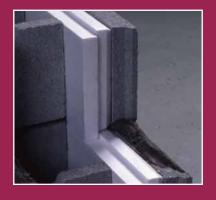


# SPEC-THERMAL<sup>TM</sup>

INSULATED MASONRY

Featuring Korfil Hi-R®





## Featuring Korfil Hi-R®

# Now available nationally though the **Concrete Products Group**

#### Korfil Hi-R Masonry Wall System:

The Hi-R Wall System from Concrete Block Insulating Systems, Inc. is a specially designed concrete masonry unit and individually molded insulation insert. The block and the insulation are combined at the block manufacturing plant prior to delivery to the job site. The assembly provides a wall system capable of achieving higher thermal R-values than conventional masonry, with no effect on the structural integrity of masonry construction.

#### **Insulation Inserts**

Hi-R Inserts are made from flame-retardant treated expandable polystyrene. Like all foamed plastics, good fire procedures must be followed during storage and installation. Inserts give off no toxic products of combustion, except carbon monoxide and carbon dioxide, concentrations of which are far less than those given off by equal volumes of wood products. Expandable polystyrene contains no fluorocarbons and no formaldehyde.

#### **Masonry Units:**

Korfil Hi-R masonry units are available in precision faced and decorative faced units. Unit sizes are available in 8, 10 and 12-inch with nominal 8 inch x 16 inch face dimensions as well as 4 inch x 16 inch face dimensions.

#### **Applicable Standards:**

ASTM C 578, Type X, replacing Federal Specifications HH-I-524C. Specification for Rigid Cellular Polystyrene Thermal Insulation.

ASTM C 90 Standard Specification for Load-bearing Concrete Masonry Units.



**Technical Data:** The Thermal Properties tables show the thermal resistance (R<sub>t</sub>), including inside and outside air surface resistances of 0.68 and 0.17 hr-ft2-°F/BTU, respectively, and the U-values for various densities of concrete masonry units. See Thermal Properties charts.

**Physical Characteristics**: See Physical Properties chart below for expandable polystyrene.

#### **PHYSICAL PROPERTIES**

Typical Density (lbs./cu. ft.)	1.3
Thermal Resistance(R) per inch of thickness at 75°	5.0
Water Vapor Permeance per inch of thickness	1.1
Water Absorption %	Volume <1.0
Flame Spread Rating*	<5.0

<sup>\*</sup> This numerical flame spread is not intended to reflect hazards presented by this or any other material under actual conditions

#### **Thermal Properties:**

The Values below are for Pre-insulated Hi-R Masonry Units.<sup>1</sup> U Values are based on conventional 3/8" Mortar Joint Construction. U-Value units are Btu/hr/sqft/DegF.

8 Inch Wide Hi-R Wall System							
Density of Block	Wall Type 1*		Wall Type 2**		Wall Type 3***		
LBS/FT <sup>3</sup>	Rt	U	Rt	U	Rt	U	
80	12.21	0.082	13.61	0.074	15.04	0.067	
100	10.27	0.097	11.67	0.086	13.10	0.076	
120	8.50	0.118	9.90	0.101	11.33	0.088	

10 Inch Wide Hi-R Wall						
Density of Block	Wall Type 1*		Wall Type 2**		Wall Type 3***	
LBS/FT³	Rt	U	Rt	U	Rt	U
80	13.92	0.072	15.32	0.065	16.75	0.060
100	11.87	0.084	13.27	0.075	14.70	0.068
120	9.95	0.100	11.35	0.088	12.78	0.078

12 Inch Wide Hi-R Wall System						
Density of Block	Wall Type 1*		Wall Type 2**		Wall Type 3***	
LBS/FT <sup>3</sup>	Rt	U	Rt	U	Rt	U
80	14.56	0.069	15.96	0.063	17.39	0.058
100	12.48	0.080	13.88	0.072	15.31	0.065
120	10.50	0.095	11.90	0.084	13.33	0.075

12 Inch Cavity Wall, 4 Inch Dense Outer Wythe 3/4 Inch Air Space, 8 inch wide Hi-R Unit						
Density of Block	Wall Type 1*		Wall Type 2**		Wall Type 3***	
LBS/FT <sup>3</sup>	Rt	U	Rt	U	Rt	U
80	13.62	0.073	15.02	0.067	16.45	0.061
100	11.68	0.086	13.08	0.077	14.51	0.069
120	9.91	0.101	11.31	0.088	12.74	0.079

- \* Hi-R Wall System only
- \*\* Hi-R Wall System, 1/2 inch gypsum board on furring strips.
- \*\*\* Hi-R Wall System, 1/2 inch foil-backed gypsum board on furring strips.
- 1. A third party thermal analysis was completed making use of the Hot Box Test Data from three accredited laboratory services. A complete Engineering Report dated November 20, 1996, including Addendum Added Nov. 1, 2002, is available upon request. It covers the thermal values of the Hi-R Masonry Wall Systems.



## Featuring Korfil Hi-R®

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Hi-R is a registered trademark of CONCRETE BLOCK INSULATING SYSTEMS, INC.





## NATIONWIDE AVAILABILITY

The Concrete Products Group (CPG) consists of regional market leaders in the concrete products industry. The Concrete Products Group, LLC is organized to provide consistent products behind a strong brand to regional and national masonry customers. SPEC-THERMAL® is produced by each manufacturer with consistent specifications and production expertise.

1-800-789-0872

#### A. JANDRIS & SONS, INC.

202 High St. Gardner, MA 01440 1 PLANT LOCATION

#### ALLIED CONCRETE PRODUCTS, LLC 3900 Shannon St.

3900 Shannon St. Chesapeake, VA 23324-1054 3 LOCATIONS

### P.O. Box 546

2211 Hwy 10 South St. Cloud, MN 56302-0546 2 LOCATIONS

#### BARNES & CONE

P.O. Box 280 5894 Court St. Rd. Syracuse, NY 13206-0280 1 LOCATION

## BASALITE CONCRETE PRODUCTS, LLC

605 Industrial Way Dixon, CA 95620 13 LOCATIONS

#### **BLOCK USA**

P.O. Box 100813 2570 Ruffner Rd. Birmingham, AL 35210 21 LOCATIONS

## FIZZANO BROTHERS CONCRETE PRODUCTS, INC.

1776 Chester Pike Crum Lynne, PA 19022-1299 3 LOCATIONS

### HEADWATERS CONSTRUCTION MATERIALS

1109 Upland Dr. Suite C Houston, TX 77043 6 LOCATIONS

#### **MIDWEST PRODUCTS GROUP**

12901 St. Charles Rock Rd. Bridgeton, MO 63044-2485 8 LOCATIONS

#### OBERFIELD'S, INC.

P.O. Box 362 • 528 London Rd. Delaware, OH 43015 7 LOCATIONS

#### ORCO BLOCK CO., INC.

11100 Beach Blvd. Stanton, CA 90680-0129 7 LOCATIONS

# REGIONAL AND NATIONAL LOCATIONS CONTINUE TO BE ADDED FOR YOUR CONVENIENCE

Kansas City, MO • Springfield, MO • Jefferson City, MO • St Louis, MO • Paducah, KY • Delaware, OH • Sunbury, OH • Lima, OH • Columbus, OH, (2) Plants • Marion, OH Little Rock, AK • Jackson, TN • Gulfport, MS • Jackson, MS • Pensacola, FL • Panama City, FL • DeFuniak Springs, FL • Mobile, AL • Dothan, AL • Andalusia, AL • Jasper, AL Sylacauga, AL • Anniston, AL • Florence, AL • Atlanta, GA (4) Plants • Denver, CO • Dixon, CA • Tracy, CA • Selma, CA • Surrey, BC • Meridian, ID • Sparks, NV • Carson City, NV Portland, OR • Dupont, WA • St. Cloud, MN (2 plants) • Gardner, MA • Stanton, CA • Riverside, CA • Romoland, CA • Banning, CA • Indio, CA • Oceanside, CA Houston, TX • Dallas, TX • San Antonio, TX • Palestine, TX • South Jordan, UT • Crum Lynne, PA • Exton, PA • Trevose, PA • Chesapeake, VA • Richmond, VA • Harrisonburg, VA

