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QAI Design B1031-1 LOGIX Insulated Concrete Form (ICF) – CAN/ULC S101 / ASTM E119 Load Bearing Fire-Resistance-Rated Wall Assembly (See Table for Hourly Ratings)¹

15 Minute Stay-In-Place Fire-Rated Wall Assembly (CAN/ULC S101)¹

ASSEMLY RATING (Hours)	MINIMUM CONCRETE CORE (MM)	MINIMUM CONCRETE CORE (INCHES)
2	102	4 ¹
3	159	6.25 ¹
4	159	6.25 ²
4	204	8 ¹



NO.	COMPONENT	DESCRIPTION	
		Note 1 Above: Minimum ½ inch (12 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.	
1	Interior Sheathing	Note 2 Above: 6 ¼ inch concrete Logix ICF product used in load bearing fire-resistance-rated wall assemblies, listed 16 mm (5/8 inch) 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	Logix ICF component 70 mm (2 3/4) inch thickness Type 2 (CAN/ULC S701) / Type II (ASTM C578) QAI	
	Polystyrene (EPS) Insulation	certified expanded polystyrene thermal insulation. Logix ICF EPS panels have interlocking teeth to allow stacking onsite to create the forming wall.	
3	Web Ties	Logix polypropylene web tie component, spaced at 203 mm (8 inches) on center spacing through Logix ICF. 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 psl) 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 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 1: The allowable load for LOGIX 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.

