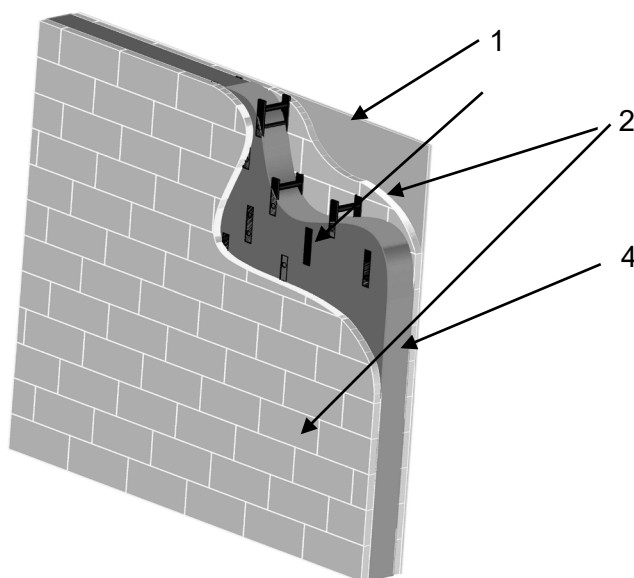


QAI Design B1031-1 Logix and Element™ Insulated Concrete Form (ICF) – CAN/ULC S101 / ASTM E119
Load Bearing Fire-Resistance-Rated Wall Assembly (See Table for Hourly Ratings)¹
Minute Stay-In-Place Fire-Rated Wall Assembly (CAN/ULC S101)¹

Wall Type	ASSEMBLY RATING (Hours)	MINIMUM CONCRETE CORE (MM)	MINIMUM CONCRETE CORE (INCHES)
Logix ICF	2	102	4 ¹
	3	159	6.25 ¹
	4	159	6.25 ²
	4	203	8 ¹
Element™ ICF	2	102	4
	3	152	6
	4	203	8



NO.	COMPONENT	DESCRIPTION
1	Interior Sheathing	Note 1 Above: Minimum ½ inch (13 mm) thickness ASTM C1396 listed gypsum wall board, installed with 51 mm (2 inch) length drywall screws spaced at 406 mm (16 inches) on center horizontally and vertically. Note 2 Above: 6 ¼ inch concrete Logix ICF product used in load bearing fire-resistance-rated wall assemblies, listed 5/8" (16 mm) thickness Type X gypsum wall board complying with ASTM C1396 is required fastened as noted above. Gypsum is required to be taped and mudded per industry standard and the applicable model code.
2	Expanded Polystyrene (EPS) Insulation	Logix and Element™ ICF component 70 mm (2 ¾) inch thickness Type 2 (CAN/ULC S701) / Type II (ASTM C578) QAI certified expanded polystyrene thermal insulation. Logix ICF and Element™ EPS panels have interlocking teeth to allow stacking onsite to create the forming wall.
3	Web Ties	Logix and Element™ polypropylene web tie component, spaced at 203 mm (8 inches) on center spacing through Logix ICF and Element™. Web ties can be stacked or staggered vertically during installation (staggered web tie system shown).
4	Concrete Core	Minimum core as noted in Table above of 20 MPa (2,900 psi) compressive strength concrete. 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 Logix and Element™ ICF load bearing fire-resistance-rated wall assemblies without negatively impacting the fire rating. These exterior claddings include brick veneer, stucco, fire rated exterior insulating finish systems where no additional EPS is added, cultured stone aluminum and steel products. All exterior claddings are to be installed with the applicable building code, and the manufacturer's approved installation instructions. Note: For use in 15-minute stay-in-place per the National Building Code of Canada, Aluminum Claddings are not approved for use. Use of these product types in fire-resistance rated assemblies does not detract the noted rating.

Note 1: The allowable load for LOGIX and Element™ ICF 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.