

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.

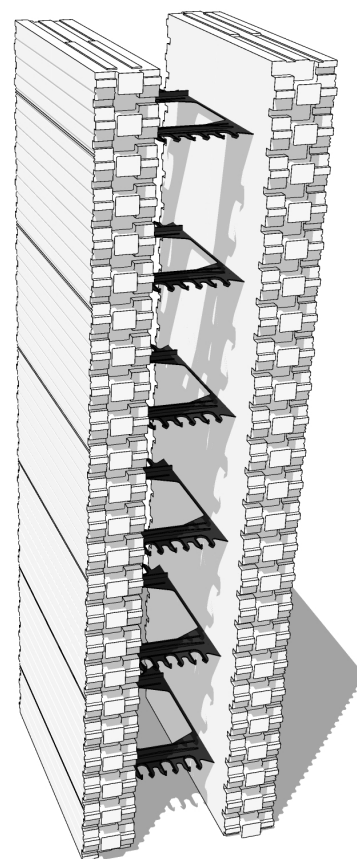
- One of the strongest ICF with form capacity strength of 865 psf (41 kPa).
- Fully reversible FormLock™ interlocking system with a depth of 1" (25mm) which provides superior connection strength between blocks.
- Webs have built-in clips which can hold two courses of reinforcing steel greatly reducing 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 File #B1061
- ICC-ES ESR-1269
- State of Florida
- State of Wisconsin

Physical Properties Table as per ASTM C578 and CAN/ULC S701.1

Density	ASTM D1622	1.5 lb/ft³ (24 kg/m³)	
Compressive Strength	ASTM D1621	20.09 psi (138.5 kPa)	
Flexural Strength	ASTM C203	50.50 psi (348.2 kPa)	
Thermal Resistance¹	ASTM C518	4.0 F.ft².hr/Btu (0.70 m²K/W)	
Water Vapor Permeance²	ASTM E96	0.69 US perm (39 ng/Pa.s.m²)	
Water Absorption	ASTM C2842	0.93%	
	ASTM C272	2.95%	
Dimensional Stability	ASTM D2126	0.52%	
Limiting Oxygen Index	ASTM D2863	>24.0%	
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	
¹ Measurement per 1" (25mm) of thickness			
² Test result at actual product thickness			



Design Specifications Table

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

¹ 12.50" (318mm) block width at the base

² 10.75" (273mm) concrete bearing width at the top

³ 12.75" (324mm) concrete bearing width at the top

