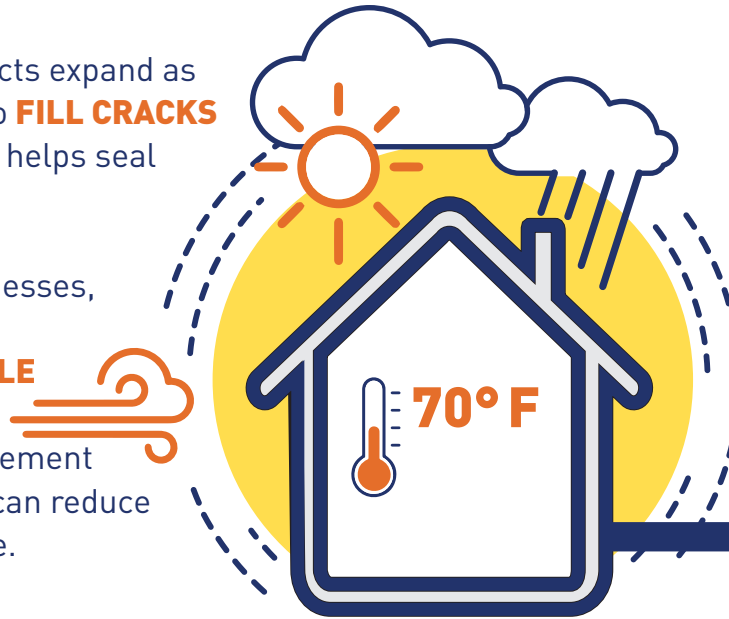


# Air Sealing with Spray Polyurethane Foam Improves Energy Efficiency

When insulating a home, R-value is used to measure how well a material resists heat flow. However, R-value doesn't account for common leaks, which waste energy by allowing conditioned air to escape the home. To fully optimize its energy efficiency, insulation needs to be supplemented with an air barrier when installed in a home. Most insulations need a secondary air barrier to keep conditioned air inside. Spray foam is the only single-step product that provides high R-value and functions as an air barrier.

Spray foam products expand as they are applied to **FILL CRACKS AND GAPS**, which helps seal the building.

At installed thicknesses, **SPRAY FOAM IS AIR-IMPERMEABLE** and prevents unwanted air movement and leakage that can reduce measured R-value.

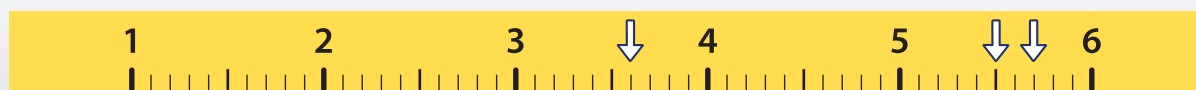


The movement of air through and within insulation can greatly reduce R-value. Installing **AIR BARRIERS LIKE SPRAY FOAM** can provide **SIGNIFICANT ENERGY SAVINGS** due to their air sealing properties.

Spray foam is the only building insulation that effectively seals a home while providing great thermal performance without the use of additional products.

## Air Barriers and R-Value<sup>1,2</sup>

### THE R-VALUE OF SPRAY FOAM



#### Low-Density

Spray foam R-value starts at 3.6 per inch

#### Medium-Density

Spray foam R-value starts at 5.7 per inch

#### High-Density

Spray foam R-value starts at 5.5 per inch

Why are both thermal performance and a functioning air barrier important? An air barrier like **spray foam can seal a home**, helping to reduce the amount of energy lost to air infiltration. The U.S. Department of Energy estimates that 56% of the energy used in a home goes to

heating and cooling,<sup>3</sup> and as much as **40% of a building's energy** is lost due to air infiltration.<sup>4</sup> Thankfully, **all three types of spray foam satisfy the R-value requirement** for walls, floors, ceilings and roofs while simultaneously closing off cracks and gaps in your home.

<sup>1</sup> R means resistance to heat flow. The higher the R-value, the greater the insulating power.

<sup>2</sup> 15 year time weighted average R-values.

<sup>3</sup> <http://energy.gov/heating-and-cooling>

<sup>4</sup> <https://www.energystar.gov/index.cfm>

For more information, visit  
[www.whysprayfoam.org](http://www.whysprayfoam.org).



Spray Foam  
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