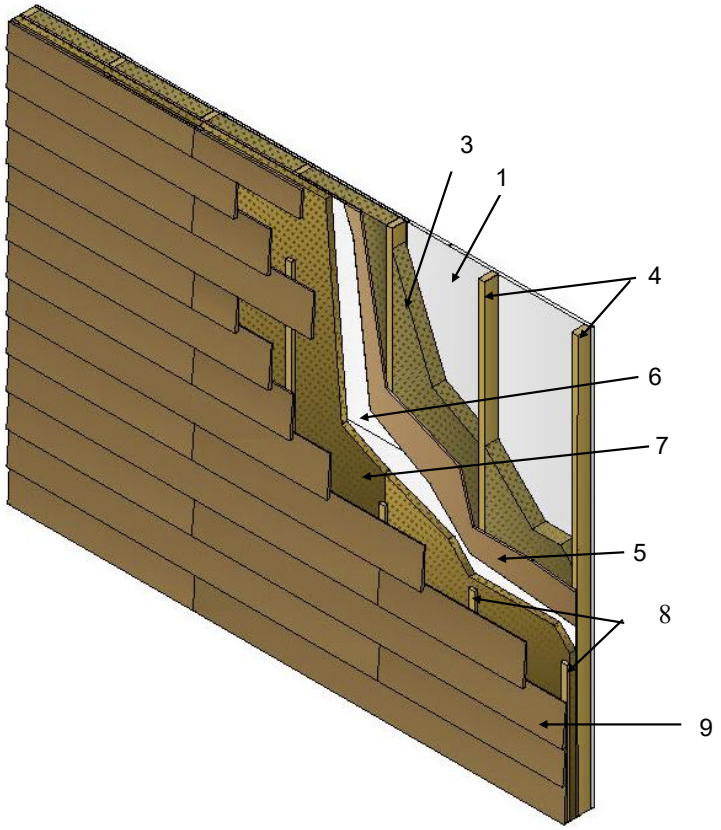
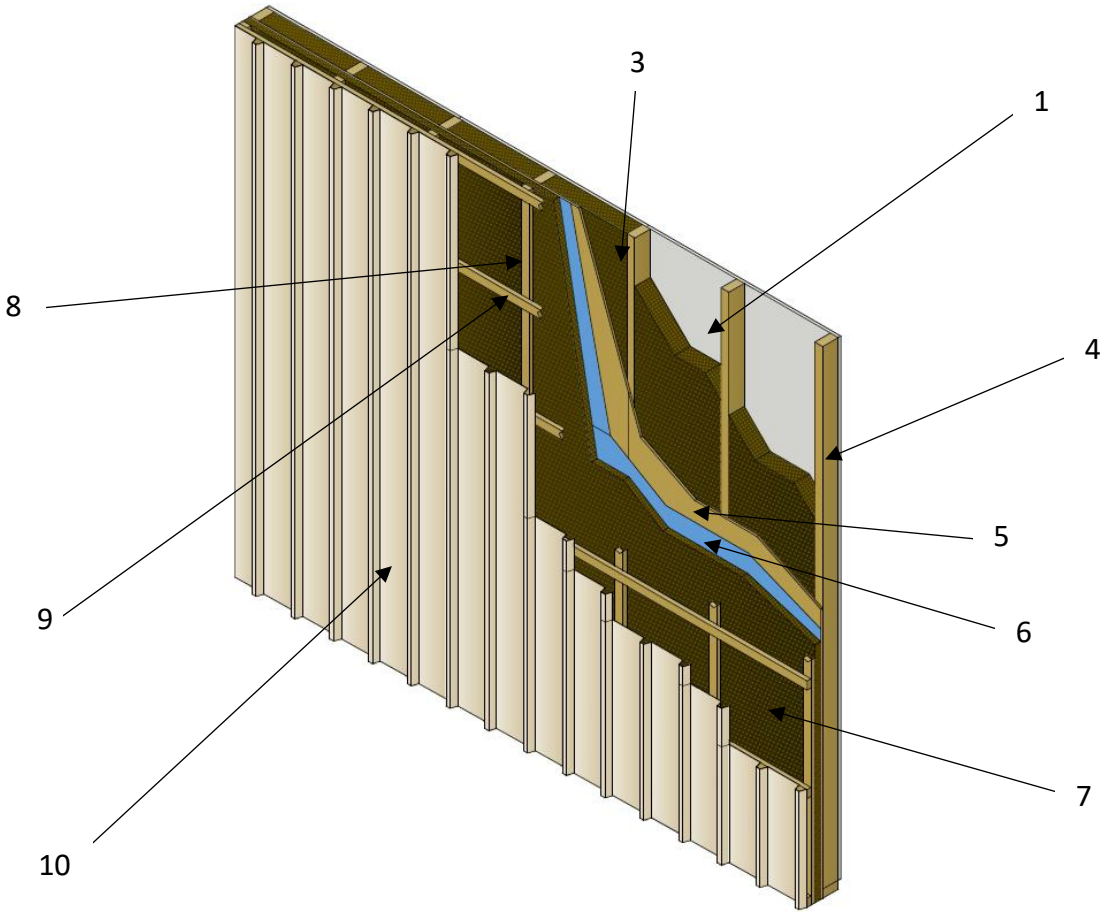
QAI Design B1067-1g – ROCKWOOL – Exterior Wall Assembly
CAN/ULC S101 / ASTM E119
1-Hour Load-Bearing[1] Fire-Resistance Rated
Configuration A – Single Layer Furring



No.	COMPONENT	DESCRIPTION	
1	Interior Gypsum	Minimum Thickness:	Single layer of min. 5/8 in. (16 mm) thick Type X gypsum board complying with ASTM C1396.
		Installation:	Installed vertically with joints located over stud locations. The gypsum is attached to the wood studs with minimum #6 1-5/8 in. (41 mm) length coarse thread drywall screws spaced at 12'' (305 mm) around the perimeter and in the field. The exposed face is to have joints taped and mudded per industry standard.
2	Vapor Barrier (Optional)	Any code compliant vapor barrier.	
3	Cavity Insulation	Certified Manufacturer:	ROCKWOOL
		Certified Product:	Comfortbatt®
		Minimum Thickness:	3-1/2 in. (89 mm)
		Installation:	Mineral wool insulation is friction fit between studs with compression applied at insulation butt joints to remove through gaps.
4	Studs	Type:	Dimensional lumber in compliance with the applicable model code.
		Minimum Size:	Nominal 2 in. x 4 in. (38 mm x 89 mm)
		Maximum Spacing:	24 in. (610 mm)
		Installation:	Stud connection to the top plate (not shown) and bottom plate (not shown) to be in accordance with the applicable code.
5	Exterior Sheathing	Type:	Exposure grade plywood, Oriented Strand Board (OSB) or exterior gypsum complying with the applicable code.
		Minimum Thickness:	7/16 in. (11 mm)
		Installation:	Sheathing is to be installed with minimum 6d common nails at 6 in. (152 mm) around the perimeter and 12 in. (305 mm) in the field. Sheathing to include spacing at panel joints in accordance with the applicable code.
6	WRB	Type:	Any code compliant WRB.
7	Continuous Exterior Insulation	Manufacturer:	ROCKWOOL
		Type:	Comfortboard® 80 or Comfortboard® 110
		Minimum Thickness:	1-1/2 in. (38 mm)
		Minimum Layers:	Single layer with joints tight after installation.
		Installation:	Fasten the board to hold it in place prior to fastening the wood furring strips over the board.
8	Furring Strips	Minimum Size:	Nominal 1 in. x 2 in. (19 mm x 38 mm) width.
		Installation:	Screws spaced a maximum of 24 inches (610 mm) vertically. Screws are to be sufficient length to penetrate a minimum 1 in. (25 mm) into wood framing. Furring strip size and fasteners for attachment of furring strip to sheathing are to comply with the applicable code and be sufficient to meet local service condition requirements.
9	Exterior Cladding	Type:	Any exterior cladding product complying and installed in accordance with the applicable code.

Configuration B – Double Layer Furring (Optional)



No.	COMPONENT	DESCRIPTION	
1	**Interior Gypsum**	Minimum Thickness:	Single layer of min. 5/8 in. (16 mm) thick Type X gypsum board complying with ASTM C1396.
		Installation:	Installed vertically with joints located over stud locations. The gypsum is attached to the wood studs with minimum #6 1-5/8 in. (41 mm) length coarse thread drywall screws spaced at 12'' (305 mm) around the perimeter and in the field. The exposed face is to have joints taped and mudded per industry standard.
2	**Vapor Barrier (Optional)**	Any code compliant vapor barrier.	
3	**Cavity Insulation**	Certified Manufacturer:	ROCKWOOL
		Certified Product:	Comfortbatt®
		Minimum Thickness:	3-1/2 in. (89 mm)
		Installation:	Mineral wool insulation is friction fit between studs with compression applied at insulation butt joints to remove through gaps.
4	**Studs**	Type:	Dimensional lumber in compliance with the applicable model code.
		Minimum Size:	Nominal 2 in. x 4 in. (38 mm x 89 mm)
		Maximum Spacing:	24 in. (610 mm)
		Installation:	Stud connection to the top plate (not shown) and bottom plate to be in accordance with the applicable code.
5	**Exterior Sheathing**	Type:	Exposure grade plywood, Oriented Strand Board (OSB) or exterior gypsum complying with the applicable code.
		Minimum Thickness:	7/16 in. (11 mm)
		Installation:	Sheathing is to be installed with minimum 6d common nails at 6 in. (152 mm) around the perimeter and 12 in. (305 mm) in the field. Sheathing to include spacing at panel joints in accordance with the applicable code.
6	**WRB**	Type:	Any code compliant WRB.
7	**Continuous Exterior Insulation**	Manufacturer:	ROCKWOOL
		Type:	Comfortboard® 80 or Comfortboard® 110
		Minimum Thickness:	1-1/2 in. (38 mm)
		Minimum Layers:	Single layer with joints tight after installation.
		Installation:	Fasten the board to hold it in place prior to fastening the wood furring strips over the board.
8	**Furring Members – First Layer**	Type:	Minimum nominal 1 in. x 2 in. (19 mm x 38 mm) wood furring strips. Alternatively, minimum 1/2 in. (13 mm) depth x 1-1/4 in. (32 mm) width steel hat channel may also be used.
		Installation	Screws spaced a maximum of 24 inches (610 mm) vertically. Screws are to be sufficient length to penetrate a minimum 1 in. (25 mm) into wood framing. Furring strip size and fasteners for attachment of furring strip to sheathing are to comply with the applicable code and be sufficient to meet local service condition requirements.

No.	COMPONENT	DESCRIPTION	
9	**Furring Members – Second Layer (Optional)**	Type:	Minimum nominal 1 in. x 2 in. (19 mm x 38 mm) wood furring strips. Alternatively, minimum 1/2 in. (13 mm) depth x 1-1/4 in. (32 mm) width steel hat channel may also be used.
		Installation:	A second cross layer of furring shall be fastened to the first layer furring strips using fasteners of sufficient length and quantity to securely transfer cladding loads to the supporting framing. Furring strip size and fasteners shall comply with the applicable building code and be sufficient to meet local service condition requirements.
10	**Exterior Cladding**	Type:	Any exterior cladding product complying and installed in accordance with the applicable code.

Note 1: The above exterior wall assemblies (Configuration A & B) are approved for use in applications loading studs 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).