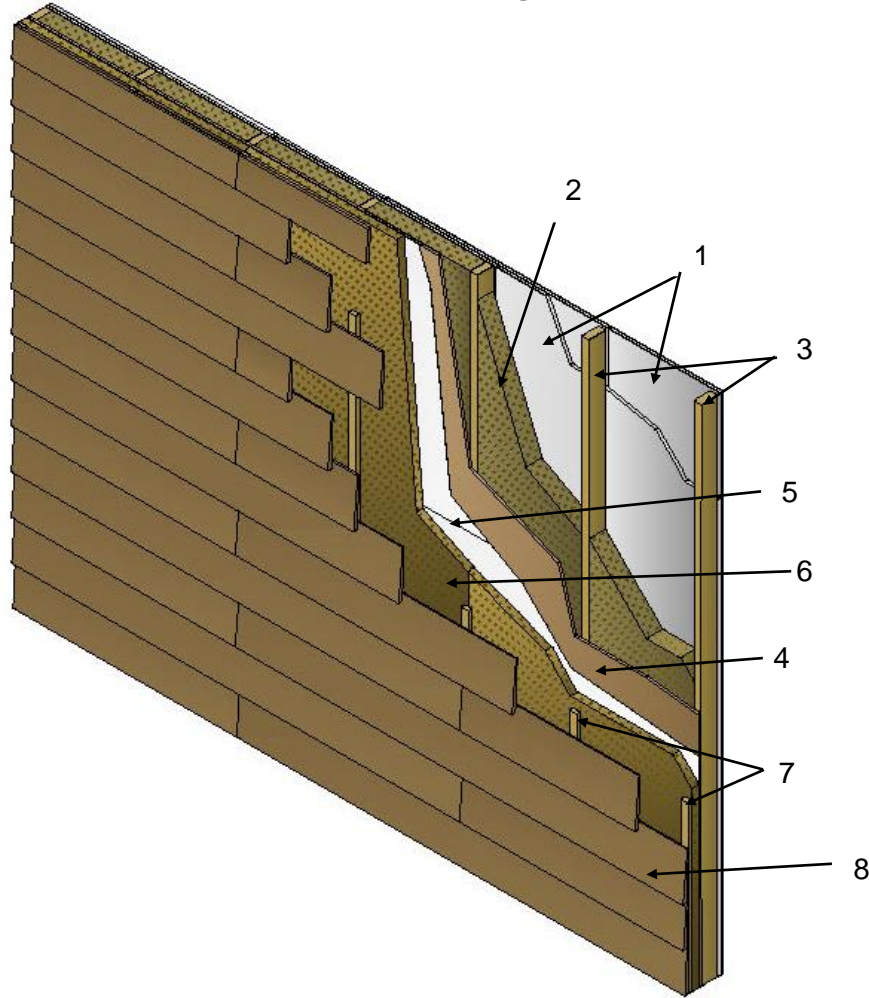


**QAI Design B1067-1h – ROXUL INC. dba ROCKWOOL – EXTERIOR WALL  
 CAN/ULC-S101/ASTM E119 – 2-Hour<sup>7</sup> Load-Bearing Fire-Resistance Rated Wall**



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" (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" (41 mm) length coarse thread drywall screws spaced at 12" (305 mm) around the perimeter and in the field. Exposed layer: Installed vertically with joints offset 24" (610 mm) from base layer. The exposed layer is attached with #6 2" (51 mm) length coarse thread drywall screws spaced at 8" (203 mm) around the perimeter and 12" (305 mm) in the field. The exposed face is to have joints taped and mudded per industry standard.
2	Mineral Wool Batt Insulation	Type:	Comfortbatt <sup>®</sup> CAN/ULC S702.1 / ASTM C665 compliant mineral wool insulation, classified as non-combustible per ASTM E136.
		Minimum Thickness:	3.5" (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" x 4" (38 mm x 89 mm).
		Maximum Spacing:	24" (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 or exterior gypsum complying with the applicable code.
		Minimum Thickness:	1/2" (13 mm).
		Installation:	Sheathing is to be installed with minimum 6d common nails at 6" (152 mm) around the perimeter and 12" (305 mm) in the field. Sheathing to include spacing at panel joints in accordance with the applicable code.
5	Weather Barrier	Type:	Per site requirements and the applicable code.
6	Continuous Exterior Insulation	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" (102 mm).
		Minimum Layers:	2 layers with joints offset by a minimum of 24" (610 mm) between layers.
		Installation:	Insulation is fastened through the furring strips detailed below.
7	Furring Strips	Type:	Wood based.
		Maximum Thickness:	3/4" (18 mm).
		Installation:	2" (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 3/4" (18 mm) air space. Furring strips are attached to the underlying wood studs with #10 4" double threaded screws spaced at 12" (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:	Terracotta plank, fiber-cement, stucco or wood based.
		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.

\*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).