



## **BUILDING PRODUCTS LISTING PROGRAM**

Customer: AMVIC Building Systems, Inc.  
Class: Insulating Concrete Forms (ICF)  
Location: Toronto, Ontario  
Website: [www.amvicsystem.com](http://www.amvicsystem.com)

Listing No. B1061-2  
Project No. B1061-2 Edition 2

Effective Date: May 7, 2014  
Last Revised Date: October 31, 2017  
Expires: N/A

Standards: CAN/ULC-S717.1 "Standard for Flat Wall Insulating Concrete Form (ICF) Systems".  
ASTM E2634 "Standard Specification for Flat Wall Insulating Concrete Form (ICF) Systems"  
CAN/ULC S701 "Thermal Insulation, Polystyrene, Boards and Pipe Covering".  
ASTM C578 "Standard Specification for Rigid, Cellular Polystyrene Thermal Insulation".  
CAN/ULC S102.2 "Standard Method of Test for Surface Burning Characteristics of Flooring, Floor Coverings, and Miscellaneous Materials and Assemblies".  
ASTM E84 "Standard Test Method for Surface Burning Characteristics of Building Materials".  
ASTM E119 Standard Test Methods for Fire Tests of Building Construction and Materials".  
CAN/ULC S101 "Standard Methods of Fire Endurance Tests of Building Construction and Materials".  
UBC 26-3 "Room Fire Test Standard For Interior of Foam Plastic Systems".

Product: AmDECK Insulated Concrete Floor Systems  
AMVIC Standard Insulated Concrete Forms (ICF)  
AMVIC Plus 3.30 Insulated Concrete Forms (ICF)

Markings: Finished product is marked with a permanent label containing the following information:

- a) Manufacturers name or recognized trademark
- b) Product model designation.
- c) Date of manufacture.
- d) CAN/ULC-S102 Flame Spread Index and Smoke Developed Index (FSI  $\leq$  250, SDI  $\geq$  500), ASTM E84 Flame Spread Index and Smoke Developed Index (FSI  $\leq$  25, SDI  $\leq$  450)
- e) CAN/ULC-S701 Type 2, ASTM C578 Type II
- f) QAI logo shown here:



Ratings: AmDECK complies with CAN/ULC S701 as Type 2 thermal insulation, and per ASTM C578 as Type II thermal insulation.

AMVIC Standard ICF and AMVIC Plus 3.30 ICF comply with CAN/ULC S717.1 and ASTM E2634 as flat walled, insulated concrete forms of Type 2 (CAN/ULC S701) / Type II (ASTM C578) insulation.

The following outlines AMVIC products ratings to the noted standards:

AmDECK / AMVIC Standard / AMVIC Plus 3.30 ICF Type 2 Specifications per CAN/ULC S701

PROPERTY	SPECIFICATION
Thermal Resistance m <sup>2</sup> *°C/W at 25 mm Thickness	Minimum 0.70
Water Vapour Permeance Ng/Pa*s*m <sup>2</sup> at 25 mm Thickness	Maximum 200
Dimensional Stability % Linear Change	Maximum 1.5
Flexural Strength kPa	Minimum 240
Water Absorption % Volume	Maximum 4.0
Compressive Strength kPa at 10% Deformation	Minimum 110
Limiting Oxygen Index %	Minimum 24

AmDECK / AMVIC Standard / AMVIC Plus 3.30 ICF Type II Specifications per ASTM C578

PROPERTY	SPECIFICATION
Compressive Resistance psi at Yield or 10% Deformation	Minimum 15.0
Thermal Resistance F*ft <sup>2</sup> *h/Btu at 1.00 Inch Thickness	Minimum 4.0
Flexural Strength psi	Minimum 35.0
Water Vapor Permeance Perms at 1.00 Inch Thickness	Maximum 3.5
Water Absorption % Volume	Maximum 3.0
Dimensional Stability % Change Dimensions	Maximum 2.0
Oxygen Index % Volume	Minimum 24.0
Density	Minimum 1.35



lbs/ft <sup>3</sup>	
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AmDECK / AMVIC Standard / AMVIC Plus 3.30 ICF Surface Burning Characteristics per CAN/ULC S102.2

AMVIC COMPONENT	DENSITY	MAXIMUM THICKNESS	FLAME SPREAD INDEX (FSI)	SMOKE DEVELOPED INDEX (SDI)
Expanded Polystyrene (EPS Panel)	22 – 29 kg/m <sup>3</sup>	100 mm Maximum	≤ 250	≥ 500

AmDECK / AMVIC Standard / AMVIC Plus 3.30 ICF Surface Burning Characteristics per ASTM E84<sup>1</sup>

AMVIC COMPONENT	DENSITY	MAXIMUM THICKNESS	FLAME SPREAD INDEX (FSI)	SMOKE DEVELOPED INDEX (SDI)
Expanded Polystyrene (EPS Panel)	1.35 – 1.80 lbs/ft <sup>3</sup>	4.0 Inches Maximum	≤ 25	≤ 450

<sup>1</sup>Ceiling Measurement Only. This measurement is conducted through determination of flame spread index and smoke developed index with the removal of any contribution of molten materials ignited on the floor of the tunnel assembly.

AMVIC ICF Allowable Fastener Loads

FASTENER	ALLOWABLE WITHDRAWAL		ALLOWABLE LATERAL SHEAR	
	lbs	kg	lbs	kg
#6 Type S Fine Thread Drywall Screw	27	12	55	25
#6 Type W Coarse Thread Drywall Screw	29	13	73	33
#8 Type W Coarse Thread Drywall Screw	35	16	85	38.5

AMVIC Plus 3.30 Allowable Fastener Loads

FASTENER	ALLOWABLE WITHDRAWAL		ALLOWABLE LATERAL SHEAR	
	lbs	kg	lbs	kg
#6 Type S Fine Thread Drywall Screw	22	10	40	18
#6 Type W Coarse Thread Drywall Screw	24	11	43	19.5
#8 Type W Coarse Thread Drywall Screw	23	10.5	63	28.5
Number 8 Wood Screw	26	12	52	23.5

### AMVIC Standard / Plus 3.30 ICF UBC 26-3 Configuration

Meets requirements with 12.7 mm (½ inch) thickness gypsum board complying with ASTM C1396, fastened with 41 mm (1-5/8 inch) length standard drywall screws at 305 mm (12 inches) on center vertically, 406 mm (16 inches horizontally) maximum spacing. Fasteners must be anchored into AMVIC Standard or AMVIC Plus 3.30 ICF web ties.

### AMVIC Standard / Plus 3.30 ICF Fire-Resistance Rated Construction

QAI Design Listing 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-Rated Wall Assembly (CAN/ULC S101)<sup>1</sup>

(See pdf Attachment)

Note: **Final acceptance of the product in the intended application is to be determined by the authority having jurisdiction.**

**Product is to be installed in accordance with the manufacturer’s published installation instructions by qualified installing personnel.**

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