



FIRE DOORS LISTING PROGRAM

Customer: Williams Brothers Corporation of America
Class: Access Doors and Frames
Location: Front Royal, Virginia, USA
Website: <https://www.wbdoors.com>

Listing No. F500-1
Project No. F500-1, Edition 2
Effective Date: March 31, 2025
Last Revised: October 14, 2025
Expires: N/A

Standards: UL 10B (2020) *"Standard for Fire Tests of Door Assemblies".*
CAN/ULC S104-15 *"Standard Method for Fire Tests of Door Assemblies."*
ASTM E119-24 *"Standard Test Methods for Fire Tests of Building Construction and Materials."*
CAN/ULC S101-14 *"Standard Methods of Fire Endurance Tests of Building Construction Materials".*

Product: Williams Brothers Access Doors

Labels See [FD001 - Fire Door Labeling requirements](#)

Models/Rating: The following outlines Williams Brothers Fire-Resistance Rated Access Door performance determined in accordance with the noted standards. The ratings outlined in the tables below are achieved in assemblies that are described.

Williams Brothers FR 800 Insulated Steel Access Door and Frame installed in fire-resistance rated wall assemblies evaluated to CAN/ULC S104 and UL 10B:

Model Name	Fire-Resistance Rating	Maximum Size	Frame	Door
FR 800 (Vertical)	90-Minutes	48 in. x 48 in. (1219 mm x 1219 mm)	16-Gauge Steel 2-5/8 in. (67 mm) Depth Frame	18-Gauge Steel 2 in. (51 mm) Depth Access Door



Williams Brothers FR 800 Insulated Steel Access Door and Frame Installed in fire-resistance rated load-bearing floor / ceiling assemblies evaluated to CAN/ULC S101 and ASTM E119:

Component	Description	
Assembly	Type:	Wood joist, gypsum and plywood
	Fire-Resistance Rating:	60-Minutes
Access Door	Manufacturer:	Williams Brothers Corporation of America
	Model:	FR 800 (Horizontal)
	Frame:	16-Gauge Steel 2-5/8 in. (67 mm) Depth
	Door:	18-Gauge Steel 2 in. (51 mm) Depth
	Maximum Size:	36 in. x 36 in. (914 mm x 914 mm)
Framing	Type:	Nominal 2 in. x 8 in. (38 mm x 184 mm) dimensional wood joists, minimum specific gravity (SG) of 0.42, spaced 24 in. (610 mm) OC
Weather Stripping Gasket (optional)	Manufacturer:	Assa Abloy
	Model:	PEMKO Hot Smoke Seal™ HSS1000
	Description:	Self-adhered intumescent edge seal, classified as Category G, 5/64 in. (2 mm) x 7/16 in. (11.1 mm). For use as weather stripping gasket only.
Ceiling Gypsum Board	Type:	Two layers of 1/2 in. (12.5 mm) Type X gypsum board, compliant to ASTM C1396 and listed by a recognized agency.
	Fasteners:	Gypsum board is to be fastened to joists with #6 x 1-1/4 in. (32 mm) self-drilling drywall screws spaced at 8 in. (204 mm) on center.
	Joints:	Joints in gypsum board to be taped and mudded in accordance with industry standards.
Sub-Floor	Type:	One layer of 3/4 in. (20 mm) plywood attached in accordance with applicable code.
Opening	Type:	One layer of 5/8 in. (16 mm) Type X gypsum board around the perimeter of the opening.
	Fasteners:	Gypsum Board fastened to wood framing with #6 x 1-1/4 in. (32 mm) self-drilling drywall screws spaced at 8 in. (204 mm) on center.
Installation	Description:	Inside edge of framing around the opening fully covered with 5/8 in. (16 mm) Type X gypsum board. The door frame is screwed into the wood stud framing of the wall through mounting holes using #10 x 2 in. (51 mm) wood screws.



Williams Brothers DW 405 Phantom Access Door and Frame installed in load-bearing fire-resistance rated floor / ceiling assemblies evaluated to CAN/ULC S101 and ASTM E119:

Component	Description	
Assembly Type	Type:	Steel joist, gypsum and plywood.
	Fire-Resistance Rating:	45-Minutes
Access Door	Manufacturer:	Williams Brothers Corporation of America
	Model:	DW 405 Phantom (Horizontal)
	Frame:	Type X gypsum
	Door:	Type X gypsum
	Maximum Size:	22 in. x 30 in. (559 mm x 762 mm)
Framing	Type:	3-5/8 in. x 1-1/4 in. (92 mm x 32 mm) steel joist support framing for the door and gypsum board spaced 24 in. (610 mm) OC.
Ceiling Gypsum Board	Type:	One layer of 5/8 in. (16 mm) Type X gypsum board, compliant to ASTM C1396 and listed by a recognized agency.
	Fasteners:	Gypsum board is to be fastened to joists with #6 x 1-1/4 in. (32 mm) self-drilling drywall screws spaced at 8 in. (204 mm) on center.
	Joints:	Joints in gypsum board to be taped and mudded in accordance with industry standards.
Sub-Floor	Type:	One layer of 3/4 in. (20 mm) plywood attached in accordance with applicable code.
Installation	Description:	Frame mounted to the steel framing with #6 x 1-1/4 in. (32 mm) self-drilling drywall screws spaced every 3 in. (76 mm). The door is manually placed on the frame edges to ensure uniform bearing coverage with no gaps between the door and frame into the floor / ceiling cavity space

Notes:

- Refer to QAI evaluation reports F500 and the applicable test reports for test assembly configurations used for fire endurance testing.
- Refer to the [QAI FD002 - Fire Door Guidelines for general guidelines of fire door assemblies](#)
- Final acceptance of the product in the intended application is to be determined by the authority having jurisdiction (AHJ).
- Product is to be installed in accordance with the manufacturer's published installation instructions by qualified personnel.

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