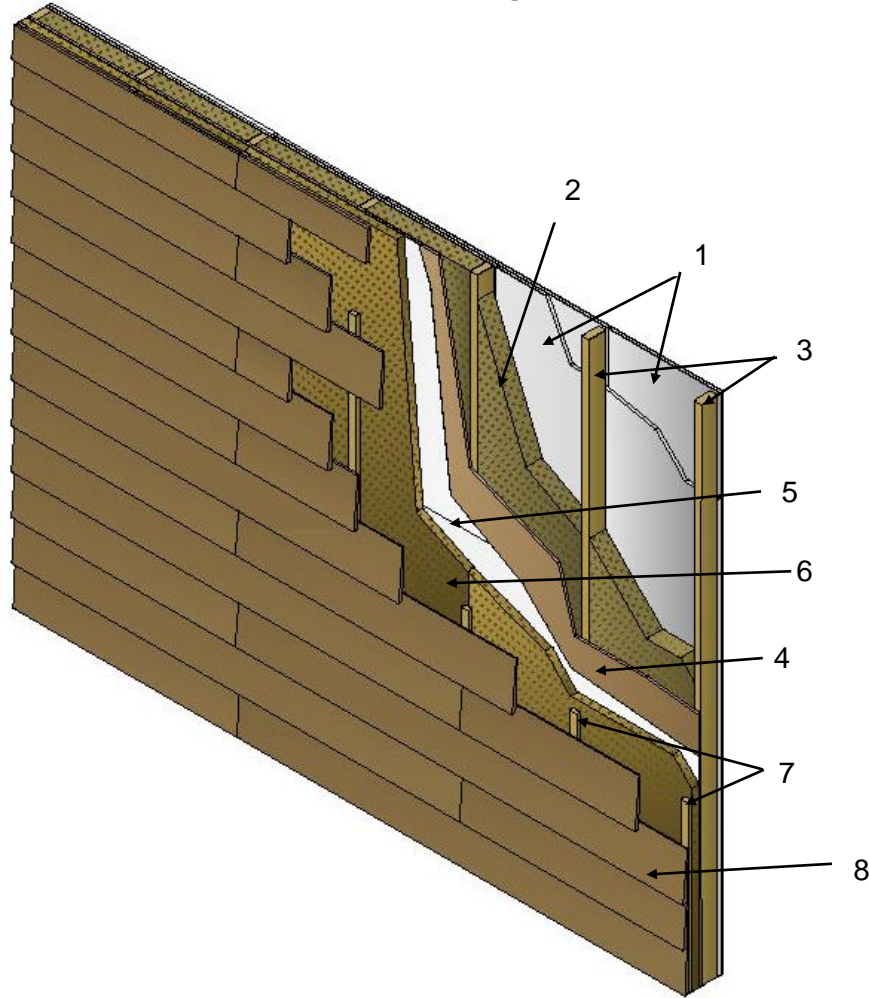


**QAI Design B1067-1h – ROXUL INC. dba ROCKWOOL – EXTERIOR WALL  
 CAN/ULC-S101/ASTM E119 – 2-Hour Load-Bearing<sup>1</sup> Fire-Resistance Rated Wall**



No.	COMPONENT	DESCRIPTION	
1	Gypsum Board	Type:	Type X gypsum wallboard complying with ASTM C1396, listed by approved agency.
		Minimum Thickness:	5/8-inch (16 mm).
		Minimum Number of Layers:	2 layers on interior face, with joints offset 24-inches (610 mm).
		Installation:	Base layer: Installed vertically with joints located over stud locations. The base layer is attached to the wood studs with minimum #6 1-5/8-inches (41 mm) length coarse thread drywall screws spaced at 12-inches (305 mm) around the perimeter and in the field. Exposed layer: Installed vertically with joints offset 24-inches (610 mm) from base layer. The exposed layer is attached with #6 2-inch (51 mm) length coarse thread drywall screws spaced at 8-inches (203 mm) around the perimeter and 12-inches (305 mm) in the field. The exposed face is to have joints taped and mudded per industry standard.
2	Mineral Wool Batt Insulation	Manufacturer:	ROCKWOOL
		Type:	Comfortbatt® CAN/ULC S702.1 / ASTM C665 compliant mineral wool insulation, classified as non-combustible per ASTM E136.
		Minimum Thickness:	3.5-inches (89 mm).
		Installation:	Mineral wool insulation is friction fit between studs with compression applied at insulation butt joints to remove through gaps.

3	Studs	Type:	Dimensional lumber in compliance with the applicable model code.
		Minimum Size:	2-inch x 4-inch (38 mm x 89 mm).
		Maximum Spacing:	24-inches (610 mm).
		Installation:	Stud connection to the top plate (not shown) and bottom plate (not shown) to be in accordance with the applicable code. Studs are approved for load-bearing conditions when used in fire-resistance rated assemblies at 100% design load as noted below.
4	Sheathing	Type:	Exposure grade plywood, Oriented Strand Board (OSB) or exterior gypsum complying with the applicable code.
		Minimum Thickness:	7/16-inches (11 mm).
		Installation:	Sheathing is to be installed with minimum 6d common nails at 6-inches (152 mm) around the perimeter and 12-inches (305 mm) in the field. Sheathing to include spacing at panel joints in accordance with the applicable code.
5	Water-Resistive Barrier (WRB)	Type:	Any WRB complying with the applicable codes and approved by the authority having jurisdiction.
6	Continuous Exterior Insulation	Manufacturer:	ROCKWOOL
		Type:	Comfortboard® 80 or Comfortboard® 110 CAN/ULC S702.1 / ASTM C612 compliant mineral wool board insulation, classified as non-combustible per ASTM E136.
		Minimum Thickness:	4-inches (102 mm).
		Minimum Layers:	2 layers with joints offset by a minimum of 24-inches (610 mm) between layers.
		Installation:	Insulation is fastened through the furring strips detailed below.
7	Furring Strips	Type:	Wood based or noncombustible material.
		Maximum Thickness:	¾-inches (18 mm).
		Installation:	2-inches (51 mm) width furring strips are to be installed at stud locations to provide an attachment substrate for the exterior cladding, while providing a maximum ¾-inches (18 mm) air space. Furring strips are attached to the underlying wood studs with #10 4-inch double threaded screws spaced at 12-inches (305 mm) on center. Furring strips are installed at the time of continuous insulation placement for installation of the mineral wool board insulation during fastening.
8	Exterior Cladding	Type:	Combustible or non-combustible exterior cladding types permitted.
		Installation:	Exterior cladding including installation shall comply with the applicable code. Evaluation for and load resistance of the exterior cladding is outside the scope of this fire-resistance rated design listing.

Note 1: The above exterior wall assembly is approved for use in applications loading stud with no load restrictions (100% design load) when used in fire-resistance rated applications, where the load is determined in accordance with the applicable codes (CSA 086 Canada, National Design Specification USA).