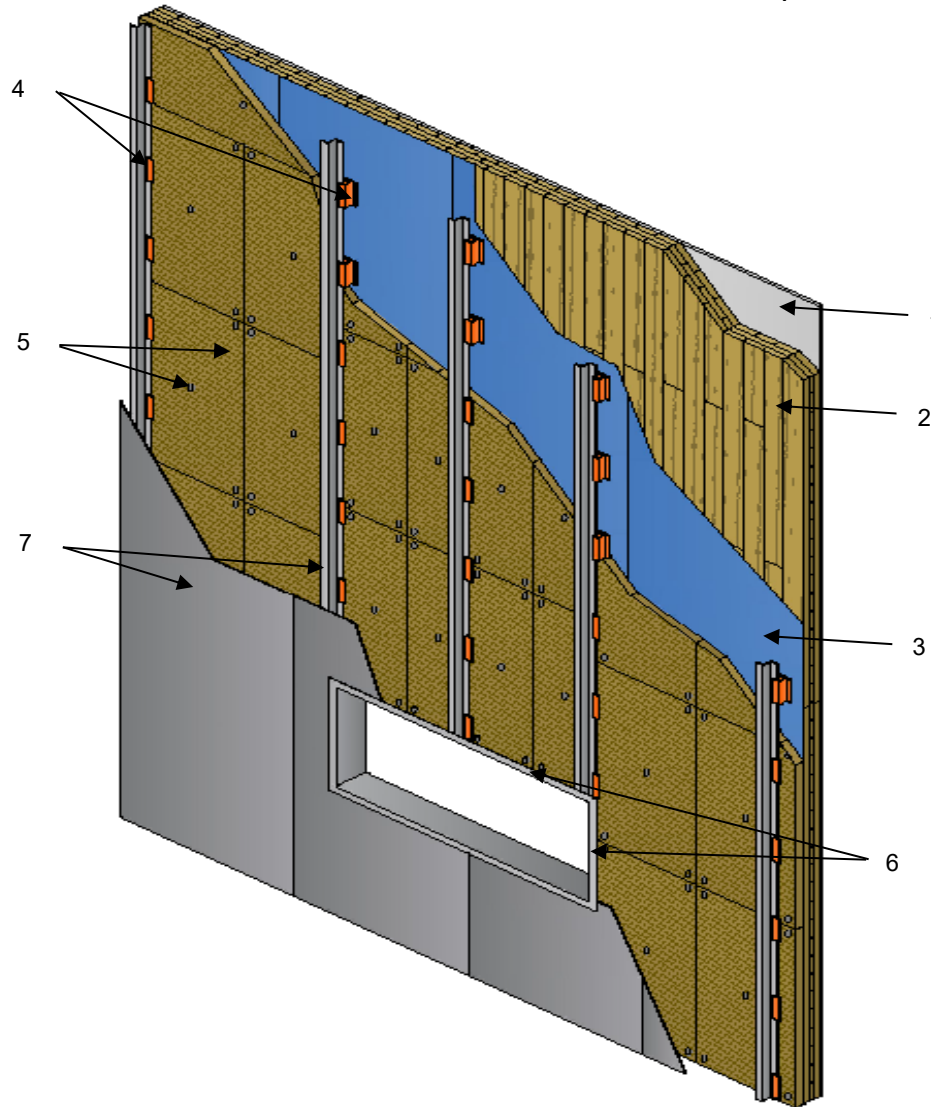


QAI Design B1067-1m – ROXUL INC. dba ROCKWOOL – Exterior Wall (CAN/ULC S134)^{1,2}



o.	COMPONENT	DESCRIPTION
1	Interior Finish	<i>** The above assembly considers fire exposure from the fire leaving a compartment only and does not consider code requirements on interior surface mass timber encapsulation. The interior is to have mass timber encapsulation protection as required by Subsection 3.1.6 of the 2020 National Building Code and subsequent provincial codes.</i>
2	Base Wall (Mass Timber)	Type: Cross-Laminated Timber (CLT) or Mass Plywood Panel (MPP) complying with PRG-320.
		Minimum Thickness: 4-1/8-inches (3.88 mm) – 3 ply.
		Installation: CLT / MPP panels are installed with panels connected on the exterior surface with 3/4-inch (19 mm) oriented strandboard (OSB) spline of minimum 6-inches (152 mm) width. CLT / MPP panel grooves are to include a single bead of rated elastomeric fire-caulking at the edge of the CLT / MPP panel and OSB spline. The interior panel joints are sealed with elastomeric fire caulking.

3	Water Resistive Barrier (WRB)	Type:	Henry Blueskin® SA, or any code compliant product complying with all the following: 1. Flame spread index of ≤ 25 and smoke-developed index of ≤ 450 determined per ASTM E84 or UL 723 (mounted per ASTM E2404). 2. Peak heat release rate $\leq 150 \text{ kW/m}^2$, total heat release $\leq 20 \text{ MJ/m}^2$, effective heat of combustion $\leq 18 \text{ MJ/kg}$ for installed thickness tested per horizontally per ASTM E1354 with applied heat flux of 50 kW/m^2 .
		Installation:	Installation of Henry Blueskin® SA is to follow manufacturer's installation instructions including primer coat. Installation of alternate code complying WRB is to follow the manufacturer's installation instructions and the applicable code.
4	Thermal Clips (Optional)	Approved Types	ISO Clips or equivalent combustible clips, or non-combustible clips
		Depth	Fit flush to depth of exterior insulation outlined below.
		Installation:	Anchored to the underlying mass timber wall at minimum 24-inch (610 mm) spacings and complying with engineering design for resisting the anticipated service loads. Thermal clips are installed prior to exterior insulation installation.
5	Exterior Continuous Insulation	Manufacturer:	ROCKWOOL
		Type:	Cavityrock®
		Minimum Thickness:	2-inches (51 mm) single or multi-layer. Where multi-layer, joints are to be offset a minimum 12-inches (305 mm) between layers.
		Installation:	A minimum five (5) steel type fasteners with steel washers or plates, spaced evenly around perimeter and with one (1) fastener at center of board. A suggested installation pattern is shown. Fastening with additional fasteners is permitted where the fasteners are uniformly distributed to retain the ROCKWOOL insulation in a fire event. The ROCKWOOL insulation is fit around the thermal clips, with no gaps present between the insulation and thermal clips after installation.
6	Window Flashing	Type:	Steel C-channel with 2-inch (51 mm) legs x depth of exterior wall assembly.
		Minimum Gauge:	18-gauge (1.02 mm).
		Installation:	The steel flashing is to extend from the interior face of the mass timber base wall to the exterior surface of the cladding. The steel flashing is to be anchored into the underlying mass timber wall with 2 rows of fasteners on exterior and interior wall surface. Fasteners are to be of sufficient length to penetrate underlying mass timber wall a minimum of 1-inch (13 mm) penetration. Each window flashing surface (interior and exterior face) are anchored with two (2) rows of fasteners, spaced at maximum 8-inches (203 mm) around window flashing perimeter.
7	Exterior Cladding	Type:	Non-combustible exterior cladding complying with the CAN/ULC S114 with melting temperatures greater than 750°C (1380°F) and the applicable code.
		Installation:	Anchorage can be to the thermal clips, direct to underlying mass timber wall. Optional steel supports oriented vertically or horizontally can be mechanically secured at maximum 24 inches on center spacing to the thermal clips or direct to the underlying wall. Attachment is to be in accordance with the applicable code or Engineering Design as approved by the Authority Having Jurisdiction for resisting anticipated service loads.

1: Exterior walls are approved for use in load-bearing and non-load bearing applications.

2: Resistance to gravity loads, wind resistance and seismic considerations are outside the scope of this report.