

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 <u>R-Value of 30</u>, <u>STC rating of 50+</u> and a <u>fire resistance rating (FRR) of 3+ hours</u>.

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

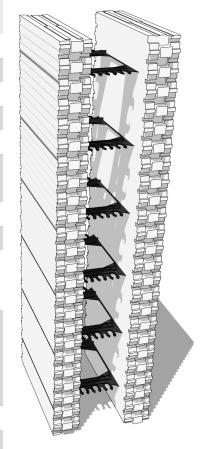
Amvic ICF ensures exceptional quality, reduced construction time and labor costs.

- 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

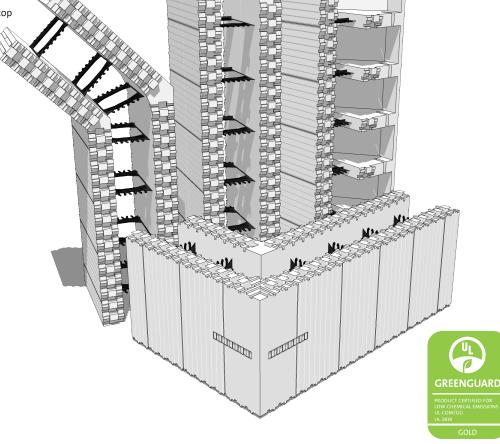
| Physical Properties Table as per ASTM C578 and CAN/ULC S701 | | | | | | | |
|---|--------------------|-------------------------------------|--|--|--|--|--|
| Density | ASTM C1622 | 1.5 lb/ft³ (24 kg/m³) | | | | | |
| Compressive Strength | ASTM D1621 | 20.09 psi (138.5 kPa) | | | | | |
| Flexural Strength | 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 yd ³ | 0.019 yd³ | 5.33 ft ² | | |
| | (152mm) | (1219 x 406 x 318mm) | (0.076 m ³) | (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 yd ³ | 0.013 yd³ | 6.22 ft ² | | |
| Corner | (152mm) | ([914+508] x 406 x 318mm) | (0.069 m ³) | (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 (0.50 m ²) | | |
| Taper Top | (152mm) | (1219 x 406 x 318mm) ² | (0.085 m³) | (0.016 m³) | | | |
| Straight | 8" | 48 x 16 x 14.5" | 0.132 yd³ | 0.025 yd³ | 5.33 ft ² | | |
| | (203mm) | (1219 x 406 x 368mm) | (0.101 m³) | (0.019 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 (0.76 m ²) | | |
| Corner | (203mm) | ([1143+737] x 406 x 368mm) | (0.122 m ³) | (0.015 m³) | | | |
| 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 yd³ | 0.027 yd³ | 5.33 ft ² | | |
| Taper Top | (203mm) | (1219 x 406 x 368mm) ³ | (0.110 m³) | (0.021 m³) | (0.50 m ²) | | |

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

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





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