

# Core Foam Masonry Foam Insulation®

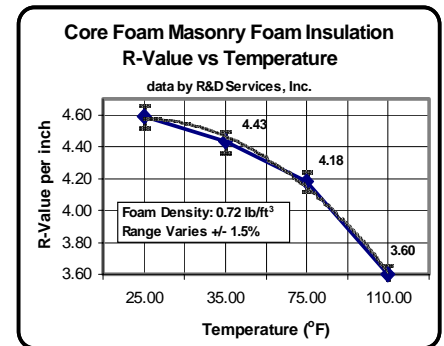
## Product Information Sheet

P. O. Box 10393 • Knoxville, TN 37939

800.656.3626 • Fax 865.588.6607 • www.cfifoam.com

|                                |              |   |
|--------------------------------|--------------|---|
| <b>R-Value per inch</b>        | 4.6/inch     | @ 25°F mean temperature <sup>1</sup>                      |
| <b>R-Value of 8" CMU Wall</b>  | 9.0 to 10.0  | Injected into 100 lbs./ft <sup>3</sup> block <sup>1</sup> |
| <b>R-Value of 12" CMU Wall</b> | 12.0 to 13.0 | Injected into 100 lbs./ft <sup>3</sup> block <sup>1</sup> |
| <b>Flame Spread</b>            | 25           | per ASTM E-84 @ 3.5" thick                                |
| <b>Smoke Density</b>           | 200          | per ASTM E-84 @ 3.5" thick                                |
| <b>Fire Classification</b>     | Class A      | per NFPA <i>Life Safety Code</i>                          |

<sup>1</sup>Thermal performance is portrayed to reflect typical installed conditions based upon NAVLAP accredited laboratory testing per ASTM C518 as well as industry accepted engineering calculations. Core Foam Masonry Foam Insulation typically is installed at densities ranging from 0.55 to 0.90 lbs./ft<sup>3</sup>; the above data is based upon ASTM C518 testing at 0.72 lbs./ft<sup>3</sup> by R & D Services, Inc., Cookeville, TN. Thermal performance claims are based upon average density and conditions.



**Kiln-Dried Powder Resin vs. Pre-Mixed Liquid Resin:** Our dry powder resin has nearly all free formaldehyde removed before shipment to our dealers. Adding water to freshly mix resin for each project facilitates superior foam production having extremely low free formaldehyde content. Tests (*sodium sulfate method*) show **Core Foam Masonry Foam Insulation** resin has under 0.5% free formaldehyde vs. similar tests show a competitor's dry powder resin has over 1.3%. **Core Foam Masonry Foam Insulation** kiln-dried powder resin has a 1-year shelf life. Pre-mixed resins need added preservative to extend useful shelf life beyond a few days.

**Brown Staining:** **Core Foam Masonry Foam Insulation** is acutely aware of the risk of brown staining of concrete masonry. Brown staining is linked to the presence of a chemical constituent called *resorcinol* that is used in adhesives and as a foam stabilizer, and also as a formaldehyde absorbent. **Core Foam Masonry Foam Insulation** has a low formaldehyde content eliminating any need for adding *resorcinol* to our foaming agent; thus, *the risk of brown staining is minimal to none.*

**Fire Separation:** As a Class A rated insulation, **Core Foam Masonry Foam Insulation** may be installed in wall assemblies without detracting from the wall's fire separation characteristics. Amino-plast foams have been shown to contribute no more than 30 minutes of added performance. Claims of 4-hour performance are based upon nearly 60 percent of core cells grouted solid using Type S mortar.

**Sound Attenuation:** Installing insulation within a wall cavity will improve the STC rating by about 4 to 6 dB according to accepted industry sources.<sup>2</sup> Applying the minimum predicted improvement shows:

| CMU Thickness   | No Insulation in CMU Wall | Core Foam Masonry Foam Insulation® in CMU Wall |
|-----------------|---------------------------|--|
| 8 inches (NCMA) | 49 to 52 dB <sup>3</sup>  | 53 to 56 dB                                    |
| 8 inches (OCBA) | 46 to 50 dB <sup>3</sup>  | 50 to 54 dB                                    |

<sup>2</sup>acoustics.com

<sup>3</sup>NCMA = National Concrete Masonry Association • OCBA = Ontario Concrete Block Association

**Wythe Cavity Fill:** Millions of double wythe masonry structures are successfully insulated by completely filling the wythe cavity with amino-plast foamed-in-place insulation. We suggest adding a mineral fiber weep hole protection strip to ensure drainage at the cavity's base.

### Core Foam Masonry Foam Insulation® Advantages -

- Superior high speed installation technology
- Low to no formaldehyde - <1% in uncured; below detectable limits in cured foam
- Exceptional thermal performance
- Class A (Class 1) acceptable to install in Fire Rated assemblies
- Costs less to install than rigid foam insulation board
- Installed by factory trained, experienced personnel
- Low shrinkage - < 0.5% in closed CMU cells; < 2.0% in open cavities
- Improves STC ratings in masonry walls
- Does not support mold growth



**Core Foam Masonry Foam Insulation Meets or Exceeds All Building Code Requirements**

*cfiFOAM products, including Core Foam Masonry Foam Insulation, are not associated with and are a different product from the Core Fill-500™ products manufactured by Tailored Chemical Products, Inc.*

December 2006