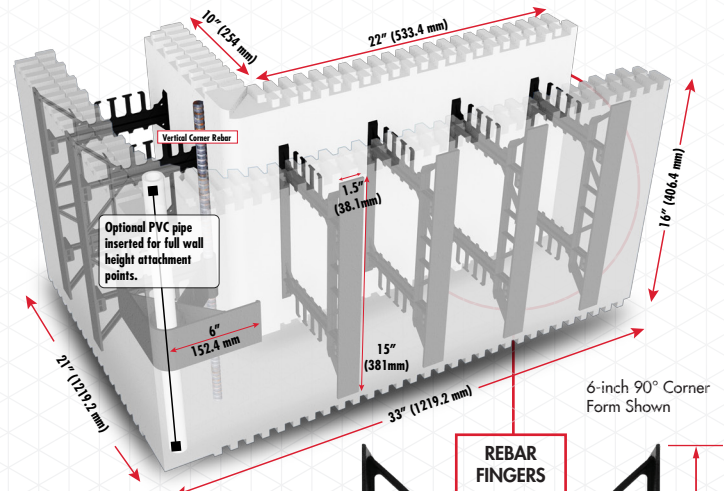
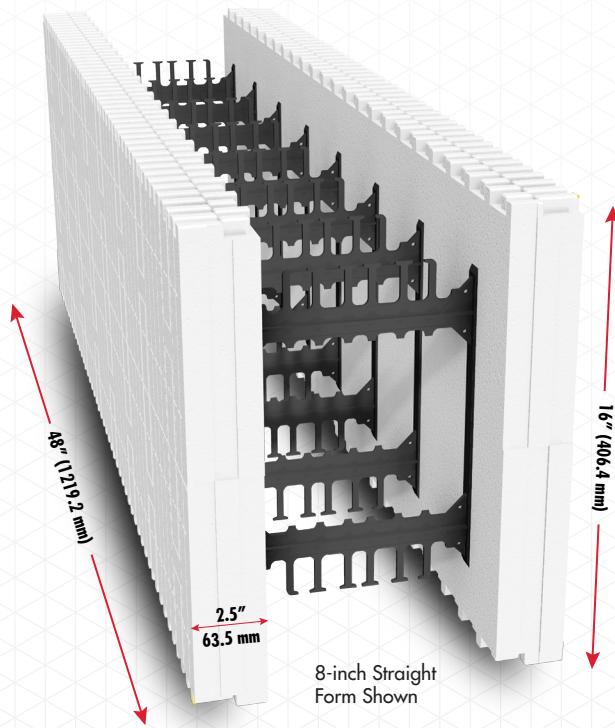


# TECHNICAL DATA

## BUILDBLOCK INSULATING CONCRETE FORMS (ICFS)



**BuildBlock ICF forms combine the standard features you expect in a quality ICF with many unique benefits you'll find in no other block. BuildBlock is built for speed with the least waste of any ICF.**

**READY TO STACK.** No on-site assembly required; start installing right off the truck.

**FULLY REVERSIBLE.** All forms are fully reversible; no top, bottom, left or right. Longer corner design provides automatic offset for each course.

**INDUSTRY STANDARD SIZE.** Industry-standard 16-inch (406.4mm) high forms produce less waste when cutting around doors and windows.

**TIGHT INTERLOCKING BLOCKS.** Blocks easily stack and securely lock into place resulting in greater strength over the competition. No foam or clips required between courses.

**2.5-INCH (63.5MM) FOAM PANELS.** Allows easy accommodation of electrical and plumbing installation in the foam.

**HIGH-DENSITY PLASTIC WEBS.** Eight 1.5-inch (38.1mm) wide webs are spaced on 6-inch (152.4mm) centers for a stronger form and more attachment points than 8-inch spacing found in many other ICFs. Greater strength, more value.

**REBAR SUPPORT.** Deep, snap-in rebar fingers hold two 5/8-inch (15.9mm) rebar in place with no need for tying steel. Alternating horizontal rebar creates a pocket for vertical rebar eliminating most steel tying.

**EASY MECHANICAL CHASES.** BuildBlock forms provide 1-inch of foam between forms and webs which can be removed after pouring for electrical, plumbing, and other cabling without

cutting through vertical webs.

**OPEN WEB DESIGN.** Interior rebar saddles provide rebar support even when cutting half height blocks without compromising concrete flow.

**EXTRA HEAVY-DUTY ATTACHMENT POINTS (495LBS.)** Located every 8-inches vertically, and 6-inches horizontally, they allow for super secure attachment of heavy cabinetry directly to the ICF. The entire face of the web, 1.5"x15" (38.1mm x 381mm) is a standard attachment point designed for attaching bracing and other finishing materials.

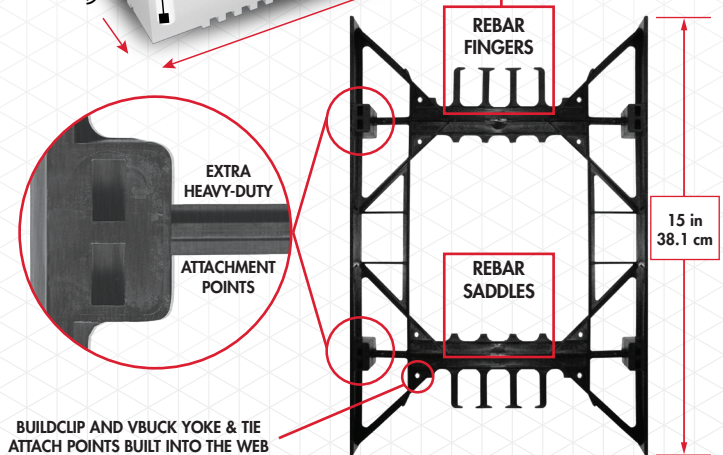
**MOLDED-IN TAPE MEASURE AND HORIZONTAL CUT LINES.** Numbered, vertical cut lines on every inch, often eliminate the need for using a tape measure.

Horizontal cut lines are located every two-inches (50.8mm) providing cutting references for straighter cuts.

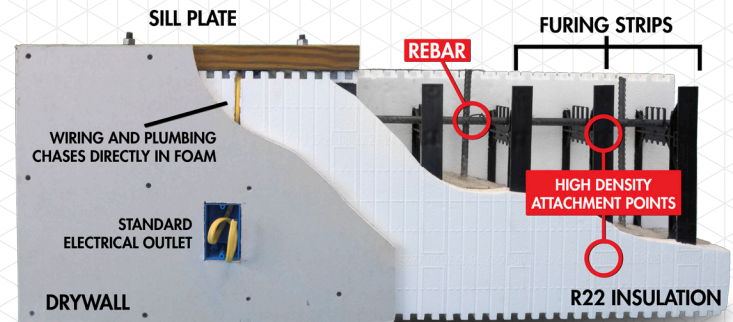
**1-INCH REPEATING CUT PATTERN ON BLOCK CONNECTION.** More layout options; no mismatched connections. One of the lowest waste factors of any ICF on the market today.

**ATTACHMENT POINT MARKINGS.** Molded-in markings identify attachment points; heavy-duty attachment points are marked with a BB.

**BUILT-IN HALF HEIGHT BLOCKS.** Easily cut blocks in half and create two identical half height blocks as needed. No special half-height blocks required.



BUILDCLIP AND VBUCK YOKE & TIE ATTACH POINTS BUILT INTO THE WEB



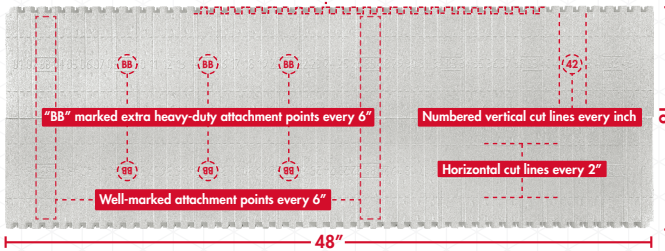
BUILDBLOCK INTERIOR ICF WALL

The EPS foam is easily cut out to provide mounting for electrical boxes, plumbing, and wiring after the forms are poured. The 1.5-inch (38.1mm) wide, 15" (381mm) tall furring strips provide attachment points for drywall. Two high-density attachment points, marked by BB provide extra strong 495lb. (224.53kg) pullout strength for mounting cabinets, shelving, installer bracing, safety equipment, or other needs.



BUILDBLOCK EXTERIOR WALL

**Tight Fully-Reversible Interlocking Connections**



FORM (HEIGHT 16")	CORE	WIDTH	LENGTH	RETURN	AREA	CONCRETE VOLUME
Straight	4"	9"	48"	N/A	5.33 ft <sup>2</sup> 4951 m <sup>2</sup>	.065844 yd <sup>3</sup> .050341 m <sup>3</sup>
	102 mm	229 mm	1219 mm	N/A		.098765 yd <sup>3</sup> .075511 m <sup>3</sup>
	6"	11"	48"	N/A		.131687 yd <sup>3</sup> .100682 m <sup>3</sup>
	152 mm	279 mm	1219 mm	N/A		.164609 yd <sup>3</sup> .125852 m <sup>3</sup>
	8"	13"	48"	N/A		.197529 yd <sup>3</sup> .151022 m <sup>3</sup>
	203 mm	330 mm	1219 mm	N/A		
90° Corner	4"	9"	(e) 31"/787 mm (i) 22"/559 mm	(e) 19"/483 mm (i) 10"/254 mm	5.56 ft <sup>2</sup> 5165 m <sup>2</sup>	.054574 yd <sup>3</sup> .041725 m <sup>3</sup>
	102 mm	229 mm	(e) 33"/838 mm (i) 22"/559 mm	(e) 21"/533 mm (i) 10"/254 mm	6.00 ft <sup>2</sup> 5574 m <sup>2</sup>	.086528 yd <sup>3</sup> .066155 m <sup>3</sup>
	6"	11"	(e) 35"/889 mm (i) 22"/559 mm	(e) 23"/584.2 mm (i) 10"/254 mm	6.44 ft <sup>2</sup> 5983 m <sup>2</sup>	.121517 yd <sup>3</sup> .092906 m <sup>3</sup>
	152 mm	279 mm	(e) 37"/940 mm (i) 22"/559 mm	(e) 25"/635 mm (i) 10"/254 mm	6.88 ft <sup>2</sup> 6391 m <sup>2</sup>	.151444 yd <sup>3</sup> .115787 m <sup>3</sup>
	8"	13"	(e) 39"/991 mm (i) 22"/559 mm	(e) 27"/686 mm (i) 10"/254 mm	7.33 ft <sup>2</sup> 6809 m <sup>2</sup>	.191408 yd <sup>3</sup> .146341 m <sup>3</sup>
	203 mm	330 mm	(e) 28"/711 mm (i) 24.272"/617 mm	(e) 16"/406 mm (i) 12.272"/312 mm	4.89 ft <sup>2</sup> 4542 m <sup>2</sup>	.080841 yd <sup>3</sup> .061807 m <sup>3</sup>
45° Corner	4"	9"	(e) 28"/711 mm (i) 23.444"/596 mm	(e) 16"/406 mm (i) 11.444"/291 mm	4.89 ft <sup>2</sup> 4542 m <sup>2</sup>	.080841 yd <sup>3</sup> .061807 m <sup>3</sup>
	102 mm	229 mm	(e) 28"/711 mm (i) 22.615"/574 mm	(e) 16"/406 mm (i) 10.615"/270 mm		.105425 yd <sup>3</sup> .080600 m <sup>3</sup>
	6"	11"				
	152 mm	279 mm				
	8"	13"				
	203 mm	330 mm				
Brickledge	4"	9"	48"	N/A	4 ft <sup>2</sup> 3716 m <sup>2</sup>	.101206 yd <sup>3</sup> .077377 m <sup>3</sup>
	102 mm	229 mm	48"	N/A		.134140 yd <sup>3</sup> .102557 m <sup>3</sup>
	6"	N/A	48"	N/A		.167074 yd <sup>3</sup> .127737 m <sup>3</sup>
	154 mm	N/A	1219.2 mm	N/A		.202748 yd <sup>3</sup> .152917 m <sup>3</sup>
	8"	N/A	48"	N/A		.238421 yd <sup>3</sup> .178097 m <sup>3</sup>
	203 mm	N/A	1219 mm	N/A		
Double Taper Top	4"	9"	48"	N/A	5.33 ft <sup>2</sup> 4951 m <sup>2</sup>	.097206 yd <sup>3</sup> .074318 m <sup>3</sup>
	102 mm	229 mm	48"	N/A		.130128 yd <sup>3</sup> .099489 m <sup>3</sup>
	6"	N/A	48"	N/A		.163050 yd <sup>3</sup> .124660 m <sup>3</sup>
	152 mm	N/A	1219 mm	N/A		.195972 yd <sup>3</sup> .149831 m <sup>3</sup>
	8"	N/A	48"	N/A		.261816 yd <sup>3</sup> .175002 m <sup>3</sup>
	203 mm	N/A	1219 mm	N/A		
BuildBuck	4"	9"	PIECE LENGTH	N/A	3.125 ft <sup>2</sup>	N/A
	102 mm	228 mm	52"/1321 mm	N/A	2.903 m <sup>2</sup>	N/A
	6"	11"	NOMINAL LENGTH	N/A	3.82 ft <sup>2</sup>	N/A
	152 mm	279 mm	48"/1219 mm	N/A	3.550 m <sup>2</sup>	N/A
BuildRadius 2 ft	4"	9"	OUTER PANEL	18"/6"	5.33 ft <sup>2</sup>	.056296 yd <sup>3</sup>
	102 mm	228 mm	INNER PANEL	457 mm/152 mm	4.951 m <sup>2</sup>	.043041 m <sup>3</sup>
	6"	11"	OUTER PANEL	12"/0	6.67 ft <sup>2</sup>	.105645 yd <sup>3</sup>
	152 mm	279 mm	INNER PANEL	305 mm/0	6.197 m <sup>2</sup>	.080771 m <sup>3</sup>
BuildRadius 4 ft	4"	9"	INNER PANEL	19.75"/502 mm	2.67 ft <sup>2</sup>	.045099 yd <sup>3</sup>
	102 mm	228 mm	INNER PANEL	21.125"/537 mm	2.480 m <sup>2</sup>	.03448 m <sup>3</sup>
	6"	11"	INNER PANEL	21.8175"/554 mm		.04642 yd <sup>3</sup>
	152 mm	279 mm	INNER PANEL	22.25"/565 mm		.035490 m <sup>3</sup>
BuildRadius 8 ft, 12 ft, 16 ft, 20 ft	4"	9"	OUTER PANEL	24"/610 mm		.04715 yd <sup>3</sup>
	102 mm	228 mm	OUTER PANEL			.036048 m <sup>3</sup>
	6"	11"	OUTER PANEL			.047606 yd <sup>3</sup>
	152 mm	279 mm	OUTER PANEL			.036397 m <sup>3</sup>

MORE INFORMATION AVAILABLE AT [BUILDBLOCK.COM](http://BUILDBLOCK.COM)

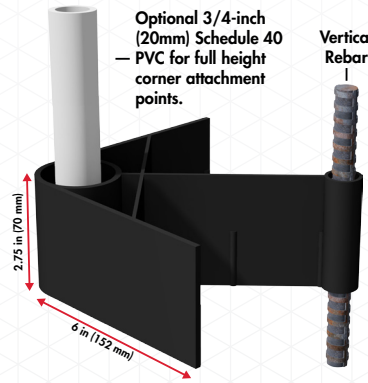
**RECOMMENDED CONCRETE MIX**

See Install & Technical Manual for more information

- All concrete and rebar placement should follow local codes or engineer specifications.
- 3000 psi: Higher psi may be used, but lower psi is not recommended. In Canada, minimum 20 mpa.

- Aggregate: 3/8-inch (10mm) rock chip or river rock is highly recommended. 1/2-inch (12mm) aggregate can be used but will require more vibration.
- Slump: 5-inch - 6-inch (Keep in mind as concrete is pumped under pressure it loses approximately 1/2-inch of slump.)

**BEST ICF CORNER ON THE MARKET**



Corners are a critical part of any ICF wall. BuildBlock ICF corners are longer and stronger than other corners on the market. This means less chance of failure, better attachment points for bracing and siding, and peace of mind during the pour.

**LONGER.** Extra length in both directions eliminates the need for additional strapping during installation and the concrete pour, saving time and labor.

**STRONGER.** The 2.5-inch (63.5mm) wide, 6-inch (152.4 mm) long high-density plastic corner web holds rebar in place, adds strength during concrete pouring, and provides superior attachment points for exterior finishes.

Optionally you can place 3/4 inch (19mm) schedule 40 PVC vertically in the corner for additional attachment points for siding or trim boards. Vertical rebar can be placed in the vertical rebar holder built into the corner web.

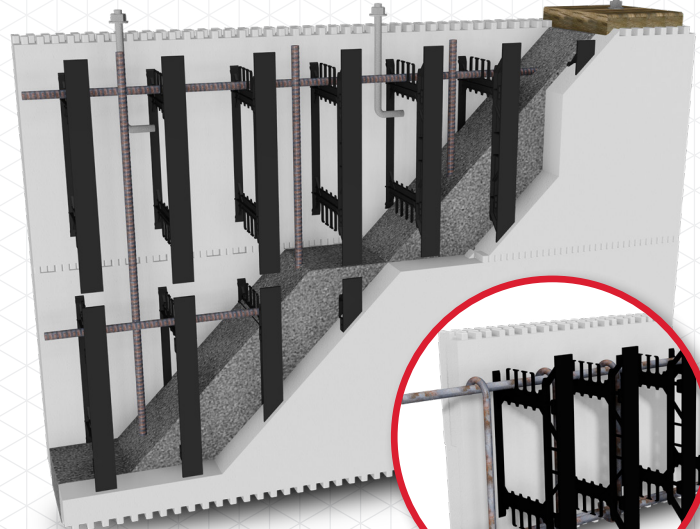


Figure 1

**FIGURE 1.** BuildBlock ICF wall section cutaway showing horizontal and vertical steel placement, alternating rebar placement to hold vertical rebar, J-bolts mounted in the concrete and a wooden top plate.

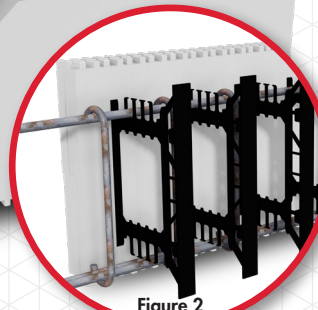


Figure 2

**FIGURE 2.** Rebar stirrups, as required by local building codes, tying the horizontal rebar together above window and door lintels. The horizontal rebar runs continuously as required by building codes and additional reinforcement as required by engineer of record or local codes.

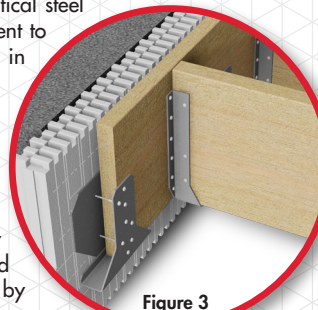


Figure 3

**FIGURE 3.** Attachment of standard floor joists to an ICF using traditional lumber. The Simpson Strong-Tie ICF-VL is embedded into the poured concrete and provides mounting for wood or steel ledgers.

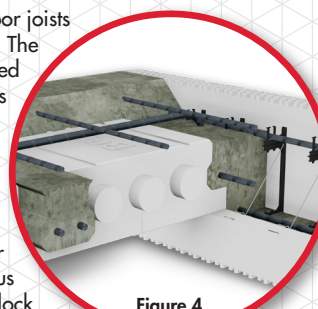


Figure 4

**FIGURE 4.** Integrate BuildDeck or other ICF flooring system directly into the ICF wall by cutting blocks at the correct height and joining the floor and wall systems during a continuous pour. Optional BuildClip ledge block reinforcement shown.