

# Spec-Thermal<sup>®</sup>

PRE-INSULATED MASONRY SYSTEM



Thermal Performance  
Outstanding Value

HI-R  
HI-R HALF HIGH

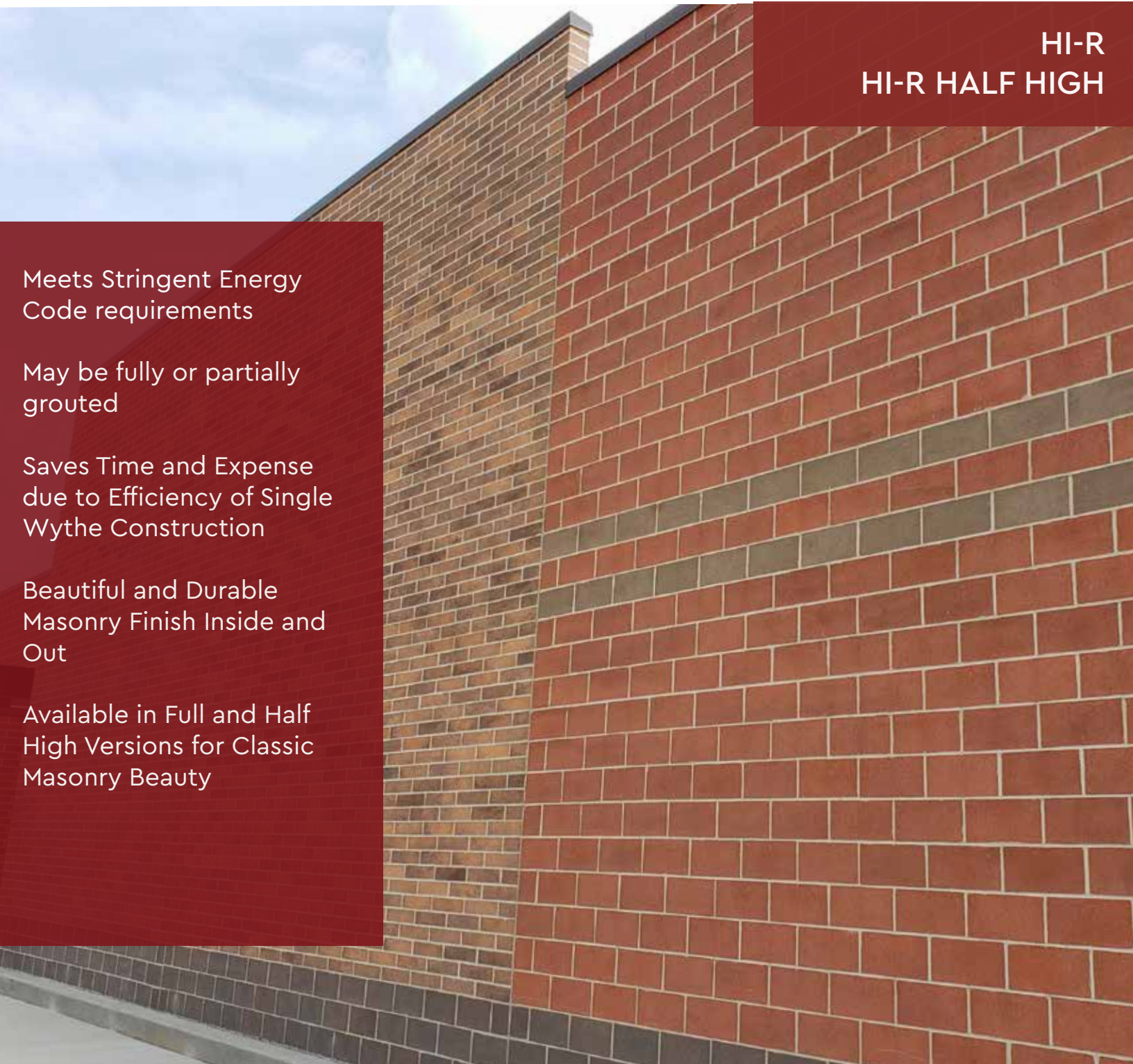
Meets Stringent Energy  
Code requirements

May be fully or partially  
grouted

Saves Time and Expense  
due to Efficiency of Single  
Wythe Construction

Beautiful and Durable  
Masonry Finish Inside and  
Out

Available in Full and Half  
High Versions for Classic  
Masonry Beauty



# 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" Korfil® insulation insert with lapped joints.
- Two web design offers reduced thermal bridging when compared to traditional CMU.
- The HI-R wall systems use interior exposed thermal mass to provide excellent energy conservation.

## May be 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".

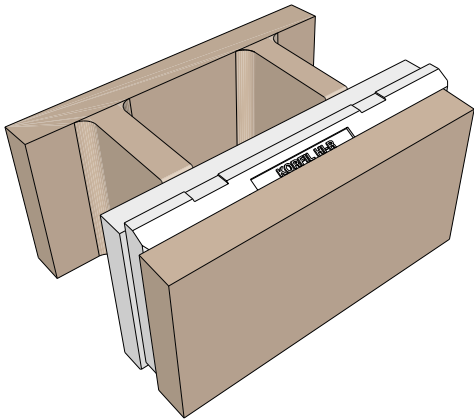
## Available Brick Aesthetics

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



# Thermal Properties

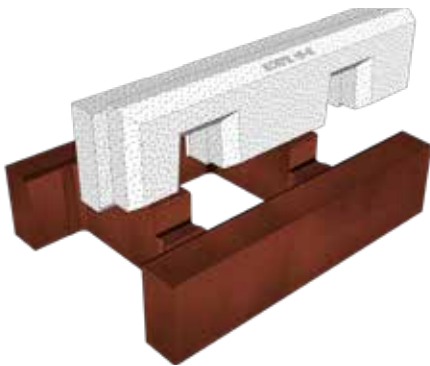
HI-R is a great choice for partially or fully grouted masonry walls



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 combines thermal performance with brick aesthetics.



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.

## Additional Resources

**Design Tools:** we offer a variety of design and construction resources for designers, including these manuals:



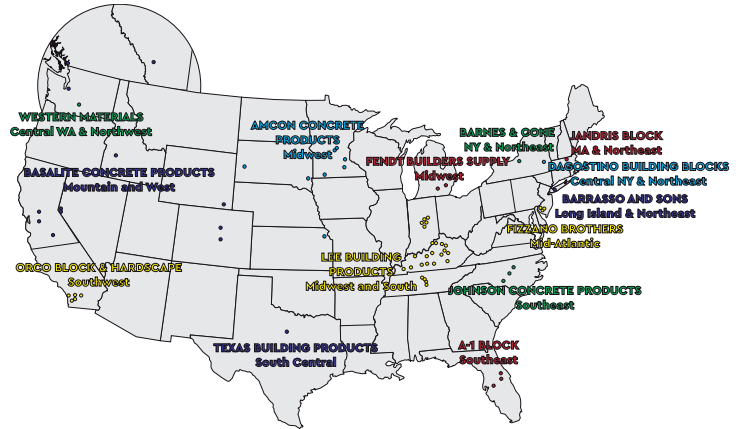
**Other Resources:** Please visit our on-line design resource center at <https://resources.concreteproductsgroup.com> for additional resources including: Guide specification, COMcheck video, Construction Details in .pdf, dwg and .rvt formats. Best Construction Practices Guide, Construction and design note series in print and video, Color Rendering software with Revit plug-in.

# Solutions Available Nationwide

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

We provide a comprehensive set of design resources to support designers, including a library of CAD Details, a Thermal properties guide, design and construction notes and videos and color selection and rendering tools that are available via a Revit® plug-in.

Please contact us if we can assist with your next project.



Manufacturing Locations

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**800-789-0872**

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 Orlando, FL 32805

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 Mendota Heights, MN 55120-1221

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 Syracuse, NY 13206-0280

**BARRASSO AND SONS INC**  
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 Islip Terrace, NY 11752

**BASALITE CONCRETE PRODUCTS LLC**  
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 Dixon, CA 95620

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 Farmington, MI 48335

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 Crum Lynne, PA 19022-1299

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 Gardner, MA 01440

**JOHNSON CONCRETE COMPANY**  
 217 Klumac Road  
 Salisbury, NC 28144

**LEE BUILDING PRODUCTS**  
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 Somerset, Kentucky 42502

**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  
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INNOVATIVE CONCRETE MASONRY SYSTEMS

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