

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

Physical Proportios Table

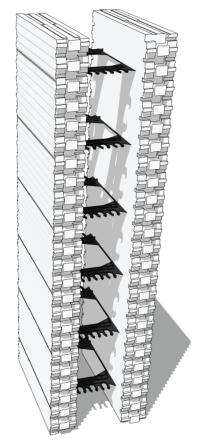
Amvic ICF ensures exceptional quality, reduced construction time and labor costs.

- One of the strongest ICF with form capacity strength of 865 psf (41.4 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

- CCMC Report #13043-R
- ICC-ES Report #1269
- QAI Listing #B1061-2
- State of Florida
- State of Wisconsin

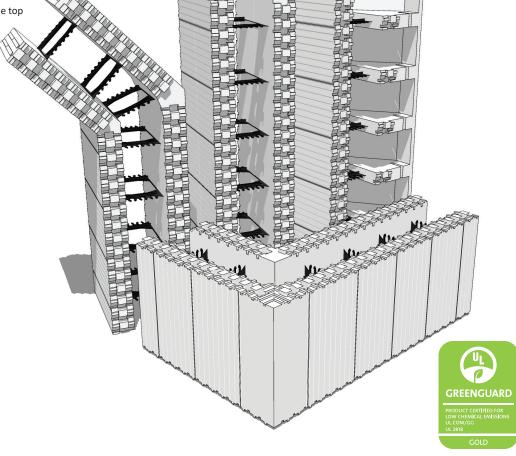
Physical Properties Table as per ASTM C578 and CAN/ULC S701							
Density	ASTM C1622	1.5 lb/ft³ (24 kg/m³)					
Compressive Strength	ASTM D1621	20.09 psi (138.5 kPa)					
Flexural Strength	ASTM C203	50.50 psi (348.2 kPa)					
Thermal Resistance	ASTM C177	4.0 F.ft².hr/Btu (0.70 m²K/W)					
Water Vapor Permeance	ASTM E96	2.27 US perm (130 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	37.0%					
Trueness and Squareness (maximum)	ASTM C550	Edge: Face: Length and Width:	0.0197 in/ft 0.0197 in/ft 0.0295 in/ft				
Surface Burning Characteristics	ASTM E84	Flame Spread: Smoke Developed:	25 or less 450 or less				
	CAN/ULC-S102	Flame Spread: Smoke Developed:	210 400-450				
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	Core	Block Dimensions	Concrete Volume	Concrete Volume Per	Surface Area		
Type	Size	L*H*W	Per Block	ft ² of Wall Area	Per Block		
Straight	6"	48 x 16 x 12.5"	0.099 yd³	0.019 yd³	5.33 ft ²		
	(152mm)	(1219 x 406 x 318mm)	(0.076 m³)	(0.014 m³)	(0.50 m ²)		
Long 90°	6"	[43+27] x 16 x 12.5"	0.119 yd³	0.015 yd³	7.78 ft ²		
Corner	(152mm)	([1092+686] x 406 x 318mm)	(0.091 m³)	(0.011 m³)	(0.72 m ²)		
Long 45°	6"	[36+20] x 16 x 12.5"	0.090 yd³	0.013 yd³	6.22 ft ²		
Corner	(152mm)	([914+508] x 406 x 318mm)	(0.069 m³)	(0.010 m³)	(0.58 m ²)		
Brick	6"	48 x 16 x 17.5" ¹	0.138 yd³	0.026 yd³	5.33 ft ²		
Ledge	(152mm)	(1219 x 406 x 445mm) ¹	(0.105 m³)	(0.020 m³)	(0.50 m ²)		
Double	6"	48 x 16 x 12.5" ²	0.111 yd³	0.021 yd³	5.33 ft ²		
Taper Top	(152mm)	(1219 x 406 x 318mm) ²	(0.085 m³)	(0.016 m³)	(0.50 m ²)		
Straight	8"	48 x 16 x 14.5"	0.132 yd ³	0.024 yd³	5.33 ft ²		
	(203mm)	(1219 x 406 x 368mm)	(0.101 m ³)	(0.018 m³)	(0.50 m ²)		
Long 90°	8"	[45+29] x 16 x 14.5"	0.159 yd ³	0.019 yd³	8.22 ft ²		
Corner	(203mm)	([1143+737] x 406 x 368mm)	(0.122 m ³)	(0.015 m³)	(0.76 m ²)		
Long 45°	8"	[36.125+20.125] x 16 x 14.5"	0.115 yd³	0.018 yd³	6.25 ft ²		
Corner	(203mm)	([918+511] x 406 x 368mm)	(0.088 m³)	(0.014 m³)	(0.58 m ²)		
Double	8"	48 x 16 x 14.5" ³	0.144 yd ³	0.027 yd³	5.33 ft ²		
Taper Top	(203mm)	(1219 x 406 x 368mm) ³	(0.110 m ³)	(0.021 m³)	(0.50 m ²)		

 $^{^{\}mbox{\tiny 1}}$ 12.50" (318mm) block width at the base

 $^{^{\}rm 3}$ 12.75" (324mm) concrete bearing width at the top





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 $^{^{\}rm 2}$ 10.75" (273mm) concrete bearing width at the top