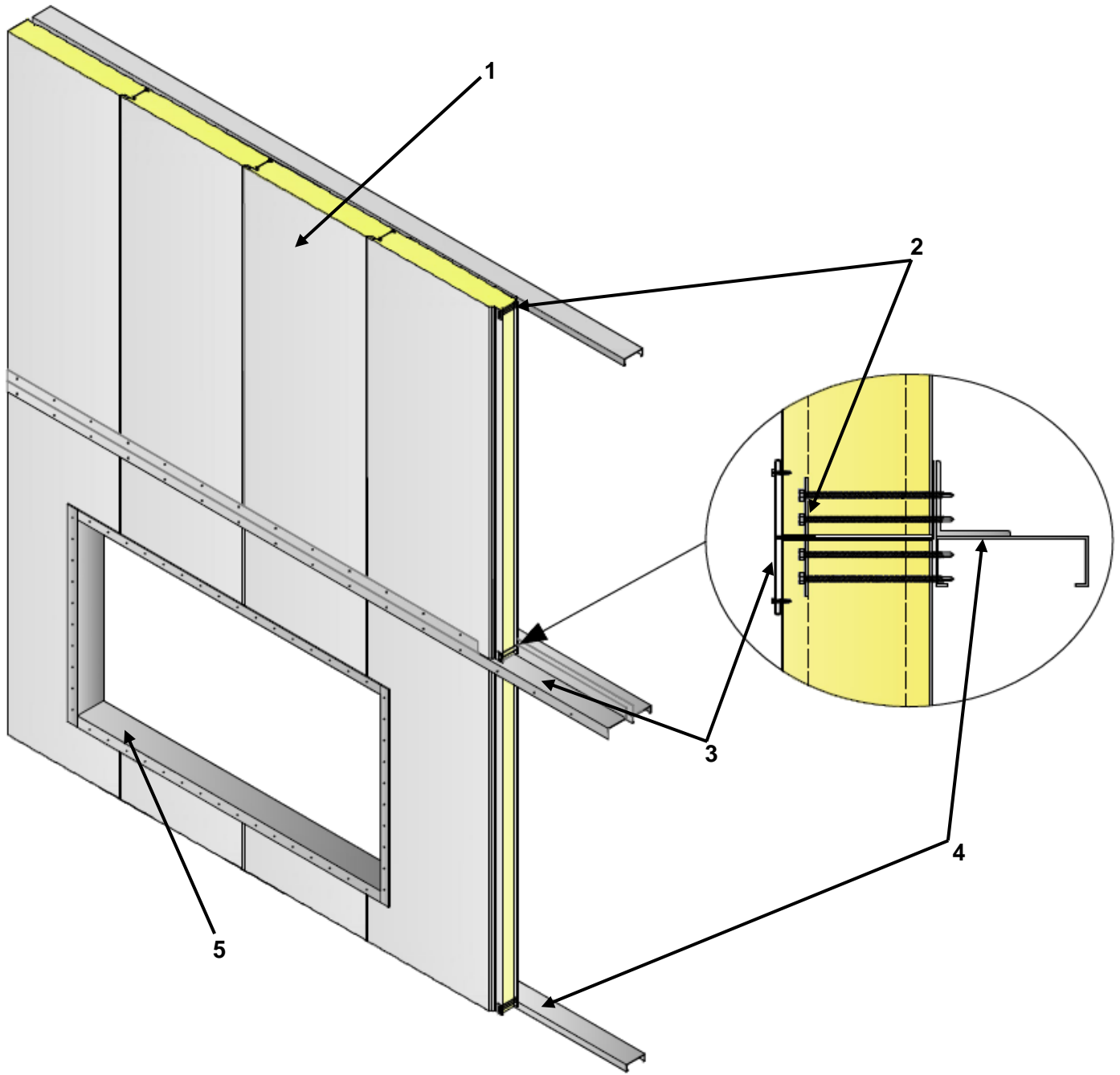




QAI Design B1142-1d – Vertical Panel Installation
CAN/ULC S134 - Exterior Wall Evaluated for Use in Non-Combustible Construction

RATINGS PER SECTION 3.1.5.5 OF THE NATIONAL BUILDING CODE OF CANADA (NBC) 2020	
Heat Flux at 3.5 meters	$\leq 35 \text{ kW/m}^2$
Flame Spread	$< 5.0 \text{ m}$



QAI Design B1142-1d – Vertical Panel Installation Details

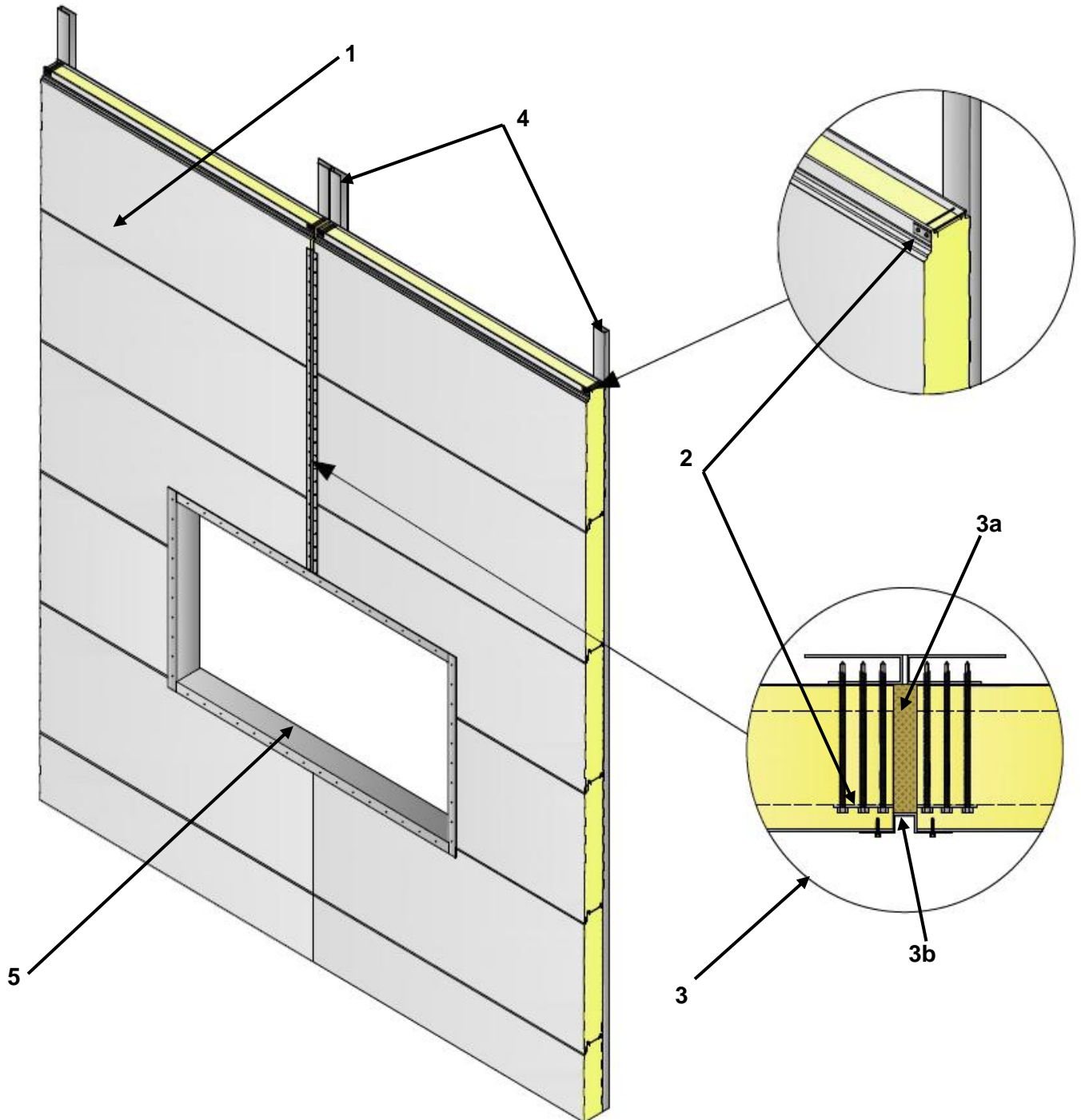
No.	COMPONENT	DESCRIPTION	
1	Insulated Metal Panels	Manufacturer:	Falk Panel LLC
		Approved Types:	HFW-40 Panels.
		Thickness:	51 – 152 mm (2 - 6 inches).
		Core:	Polyisocyanurate (PIR) maximum density 43.2 kg/m ³ (2.7 lbs/ft ³) with potential heat of combustion of 26,013 kJ/kg (11,184 Btu/lbs) per NFPA 259.
		Skins:	Minimum 26 Gauge (0.45 mm / 0.0179 inches) G60 galvanized steel.
		Installation:	Installation is to be done in accordance with Falk Production, LLC Installation Instructions, Design Professional, or the Authority Having Jurisdiction.
2	Panel Fastener	Approved Types:	Falk 6 mm (1/4-inch) thickness hidden clips with mechanical connection following Falk Installation Instructions and design specifications.
		Installation:	Mechanical connection of the panel to underlying structural members is to be spaced per site specifications to resist intended design loads as determined by the Design Professional and approved by the Authority Having Jurisdiction.
3	Panel Edge Flashing	Approved Types	Minimum 24 Gauge (0.61 mm / 0.0239 inches) G60 galvanized steel.
		Installation:	Panel edge flashing is required at vertical panel connections as drip flashing and fire-blocking as detailed by Falk's installation instructions, Design Professional, or the Authority Having Jurisdiction and the appropriate model code.
4	Structural Members	Approved Types	Structural supports, corrosion resistant, sized per project design.
		Installation:	Design and spacing and installation of structural members as required to resist intended design loads as determined by the Design Professional and approved by the Authority Having Jurisdiction.
5	Window Flashing	Approved Types	Minimum 16 Gauge (1.52 mm / 0.60 inches) thickness with 51 mm (2-inch) leg length of depth to cover panel width, G60 galvanized steel C-channel. Falk window trim.
		Installation:	Steel C-channel is required to be installed around the window perimeter fully covering the underlying panel foam. The steel C-channel is required to be fastened at maximum 305 mm (12 inches) spacing with minimum 19 mm (3/4-inch) self-tapping screws to the underlying insulated metal panel. 24 Gauge (0.61 mm / 0.0239 inches) thickness Falk Panel trim is to be attached on the interior and exterior of the window opening, covering the steel C-channel, and is to be anchored with #8 19 mm (3/4-inch) length self-tapping screws spaced at maximum 152 mm (6 inches) on center. 3M Fire Barrier CP25WB+ is to be applied in a single bead is required around the window opening to seal the steel C-channel to the underlying insulated metal panel.

Note 1: Spacing of structural supports and anchoring of Falk panels to the underlying structure are to be designed in accordance with the local codes.

Note 2: Wind resistance and seismic considerations are outside the scope of this QAI listing

QAI Design B1142-1d – Horizontal Panel Installation
CAN/ULC S134 - Exterior Wall Evaluated for Use in Non-Combustible Construction

RATINGS PER SECTION 3.1.5.5 OF THE NATIONAL BUILDING CODE OF CANADA (NBC) 2020	
Heat Flux at 3.5 meters	$\leq 35 \text{ kW/m}^2$
Flame Spread	$< 5.0 \text{ m}$



QAI Design B1142-1d – Horizontal Panel Installation Details

No.	COMPONENT	DESCRIPTION	
1	Insulated Metal Panels	Manufacturer:	Falk Panel LLC
		Approved Types:	HFW-40 Panels.
		Thickness:	51 – 152 mm (2 - 6 inches).
		Core:	Polyisocyanurate (PIR) maximum density 43.2 kg/m ³ (2.7 lbs/ft ³) with potential heat of combustion of 26,013 kJ/kg (11,184 Btu/lbs) per NFPA 259.
		Skins:	Minimum 26 Gauge (0.45 mm / 0.0179 inches) G60 galvanized steel.
		Installation:	Installation is to be done in accordance with Falk Production, LLC Installation Instructions, Design Professional, or the Authority Having Jurisdiction.
2	Panel Fastener	Approved Types:	Falk 6 mm (1/4-inch) thickness hidden clips with mechanical connection following Falk Installation Instructions and design specifications.
		Installation:	Mechanical connection of the panel to underlying structural members is to be spaced per site specifications to resist intended design loads as determined by the Design Professional and approved by the Authority Having Jurisdiction.
3	Panel Joint	Description:	Maximum 25 mm (1-inch) joint width.
		Installation:	a) Mineral wool insulation to be packed into vertical joint. b) Falk FJC5 24 Gauge (0.024 inches / 0.61 mm) galvanized steel joint cover of 102 mm (4 inches) width to be installed over the joint, and to be anchored with minimum #8 x 19 mm (3/4-inch) self-tapping screws spaced at 102 mm (4 inches) vertically along each panel. 3M Fire Barrier CP25WB+ fire caulking is to be applied in a single bead between the joint trim, and underlying insulated metal panel, on each panel to trim interface.
4	Structural Members	Approved Types	Structural supports, corrosion resistant, sized per project design.
		Installation:	Design and spacing of structural members to be installed to resist intended design loads as determined by the Design Professional, or the Authority Having Jurisdiction.
5	Window Flashing	Approved Types	Minimum 16 Gauge (1.52 mm / 0.60 inches) thickness with 51 mm (2 inch) leg length of depth to cover panel width, G60 galvanized steel C-channel. Falk window trim.
		Installation:	Steel C-channel is required to be installed around the window perimeter fully covering the underlying panel foam. The steel C-channel is required to be fastened at maximum 305 mm (12 inches) spacing with minimum 19 mm (3/4-inch) self-tapping screws to the underlying insulated metal panel. 24 Gauge (0.61 mm / 0.0239 inches) thickness Falk Panel trim is to be attached on the interior and exterior of the window opening, covering the steel C-channel, and is to be anchored with #8 19 mm (3/4-inch) length self-tapping screws spaced at maximum 152 mm (6 inches) on center. 3M Fire Barrier CP25WB+ is to be applied in a single bead is required around the window opening to seal the steel C-channel to the underlying insulated metal panel.

Note 1: Spacing of structural supports and anchoring of Falk panels to the underlying structure are to be designed in accordance with the local codes.

Note 2: Wind resistance and seismic considerations are outside the scope of this QAI listing.