

NCFI – An Innovative Leader for Five Decades.

Since 1964, NCFI has been an industry leader and innovator of spray foam insulation and roofing systems solutions. NCFI's superior insulation and roofing technologies not only help families and commercial businesses save on heating and cooling costs, they have helped secure homes and commercial facilities against some of nature's harshest forces such as hurricanes. Additionally, we sell and service the equipment that enables these applications, assuring end users of 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 foams 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 for you. All systems are quality control tested for conformity to NCFI specifications. Our spray polyurethane foam is shipped from our manufacturing facilities to meet your special project requirements.

The Best Trained Applicators In The Business.

Before becoming a GoldStar Applicator, NCFI provides a comprehensive training program so contractors can meet and exceed the customer's needs. Our hands-on training covers all technical aspects of accurately applying spray polyurethane foams and how to properly operate spraying equipment with step-by-step procedures, parts information, and troubleshooting guides. NCFI's experienced staff can show contractors the most efficient way to apply our high-quality spray polyurethane foams and premium coatings to provide a high performance solution. Beyond product and equipment training, NCFI offers on-site technical representatives to help explore the best approach to solving your unique construction problems.



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InsulBloc® Masonry Insulation

A High-Performance Closed-Cell, Spray-In-Place Insulation Providing A Seamless Air Barrier And Water Resistant Barrier In One Application.

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A High-Performance Closed-Cell, Spray-In-Place Insulation Providing A Seamless Air Barrier And Dampproofing In One Application.

For insulating exterior masonry walls or masonry cavity walls, there is no better choice than InsulBloc®. InsulBloc® is a 2lb/ft³ density, spray-in-place closed-cell foam that forms a fully-adhered and seamless insulating, dampproofing, and air blocking membrane. InsulBloc® offers higher R-values per unit thickness than can be achieved with any other type of commercially available insulation. InsulBloc® can be applied to any masonry or construction material including concrete block, concrete, brick, steel, wood, laminates, and exterior sheathing boards, and it conforms to any design shape, insulating around brick ties, corners, angles and curves. InsulBloc® leaves no gaps or joints, eliminating thermal bridging and thermal bypass associated with preformed boards.



InsulBloc® offers higher R-values and dampproofing.



InsulBloc® adheres to CMU, poured concrete, primed steel, wood and most other construction materials.



The Problem

Exterior Masonry Walls

In traditional exterior masonry or concrete wall construction, high heat transfer of the masonry is very inefficient and provides a cold surface which can set up condensation situations leading to water damage and mold growth. Insulating with fiber based materials or rigid boards leaves seams and gaps in the thermal blanket. Additional materials must be used to provide the water seal and moisture vapor retarder.

Masonry Cavity Walls

In traditional masonry cavity wall construction, a dampproof coating is applied to the exterior of the concrete masonry unit (CMU) wythe followed by the installation of preformed insulation board between the brick ties or wall cladding attachments. This leaves gaps, breaks, and holes in the insulation at joints and penetrations. Preformed boards can restrict your design options, allowing for only flat walls and surfaces. Sealing joints of dissimilar building materials for air, water and heat infusion is also very difficult if not impossible.

The Solution

The InsulBloc® Masonry Insulation System. InsulBloc® is a closed-cell, spray-applied polyurethane foam insulation system that performs as a dampproofing and air barrier membrane. Spray-applied as a liquid, the insulation expands within seconds to form a seamless barrier that fills and seals large and small gaps, seams and penetrations. Joints between dissimilar materials, such as steel columns and masonry units, and joints between different building elements, such as roof decks and walls, are snugly sealed to prevent heat, air and moisture transfer. Building owners save energy, have healthier interior environments with reduced potential for mold growth. With InsulBloc®'s cost being about the same as conventional dampproofing and board insulation, it's easy to see why InsulBloc® has been used for over 40 years.

The End Result

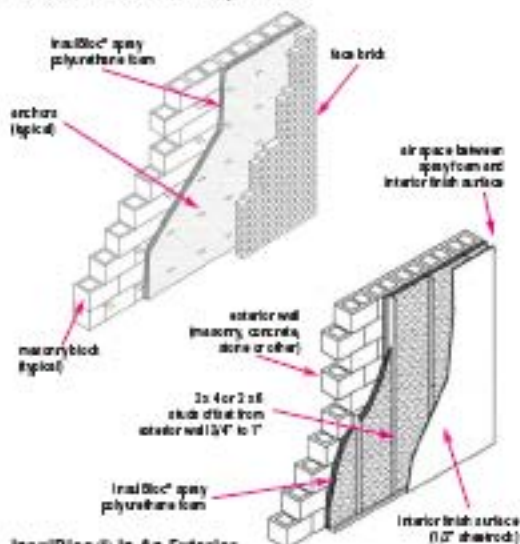
More than just insulation, InsulBloc® provides superior wall insulation offering high performance and a seamless barrier. A wall covered with InsulBloc® spray foam will lower your energy costs, keep the occupants more comfortable and lower cost for repair and maintenance. Add up the benefits and it's easy to see that InsulBloc® is the commercial masonry solution you've been looking for.

Use InsulBloc® in new construction or to give new life to older buildings.

How InsulBloc® Masonry Insulation Works

InsulBloc® In A Masonry Cavity Wall

Applied between the masonry block and brick face, InsulBloc® forms a fully adhered and seamless membrane that bridges and seals construction gaps and holes around penetrations while providing the highest R-value per unit thickness of any commercially available material plus provides an air barrier, a water barrier and a moisture vapor retarder.



InsulBloc® In An Exterior Masonry Cavity Stud Wall

Design with the studs offset by 1" from the masonry wall. InsulBloc® is applied to the masonry surface, expanding out to form a seamless membrane, sealing between the wall and the studs. Additionally, the membrane seals the wall to floor and wall to roof deck joints. InsulBloc® has no thermal or moisture gaps resulting in superior thermal control with an air barrier and Class II vapor retarder. In one simple step, InsulBloc® provides multiple benefits.

InsulBloc® Polyurethane Foam Typical Physical Properties*

Description	Closed-cell spray polyurethane foam
Closed-cell content:	Greater than 99%
Density:	~1.9 to 2.1 lb./cu.ft. nominal (ASTM D 1622)
Compressive strength:	>25 psi (ASTM D 1622)
R-value:	>6.0 @ 1" (ASTM C 533)
Flame spread:	0 (ASTM E 84)
Smoke development:	0 (ASTM E 84)
Air permeance:	0.000 acfm/ft ² at 0.01 in. H ₂ O @ 57 psi (ASTM E 215)
Tensile strength:	>50 psi (ASTM D 1622)
Hydrostatic pressure resistance:	No failure @ 50 lb. Head Pressure (ASTM D 7)
Water Resistant Barrier:	Pass (ASTM E 87)

* Physical properties may change based on job speed & conditions.

ARCHITECT BENEFITS

InsulBloc® high performance insulation provides architects with the highest quality spray foam technology on the market today, offering these benefits:

- Adaptable to uniquely shaped structures and difficult-to-insulate designs.
- Easy to install so the job is finished under budget and ahead of schedule.
- Insulates, dampproofs and air seals in one step creating a seamless membrane.
- Water tight within seconds of being applied. Seal a roof to wall joints, blocking wind driven rain penetration.
- FEMA Class 4 flood resistant material.
- Environmentally friendly using no harmful ozone-depleting chemicals – NCFI has awarded the EPA (Environmental Protection Agency) Stratospheric Ozone Protection Award.
- Proven Performance – for over 40 years, InsulBloc® has been used as a high performance insulation solution.
- Building code compliant.

BUILDING OWNER BENEFITS

InsulBloc® high performance insulation can save property owner's money while making their building healthier and more comfortable.

- Save on your monthly energy bills.
- Provides superior R-value greater than 6 per inch, reducing both heating and cooling costs.
- Creates an air barrier that eliminates leaks and energy loss.
- Provides a vapor barrier that controls moisture problems.
- Water barrier that blocks wind driven rain preventing water damage and repair cost.
- Improves indoor air quality by keeping out dust and pollutants.
- Reduces your energy consumption lessening your environmental impact.
- Provides consistent interior temperatures – no drafts, no cold or hot spots.
- Reduces outside noise by creating a seamless, airtight insulated barrier.
- Never settles, shrinks, compresses or sags, maintaining its insulation efficiency for the life of the building.
- Proven insulating power – spray polyurethane foam systems have been applied successfully for over 40 years.