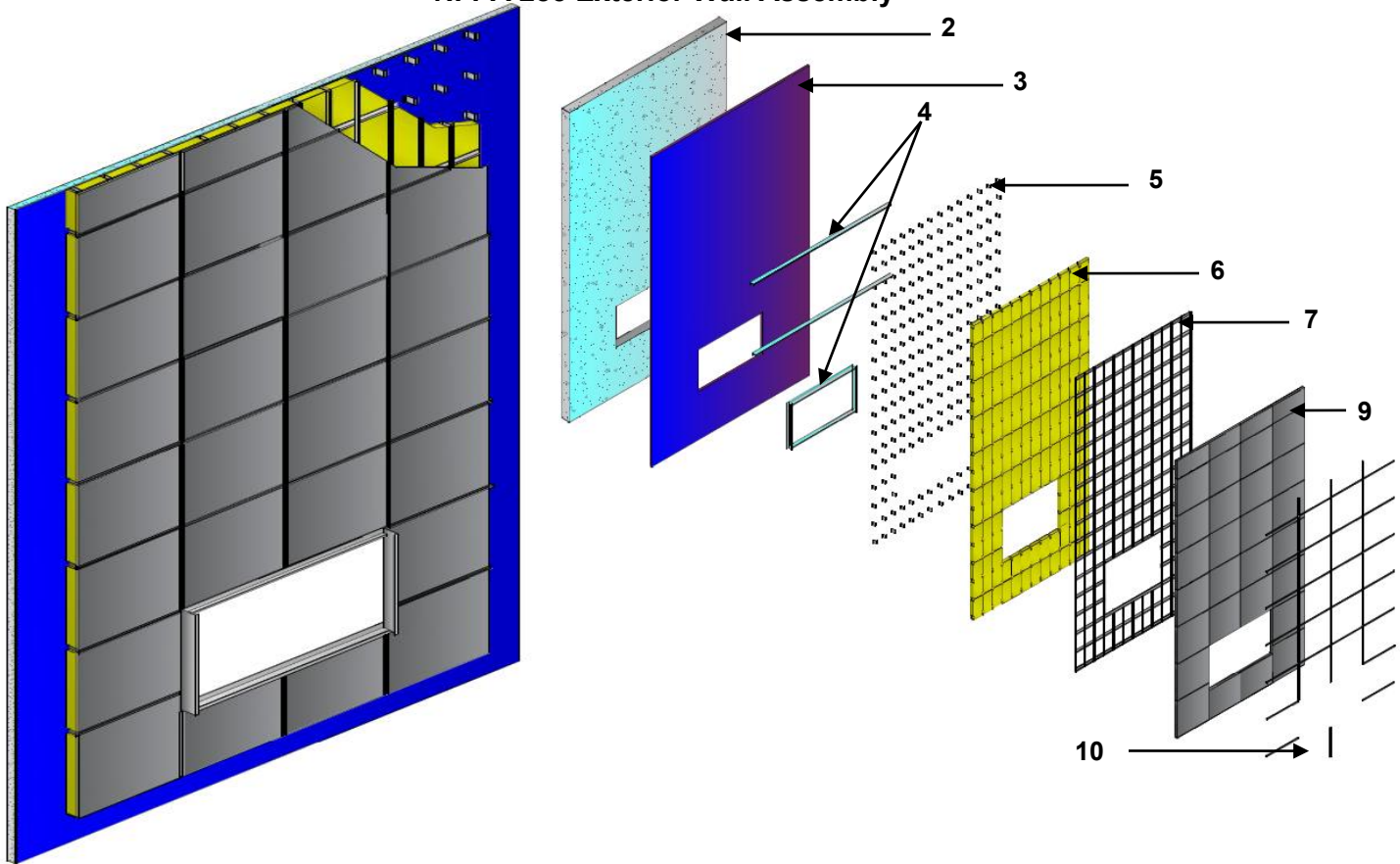


**QAI Design B1120-1b – AL13
NFPA 285 Exterior Wall Assembly**



No.	COMPONENT	DESCRIPTION	
1	Base Wall Structure (Not shown)	Approved Types:	Concrete / Masonry / Steel stud of minimum 3-5/8" (91 mm).
		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 E16, installed to securely remain in place during a fire event.
		Interior Sheathing:	5/8" Type X gypsum board complying with ASTM C1396. Joints are required taped and mudded with minimum Level 3 finish per ASTM C840.
2	Exterior Sheathing (Steel Stud Assembly)	Approved Types:	Type X gypsum complying with ASTM C1396 or ASTM C1177
		Thickness:	Minimum 5/8" (16 mm)..
		Installation:	Joints are to be staggered from exterior insulation. Taping and mudding of joints is optional.
3	Water Resistive Barrier (WRB)	Approved Types:	Henry Blueskin
		Installation:	Installation of the 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 and Isoclips.
		Depth	Fit flush to depth of exterior insulation outlined below.
		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 16" (405 mm) minimum.

B1120- 1b - AL13 NFPA 285 Exterior Wall Assembly Details Continued

6	Exterior Insulation	Approved Types:	Mineral wool board exterior insulation complying with ASTM C612, Type IVB and classified 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 the exterior to WRB are present, and no gaps between insulation and 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 pins spaced at 24" (610 mm) on center.
7	Panel Girt System	Approved Types:	Horizontal steel hat-channel with vertical aluminum extrusions.
		Sizes:	Steel hat-channel is 4" (102 mm) width 1" (25 mm) depth.
		Installation:	Steel hat-channel are spaced vertically to coincide with horizontal panel joint locations of AL13 exterior cladding. Attachment of the steel hat channel to the thermal clips is to be in accordance with the engineering design to resist anticipated service loads. Aluminum extrusions are spaced horizontally to match vertical exterior cladding joints. Attachment of the aluminum extrusion to steel hat-channel is to be in accordance with the engineering design to resist anticipated service loads.
8	System Clip (Not shown)	Approved Types:	AL13 supplied Fiber Reinforced Plastic or Polyamide clips.
		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 16" (406 mm) on center and 3" (76 mm) from corners. System clips are approximately ¾" width x ½" thickness x 4' length (21 mm x 13 mm thickness, by 100 mm).
9	AL13 Aluminum Composite Panels (ACP)	Approved Types:	AL13 FR and FR-1 Metal Composite Materials, listed and labeled by QAI Laboratories
		Thickness:	Maximum 0.157" (4 mm).
		Installation:	Panels of maximum 60" x 120" x 0.157" (1524 mm x 3048 mm x 4 mm) are installed into AL13 System Clip system. Prior to installation, AL13 1" (24 mm) I-beam (IB) are installed into each AL13 ACP 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 AL13 ACP. Once complete, the AL13 panels are installed to the described underlying 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.