SPRAYTITE®

Insulation and Air Barrier Material

FREQUENTLY ASKED QUESTIONS

What is SPRAYTITE® insulation?

SPRAYTITE is a closed-cell, spray-applied polyurethane foam insulation that creates a seamless, insulating air barrier to improve the energy efficiency, comfort and durability of homes and buildings.

How is it applied?

SPRAYTITE is a sprayed application of a liquid, two-component, non-fibrous product that includes an A-Side and a B-Side. During application, there is a chain reaction between the two components that creates a bond to the substrate as it foams up. It dries, cures and hardens very quickly. This product should always be installed by a trained applicator and is not suitable for do-it-yourself projects.

What is its insulation R-value?

SPRAYTITE polyurethane foam insulation is a closed-cell insulating system with an R-value of 6.7 per inch[1].

What are the differences between closed-cell and open-cell foams?

There are three major differences. First, closed-cell foams like SPRAYTITE technology offer an R-value of over 6.7 per inch, while open-cell foams like BASF's ENERTITE® offer an R-value of 3.7-3.9 per inch. Second, closed-cell foam is a rigid polyurethane foam that adds strength to the structure, whether in walls or under the roof deck, while open-cell foam is a softer, non-structural material. Third, closed-cell foams offer a greater resistance to moisture in the walls, in both liquid and vapor forms.

Is the SPRAYTITE insulation also an air barrier?

SPRAYTITE insulation has been tested and performs as an air barrier material at a minimum thickness of 1 inch. And because it's fully-adhered and does not allow air to flow around, behind, or through the insulation system, you can create a more efficient wall.

The U.S. Department of Energy (DOE) has shown that 15 percent of traditional insulation materials' effectiveness is lost due to convection loops through and behind board and batt systems. SPRAYTITE polyurethane technology eliminates this by forming a fully adhered, seamless insulation and air barrier material.

Is SPRAYTITE good for the planet?

The SPRAYTITE insulating air barrier material is a formaldehyde- and lead-free formula that emits no volatile organic compounds (VOCs) and uses zero ozone depleting blowing agent technology. The BASF Eco-Efficiency Analysis, which won an award from the Sustainable Buildings Industry Council (SBIC), assesses total cost and ecological impact over the product lifecycle to benchmark current performance and get insight for future improvements. The SPRAYTITE insulating air barrier material outperformed traditional insulation materials in eco-efficiency on its test scores. The performance features of SPRAYTITE insulation may help contribute to Leadership in Energy and Environmental Design (LEED®) certification.

BASF

We create chemistry

Can SPRAYTITE be used in a chemically sensitive environment?

Yes. The SPRAYTITE system does not emit VOCs after it has been fully cured. Off-gassing from this product has been measured at 0.0001 parts per million. The installed SPRAYTITE product is inert when properly installed by a qualified applicator. All occupants and pets should be vacated from the building during the application and after, for the designated ventilation period.

Can it be used for unvented attics or ceilings?

Yes, in cathedral ceilings and cathedralized attics, SPRAYTITE does not promote deterioration of the existing roof sheathing, because a properly designed spray foam application does not allow condensation between the foam / roof deck interface. Some traditional insulation systems have high air / vapor permeance and moisture retention, which could lead to water accumulation against the underside of the sheathing. SPRAYTITE insulation can be applied without roof ventilation, because it is fully adhered and air / vapor impermeable (at over 1.5" thickness). See the International Codes for additional acceptance criteria for unvented roof designs.

Can an insulation system add structural strength?

Spray-applied, closed-cell spray polyurethane foam (SPF) has been proven to add substantial structural integrity throughout the wall system. Testing[2] shows SPF insulation installed between wood- and steel-stud wall panels increased racking (shear) strength two-to-three times compared with standard stick-built components with glass fiber insulation, when sprayed onto gypsum wallboard, vinyl and plywood siding, and oriented strand board (OSB). In addition, testing[3] conducted for uplift pressure resistance shows that closed-cell SPF insulation can provide wind uplift performance to withstand up to a Category 5 hurricane, depending on thickness.

What about moisture and mold?

When used as insulation at appropriate thickness, SPRAYTITE polyurethane eliminates condensing surfaces and reduces the potential to accumulate moisture. It also eliminates air movement within the wall cavity. Other insulations are less successful at controlling air and moisture movement and often do not provide adequate insulation to eliminate condensing surfaces, thus these competitive systems increase the possibility of an environment susceptible to mold.

Are there any fire protection requirements?

SPRAYTITE insulation meets Class 1 flame and smoke characteristics in accordance with ASTM E84[4], meeting all major building Codes, including the International Residential (IRC) and Building Codes (IBC). Once installed, it must be covered by a 15-minute thermal barrier or ignition barrier, depending on the application. Check with local Building Codes for final determination.

For more information please visit our website at www.spf.basf.com/homeowners.php or visit the Center for the Polyurethanes Industry at http://spraypolyurethane.org/Main-Menu-Category/Consumers.aspx

Insulation and air barrier material for energy-efficient homes and buildings

This fact sheet complies with the Federal Trade Commission labeling and advertising of home insulation rules and regulations, Federal Register, 16 CFR Part 460 Labeling and Advertising of Home Insulation: Trade Regulation Rule; Final Rule, Tuesday, May 31, 2005.

[1] R means resistance to heat flow. The higher the R-value, the greater the insulating power.
[2] Studies performed by the National Association of Home Builders (NAHB).
[3] Testing in accordance with TAS 114-95 performed at various labs in Florida and awarded NOA from Miami-Dade County.
[4] Test method for determining surface burning characteristics of building materials.

1-888-900-FOAM

BASF Corporation
1703 Crosspoint Avenue
Houston, TX 77054
Fax: 713-383-4592
www.spf.basf.com
spfinfo@basf.com

363-3136B

BASF
We create chemistry