AMERICA'S MOST TRUSTED HIGH PERFORMANCE INSULATION

NCFI 1964 2024

INSULSTAR OPTIMAXX

OPTIMIZED FORMULATION

HIGH PERFORMANCE RESIDENTIAL SPRAY FOAM INSULATION

NCFI POLYURETHANES

800.346.8229 | www.NCFI.com

INSULSTAR OPTIMAXX

OPTIMIZED FORMULATION

A High-Performance Closed-Cell Spray Foam Insulation that Delivers Exceptional R-Value, Great Energy Savings, Water and Air Barriers, and Added Strength Against High Wind Events.

EXPERIENCE MATTERS

Superior Home Insulation Offering High Performance and Exceptional Value. By designing and building a highly energy-efficient, low-maintenance home, the reduction in energy used for heating and cooling will lower demand on utility companies for the life of the house. With **InsulStar® OPTIMAXX,** you can insulate directly to the roof deck, putting all of the space under the roof to use. By putting HVAC duct work in conditioned space, energy waste from leakage is eliminated. This additional conditioned space can then be utilized for computer rooms, bonus rooms, playrooms, or closet space. Previously wasted attic areas become valuable living space for very little cost, while adding tremendous retail market value to the house. Add up the benefits and it's easy to see why **InsulStar® OPTIMAXX,** is the high-performance insulation you've been looking for.

HOMEOWNER BENEFITS

+ Significant savings on your monthly energy bills.
+ Provides superior R-value of 7.1 at one inch, reducing both heating and cooling costs.
+ Creates an air barrier that aids in eliminating leaks and energy loss.
+ Provides a vapor retarder that controls moisture problems.
+ Improves indoor air quality by helping block dust and pollutants.
+ Reduces your energy consumption, lessening your environmental impact.
+ Reduces outside noise by helping create a seamless, airtight, insulated barrier.
+ Strengthens walls and increases overall structural integrity by adhering and bonding to the wall surface.
+ Provides secondary water barrier.
+ FEMA Class 5 Flood-Resistant Material.

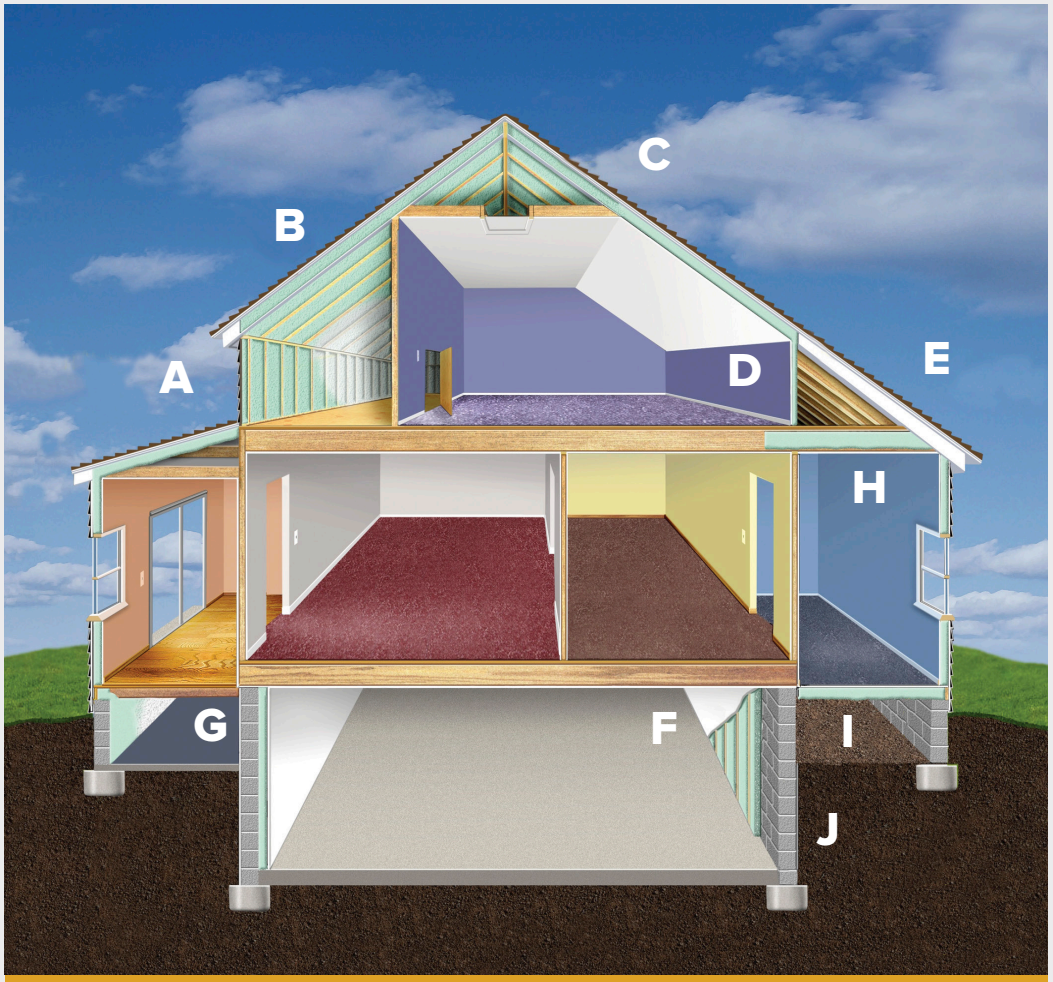
BUILDER BENEFITS

+ Adaptable to uniquely shaped, hard-to-insulate designs.
+ Easy to install so you finish a job under budget and ahead of schedule.
+ Watertight within seconds of being applied.
+ Can be applied to the underside of roof decks to form conditioned or cathedralized attic areas.
+ Normally unusable attic area can be "harvested" by converting it into usable living space.
+ Crawl space insulation can be installed in a nonvented configuration for greater energy savings.
+ Building code compliant ER #667.
+ Installed by trained and highly experienced GoldStarSM contractors.
+ Damp-proofs by creating a seamless membrane between the inner and outer walls.
+ Proven insulating power – spray polyurethane foam systems have been applied successfully for more than 60 years.




HOW INSULSTAR® OPTIMAXX CLOSED-CELL INSULATION WORKS

InsulStar® OPTIMAXX foam insulation is a two-part liquid sprayed in place by specially trained GoldStar℠ contractors. This liquid quickly expands, filling all gaps and voids, and cures to form a fully adhered, solid, monolithic insulation envelope that is a highly effective air barrier and moisture vapor retarder. InsulStar's® OPTIMAXX high R-value allows designers to reduce the depth of exterior walls and still obtain high energy efficiency. This means more living space in your home. By simply changing the exterior walls from 2" x 6" studs to 2" x 4" studs, a 2,500 sq. ft house gains almost six square feet of living space – reducing the wood required and saving two trees.



A. Under Roof Deck (unvented)
B. Unvented Attic w/ storage space
C. Unvented Attic - limited access
D. Vented Attic Knee Wall - no access
E. Vented Attic Floor
F. Basement Walls
G. Unvented Crawlspace Walls
H. House Walls
I. Vented Crawlspace Ceilings
J. Ext. wall below grade

ABOUT NCFI

AN INNOVATIVE LEADER FOR SIX DECADES

NCFI has been an industry leader and innovator of spray foam insulation and roofing systems solutions since 1964. NCFI's superior insulation and roofing technologies not only help families and commercial businesses save on heating and cooling costs, they help secure homes and commercial facilities against some of nature's harshest forces. We also sell and service the equipment to facilitate these applications, assuring end users a single, reliable support resource for their foam-in-place operations.

HIGHEST PRODUCT QUALITY AVAILABLE

We start with the finest raw materials from proven, reliable sources to develop our high-quality, advanced spray polyurethane foam and premium acrylic coatings. Our high-performance products must pass an array of quality control measures before ever reaching the job site. All ingredients are accurately weighed and blended for optimum performance. All systems are quality control tested for conformity to NCFI specifications. Our spray polyurethane foam is shipped from our manufacturing facilities to meet your specific project requirements.

THE BEST TRAINED APPLICATORS IN THE BUSINESS

Certification as a GoldStar℠ Applicator requires contractors to successfully complete a comprehensive NCFI-led training program, ensuring they are properly equipped to meet and exceed each customer's needs. Our hands-on training covers all technical aspects of accurate spray polyurethane foam application and proper equipment operation, including step-by-step procedures, parts information, and troubleshooting guides. Contractors learn the most effective ways to apply NCFI's high-quality spray polyurethane foam and premium coatings to achieve a high-performance solution. Our technical representatives can join you on-site to help explore the best approach to solving your unique construction problems.

INSULSTAR® OPTIMAXX TECHNICAL DATA

SPRAY FOAM SYSTEM

DISTINGUISHING CHARACTERISTICS:

+ Low GWP
+ Passed Appendix X with no Ignition Barrier
+ High Yields
+ Meets ASTM E84, FS <25, SD <450 @ 4"
+ Air Impermeable Insulation at ½"
+ Approved with DC315 coating in lieu of code prescribed thermal barrier
+ Class II Moisture Vapor Retarder @ 1"
+ Approved for use in Type I, II, III, IV, V construction
+ Contact NCFI regarding the specific approved wall assemblies.

TYPICAL PHYSICAL PROPERTIES*1

Free Rise Core Density*2, ASTM D 1622	2.0 pcf
Closed Cell Content, ASTM D 6226	>90%
R-value @ 1" ASTM C 518	7.1
Air Perm @ 1/2" & 75 Pa ASTM E2178	0.0048 L/(m-s²)
Moisture Vapor Perm	1.3 perms
Flammability ASTM E84 @ 4 inches	Flame Spread <25 Smoke Dev <450
Maximum Service Temp	180°F

*1 The above values are average values obtained from laboratory experiments and should serve only as guide lines.

*2 Free rise core density should not be confused with overall density. Overall densities are always higher than free rise core densities and take into account skin formation, thickness of application, environmental conditions, etc.

R-VALUES*

Thickness (inches)	R-Value (°F·hr·ft² / Btu)	Moisture Vapor Perm
1"	7.1	0.947
2"	13	0.474
3"	20	0.316
3.5"	23	0.271
5.5"	37	0.172
6"	40	0.158
7"	47	0.135
8"	53	0.118
9"	60	0.105

*Note: As with all insulating materials, the R-value will vary with age and use conditions.

NCFI POLYURETHANES

ENERGY STAR PARTNER

EPA United States Environmental Protection Agency
Montreal Protocol Award Winner

SMART SPF Low Global Warming Potential BLOWING AGENT
Our White House-Honored Commitment to a Low GWP Construction Product Line

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