



**Spec-Thermal**



**CONCRETE**  
PRODUCTS GROUP

**HI-R and HI-R Half High**



**JOHNSON**  
CONCRETE PRODUCTS

**Thermal Performance**  
**Outstanding Value**

# HI-R and Half High HI-R

Spec-Thermal HI-R and HI-R Half High are pre-insulated partially or fully grouted masonry wall systems for superior thermal performance. These units are a cost-effective option for masonry walls that comply with Energy Code.



## Applications

- Single wythe walls for conditioned spaces in Climate Zones 1-5.
- Single wythe walls for conditioned spaces with furring/wallboard and/or interior or exterior insulation.



## Thermal Performance

- Two part offset interlocking 2.5" Korfiil® insulation insert with lapped joints.
- Two web design reduces thermal bridging when compared to traditional CMU.
- The HI-R wall systems use interior exposed thermal mass to provide excellent energy conservation.

## Fully or Partially Grouted

- Great for regions where partially grouted walls are preferred.
- Fire resistance: depends on unit width, density and whether partially or fully grouted.
- May be constructed as a fully grouted wall to increase fire resistance.

## Construction Efficiency and Value

- Shape eases placement even with tight reinforcement spacing.
- Bond beam units are available.
- Utilities (plumbing and electrical) readily fit in unit cores and horizontal voids.
- Single trade installs interior and exterior finishes, structure and insulation in one step.
- HI-R Unit Widths: 8", 10" or 12". 8" has limited core area and may be difficult to grout.
- HI-R Half High Unit Widths: 12".

## Available Brick Aesthetics

- Spec-Brik HI-R is available in Spec-Brik colors for brick aesthetics.
- 12 Standard blends are available matching many popular clay brick colors.



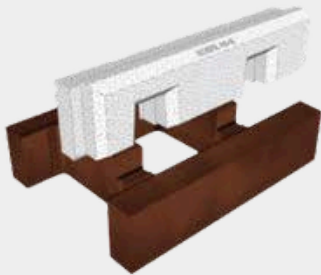
## Design Resources



Hi-R is a great choice for partially or fully grouted masonry walls.



Hi-R Half High combines thermal performance with brick aesthetics.



## Thermal Properties

KORFIL HI-R (8" High) Masonry Units (Grouted)					
Type of Block (inches)	Density of Block (pcf)				
	95	105	115	125	135
<b>8x8x16</b>					
R <sub>v</sub> Value	10.00	9.07	8.18	7.36	6.59
U Factor	0.10	0.11	0.12	0.14	0.15
Heat Capacity	11.60	12.00	12.40	12.90	13.30
Equivalent Thickness	5.60	5.60	5.60	5.60	5.60
<b>10x8x16</b>					
R <sub>v</sub> Value	11.82	10.82	9.85	8.94	8.08
U Factor	0.08	0.09	0.10	0.11	0.12
Heat Capacity	15.80	16.30	16.90	17.50	18.00
Equivalent Thickness	7.60	7.60	7.60	7.60	7.60
<b>12x8x16</b>					
R <sub>v</sub> Value	12.58	11.56	10.57	9.62	8.72
U Factor	0.08	0.08	0.09	0.10	0.11
Heat Capacity	20.10	20.80	21.50	22.10	22.80
Equivalent Thickness	9.60	9.60	9.60	9.60	9.60

Check with your local manufacturer for available densities

HI-R Half High/Spec-Brik Hi-R Masonry Units (Grouted)					
Type of Block (inches)	Density of Block (pcf)				
	95	105	115	125	135
<b>12x4x16</b>					
R <sub>v</sub> Value	12.58	11.56	10.57	9.62	8.72
U Factor	0.08	0.08	0.09	0.10	0.11
Heat Capacity	20.10	20.80	21.50	22.10	22.80
Equivalent Thickness	9.60	9.60	9.60	9.60	9.60

Check with your local manufacturer for available densities.

Designers should also take into account the thermal performance of fittings at joints, openings, and corners in performing Energy Code compliance calculations.

## Service and Support

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



800-789-0872

[www.concreteproductsgroup.com](http://www.concreteproductsgroup.com)

### CPG Members

A-1 BLOCK  
1617 South  
Division Avenue  
Orlando, FL 32805

TCC Materials  
2025 Centre Pointe Blvd.,  
Suite 300  
Mendota Heights, MN 55120-1221

BARNES & CONE  
P.O. Box 280  
5894 Court St. Rd.  
Syracuse, NY  
13206-0280

BASALITE CONCRETE  
PRODUCTS LLC  
605 Industrial Way  
Dixon, CA  
95620

BARRASSO AND SONS INC  
160 Floral Park Street  
Islip Terrace, NY  
11752

DAGOSTINO BUILDING  
BLOCKS, INC.  
1111 Altamont Avenue  
Schenectady, NY 12303

FENDT BUILDERS  
SUPPLY  
22005 Gill Rd,  
Farmington, MI 48335

FIZZANO BROTHERS  
CONCRETE PRODUCTS, INC.  
1776 Chester Pike  
Crum Lynne, PA  
19022-1299

JANDRIS BLOCK  
202 High St.  
Gardner, MA  
01440

JOHNSON CONCRETE  
COMPANY  
217 Klumac Road  
Salisbury, NC 28144

LEE BUILDING  
PRODUCTS  
4301 Industrial Drive  
Bowling Green, KY  
42101

PREMIER CONCRETE CONCRETE  
PRODUCTS, INC  
38200 Hwy 16  
Denham Springs, LA  
70706

ORCO BLOCK &  
HARDSCAPE  
11100 Beach Blvd.  
Stanton, CA  
90680-0129

TEXAS BUILDING  
PRODUCTS  
3261 Highway 108  
Strawn, Texas 76454

WESTERN MATERIALS  
COMPANY  
1202 South First Street  
Yakima, WA 98901