

## QAI Design B1061-2 AMVIC Standard / AMVIC Plus 3.30 Insulated Concrete Form (ICF) CAN/ULC S101 / ASTM E119 3-Hour Load-Bearing Fire-Resistance-Rated Wall Assembly<sup>1</sup> 15-Minute Stay-In-Place Fire-Rated Wall Assembly (CAN/ULC S101)<sup>1</sup>



No.	COMPONENT	DESCRIPTION
1	Interior Sheathing	Minimum 12 mm (1/2 inch) thickness gypsum board complying with ASTM C1396 and listed by an approved agency or alternate approved thermal barrier meeting the applicable model code. Where gypsum is installed, 37 mm (1-½ inch) length, Type W coarse thread drywall screws are fastened at 305 mm (12 inches) on center horizontally and 406 mm (16 inches) on center vertically. Joints and fastener heads are to be tapped and mudded with industry standard joint compound in accordance with the applicable code.
2	Expanded Polystyrene (EPS) Insulation	AMVIC Standard 64 mm (2-1/2 inch) / AMVIC Plus 3.30 ICF EPS panels to maximum 83 mm (3-1/4 inch) thickness Type 2 (CAN/ULC S701.1) / Type II (ASTM C578) expanded polystyrene certified by QAI. AMVIC Standard / AMVIC Plus 3.30 ICF EPS panels have interlocking teeth to allow stacking onsite to create the forming wall.
3	Web Ties	AMVIC polypropylene web tie component, spaced at 153 mm (6 inches) on center spacing through AMVIC ICF. Web ties can be stacked or staggered vertically during installation (staggered web tie system shown).
4	Concrete Core	Minimum 159 mm (6-¼ inches) thickness concrete core or greater, of minimum 28 MPa (4,000 psl) compressive strength. Steel reinforcing, while not shown, is approved for use. Rebar addition is to be designed and approved by a registered design professional, or authority having jurisdiction in accordance with the applicable code requirements.
5	Exterior Cladding (Not Shown)	Exterior claddings are approved for use with the AMVIC 3-hour load-bearing fire-rated-resistant wall assembly without negatively impacting the fire rating. Exterior claddings complying for use with 15-minute-stay-in-place for use in Canada for combustible construction include: brick veneer, stucco, fire rated exterior insulating finish systems where no additional EPS is added and backwrap is anchored to competent substrate (not foam), and cultured stone. All exterior claddings are to be installed with the applicable building code, and the manufacturer's approved installation instructions.

**Note 1:** The allowable load for Amvic ICF 3 Hour Load Bearing Fire-Resistance-Rated Construction is to be determined by a registered design professional, or authority having jurisdiction in accordance with the applicable codes.