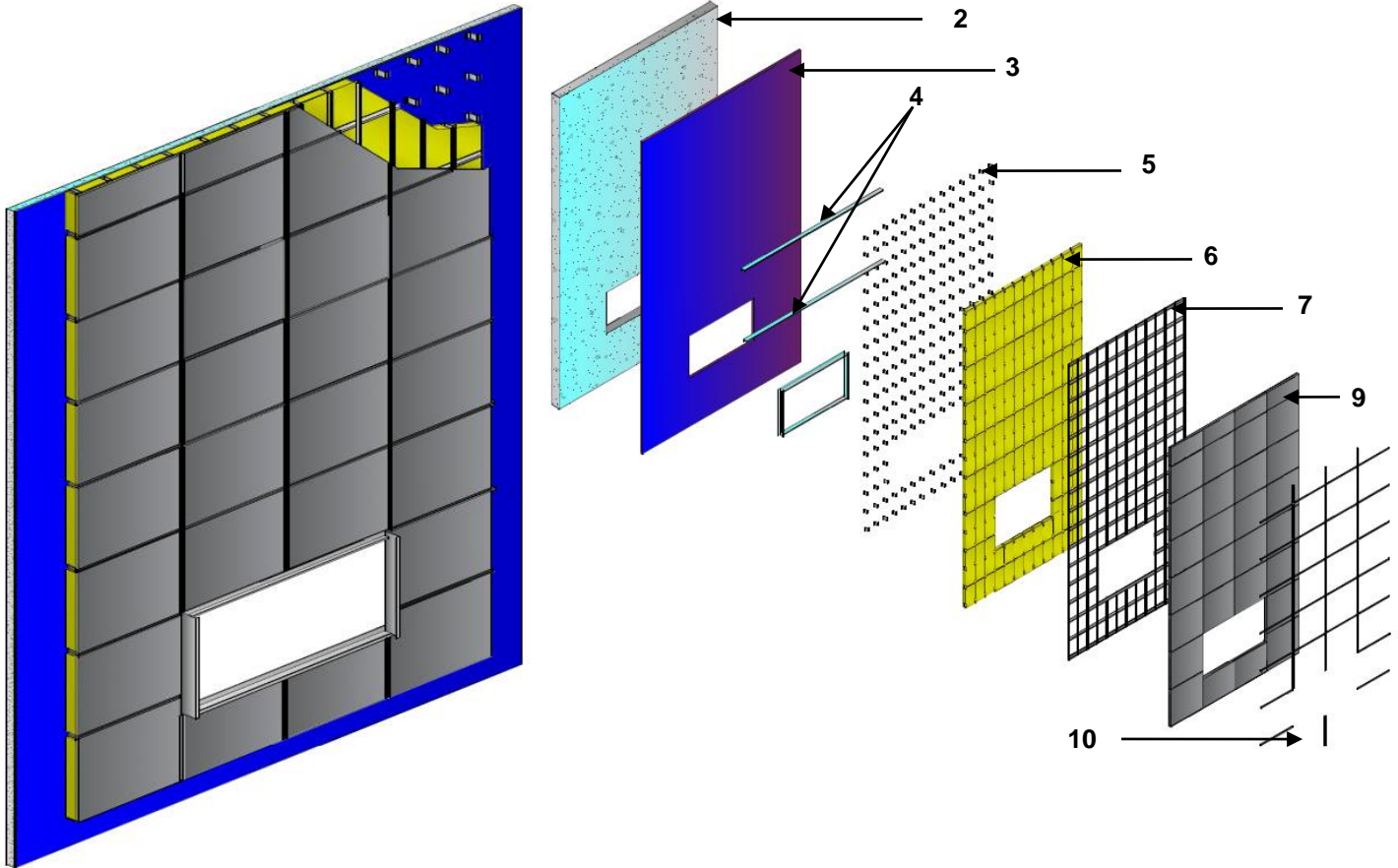


**QAI Design B1120-1b – AL13  
 NFPA 285 Exterior Wall Evaluated for Flame Propagation**



No.	COMPONENT	DESCRIPTION
1	Base Wall Structure (Not Shown)	Approved Types: Concrete / Masonry / Steel Stud of minimum 3-5/8".
		Cavity Insulation: Optional. Where used, must be non-combustible per ASTM E136.
		Fire Blocking: Where required in concealed spaces, is to be mineral wool or mineral fiber rated as non-combustible per ASTM E136, installed to securely remain in place during a fire event.
		Interior Sheathing: 5/8" Type X gypsum wall board complying with ASTM C1396. Joints are required taped and mudded per ASTM C840.
2	Exterior Sheathing	Approved Types: Type X Gypsum complying with ASTM C1396 or ASTM C1177
		Thickness: Minimum 1/2" (13 mm).
		Installation: Joints are to be staggered from exterior insulation. Taping and mudding of the exterior insulation joints is optional.
3	Weather Resistive Barrier (WRB)	Approved Types: Henry Blueskin.
		Installation: Installation of Henry Blueskin peel and stick membrane is to follow manufacturer's installation instructions with a minimum 4" overlap at joints.
4	Through Wall Flashing	Approved Types: Minimum 1.02 mm (18 Gauge) G60 Galvanized Steel
		Installation: Required at floor line locations.

5	Thermal Clips	Approved Types	Cascadia Clips or Isoclip
		Depth:	2" (51 mm) depth.
		Installation:	Anchored to the underlying steel studs, or wall structure at spacings as determined by the engineering design for resisting the anticipated service loads. Around window openings, the thermal clip spacing is to be a minimum of 16" (405 mm).
6	Exterior Insulation	Approved Types	Mineral wool insulation complying with ASTM C612, Type IVB and classified as non-combustible per ASTM E136.
		Thickness:	Minimum 2" (51 mm).
		Installation:	Mineral wool continuous exterior insulation is friction fit between thermal clips, ensuring no gaps from exterior to interior are present, and no gaps between the insulation and combustible thermal clips are present. Insulation pins with 2" x 2" (51 mm x 51 mm ) steel washer heads installed through the field of the exterior insulation with insulation pins spaced at 24" (610 mm) on center.
7	Panel Girt System	Approved Types	Horizontal steel hat-channel with aluminum extrusions.
		Sizes:	Steel hat-channel is 4" width x 1" depth (102 mm x 25 mm) G60 galvanized steel. Aluminum extrusion consists of AL13 Back Plate (BP-8) and Back Plate: Half (BPH-8).
		Installation:	Steel hat-channel are spaced vertically to coincide with horizontal panel joints. Attachment of the steel hat-channel to the thermal clips is to be in accordance with engineering design to resist anticipated service loads. Aluminum are spaced horizontally to match vertical panel joints. Attachment of the aluminum extrusions to the steel hat-channel is to match the engineering design to resist the anticipated service loads.
8	System Clip (Not shown)	Approved Types:	AL13 supplied Fiber Reinforced Plastic or Polyamide.
		Installation:	Each AL13 panel is installed using System Clips attached around the perimeter of the frame. They are to be spaced at a maximum distance of 406 mm (16") on center and 75 mm (3") from corners. System clips are approximately 3/4" (21 mm) x 1/2" (13 mm) thickness, by 4" (100 mm) depth.
9	AL13 Aluminum Composite Panels (ACP)	Approved Types:	AL13 FR-1 Aluminum Composite Panels.
		Thickness:	Maximum 4 mm (0.157 inches).
		Installation:	Panels of maximum 60 inches x 120 inches (1524 mm x 3048 mm) are to be installed into AL13 clip system. Prior to panel installation AL13 1" I-Beam (IB) are installed to each ACP panel to provide panel stiffness as intermediate panel locations between the aluminum extrusion supports. The AL13 I-beams are applied with 3M VHB double sided tape applied to the I-beam, following which the I-beam is fit to the ACP panel. Once complete, the AL13 panels are installed to the described wall assembly.
10	Aluminum Trim	Approved Types:	AL13 supplied aluminum trim for use with AL13 panels.
		Installation:	Trim to be installed along panel joints per AL13 installation guidelines.

Note 1: Gravity loads, Wind resistance and seismic considerations are outside the scope of QAI listing.