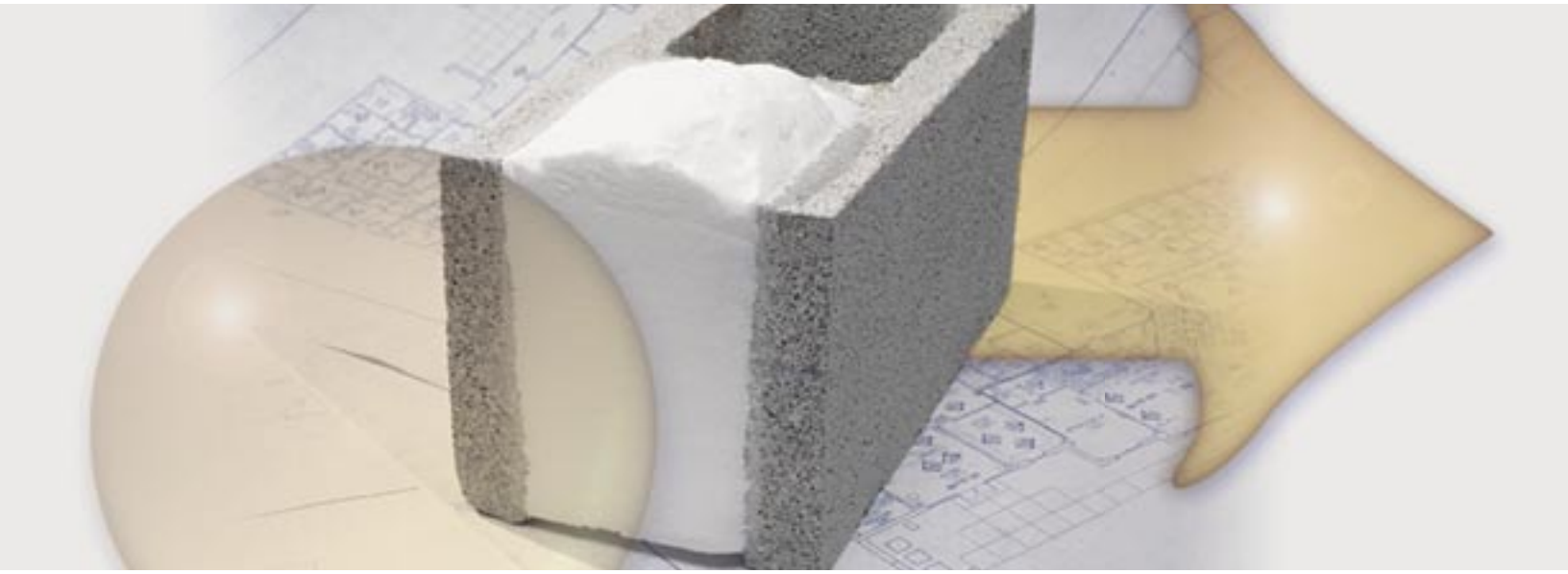
R501®

Foamed-in-Place Insulation



Polymaster®

Insulating Foams

www.polymaster.com

R501 Foamed-in-Place Insulation is preferred by America's Leaders!

WAL★MART®

FOOD LION

The World's FIRST Dry Foam.

Polymaster Foam perfected "dry foam" technology. R-501 is specifically engineered for walls constructed of concrete blocks (CMU's). Only Polymaster has the experience and staff to stand behind its dealers and their customers to ensure consistently reliable and superior insulation products.

Not all aminoplast foams are the same. There are distinct and important differences that should be noted by architects, engineers, and general contractors. These are detailed below:

- R-501 is "dry powder foam." R-501's resins are kiln-dried and are delivered to our field partners as a dry powder. Our factory trained installers then are able to produce the foam from fresh components at the time of installation. Pre-mixed resins are unstable, have a short shelf life, and can yield an inferior product when installed.
- R-501 Foam is the only product of its kind that meets government formaldehyde standards. The kiln-drying process burns off most of the free formaldehyde inherent in resin-based products. Others have formaldehyde content of 30% verses 3% for R-501. This is an important consideration for anyone concerned about health and safety issues.
- The chemistry of R-501 allows it to have 20% less moisture than its pre mix competitors. This means faster curing and less chance of "wet wall."

1 drumset of R-501; 3 5lb. bags and 2 gallons of foaming agent

R-501's R-Values are higher, yielding lower energy costs for building owners. R-501 Foam yields an R-4.63 per inch or an R-11 in a conventional 8" block wall.

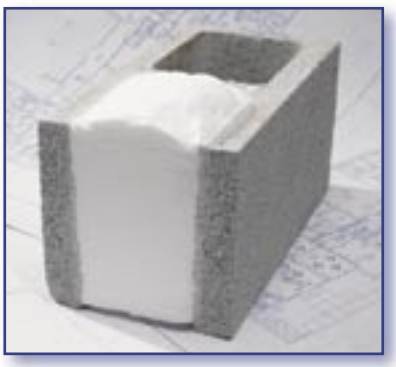
Benefits of R501 over other types of CMU Insulation.

R501 Foam vs. Loose Fill.

- Dry fill refers to any type of insulating material that is poured in to the cells of the CMU's from the top as the wall is erected. Materials most commonly used are vermiculite and polystyrene balls. These products yield similar R-Values to R-501 but possess distinct disadvantages. First, is inefficiency. Every four courses or so, masons must stop laying block, manhandle sacks of material up the wall, then try to pour the material through the open cells. Often wind will blow away the insulation as it is poured causing waste and frustration. Secondly, should any puncture of the block occur by accident or by necessity, the dry fill insulation will drain out through the hole, with no way to replace it. Thirdly, dry fill does not insulate the spaces between the blocks known as the webbing.

Loose fill is hard to handle and blows away easily in the breeze.

Loose fill drains out of the wall if puncture occurs, with no way to reinstall it.



R-501 totally fills the wall cavity and stays there.

R-501 is installed after the masons have finished their job. As the foam is injected, it flows from cell to cell, through the webbing of the blocks, providing a total fill of the wall. Once the foam is in place, it stays there for the life of the building with no fear of loss due to an accidental or intentional hole in the wall.

BABIES R US | THE HOME DEPOT | LOWE'S Home Improvement Warehouse | SAFEWAY FOOD & DRUG

Polymaster is the R-Value Leader!

8 Inch Block R-Values 11.1

	20.0	16.0	12.5	11.1	11.0	10.0	9.2	8.5	8.0	7.0	6.0
R501 Foamed-in-Place Insulation											
Other Foams	15.0	11.0	9.0	8.5	8.0	7.5	7.0	6.8	6.0	5.5	5.0
No Insulation	3.5	3.0	2.7	2.5	2.5	2.5	2.1	2.0	2.0	2.0	2.0
Block Density	60	80	100	105	110	115	120	125	130	135	140

*Tested Value using ASTM Method C-236.

12 Inch Block R-Values 20.0

	25.0	24.2	23.2	22.2	21.9	21.2	20.0	19.6	18.8	18.0	17.3
R501 Foamed-in-Place Insulation											
Other Foams	13.9	13.2	12.5	11.8	11.1	10.5	9.8	9.1	8.4	7.7	7.0
No Insulation	3.5	3.0	2.7	2.5	2.5	2.5	2.1	2.0	2.0	2.0	2.0
Block Density	90	95	100	105	110	115	120	125	130	135	140

*Extrapolated value of 20.03 based on ASTM Method C-236 using 8-inch block.

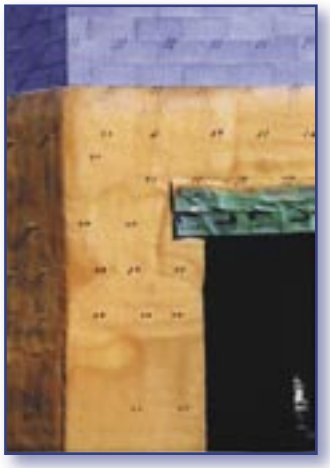
R501 Foam vs. Wall Board.

- Wall Board, also referred to as rigid board insulation is commonly seen hanging on the exterior of block buildings under construction. This insulation is usually made of polystyrene and is available in thicknesses of one to two inches. Its purpose is to insulate the block wall in the wythe cavity – the space between the blocks and the brick fascia.

R-501 is a less expensive alternative to rigid board, yielding a higher R-Value in the final analysis. Wythe cavities are usually 2" wide. Since many architects wish to leave this cavity open, only 1" of rigid board can be used. One inch of rigid board has an R-Value of 5. An R-501 filled wall, on the other hand, yields an R-11.05 in a conventional 8" block wall. R-501 is not a damp-proofer, nor is rigid board. The fact is, the only reliable way to control moisture in a block wall is to apply a damp-proof material to the wall before rigid board or any other type of insulation is used (with the exception of 2 lb. or higher density spray Incylthane foam).

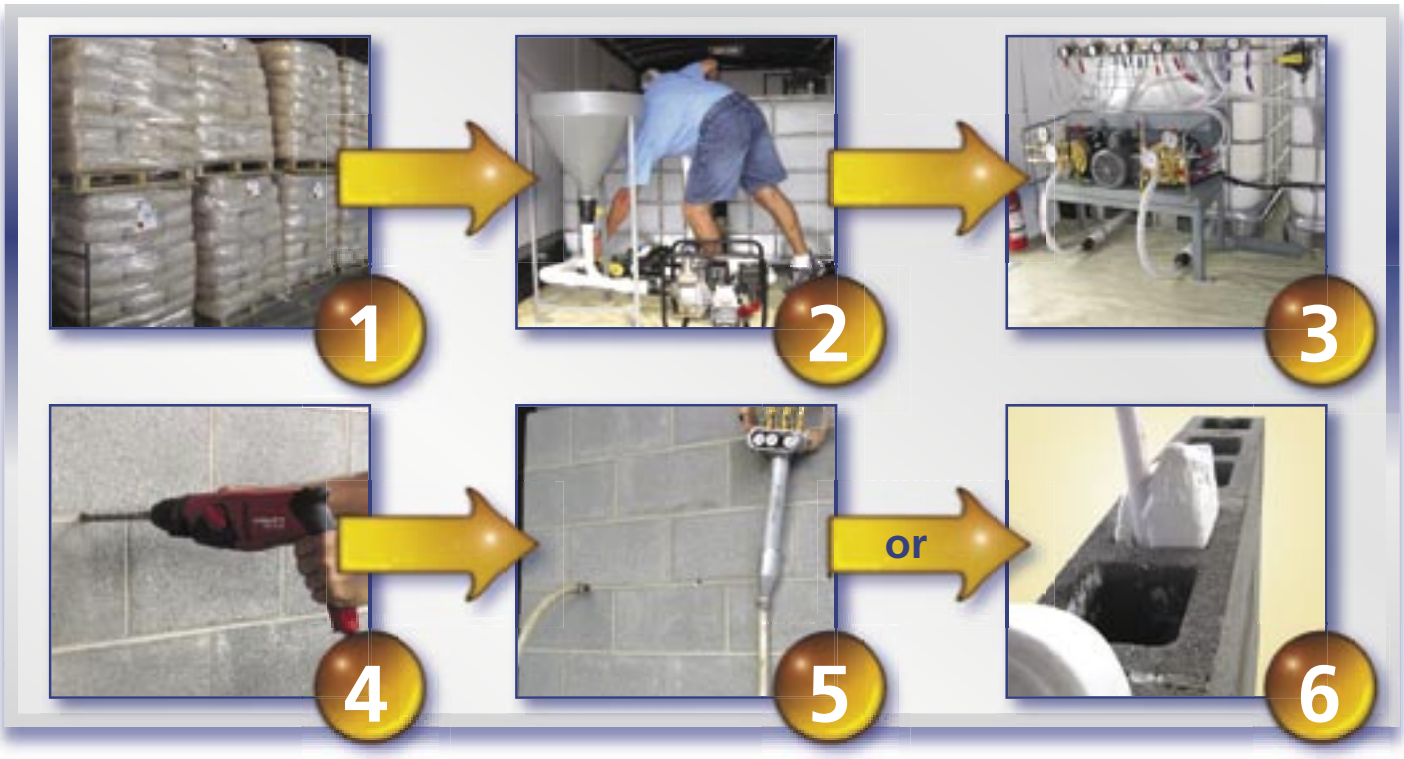
Polyurethane Spray Foam.

- Incylthane brand polyurethane spray foam is available in a variety of densities and is only suitable for CMU application in densities of two pounds or higher. Two-pound density spray foam is a damp-proof, self-adhesive insulation product suitable for wythe cavity application. It yields an R-7 per inch and provides a seamless coating to walls and joints. Polymaster is the only foam company that offers both aminoplast foams and polyurethane spray foams. **When used in conjunction, R-501 and Incylthane 2000 will increase thermal resistance by 120%!**



What is R501 Foam for CMU's?

The product is produced from a two-part system of kiln-dried resins and foaming agent. The resins (1) are blended in water (2). The foaming agent and resins are delivered to the foam gun via a pump system (3) that delivers the elements in a precise ratio to the foam gun where the foam is produced. Factory-trained installers drill holes at regular intervals (4) in the cells of block structures. These holes are patched after application. Beginning about four feet from the ground, foam is injected through the holes (5), totally filling all the cavities as high as ten feet. An alternate application is top filling (6) that is used for shorter walls or foundations. Picture #6 also shows the consistency of the foam upon application.



Architectural Information.

Specifications for Polymaster R-501 are downloadable and are available in a variety of formats for your convenience at polymaster.com.

- Please do not use Polymaster R-501 to achieve a 4-hour firewall. Independent testing in an empty block wall indicates that there is little benefit provided by aminoplast foams to a fire rating. Some manufacturers have gone to great strides to make it appear that the addition of foam will increase the rating of a block wall from 2 hours to four hours. Please be sure that the tests cited were conducted on conventionally built walls with two-hour rated, conventional blocks that are empty of all grout or other material at the time of foam installation. Always ask for a diagram of the wall design and grout schedule when 4-hour firewall claims are made.
- In that pre-mixed resins have a very short shelf life (seven days), please be sure that you specify that the foam be made of dry resin. Old components will yield an inferior, shrinking product.

R-501 will provide an R-Value of 11.05 in an empty wall constructed of 105 lb. density blocks, tested to ASTM C-236.

Polymaster resins proudly carry these seals of approval for environmental and quality controls.

ENERGY STAR

Responsible Care® Good Chemistry at Work

UNI EN ISO 9002 CERTIQUALITY SISTEMA QUALITÀ CERTIFICATO

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