

# R30 Insulated Concrete Forms

Amvic™ Insulated Concrete Forms (ICF) are stay in place formwork manufactured using two 3.25" (83mm) Type II/Type 2, closed cell, Expanded Polystyrene (EPS) panels connected by polypropylene webs placed at 8" (203mm) on center.

The forms offer a 6-in-1 system that provides structure, insulation, vapor barrier, air barrier, sound attenuation and attachments for interior finishes and exterior cladding.

Completed Amvic™ ICF walls offer a sustainable and resilient building structure with R-Value of 30, STC rating of 50+ and a Fire Resistance Rating (FRR) of 3+ hours.

### Applications

- Below grade foundation walls
- Above grade walls
- Frost walls
- Additions to existing buildings
- Multi-story residential and commercial construction
- Institutional buildings
- High wind/hurricane areas

Amvic™ ICF ensures exceptional quality, reduced construction time and labor costs.

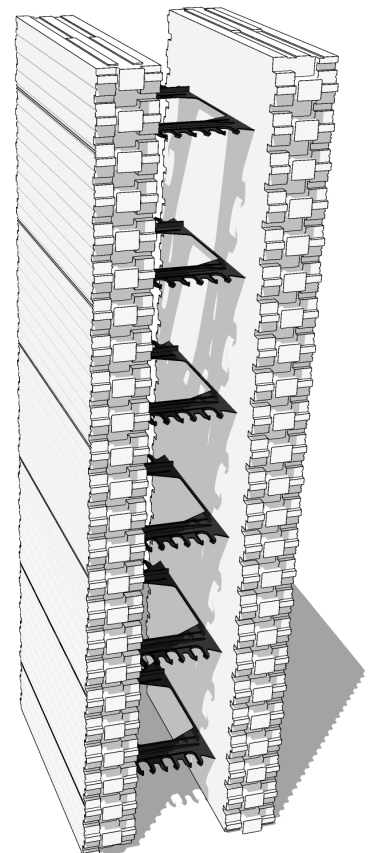
- One of the strongest ICF with form capacity strength of 865 psf (41 kPa).
- Fully reversible FormLock™ interlocking system with a depth of 1" (25mm) which provides superior connection strength between blocks.
- Webs have built-in clips which can hold two courses of reinforcing steel greatly reducing the need for additional tying.
- Withstands internal vibration.
- Manufactured with over 60% recycled materials (by weight).
- Generates less than 1% construction waste.

### Code Approvals

- QAI Listing #B1061-2
- ICC-ES Report #1269
- State of Florida
- State of Wisconsin

### Physical Properties Table as per ASTM C578 and CAN/ULC S701

Density	ASTM C1622	1.5 lb/ft <sup>3</sup> (24 kg/m <sup>3</sup> )	
Compressive Strength	ASTM D1621	20.09 psi (138.5 kPa)	
Flexural Strength	ASTM C203	50.50 psi (348.2 kPa)	
Thermal Resistance	ASTM C177	4.0 F.ft <sup>2</sup> .hr/Btu (0.70 m <sup>2</sup> K/W)	
Water Vapor Permeance	ASTM E96	2.27 US perm (130 ng/Pa.s.m <sup>2</sup> )	
Water Absorption	ASTM C2842	0.93%	
	ASTM C272	2.95%	
Dimensional Stability	ASTM D2126	0.52%	
Limiting Oxygen Index	ASTM D2863	37.0%	
Trueness and Squareness (Maximum)	ASTM C550	Edge:	0.0197 in/ft
		Face:	0.0197 in/ft
		Length and Width:	0.0295 in/ft
Surface Burning Characteristics	ASTM E84	Flame Spread:	25 or less
		Smoke Developed:	450 or less
	CAN/ULC-S102	Flame Spread:	250 or less
		Smoke Developed:	500 or more
Form Capacity Strength	CCMC Section 6.4.4	865 psf (41.4 kPa)	
Fire Resistance Rating (FRR)	CAN/ULC-S101	3+ hrs	



Design Specifications Table

Block Type	Core Size	Block Dimensions L*H*W	Concrete Volume Per Block	Concrete Volume Per ft <sup>2</sup> of Wall Area	Surface Area Per Block
Straight	6" (152mm)	48 x 16 x 12.5" (1219 x 406 x 318mm)	0.099 yd <sup>3</sup> (0.076 m <sup>3</sup> )	0.019 yd <sup>3</sup> (0.014 m <sup>3</sup> )	5.33 ft <sup>2</sup> (0.50 m <sup>2</sup> )
Long 90° Corner	6" (152mm)	[43+27] x 16 x 12.5" ([1092+686] x 406 x 318mm)	0.119 yd <sup>3</sup> (0.091 m <sup>3</sup> )	0.015 yd <sup>3</sup> (0.011 m <sup>3</sup> )	7.78 ft <sup>2</sup> (0.72 m <sup>2</sup> )
Long 45° Corner	6" (152mm)	[36+20] x 16 x 12.5" ([914+508] x 406 x 318mm)	0.090 yd <sup>3</sup> (0.069 m <sup>3</sup> )	0.013 yd <sup>3</sup> (0.010 m <sup>3</sup> )	6.22 ft <sup>2</sup> (0.58 m <sup>2</sup> )
Brick Ledge	6" (152mm)	48 x 16 x 17.5" <sup>1</sup> (1219 x 406 x 445mm) <sup>1</sup>	0.138 yd <sup>3</sup> (0.105 m <sup>3</sup> )	0.026 yd <sup>3</sup> (0.020 m <sup>3</sup> )	5.33 ft <sup>2</sup> (0.50 m <sup>2</sup> )
Double Taper Top	6" (152mm)	48 x 16 x 12.5" <sup>2</sup> (1219 x 406 x 318mm) <sup>2</sup>	0.111 yd <sup>3</sup> (0.085 m <sup>3</sup> )	0.021 yd <sup>3</sup> (0.016 m <sup>3</sup> )	5.33 ft <sup>2</sup> (0.50 m <sup>2</sup> )
Straight	8" (203mm)	48 x 16 x 14.5" (1219 x 406 x 368mm)	0.132 yd <sup>3</sup> (0.101 m <sup>3</sup> )	0.025 yd <sup>3</sup> (0.019 m <sup>3</sup> )	5.33 ft <sup>2</sup> (0.50 m <sup>2</sup> )
Long 90° Corner	8" (203mm)	[45+29] x 16 x 14.5" ([1143+737] x 406 x 368mm)	0.159 yd <sup>3</sup> (0.122 m <sup>3</sup> )	0.019 yd <sup>3</sup> (0.015 m <sup>3</sup> )	8.22 ft <sup>2</sup> (0.76 m <sup>2</sup> )
Long 45° Corner	8" (203mm)	[36.125+20.125] x 16 x 14.5" ([918+511] x 406 x 368mm)	0.115 yd <sup>3</sup> (0.088 m <sup>3</sup> )	0.018 yd <sup>3</sup> (0.014 m <sup>3</sup> )	6.25 ft <sup>2</sup> (0.58 m <sup>2</sup> )
Double Taper Top	8" (203mm)	48 x 16 x 14.5" <sup>3</sup> (1219 x 406 x 368mm) <sup>3</sup>	0.144 yd <sup>3</sup> (0.110 m <sup>3</sup> )	0.027 yd <sup>3</sup> (0.021 m <sup>3</sup> )	5.33 ft <sup>2</sup> (0.50 m <sup>2</sup> )

<sup>1</sup> 12.50" (318mm) block width at the base

<sup>2</sup> 10.75" (273mm) concrete bearing width at the top

<sup>3</sup> 12.75" (324mm) concrete bearing width at the top

