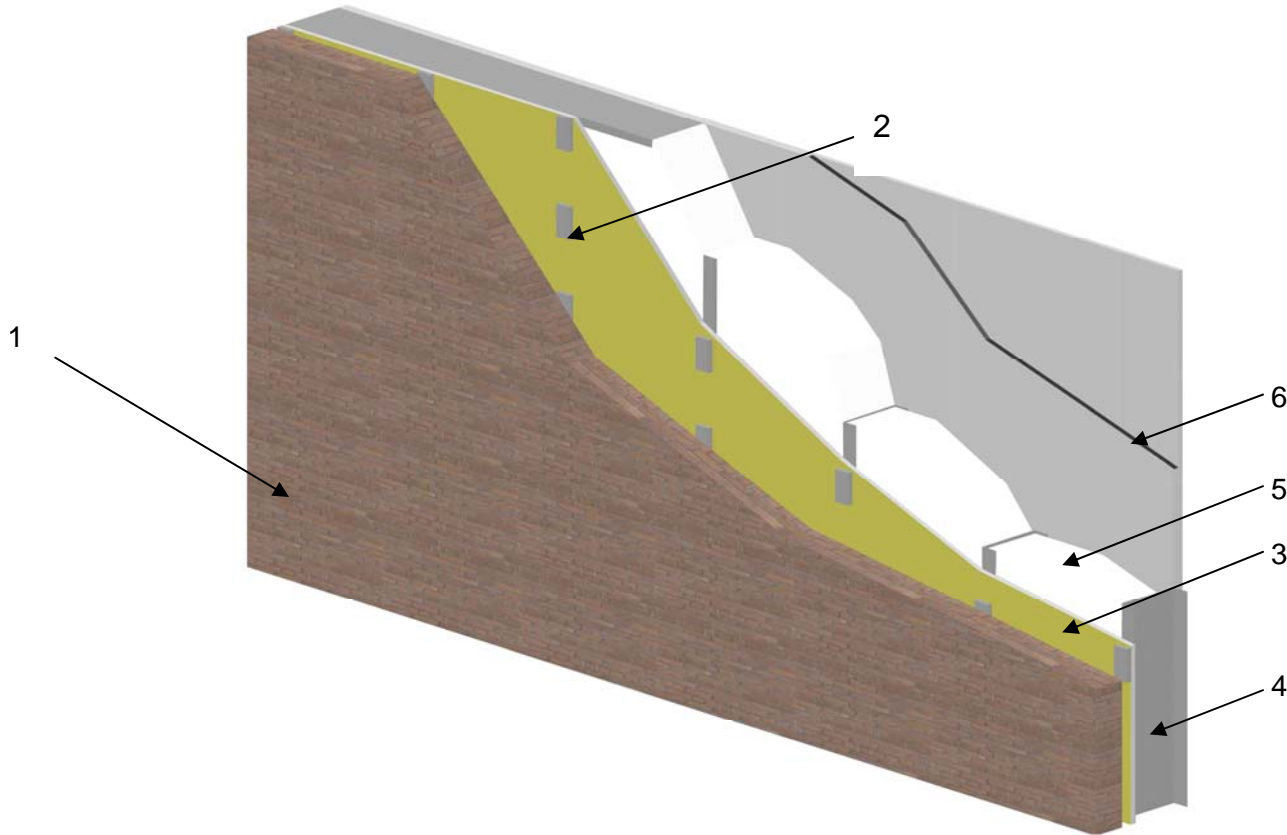


**QAI Design B1056-1f – Icynene Inc. – Pro Seal ECO (MD-R-210™) – ASTM E119/CAN/ULC S101
3 Hour Non-Load Bearing Fire Resistance Rated Wall Assembly**



No.	COMPONENT	DESCRIPTION	
1	Brick Finish	Type:	Brick that meet the requirements of ASTM C67 & CSA A82 and applied as per ASTM C216
		Mortar:	Type S Mortar meeting the requirements of ASTM C270 and CSA A179
		Air Gap:	Nominal 1 inch (25 mm) between the brick and the exterior sheathing (Item 3)
2	Brick Anchors	Type:	Anchors meeting the requirements of ASTM E488 or CAN/CSA-A370
		Fasteners:	Secured through the exterior sheathing (Item 3) into the steel stud (Item 4) with #8 x 1-5/8 inch (41 mm) long self-taping screws
3	Exterior Sheathing	Sheathing Type:	Must meet the requirements of ASTM C1777 "Glass Mat Gypsum Substrate"
		Minimum Thickness:	1/2 inch (12 mm)
		Vertical Joint Offset:	Vertical joints must have a minimum 16 inches (400 mm) offset from the interior gypsum board (Item 6)
		Horizontal Joint Offset:	Horizontal joints must have a minimum 24 inches (610 mm) offset from the interior gypsum board (Item 6)
		Minimum Fastener Size:	#6 x 1-1/4 inch (32 mm) long self-taping zinc plated drywall screws
	Maximum Fastener Spacing:	8 inches (200 mm) on center around the perimeter and the field	
4	Steel Stud	Minimum Gauge:	18 ga galvanized steel stud meeting the requirements of ASTM A370 or CAN/CSA-S136
		Minimum Size:	6 inch (150 mm) [Nominal]
		Maximum Spacing:	16 inches (400 mm) on center
		Installation:	As per ASTM C955
5	Insulation	Certified Company:	Icynene, Inc.
		Certified Product:	Polyurethane Foam Insulation
		Certified Model(s):	Pro Seal ECO (MD-R-210™)
		Application:	Spray
		Maximum Thickness:	6 inches (150 mm)
		Maximum Density:	2.3 lbs/ft ³ (37 kg/m ³)
	Details:	Applied between the steel stud (Item 4) cavities. Trim any excess insulation (trim insulation flush with the front edge of the steel stud) (Item 4)	
6	Gypsum Board	Type:	Type X Gypsum Board meeting the requirements of ASTM C1396 or CAN/CSA-A82.27
		Minimum No. of Layers	Two layers (Joints offset by at least 16" (400 mm))
		Minimum Thickness:	5/8 inch (16mm)
		Minimum Fastener Size:	#6 x 1-1/4" (32 mm) long self-taping zinc plated drywall screws
		Maximum Fastener Spacing:	8 inches (200 mm) on center around the perimeter and 12 inches (305 mm) on center in the field
	Finish:	Joints to be tapped and mudded, and fastener heads to be mudded to a level 2 finish as per ASTM C840 or CSA A82.31-M & Gypsum Association GA-216/214	