



For all-season comfort,
energy savings, an end to
air and moisture infiltration.

InsulStar[®] Spray-In-Place
Insulation does it all.

Choose InsulStar® Spray Foam Insulation for the Right Reasons.

InsulStar® spray polyurethane foam insulation is a major innovation in home insulation technology. This remarkable system provides extremely high R-value (R13 at 2-inch thickness). InsulStar environmental, closed-cell insulation also creates a permanent air barrier and vapor diffusion retarder (VDR), protecting your home's interior from dust, pollen and moisture infiltration, while strengthening walls. Its closed-cell structure provides superb noise reduction to make even a busy life peacefully quiet. And it's environmentally friendly, too. *But best of all, InsulStar helps save you money on heating and cooling costs year after year.*

Although InsulStar represents a breakthrough, its most important achievement lies in making homeowners happier about their choice of insulation.

For more than 40 years, spray foam insulation has been providing year-round comfort in homes across America. Federal and state energy-saving education groups refer to spray-in-place foam as one of the most efficient means of insulating your home.

Professionally installed InsulStar insulation is applied by specially trained contractors to the inside surface of exterior walls, to the underside of the roof, and beneath floors in basements and crawl spaces during new home construction or home remodeling. The two-part spray mixture expands rapidly to fill all gaps and voids, completely and permanently adhering to wood, masonry, metal, studs and joists. It is best applied after rough plumbing, electrical wiring, and heating and air conditioning ducts are in place and before interior wallboard is installed.

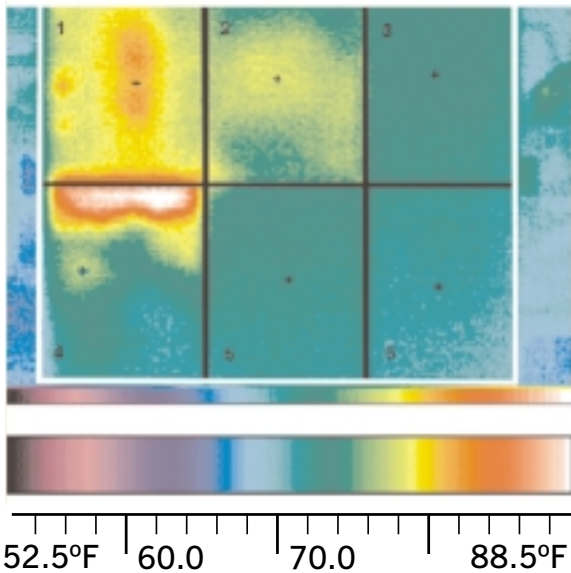
INSULSTAR® IS FAR SUPERIOR TO EARLIER SPRAY FOAM INSULATION PRODUCTS BECAUSE OF SIX IMPORTANT FACTS:

- FACT** InsulStar® spray foam insulation is specially formulated to inhibit mold, mildew and bacterial growth.*
- FACT** InsulStar® insulation is formulated using renewable agricultural resources and uses a proprietary new environmentally friendly blowing agent. That makes everyone comfortable.
- FACT** InsulStar® spray-in-place insulation never settles, shrinks, compresses or sags.
- FACT** InsulStar® spray foam insulation has higher density (nominal 2 lbs/ft³ of foam) for higher R-value and more efficient vapor and air retardation.
- FACT** InsulStar® high-density, closed-cell insulation strengthens walls with more than twice the racking strength of so called "soft" open-cell foam insulation products.
- FACT** Homes insulated with InsulStar® use less energy for heating and cooling and can often be served by smaller heating and air conditioning units.

*InsulStar insulation systems are formulated with an anti-microbial ingredient to inhibit the growth of molds that may affect this product. The anti-microbial properties do not protect occupants of spaces insulated with InsulStar insulation from potential deleterious effects of molds, mold spores, or disease organisms that may be present in the environment.

InsulStar® Insulation is Proven Energy Effective

The thermal image below indicates the surface temperature of the sheet rock facing of six panels insulated with different materials. The crosses (+) mark points where spot surface temperature measurements were taken. The air temperature behind the panels was controlled at 110°F in a “hot box” which contained a fan to keep the temperature in the box uniform and to simulate the effect of wind.



INSULATION SYSTEMS

1. Reflective Radiant Barrier
2. Glass Fiber Batting (3 1/2")
3. InsulStar® Spray Polyurethane Foam (2")
4. Cellulose (3 1/2")
5. 1/2 lb. Density, Open-Cell Foam (3 1/2")
6. InsulStar® Spray Polyurethane Foam (3")

The insulation systems, their nominal R-values, and the surface temperatures are listed below.

INSULATION SYSTEM	R-VALUE	SURFACE TEMPERATURE AT POINTS INDICATED
1. RADIANT BARRIER 5/16" barrier made from two layers of "bubble-pack" laminated between two layers of aluminum foil	R-9.8	80.5°F
2. FIBERGLASS 3-1/2" batting	R-13	76.3°F
3. INSULSTAR® spray foam, 2"	R-13	72.5°F
4. CELLULOSE 3-1/2", 2 lbs. density	R-12	75.5°F
5. SEALITE™ open-cell spray foam, 3-1/2"	R-12	72.2°F
6. INSULSTAR spray foam, 3"	R-21	70.4°F

Specify InsulStar[®] Insulation for Energy Star[®] Certification



InsulStar[®] is the most energy-efficient, environmentally-friendly, closed-cell spray-in-place polyurethane foam system available. Formulated from renewable agricultural resources. Odorless, completely non-toxic after installation. Stops airflow into and out of your home. Reduces noise and blocks dust and pollen for a more comfortable environment. In most cases a separate vapor barrier is not necessary.

InsulStar[®] insulation is code-supported, warranted* for the life of the home against manufacturing defects including settling, shrinkage and deterioration. It will maintain its R-value and noise reduction qualities within close tolerance over the life of your home.

InsulStar[®]'s high R-value per inch allows designers to reduce the depth of exterior walls and still obtain the desired level of energy efficiency. This means more living space in your home. And converting walls from 2x6 to 2x4 studs reduces demand for forest resources and helps save trees.

SPECIFICATIONS

Description:	Closed-cell polyurethane foam (PUR)
Closed-cell content:	Greater than 90%
Density:	2.0 lb./cu.ft. nominal
Compressive strength:	25 psi nominal
Tensile strength:	45 psi nominal
R-value:	R-13 at 2-inches nominal
Anti-bacterial:	Yes
Fire Rating:	Class 1
Flame spread:	<25 (ASTM E84)
Smoke development:	<450 (ASTM E84)

Numerical flame spread and smoke development ratings are not intended to reflect hazards presented by this, or any other material, under actual fire conditions.

*Warranty available through Gold StarSM certified insulation contractors upon request and approval of specifications.

For the names of Gold StarSM certified insulation contractors and more information, call us or visit our Web site.

Toll Free: 1-866-NSULATE (866-678-5283)
Web site: www.insulstar.com

InsulStar[®] spray-in-place insulation is a product of NCFI, a division of Barnhardt Manufacturing Company

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WHEN JUST INSULATION ISN'T ENOUGH[®]

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