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

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| 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/ft³ (37 kg/m³)  
    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 |