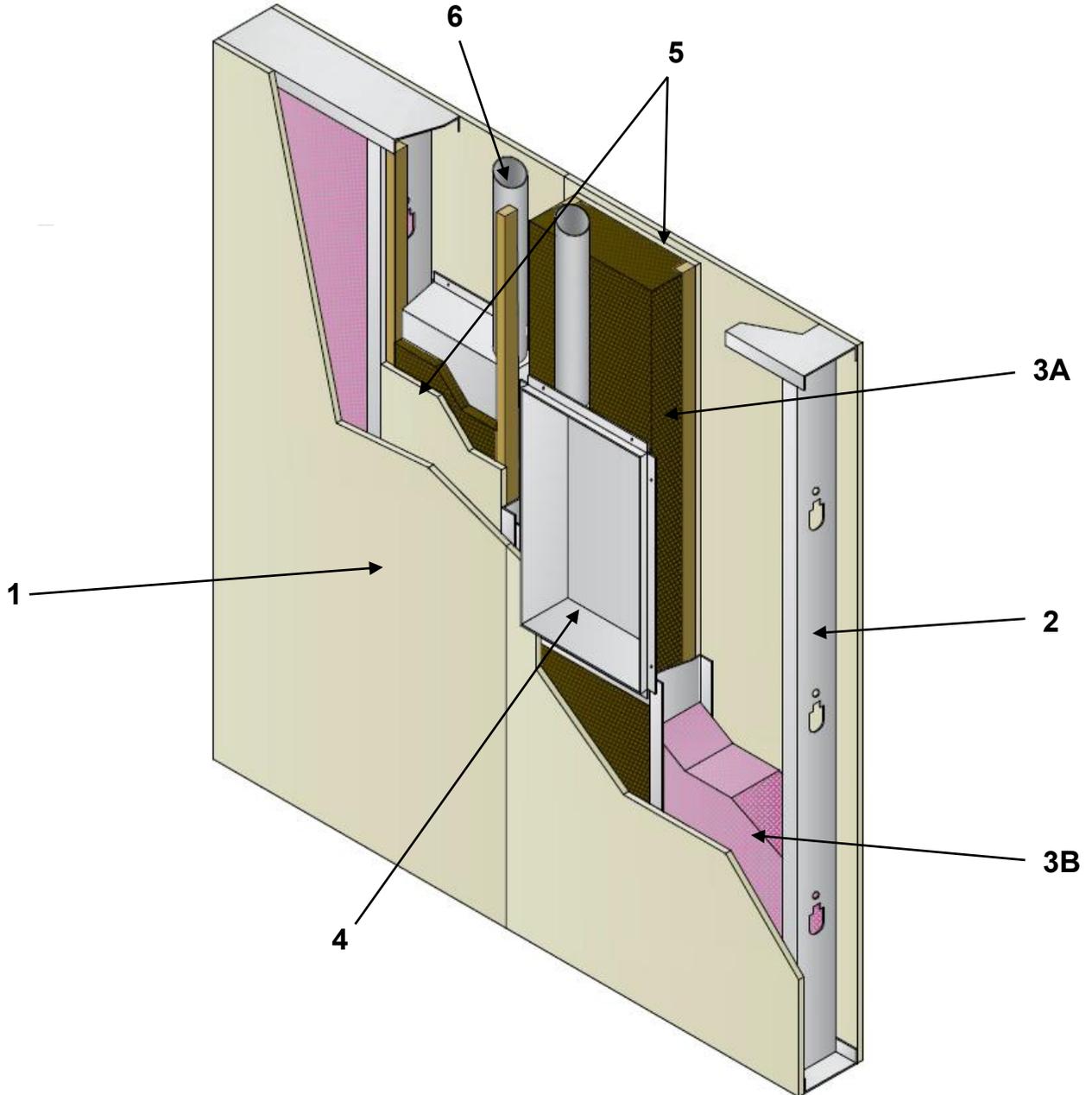


**QAI Design B1072-1H – Construction Solutions – Dryer Vent Box DBX1424 4.25in.
CAN/ULC S115 / ASTM E814 – 1 Hour & 2 Hour Membrane Penetration Assembly
Non-Load Bearing**



No.	COMPONENT	DESCRIPTION			
1	Gypsum Board Sheathing	Type:	Type X gypsum wallboard complying with ASTM C1396 and labeled by an approved agency.		
		Thickness	<table border="1" style="width:100%"> <tr> <td style="width:50%">1-Hour Rating: One layer of 5/8 in. (16 mm) on each face of the wall.</td> <td style="width:50%">2-Hour Rating (not shown): Two layers of 5/8 in. (16 mm) on each face of the wall.</td> </tr> </table>	1-Hour Rating: One layer of 5/8 in. (16 mm) on each face of the wall.	2-Hour Rating (not shown): Two layers of 5/8 in. (16 mm) on each face of the wall.
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		Application	<table border="1" style="width:100%"> <tr> <td style="width:50%">Installed vertically with joints located over stud locations. On each side, one layer of 5/8 in. (16 mm) Type X is attached to the steel studs with minimum #6 x 1-5/8-inch (41 mm) self-drilling drywall screws spaced at 12 in. (305 mm) around the perimeter and in the field.</td> <td style="width:50%">Installed vertically with joints offset 24-inches (610 mm) from base layer. The second layer of 5/8 in. (16 mm) Type X is attached with minimum #6 x 2-1/4 inch (57 mm) self-drilling drywall screws spaced at 8 in. (203 mm) around the perimeter and 12 in. (305 mm) in the field.</td> </tr> </table>	Installed vertically with joints located over stud locations. On each side, one layer of 5/8 in. (16 mm) Type X is attached to the steel studs with minimum #6 x 1-5/8-inch (41 mm) self-drilling drywall screws spaced at 12 in. (305 mm) around the perimeter and in the field.	Installed vertically with joints offset 24-inches (610 mm) from base layer. The second layer of 5/8 in. (16 mm) Type X is attached with minimum #6 x 2-1/4 inch (57 mm) self-drilling drywall screws spaced at 8 in. (203 mm) around the perimeter and 12 in. (305 mm) in the field.
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Exposed joints to be taped and mudded. Fastener heads to be mudded for a monolithic surface. Follow ASTM C840 for level of finish.					
2	Wall Studs	Stud Type:	Minimum 6 in. (152 mm) steel stud with 1-1/4 in. (32 mm) Flange.		
		Gauge:	Minimum 25 Gauge.		
		Stud Spacing:	Maximum 16 in. (406 mm) on center.		
3A	Insulation (Dryer Vent Box Cavity)	Type:	Mineral wool firestopping insulation, compliant to ASTM C612 Type IVA or CAN/ULC S702 Type 1 and non-combustible as defined by ASTM E136 or CAN/ULC-S114.		
		Nominal Density:	Minimum 4.0 lb/ft ³ (64 kg/m ³).		
		Installation:	1 in. mineral wool firestopping insulation shall be installed behind the dryer vent box. Remainder of the cavity shall be filled with non-combustible mineral wool firestopping insulation including between the box and the steel stud.		
3B	Insulation (Adjacent Cavities)	Type:	Minimum R-19 unfaced fiberglass batt insulation, complaint to ASTM C665 Type 1 or CAN/ULC S701 Type 1 and non-combustible as defined by ASTM E136 or CAN/ULC-S114.		
		Minimum Thickness:	6 inch (152 mm).		
		Installation:	Fiberglass batt must be installed in the adjacent cavities.		
4	Dryer Vent Box	Certified Manufacturer:	Construction Solutions, LLC.		
		Certified Products:	DBX1424 4.25 in. (108 mm) steel dryer vent box		
		Box Dimensions:	14 in. (356 mm) wide by 24 in. (610 mm) high by 4.25 in. (108 mm) deep with a 1 in. (25 mm) flange. A 4 in. (102 mm) cut out for the dryer vent. 1-1/8 in. (29 mm) knockout on the top of the box. 24 Gauge steel.		
		Sealing:	PFP 4800DW Hilti FS-ONE MAX STI LC Endothermic Firestop Sealant 3M Fire Barrier Sealant CP 25WB+ WF300 Intumescent Caulking Foil Tape listed to UL 723		
Installation:	The dryer vent box is fastened to the stud and sill through two holes on the side and bottom of the box using #8 x 5/8 in. (16 mm) self-drilling screws. The galvanized steel dryer vent is inserted through the top of the box then caulked at the vent/box interface. The opening cut into the gypsum board shall be a maximum of 10-1/2 in. (267 mm) wide by 17- 1/2 in. (445 mm) high. Only one box is permitted per stud cavity.				
5	Gypsum Board (Back of Dryer Box Cavity)	Type:	Type X gypsum wallboard complying with ASTM C1396 and labeled by an approved agency.		
		Thickness:	Single layer of 5/8 in. (16 mm).		
		Application:	The cavity containing the dryer vent box shall have a layer of 5/8 in. (16 mm) Type X gypsum placed behind the box. The gypsum shall be fastened to two 3/4 in. (19 mm) by 1-1/2 in. (38 mm) wood strips fastened to the stud with steel stud screws such that the gypsum will be flush with the 1-1/4 in. (32 mm) face of the studs prior to fastening the sheathing. The gypsum board shall be fastened with #6 x 1-5/8 in. (41 mm) drywall screws.		
6	Vent Pipe	Size:	4 in. (101 mm) round.		
		Type:	26 Gauge galvanized steel.		