



# LET'S BUILD AMERICA TOGETHER.



**INSULBLOC  
OPTIMAXX**  
OPTIMIZED FORMULATION

**HIGH-PERFORMANCE CLOSED-CELL, OPTIMAXX INSULATION**

High R-Value, and Seamless Air and Water Barriers in a Single Application.



800.346.8229 | [www.NCFI.com](http://www.NCFI.com)



The US building industry speaks loud and clear: There is no better choice than **InsulBloc®** for insulating exterior walls, masonry cavity walls, and roof decks. **InsulBloc** is a 2-pound density, spray-in-place closed-cell foam that forms a fully adhered and seamless insulating, damp-proofing, and air-blocking membrane.

**InsulBloc** offers higher R-values per unit thickness than can be achieved with other types of commercial insulation. **InsulBloc** can be applied to any masonry or construction material, including concrete block, concrete, brick, metal, wood, laminates, and exterior sheathing boards, and it conforms to any geometric 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.

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## THE SOLUTION

### The InsulBloc® OPTIMAXX (Commercial) Insulation System.

**InsulBloc** is a closed-cell, spray-applied polyurethane foam insulation system that performs as a damp-proofing 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, and have healthier interior environments with reduced potential for mold growth. **InsulBloc** costs about the same as conventional damp proofing and board insulation, so it's easy to see why **InsulBloc** has been a top choice for commercial builders for more than 60 years.

## THE CHALLENGE

### 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 water-seal coating is applied to the exterior of the concrete masonry unit (CMU) wythe or the exterior gypsum wall board, 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.



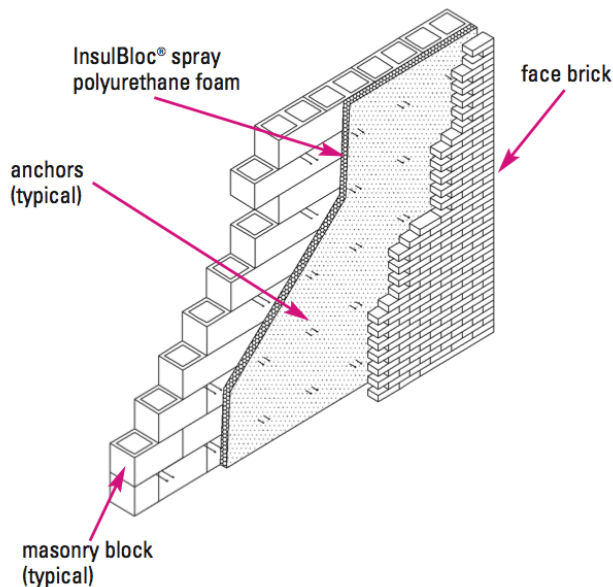
## THE END RESULT

**InsulBloc** provides superior wall insulation with exceptional value, and helps any building achieve high-performance status. Walls covered with **InsulBloc** spray foam will lower your energy costs, keep the occupants more comfortable, and lower repair and maintenance costs. Add up the benefits and it's easy to see that **InsulBloc** is the commercial solution you've been looking for.

# HOW INSULBLOC® OPTIMAXX (COMMERCIAL) INSULATION WORKS

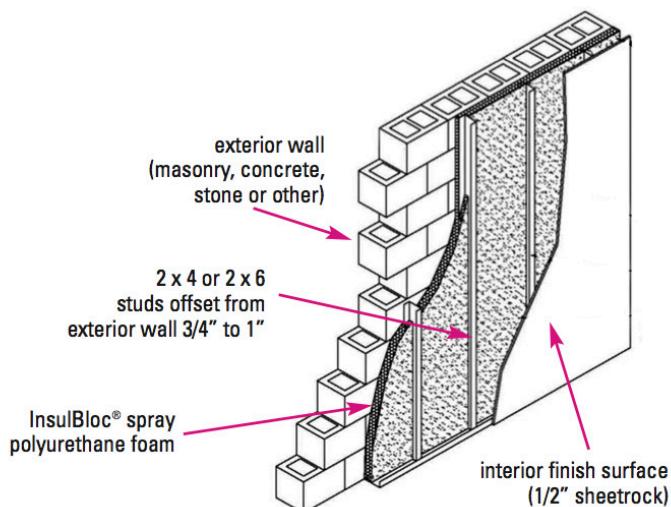
## InsulBloc In A Masonry Cavity Wall

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 on Masonry Wall with Interior Framing

Designed 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.



## 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, damp-proofs and air seals in one step, creating a seamless membrane
- Watertight within seconds of being applied. Seals roof to wall joints, blocking wind-driven rain penetration
- FEMA Class 5 Flood Resistant Material.
- Uses no harmful ozone-depleting chemicals – NCFI was awarded the EPA (Environmental Protection Agency) Stratospheric Ozone Protection Award and has recently been recognized by the White House for its OPTIMAXX efforts to eliminate HFCs from engineered building products
- Proven Performance — for over 60 years, **InsulBloc** has been used as a high-performance insulation solution
- NCFI design consultants provide design details, specifications, and answers to your code compliance questions

## BUILDING OWNER BENEFITS

**InsulBloc** high-performance insulation can save property owners money while helping make their building healthier and more comfortable.

- Saves on 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 retarder 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 and lessens 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 60 years

**InsulBloc® OPTIMAXX**

# NCFI

## WE PIONEERED US SPRAY FOAM INSULATION IN THE 1960S AND STILL LEAD THE WAY

NCFI has been an industry leader since 1964, and the recognized leading innovator of spray foam insulation. NCFI's superior insulation products 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 QUALITY PRODUCT 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 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 AND SUPPORTED APPLICATORS IN THE BUSINESS

Before becoming a Gold Star 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 foam 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 foam 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.

Using less energy helps the environment. InsulBloc® can help cut your energy use and reduce your carbon footprint. NCFI, maker of InsulBloc®, is an Energy Star partner, member of the US Green Building Council, and winner of a prestigious award from the Environmental Protection Agency for protecting the ozone. See inside to learn why InsulBloc® is among the most sustainable of all insulations.

## LET'S BUILD AMERICA TOGETHER.

- + Contains no ozone-depleting chemicals. NCFI is the recipient of an EPA Stratospheric Ozone Protection Award for extraordinary accomplishments and significant contributions to protect the environment
- + Contains renewable agricultural products, including sugar cane, sugar beets and corn. NCFI has formulated spray polyurethane foam containing sucrose-based, agriculturally-derived ingredients since the 1960s
- + Provides a higher R-value than conventional insulation and lowers monthly energy bills
- + Reduces energy consumption which lessens your environmental impact and carbon footprint
- + Helps improve indoor air quality because it aids in blocking dust and pollutants
- + Promotes a sustainable design because it never settles, shrinks, compresses or sags, maintaining its insulation efficiency for the life of the structure
- + Reduces the amount of waste and debris that go into landfills. It strengthens walls and increases overall structural integrity by adhering and bonding to the wall surface, so buildings last longer and don't need to be replaced as often

