynene can help achieve an airtightness level of 0.1 air changes per hour at natural pressure (ACH<sub>nat</sub>) without the extensive use of labor-intensive sealing materials. Icynene insulations can optimize heating and cooling performance with smaller, less expensive HVAC equipment for additional cost savings.

#### **Indoor Environmental Quality (IEQ)**

Buildings that minimize indoor air pollution promote health, comfort, and productivity. Icynene insulation and air barrier products support a project's IEQ goals by minimizing the causes of unhealthy buildings. Icynene delivers a continuous thermal barrier that seals around plumbing, vents and electrical openings as well as other cracks and voids that allow unwanted air leakage. Leaving no gaps or seams once applied (which can compromise building performance), Icynene minimizes the entry of airborne irritants such as allergens, drafts, or humidity. Combined with proper mechanical ventilation, Icynene products allow occupants to control the quality of the indoor air they breathe.

#### **Moisture Management**

Icynene insulation delivers advanced moisture management by forming an air seal to minimize air movement. By minimizing air transported moisture through the building envelope, Icynene helps to prevent condensation and the resulting potential for mold growth within walls and ceilings. Icynene Low Density Foams (LD-C-50<sup>TM</sup> and LD-R-50<sup>TM</sup>) have an open-celled structure for superior breathability, allowing them to dry and remain unaffected by minor wetting so they can continue to operate at peak performance levels. This open-cell technology helps in the identification and diagnosis of leaks and in protecting roof decks from sustained wetting/conditions that can lead to rot. It is also helpful in drying moisture trapped in adjoining materials. Wood framing and fresh concrete, for example, can have vast amounts of moisture trapped in their pores. A "breathable" insulation such as LD-R-50<sup>TM</sup> or LD-C-50<sup>TM</sup> allows these materials to dry over time helping to minimize the potential for damage.

For areas that require insulation with a lower vapor permeance, Icynene's Medium Density products are available. These products are ideal for use in areas with higher levels of humidity, such as crawlspaces, or where a higher R-value per inch is required.

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#### **Reduce Your Project's Footprint**

Homeowners are increasingly aware that the right building product choices can have positive health implications to them, their community and the natural environment. Icynene Inc. believes that being a good corporate neighbor and a responsible steward of the world's resources means providing innovative solutions that help address issues such as global warming.

Icynene products feature 100% water-blown technology with the lowest Global Warming Potential (value of 1). An alternative to the water-blown technology is the use of synthetic blowing agents. Icynene as a company has chosen not to use synthetic blowing agents, some of which have high GWP (value of 950).<sup>2</sup>

Icynene's air-sealing properties also assist builders and designers in making efficient use of energy, which in turn helps to reduce related Greenhouse Gas Emissions. Using Icynene insulation in place of an air-permeable option can dramatically reduce a building's carbon footprint by as much as 50% since less energy is required to heat and cool the building.

Selecting Icynene products containing renewable or recycled content can further reduce environmental impact and possibly tip the scale to help take your project to a higher level of certification within green building programs such as LEED. Explore Icynene's environmentally preferable line of products, including ICYNENE LD-R-50<sup>TM</sup> (Light Density insulation/air barrier with renewable content) and ICYNENE MD-R-200<sup>TM</sup> (Medium Density insulation/air barrier with recycled content).

Icynene. Facilitating the blueprint while reducing its footprint.



### **Long-Term Comfort**

The right insulation is an investment that pays for itself in significant energy savings. It's an investment that you will rarely see, but will feel the effects every day. Why not choose the peace of mind that comes with a Healthier, Quieter, More Energy Efficient® indoor environment.

Icynene's portfolio of insulation solutions is ideal for residential or commercial use. Let us provide you with a list of products and performance data to meet your needs.



## For more information, visit our website at

Icynene.com

or call toll-free 1-800-758-7325







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- All measures of GWP are given relative to carbon dioxide, the most well-known gas with global warming potential, which has a GWP of 1. Synthetic blowing agents can have a GWP value of as much as 950.
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