

MYTH #1

**Certain types of insulation
are air barriers**

REALITY

The home is a system. No cavity insulation **ALONE
is capable of providing a continuous air barrier.**

It's a two step process. The sill plates need to be sealed and lengthwise stud cavities should be caulked. There needs to be good attention to detail around pipes/openings. This applies to all insulation – spray-applied foams, fiber glass, mineral wool and cellulose, etc. Studies done by NAHB and others confirm that with proper air sealing, various insulations perform equally.

NAIMA
NORTH AMERICAN INSULATION
MANUFACTURERS ASSOCIATION

**STAY
TUNED!**



Insulation = Air Infiltration.



Insulation = Thermal Performance.

No insulation plays a major role in blocking air infiltration through the walls of a home. Resistance to air flow through walls is primarily done by gypsum board (77%)* and sheathing, siding or housewrap (12%)*. The rest comes from proper sealing of the building envelope and the numerous gaps and penetrations to the outside such as pipes, ducts, and flues. Many of these areas can be difficult or impractical to seal with spray-foam insulation, and may require caulking or other sealing measures. Don't be fooled. Air infiltration is not about insulation.

NAIMA
NORTH AMERICAN INSULATION
MANUFACTURERS ASSOCIATION

**STAY
TUNED!**

MYTH #3

Skimming the wall cavity with spray-applied insulation completely solves air infiltration

REALITY

Everyone knows the house is a system. Spray-foam inside a cavity does not come close to stopping all air leakage.

Air infiltration happens all over the house with the wall cavities only contributing a small amount (14%^{*}). To solve air infiltration you need to address air flow throughout the structure, with the most important places being gypsum board, gaps, and penetrations, not the cavity. Spray-foam insulation in a typical application is not a continuous air barrier. For that you need to seal under sill plates, fill band joists, and seal around penetrations such as recessed lights and electrical boxes. If the foam shrinks, that seal could be lost. Fiber glass insulation with an air barrier or skim coating provides a high performance wall with excellent thermal performance and minimal air leakage at a cost effective price point.

NAIMA
NORTH AMERICAN INSULATION
MANUFACTURERS ASSOCIATION

**STAY
TUNED!**

MYTH #4

Spray-foam insulation is a one step solution to air leakage

REALITY

No cavity insulation **ALONE** is capable of providing a continuous air barrier.

While spray-foam insulation products can be used to fill gaps and voids, they are not always applied that way and don't always solve all air leakage problems. Achieving a continuous air barrier with spray-foam insulation can be a very costly solution and something that may not be feasible if framing techniques keep some areas from being completely sealed. If your insulation provider is claiming that they provide a "one-step" solution, look again. For an effective solution to air infiltration and thermal performance, choose fiber glass batt, loose fill or spray-applied insulation with a continuous air barrier outside or a skim coating inside. This is common building practice that is high performing and cost effective.

NAIMA
NORTH AMERICAN INSULATION
MANUFACTURERS ASSOCIATION

**STAY
TUNED!**

MYTH #5

R-value doesn't matter.

REALITY

**According to the Federal Trade Commission,
"R-value 'is the only quantifiable...measure of thermal
resistance that might provide the typical consumer
with a means to evaluate insulation products'."**

Any claim that R-value may be discounted or enhanced for air infiltration capabilities is false and misleading. There is no provision or language within the FTC R-value Rule that explicitly, implicitly or even slightly hints that there is "any performance yardstick suited" for measuring thermal performance other than R-value. Don't be fooled. Air infiltration and thermal performance are two separate and distinct issues.

NAIMA
NORTH AMERICAN INSULATION
MANUFACTURERS ASSOCIATION

**STAY
TUNED!**