



WEAVER CONSTRUCTION MANAGEMENT, INC.
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SUBMITTAL TRANSMITTAL

November 22, 2011

WGC Submittal No: 04150-001.C

PROJECT: Harold Thompson Regional WRF
 Birdsall Rd.
 Fountain, CO 80817
 Job No. 2908

ENGINEER: GMS, Inc.
 611 No. Weber St., #300
 Colorado Springs, CO 80903
 719-475-2935 Roger Sams

OWNER: Lower Fountain Metropolitan
 Sewage Disposal District
 901 S. Santa Fe Ave.
 Fountain, CO 80817
 719-382-5303 James Heckman

CONTRACTOR: Ammex Masonry, Inc.
 P.O. Box 1272
 Commerce City, CO 80022
 303-853-9008 Amy Wheeler

SUBJECT: Replacement Core-Fill 500 Foam in Lieu of Perlite Loose Fill

SPEC SECTION: 04150 - Masonry Accessories

PREVIOUS SUBMISSION DATES: 8/17/11, 10/3/11, 10/27/11

DEVIATIONS FROM SPEC: ___ YES X NO

CONTRACTOR'S STAMP: This submittal has been reviewed by Weaver Construction Management and approved with respect to the means, methods, techniques, & safety precautions & programs incidental thereto. Weaver General Construction also warrants that this submittal complies with contracted documents and comprises on deviations thereto:

Contractor's Stamp:

Engineer's Stamp:

Date: 11/22/11
 Reviewed by: H.C. Myers
 (X) Reviewed Without Comments
 () Reviewed With Comments

ENGINEER'S
 COMMENTS: _____

America's Leader in Commercial and Industrial Foaming™

CORE-FILL 500™

FOAM INSULATION



This product is classified by
Underwriters Laboratories Inc. as to
Surface Burning Characteristics; R19134



Core-Fill 500™ is a thermal and acoustical amino-plast masonry foam insulation.

Superior R-values, excellent sound absorption characteristics and enhanced fire-resistance ratings.

Economical alternative to loose-fill and rigid insulation products.

Applications Include:

- Concrete Block
- Masonry Cavity Fill
- Precast Hollow-core Panels

TAILORED
CHEMICAL PRODUCTS, INC.

To learn more, call
800-627-1687

www.core-fill500.com

DESCRIPTION

Core-Fill 500™ is a superior insulation material for use in commercial and industrial construction and has excellent thermal and acoustic properties. It is a two-component system consisting of amino-plast resin and a catalyst foaming agent surfactant.

These two components, when properly ratioed and propelled by compressed air, produce a foam insulation having the appearance of shaving cream.

PERFORMANCE CHARACTERISTICS

Core-Fill 500™ is fire-rated as a Class A building material for use in the filling of cores in concrete masonry blocks, cavity walls and between brick and block.

It sets cold in 10 to 60 seconds after leaving the hose nozzle and does not expand any further, so enclosed spaces may be filled without pressure build-up. Before setting, the foam flows easily to fill the total cavity, regardless of its shape or the presence of obstructions such as pipes, wires and electrical boxes. It may also be troweled into open areas if desired.

ADVANTAGES

Core-Fill 500™ offers proven performance as an insulating material. It combines a high 'R' value with the unique ability to completely fill and seal voids, a true advantage when dealing with masonry construction.

It deadens sound very efficiently.

Because it is applied under pressure, the foam fills irregular spaces with ease. Core-Fill 500™ does not settle like vermiculite or EPS beads, thus remaining effective for the entire life of the building.

Most important, it is cost-competitive with any other insulation method.

Core-Fill 500™ easily complies with all relevant codes, standards and testing (DOE, EPA, ASTM and others). Because it contains no polystyrenes, polyisocyanurate, or polyurethanes, it offers superior fire safety characteristics. It does not contain or emit CFC's or HCFC's.

Core-Fill 500™ is activated on-site and pumped under pressure into the wall cavity, pipe chase or interwall space.

Core-Fill 500™ has been installed in over 80,000 installations and \$60 billion in new construction.

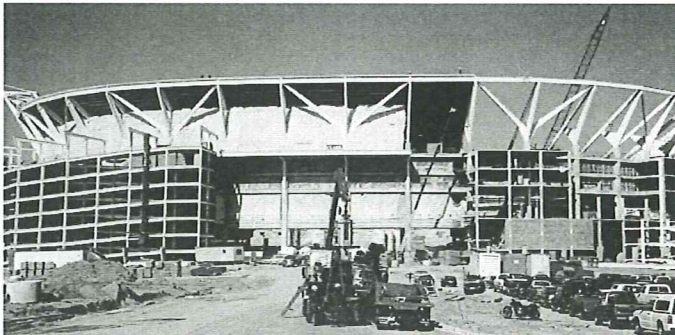
Core-Fill 500™ is easily applied in new and existing construction.

1. A series of small holes are drilled into the mortar.
2. The foam flows through the entire cavity and web.
3. Holes are patched once the wall is completely filled.

Core-Fill 500™ can also be pumped into a wall or cavity from the top of the uncapped wall.



In a typical day, one crew can fill up to 8,000 square feet of wall space with Core-Fill 500™, a speed much higher than alternative methods.



Core-Fill 500™ was recently installed into 350,000 square feet of masonry in the new Washington Redskins Stadium.



Hollow-core, pre-stressed concrete panels.

APPLICATION

No surface preparation is required. The foam is mixed and then applied continuously from the applicator hose. One of the greatest advantages of Core-Fill 500™ foam insulation is that it is typically installed after wall sections have been completed. This allows the mason contractor to work uninterrupted thus shortening construction times and production costs.

When wall sections have been completed, sealed or closed, Core-Fill 500™ is pumped into each cavity through a small hole drilled into the mortar joints around the entire wall area approximately 5' from the floor level. This method is repeated in lifts of 10' until the wall is filled.

SUGGESTED USES

Core-Fill 500™ is an essential part of any construction that values long-term energy savings and acoustic shielding. It has been specified again and again by the architects for such companies as Wal-Mart, K-Mart, Winn-Dixie, Safeway, Kroger, Publix, Ingles, Harris Teeter, Circuit City, Lowes Foods and Lowe's Hardware.

It has been installed in schools, churches, prisons, banks, hospitals and manufacturing facilities. Use Core-Fill 500™ wherever an insulated vertical space is of importance to the finished project.

USAGE NOTES

Although easily applied and light in weight, Core-Fill 500™ is not recommended for ceiling or attic applications. It will not support compressive loads nor should it be used for flotation. Do not use in overhead applications or underground as a vapor barrier. Do not use against surfaces with sustained temperatures in excess of 190°F.



Architects are increasingly specifying Core-Fill 500™ in new school and church construction.



Wal-Mart and Lowe's Building Supply specify Core-Fill 500™ in all their new stores nationwide.

CORE-FILL 500™ FOAM INSULATION

- An amino-plast foam insulation that completely fills irregular and hard-to-reach spaces.
- Can be installed in both new and existing construction.
- Excellent energy and sound insulation values.
- Inexpensive and effective alternative to loose-fill and rigid insulation products.
- No settling or expansion after installation.
- Superior fire wall and safety performance.
 - Fire ratings can be enhanced to 4 hours on 2 hour rated 8" and 12" CMU wall assemblies.
 - No CFC's or HCF's
 - Safe for the environment

**CORE-FILL 500™ MEETS OR EXCEEDS
ALL PERTINENT TESTS, CODES AND STANDARDS.**

07210/TAI
Buyline 2097

| Test/property | Reference | Required Performance | Core-Fill 500™ Performance |
|------------------|---------------------------|--|---|
| Fire Safety | ASTM E-84 | Flame spread not to exceed 25 Smoke developed of not more than 450 | Flame spread 0* Smoke developed 5 Fuel contribution 0 |
| Fire Wall Rating | ASTM E-119 | Minimum - 2 hours | 4 hrs. on 12" CMU 4 hrs. on 8" CMU |
| Corrosiveness | DOE (e) (3) HUD 6.2.8 | Al, Cu, Steel - No Perforations Loss of mass not to exceed 0.2g | No Perforations Less than 0.1g |
| Density | DOE (c) (4) HUD 6.1.4 | Dry 0.7 to 0.9 lb/ft ³ Wet 2.5 to 5.5 lb/ft ³ | 0.8 lb/ft ³ 2.7 to 3.3 lb/ft ³ |
| Water Absorption | DOE (e) (8) HUD 6.2.2 | Not to exceed 15% No absorption in less than one hour | Floating test 3% Droplet test 1 hr. 15 min. |
| Shrinkage | DOE (e) (11) HUD 6.2.5 | Not more than 4.0% | Less than 1% |

*Flame spread values are not intended to reflect hazards presented by this or any other material under actual fire conditions.

QUALITY ASSURANCE

Core-Fill 500™ contractors are licensed and approved by Tailored Chemical Products, Inc. All applicators are trained and certified in the use of Core-Fill 500™ materials and equipment.

**For more information or
the name of the certified
installer nearest to you,
call 800-627-1687.**



This product is Classified by Underwriters Laboratories Inc. as to Surface Burning Characteristics; R19134



When installed as suggested in the ENERGY STAR® Insulation Guide, this product can save energy. Call for the insulation guide or call 1-888-STAR-YES.

CORE-FILL 500™ PERFORMANCE

THERMAL PROPERTIES

| Insulation Value | Construction | 'U' Value | 'R' Value |
|--------------------|----------------------------|-----------|-----------|
| Parallel Heat Flow | 8" block/60 lbs. density | 0.07 | 14.2 |
| | 8" block/100 lbs. density | 0.10 | 9.1 |
| | 12" block/60 lbs. density | 0.05 | 20.0 |
| | 12" block/100 lbs. density | 0.08 | 12.5 |

R-value = 4.9/inch

R-values taken from the National Concrete Masonry Association.

R-value varies with block density.

FIRE WALL RATINGS

| Reference | Construction | Minimum Requirement | Core-Fill 500™ Performance |
|--|--------------|---------------------|----------------------------|
| ATSM E-119-88 (equiv. to UL 901 and UL 905) | 8" block | 2 hours | 4 hours |
| | 12" block | 2 hours | 4 hours |

Tests performed at Southwest Research, San Antonio, Texas.

A two-hour rated 8" or 12" CMU can be improved to 4 hours when cores are filled with Core-Fill 500™.

ACOUSTIC PROPERTIES

| | |
|-----------------------------------|----------------|
| Core-Fill 500™ Filled 8" CMU..... | STC 53/OITC 44 |
| Sand-Filled 8" CMU..... | STC 53/OITC 44 |

TESTS PERFORMED BY ACOUSTIC SYSTEMS, AUSTIN, TX

**CORE-FILL 500™
FOAM INSULATION**

Manufactured by **TAILORED** CHEMICAL PRODUCTS INC.

PO Drawer 4186 • Hickory, NC 28603 • 828 322 6512 • Fax 828 322 7688

www.core-fill500.com