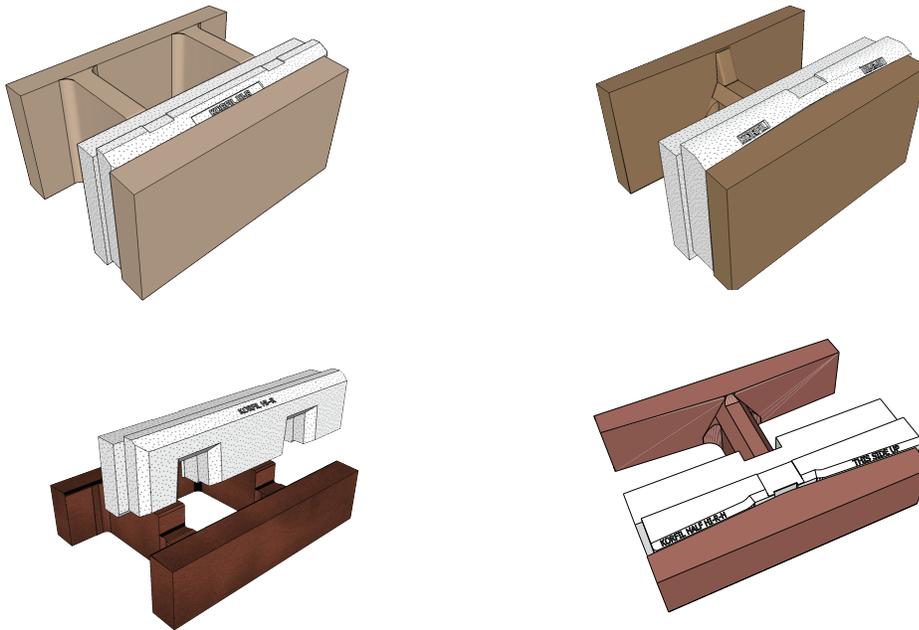


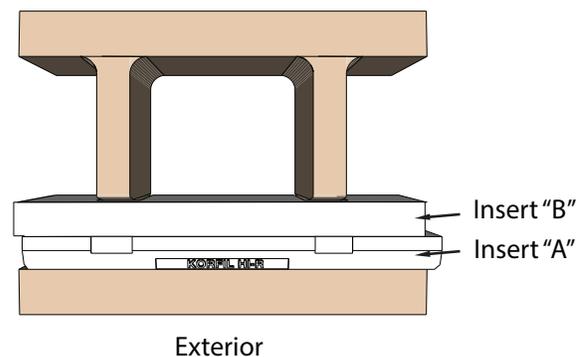
Korfil HI-R and HI-R-H Construction Best Practices

The following tips should be used for best results when building walls using Korfil® Hi-R and Hi-R H Wall Systems.

- 1. Unit and Mortar Dimensions.** The Hi-R and Hi-R H systems are designed to use a 3/8" mortar joint, head and bed. The units are 1/8" taller at the inside of the face shell (7-3/4") than at the face (7-5/8") so less mortar will be required for the bed joints than conventional CMU.
- 2. Install the Units "Right Side Up".** Korfil Hi-R/Hi-R-H Units are pre-insulated at the manufacturer and will arrive at the job site with the insulation in place. Unlike standard CMU, these units are not inverted for installation. When the units are correctly oriented, the insert will rest on top of the webs as shown below.



- 3. Locate Insulation Inserts toward the Exterior of the Wall.** Typically the blocks should be oriented so that the inserts are located toward the exterior of the wall, as shown below. If your plans indicate a different orientation, check with the designer to confirm that it was intentional.



- 4. After Laying Block, Tap Insert Into Place.** You will notice that the inserts have two interlocking parts which are referred to as the "A" insert (located toward the exterior of the block) and the "B" Insert (located toward the interior of the block). The inserts are designed to form lapping joints when placed in the wall both with blocks located above and below and to both sides to provide superior insulation. As you build each course, be sure to tap or push the "B" Insert downwards to position it correctly to form a tight joint with the inserts below. At the end of each work day, make sure the "B" Inserts on the top course are tapped down into place to avoid a height gain when work

is recommended due to excess mortar getting Handling Inserts on the Starter Course. Either carefully avoid leaving excess mortar under the "B" insert or remove the "B" insert on the starter course. This is done to make certain any mortar that may have fallen under the inner insert does not prevent inserts on the next course from being pushed downward.

5. Grouting and Reinforcing Hi-R and Hi-R H Walls. The Hi-R product is suitable for both full and partial grouting. The Hi-R H products is designed for only for fully grouted walls. The webs in Hi-R blocks will align when they are placed in either a running bond or stack bond pattern providing an unobstructed cavity for grouting and re-bar placement. The reduced height of the Hi-R H single web will allow grout to flow between units and is suitable for fully grouted walls in either running or stack bond patterns. When building partially grouted Hi-R Walls, request that the webs be full height. This will eliminate the need to mortar the reduced height webs. under the insert and hardening.

Grout Information

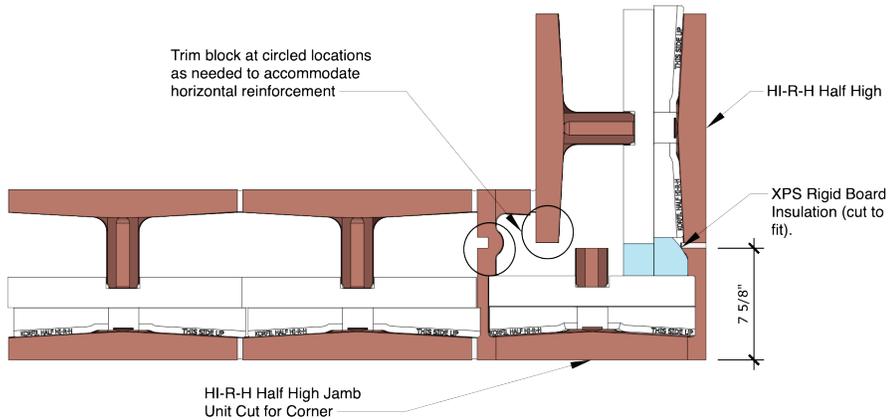
Unit	Grout volume per unit (cubic inches)	Grout ft ³ per ft ² of wall area (fully grouted)
Hi-R 8-8-16 Smooth	215.2 in ³	.140 ft ³
Hi-R 8-8-16 Split	215.2 in ³	.140 ft ³
Hi-R 10-8-16 Smooth/Split	398.8 in ³	.260 ft ³
Hi-R 12-8-16 smooth/split	582 in ³	.379 ft ³
Hi-R-12-4-16	291 in ³	.379 ft ³
Hi-R-H 12-8-16 Smooth	551 in ³	.358 ft ³
Hi-R-H 12-8-16 Split	551 in ³	.358 ft ³
Hi-R-H 10-8-16 smooth	325 in ³	.211 ft ³
Hi-R-H 10-8-16 split	325 in ³	.211 ft ³
Hi-R-H 12-4-16	241.5 in ³	.315 ft ³
Hi-R-H 12-4-16 Jamb unit	182.1 in ³	.237 ft ³

6. Building Bond Beams. For Korfil Hi-R units, check with your local manufacturer for available bond beam units. For Hi-R H units, the standard Hi-R H unit may be used as a bond beam unit without the need for any modifications.

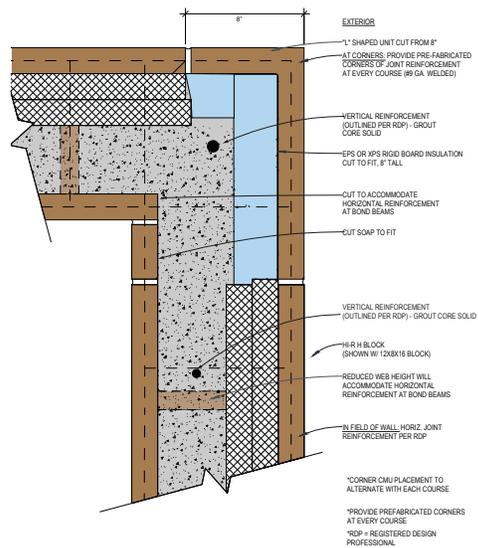
7. Anticipate Vertical Rebar Placement. Provide the General Contractor information on the proper spacing and location for vertical rebar placement in grade beam to avoid having to bend rods or cut block.

8. Horizontal Joint Reinforcement Placement. The Hi-R and Hi-R H Systems work with 9-gauge Ladder Type Wall Reinforcing with butt welded center cross ties at 16 inch increments. The ties should be placed directly over webs of blocks to allow the innermost insert to be pushed down to lock with the insert below it.

9. Corners. These details can be constructed using specialty units (available regionally – check on availability) or standard masonry fittings and insulation.

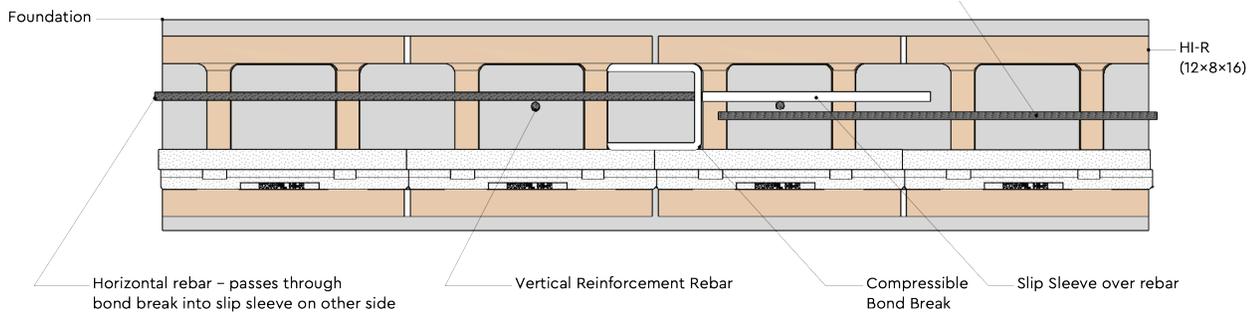
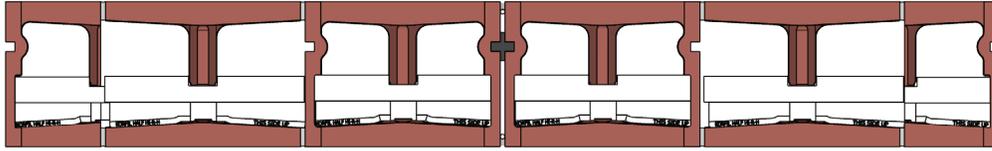


Corner Constructed Using Specialty HI-R-H Jamb and Corner Unit

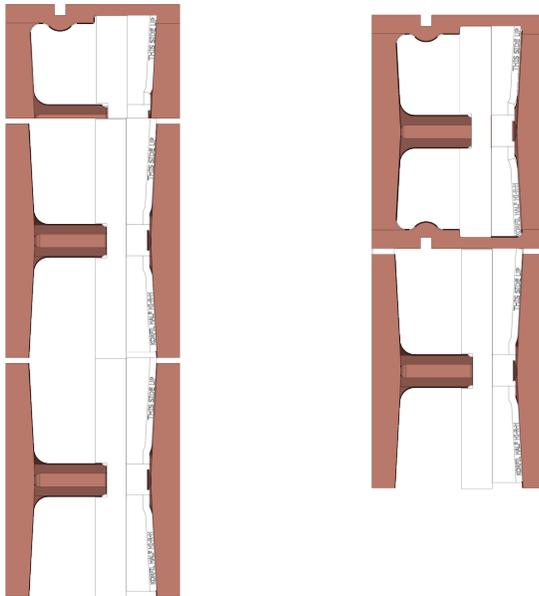


Corner Constructed Using Concrete Masonry Unit Fittings

10. Joints and Jamb. These details can be constructed using specialty units (available regionally or standard masonry fittings and rigid insulation). The HI-R-H Jamb and Corner Unit is only available in some regional markets – please check availability before specifying.



Michigan Style Soft Joint Constructed Using HI-R Units
(Not Feasible with HI-R-H style units)



Jamb – Alternate Courses Constructed with HI-R-H/Hi-R-H Half High Jamb Unit

11. **Avoid Chippage.** Care should be taken in job site handling to avoid chippage and breakage. Your fork-lift operator should exercise caution on rough terrain.
12. **Loadbearing Points.** Delete inserts at load-bearing points directly under bar joist, pre-cast beams, etc. Consult your project architect and engineer for approval
13. **Store or Dispose of Loose Inserts.** Since the inserts are relatively light and can be moved by wind, collect and secure any loose inserts on the job site.
14. **Architectural Masonry Construction Best Practices.** For Architectural Masonry, please refer to "Spec-Brik® Construction Best Practices" available from the Concrete Products Group LLC.

For more information, contact CPG at 1-800-789-0872 or info@concreteproductsgroup.com