# **SPEC-BRIK**® Hi-R

# Beautiful Energy Efficient Walls

The beauty of flashed brick with the thermal performance of Korfil Hi-R

Offered in all 12 Spec-Brik color blends plus custom options

Factory pre-installed insulation provides guaranteed consistent insulation value

Permits full grout and reinforcement of wall without removing insulation

Provides Moisture Protection of a Barrier Wall

Available in half-high (nominal 4") and Jumbo (nominal 8") heights





www.concreteproductsgroup.com



## The Beauty of SPEC-BRIK... Now With Korfil **Hi-R** Insulation

The SPEC-BRIK Hi-R Wall System uses SPEC-BRIK color blends in a special concrete masonry unit with individually molded insulation inserts to provide superior thermal performance to assist in meeting prevailing Codes and Standards. The SPEC-BRIK Hi-R Masonry Unit has been designed to provide reduced thermal bridging. The assembly provides a wall system capable of achieving higher thermal R-values than conventional masonry, while providing full Code-compliant load resistance.

#### Insulation Inserts

Hi-R Inserts are made by Concrete Block Insulating Systems, **Inc.** 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 more dense building construction products. Expandable polystyrene contains no fluorocarbons and no formaldehyde.

#### **Masonry Units**

SPEC-BRIK Hi-R Masonry Units from the Concrete Products Group, LLC are available in precision faced Unit sizes are available in 10 and 12 widths with nominal 4 inch or 8 inch x 16 inch face dimensions. Other units are available with split or other textures.

#### **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.



SPEC-BRIK is available in 12 Standard Colors (custom colors are also available) Check concreteproductsgroup.com for downloadable Masonry Designer Rendering Software



St. Cloud Blend

Syracuse Blend

The colors shown are digital graphic representations of SPEC-BRIK color blends. We highly recommend viewing physical samples prior to order and the assembly of a SPEC-BRIK Sample Panel for judging acceptance.of the finished work for best results.

Spec-Brik Hi-R units may be partially or fully grouted and reinforced without removing the insulation inserts





SPEC-BRIK Hi-R in 12x4x16 and Korfil Hi-R Insert

## THERMAL PROPERTIES - SPEC-BRIK HI-R

The values below are for Pre-insulated SPEC-BRIK Hi-R Masonry Units. U Factors are based on conventional 3/8" Mortar Joint Construction and ungrouted cells (data for grouted units is also available). U Factor units are Btu/hr/sqft/Deg.F. The results below are calculated based on the results of a third party thermal analysis that 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 System.

R-Value and U-Factor Comparison 10" Thick Units					
Density of Block	10x4x16 Conventional Masonry (grouted)	10x4x16 Spec-Brik Hi-R (grouted)	10x4x16 Conventional Masonry (grouted)	10x4x16 Spec-Brik Hi-R (grouted)	
	R-Value	R-Value	U-Factor	U-Factor	
95	2.0	11.82	0.50	0.08	
105	1.9	10.82	0.53	0.09	
115	1.8	9.85	0.55	0.10	
125	1.7	8.94	0.59	0.11	
135	1.6	8.08	0.62	0.12	

#### **R-Value and U-Factor Comparison 12" Thick Units**

Density of Block	12x4x16 Conventional Masonry (grouted)	12x4x16 Spec-Brik Hi-R (grouted)	12x4x16 Conventional Masonry (grouted)	12x4x16 Spec-Brik Hi-R (grouted)
	R-Value	R-Value	U-Factor	U-Factor
95	2.1	12.58	0.48	0.08
105	2.0	11.56	0.50	0.09
115	1.9	10.57	0.53	0.09
125	1.9	9.62	0.54	0.10
135	1.8	8.72	0.55	0.11

#### **Check for Local Availability**

Note: Our manufacturing locations typically select one or more mix designs with densities that meet their local market requirements and these may not match some or all of the densities listed in these charts. In addition, some locations may not produce 10" units. Please contact us if you have questions regarding which densities and sizes are available in your region and to get thermal data that corresponds to the available densities in your location.

References:

www.cbisinc.com, Technical Library Section PDF File 316 (Development of Hi-R Block R-Values). National Concrete Masonry TEK No 6-16A Heat Capacity (HC) National Concrete Masonry TEK 7-1C Fire Resistance Rating of Concrete Masonry Assemblies

Insulated concrete blocks specified for any project must certify that the R-Values they publish comply with the calculation procedures outlined in the Natonal Concrete Masonry Association's Thermal Catalog of Concrete Masonry Assemblies, which is based on the American Society of Heating, Refrigerating and Air-Conditioning Engineer Standard 90.1. Further, Concrete Block Insulating Systems, Inc. certifies that the Thermal R-Values listed here do comply with the above stated calculation procedures.



SPEC-BRIK Hi-R is available in two sizes to meet a variety of project requirements





# **Nationwide Availability**

The Concrete Products Group LLC (CPG) consists of regional market leaders in the concrete products industry. The CPG is organized to provide consistent, top-quality products to regional and national customers.





**Over 70 Manufacturing Locations** 



