Core Foam Masonry Foam Insulation®
Product Information Sheet

R-Value per inch
4.92/inch @ 25°F mean temperature
4.40/inch @ 75°F mean temperature

R-Value of 8” CMU Wall
8.0 to 10.0 Injected into 100 lbs./ft³ block

R-Value of 12” CMU Wall
11.00 to 13.0 Injected into 100 lbs./ft³ block

Flame Spread
25 per ASTM E-84 @ 3.5” thick

Smoke Density
200 per ASTM E-84 @ 3.5” thick

Fire Classification
Class A per NFPA Life Safety Code

Thermal Resistance of Core Foam Masonry Foam Insulation

1Thermal performance is portrayed to reflect typical installed conditions based upon NAVLAP accredited laboratory testing per ASTM C518 as well as industry accepted engineering calculations. This data is based on Test No. RD072318TR, dated August 8, 2007, performed by R&D Services, Cookeville, TN.

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 Claims: Core Foam Masonry Foam Insulation is a Class A rated insulation that may be installed in CMU walls without diminishing CMU wall fire ratings. Masonry foam contributes negligibly to fire ratings and cannot increase 2-hr CMU wall fire-ratings to 4-hrs. Such claims by some are supported by ASTM E-119 test reports wherein the test panels were built using High Performance CMU made with 100% shale aggregate, now obsolete moulds, proprietary foam laced with fire retardant, and up to 57% of the core cells grouted. Manufacturers and installers pass-off “modified” foam in “atypical” construction as equal to “normal” foam in “typical” construction, creating the false impression that their normal foam increases CMU wall’s fire-rating by up to 2-hrs. These claims are false!

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

<table>
<thead>
<tr>
<th>CMU Thickness</th>
<th>No Insulation in CMU Wall</th>
<th>Core Foam Masonry Foam Insulation® in CMU Wall</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 inches (NCMA)</td>
<td>49 to 52 dB³</td>
<td>53 to 56 dB</td>
</tr>
<tr>
<td>8 inches (OCBA)</td>
<td>46 to 50 dB³</td>
<td>50 to 54 dB</td>
</tr>
</tbody>
</table>

²acoustics.com
³NCMA = National Concrete Masonry Association • OCBA = Ontario Concrete Block Association

Wythe Cavity Fill: Many 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.

Dated 11/09