

REPAIR & PREPARE

IN THE AFTERMATH OF A HURRICANE OR FLOODING, SPRAY FOAM INSULATION IS AN INVESTMENT IN FUTURE PREPAREDNESS AND PROTECTION. ICYNENE SPRAY FOAM INSULATION CAN BE USED TO AID REMEDIATION EFFORTS FOLLOWING A DISASTER.

Extreme weather events like hurricanes and floods can cause serious damage to buildings. The damage sustained, whether wind-driven or water-driven, can be extensive and expensive to repair. Spray foam insulation can be a key component in the design of building assemblies against future disaster-driven damage. Closed-cell spray foam is identified as a flood-resistant material used in coastal homes by U.S. Federal Emergency Management Agency (FEMA) due to its resilience.

“Flooding accounts for a large percentage of the damage caused by a coastal storm. Building materials exposed to flooding must be resilient enough to sustain a certain amount of water exposure in order to avoid the need for complete replacement after the flood.”

FEMA defines a flood-resistant material as any building material capable of withstanding direct and prolonged contact with floodwaters without sustaining significant damage.

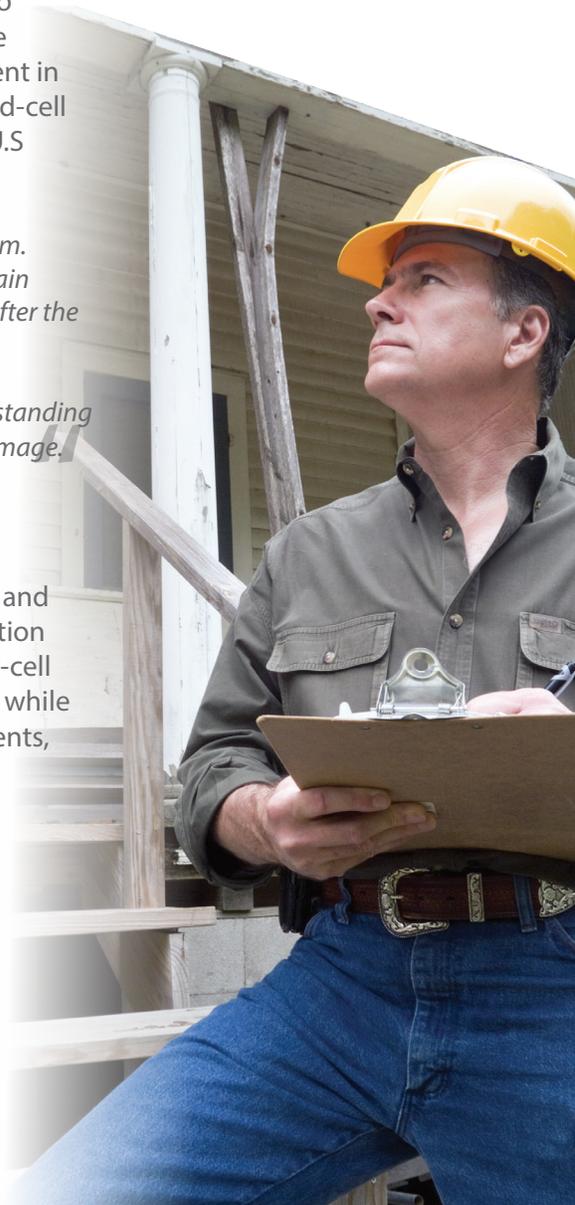
FEMA COASTAL BUILDING MATERIALS TECHNICAL FACT SHEET NO.8

HOW SPRAY FOAM INSULATION WORKS

When applied, spray foam insulation expands within seconds to fill every crack and gap in a wall or roof cavity. Whether open-cell or closed-cell, spray foam insulation is an effective air-barrier and helps minimize heating and cooling costs. Closed-cell spray foam can be used a water-resistant barrier to help deflect moisture away, while open-cell spray foam breathes for bi-directional drying. In extreme weather events, spray foam offers additional benefits.



ICYNENE®
THE EVOLUTION OF INSULATION



WORRIED ABOUT ROOF DAMAGE?

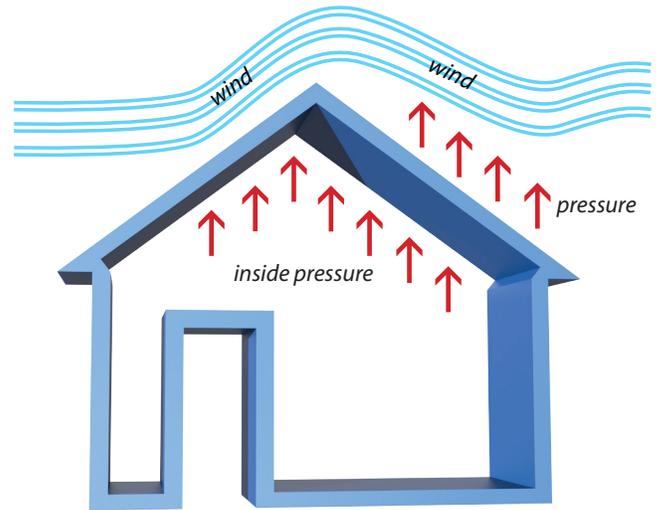
Water ingress is one of the most common of insurance claims. An unvented roof designed around spray foam is one easy solution to protect from roof damage during extreme weather events. An unvented roof has fewer openings, therefore the chance of water penetration is reduced. Icynene spray foam actually provides several roof protection benefits:

- Open-cell spray foams, like Icynene Classic™ and Icynene Classic Max™, expand 100 times their size upon application to provide a superior air seal that completely seals and insulates the roof space.
- In the event of a roof leak, open-cell spray foam is vapor permeable allowing for bi-directional drying allowing leaks to be detected and repaired immediately. Bidirectional drying helps protect the roof sheathing from rot and moisture damage.
- Closed-cell spray foam can be used as a water resistant barrier to deflect water, especially wind-driven rain.
- Where additional hurricane hold-down resistance is required, all Icynene spray foam products benefit an unvented roof by eliminating upward pressures from pressurizing the attic via roof vents.

WIND, WATER & WALLS

The strong winds of a hurricane and threat of wind-driven rain and flooding can be confidently addressed with the use of spray foam. Icynene spray foams are considered air-impermeable materials that help deflect wind and wind-driven rain.

- Light-density spray foam reject water penetration and have a low water absorption (less than 5%).
- Medium-density spray foams are considered water-resistant barriers with very low water absorption (less than 1%).
- Medium-density spray foams are able to provide additional 'racking' strength to help resist the high winds of a storm or hurricane.



ALL ICYNENE SPRAY FOAM PRODUCTS BENEFIT AN UNVENTED ROOF BY ELIMINATING UPWARD PRESSURES, AS ABOVE, FROM PRESSURIZING THE ATTIC VIA ROOF VENTS.

SPRAY FOAM IN BASEMENTS AND CRAWLSPACES

Icynene spray foam can help protect the most vulnerable area of a building during extreme weather. Icynene spray foam insulation is considered an air barrier, so it helps limit the penetration of moist air entering a building. In non flood-prone areas, light-density spray foams, like Icynene Classic™ and Icynene Classic Max™ are air-barriers that breathe to allow basements to dry. In flood zones, medium-density spray foam can be used since it does not absorb moisture.

With a range of benefits, Investing in Icynene spray foam helps prepare and protect homeowners and building owners against future extreme weather events with confidence.



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