

SECTION 08310 ACCESS DOORS AND FRAMES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes:
1. **[Fire rated] [and] [Non-fire rated]** wall access panels.
 2. **[Fire rated] [and] [Non-fire rated]** ceiling access panels.
 3. Related hardware and attachments.

EDIT NOTE: MODIFY THIS LIST PER PROJECT REQUIREMENTS.

- B. Related Sections:
1. Section 04810 - Unit Masonry Assemblies.
 2. Section 09260 - Gypsum Board Assemblies.
 3. Section 09510 - Suspended Acoustical Ceilings.
 4. Section 09900 – Paints and Coatings.
 5. Division 15 - Mechanical.
 6. Division 16 – Electrical.

1.2 SYSTEM DESCRIPTION

- A. Design Requirements:
1. Verification: Obtain specific locations and sizes for required access doors and frames from trades, including mechanical and electrical, requiring access to concealed equipment and indicate on submittal schedule.

1.3 SUBMITTALS

- A. Comply with Section **[01300] [01330] [01340] [_____]**.
- B. Shop Drawings:
1. Door and panel units: Show types, elevations, thickness of metals, full size profiles of door members.
 2. Hardware: Show materials, finishes, locations of fasteners, types of fasteners, locations and types of operating hardware, and details of installation.
 3. General: Show connections of units and hardware to other Work. Include schedules showing location of each type and size of door and panel units.
- C. Product Data: Manufacturer's technical data for each type of access door and panel assembly, including setting drawings, templates, fire-resistive characteristics, finish requirements, and details of anchorage devices.
1. Include complete schedule, types, locations, construction details, finishes, latching or locking provisions, and other pertinent data.
- D. Manufacturer's Installation Instructions: Indicate installation requirements and rough-in dimensions.

1.4 QUALITY ASSURANCE

- A. Comply with Section **[01400] [01410] [01430]**.
- B. Single Source Responsibility: Obtain access door and panel units, and frames for entire Project from 1 source and 1 single manufacturer.

- C. Fire-Resistance Ratings: Wherever a fire-resistance classification is indicated, provide access door and panel assemblies with panel door, frame, hinge, and latch from manufacturer listed in Underwriter's Laboratories (UL), "Building Materials Directory" for rating shown.
 - 1. Provide 90 minute UL label at 2-hour rated partitions.
 - 2. Provide 3 hour Warnock Hersey label at horizontal applications, up to 24 inch wide x 36 inch high.
 - 3. Provide 2 hour Warnock Hersey label at horizontal applications greater than 24 inch wide x 36 inch high.
 - D. Size Variations: Obtain Architect's acceptance and approval of manufacturer's standard size units that may vary slightly from sizes indicated on Drawings.
 - E. Coordination: Provide inserts and anchoring devices that will be built into other Work for installation of access door assemblies. Coordinate delivery with other Work to avoid delay.
- 1.5 DELIVERY, STORAGE AND HANDLING
- A. Comply with Section [01600] [_____].
 - B. Package and ship per manufacturer's recommendations.
 - C. Store per manufacturer's instructions.
 - 1. Store in dry area out of direct sunlight.
- 1.6 WARRANTY
- A. Provide manufacturer's written warranty per Section [01795] [_____].
 - B. Warrant materials and workmanship against defects after completion and final acceptance of Work.
 - 1. Repair defects, or replace with new materials, faulty materials or workmanship developed during the guarantee period at no expense to Owner.
 - 2. Access Panel Warranty: 1 year from date of shipment.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Subject to compliance with requirements, provide products from the following manufacturer:
 - 1. Babcock-Davis

9300 73rd Avenue North

Brooklyn Park, MN 55428

Toll Free Hotline: 888.412.3726

Toll Free Fax: 888.312.3726

Direct Phone: 763-488-9247

E-Mail: info@babcockdavis.com

Internet: <http://www.babcockdavis.com/>
- B. Substitutions: Comply with Section [01600] [01630] [_____].

- C. Specifications and Drawings are based on manufacturer's proprietary literature from Babcock-Davis. Other manufacturers shall comply with minimum levels of material, color selection, and detailing indicated in Specifications or on Drawings. Architect will be sole judge of appropriateness of substitutions.

2.2 MATERIALS

- A. Commercial quality, cold steel sheet with gray baked on powder coat finish.
- B. Galvanized, bonderized steel with gray baked on powder coat finish.
- C. Type: No. 304 stainless steel with No. 4 satin polish finish.

2.3 ACCESS PANELS

- A. Non rated flush access doors, Babcock-Davis N & P series
1. Door: Fabricate from 14-gauge cold rolled sheet steel.
 2. Frame: Fabricate from 16-gauge cold rolled sheet steel. Provide 1/4 inch mounting holes.
 - a. NT - All surfaces - 1 inch flange at perimeter.
 - b. NW - Wallboard surfaces – 22-gauge galvanized drywall bead at perimeter.
 - c. NP - Plaster surfaces – 22-gauge galvanized plaster bead at perimeter.
 - d. PT – Stainless Steel – 1 inch flange at perimeter.
 3. Hinge:
 - a. NT – Concealed pin type, spring loaded to allow for door removal, set to open 175 degrees.
 - b. NW and NP – Concealed continuous piano hinge.
 - c. PT – Pin hinge
 4. Latching/Locking Devices: Screwdriver cam latch - standard.

OPTIONS:

- a. Key operated cylinder cam lock with 2 keys per lock, keyed alike.
- b. Preparation to accept a 1 1/8" mortise cylinder. Cylinder and core specified in Division 8 Section "Door Hardware"
- c. Other options as specified.

SELECT ONE OF THE FOLLOWING FINISHES: GRAY BAKED ON POWDER COAT IS STANDARD.

5. Finish:
 - a. Gray baked on powder coat finish.
 - b. Galvanized, bonderized steel, with gray baked on powder coat finish.
 - c. Type No. 304 stainless steel with No. 4 satin polish.
- B. None rated access panels for walls only, Babcock-Davis D series
1. Maximum size = 36"w x 48"h (W & P only).
 2. Door: Fabricate from 14-gauge cold rolled sheet steel.
 3. Frame: Fabricate from 16-gauge cold rolled sheet steel of configuration to suit material application.
 - a. DT- All surfaces - 1 inch flange at perimeter.
 - b. DW - Wallboard surfaces – 22-gauge galvanized drywall bead at perimeter.
 - c. DP- Plaster surfaces – 22-gauge galvanized plaster bead at perimeter.
- C. Insulated fire rated access panels for walls and ceilings, Babcock-Davis I series
1. Maximum size horizontal applications = 24 inch x 36 inch.
 2. Maximum size vertical applications: IT= 48 inch x 48 inch, IW, and IP= 36 inch x 48 inch.
 3. Door: Fabricate from 20-gauge cold rolled sheet steel, insulated sandwich type construction.

4. Frame: Fabricate from 16-gauge cold rolled steel of configuration to suit material application.
 - a. IT - All surfaces - 1 inch flange at perimeter.
 - b. IW - Wallboard surfaces - 22-gauge galvanized drywall bead at perimeter.
 - c. IP - Plaster surfaces - 22-gauge galvanized plaster bead at perimeter.
5. Hinge: Flush continuous piano type on model IT. Concealed pin hinge on style IW and IP.
6. Latching/Locking mechanism: Knurled knob/flush key operated latch bolt - standard.

OPTIONS:

- a. Preparation to accept a 1 1/8" mortise cylinder. Cylinder and core specified in Division 8 Section "Door Hardware"
- b. Other options as specified.

SELECT ONE OF THE FOLLOWING FINISHES: GRAY BAKED ON POWDER COAT IS STANDARD.

7. Finish:
 - a. Gray baked on powder coat finish.
 - b. Galvanized, bonderized steel, with gray baked on powder coat finish.
 - c. Type No. 304 stainless steel with No. 4 satin polish.
8. Insulation: 2 inch thick fire rated mineral fiber.
9. Automatic closure device: Integral automatic spring closure device for each door.
10. Interior latch release: Mechanism to allow for panel to open from interior side.

D. Uninsulated fire rated access panels for walls only, Babcock-Davis U series

1. Maximum size = 36"w x 48"h.
2. Door: Fabricate from 14-gauge cold rolled sheet steel.
3. Frame: Fabricate from 16-gauge cold rolled sheet steel of configuration to suit material application.
 - a. UT- All surfaces - 1 inch flange at perimeter.
 - b. UW - Wallboard surfaces - 22-gauge galvanized drywall bead at perimeter.
 - c. UP- Plaster surfaces - 22-gauge galvanized plaster bead at perimeter.

SELECT ONE OF THE FOLLOWING FINISHES: GRAY BAKED ON POWDER COAT IS STANDARD.

4. Finish:
 - a. Gray baked on powder coat finish.
 - b. Galvanized, bonderized steel, with gray baked on powder coat finish.
 - c. Type No. 304 stainless steel with No. 4 satin polish.
5. Hinge: Flush continuous piano type.
6. Latching/Locking mechanism: Knurled knob/flush key operated latch bolt - standard.

OPTIONS:

- a. Preparation to accept a 1 1/8 inch mortise cylinder. Cylinder and core specified in Division 8 Section "Door Hardware"
- b. Other options as specified.
7. Automatic closure device: Integral automatic spring closure device for each door.
8. Interior release: Mechanism to allow for panel to open from interior side.

E. Oversized Fire Rated Access Panels for horizontal and vertical applications, Babcock-Davis FRD Series

1. Sizes: 30 inch x 30 inch up to 48 inch x 60 inch for horizontal applications. Call factory for single or double door construction options.
2. Sizes: Greater than 48 inch x 48 inch up to 48 inch x 60 inch vertical applications, all panels to be double door construction.
3. Door: Fabricate from 18-gauge galvanized steel, insulated sandwich type construction. 22 gauge liner.
4. Frame: Fabricate from 16-gauge galvanized steel.

- a. .875 flange at perimeter.
5. Hinge: Concealed continuous rod opening to 100 degrees.
6. Latching/Locking Mechanism: Factory installed flush ¼ inch allen key, self latching.

SELECT ONE OF THE FOLLOWING TWO FINISHES:

7. Finish: White electrostatically applied rust inhibitive prime coat.
 - a. White electrostatically applied rust inhibitive prime coat.
 - b. Options: Type No. 304 stainless steel with No. 4 satin polish.
 8. Insulation: 1 ½ inches thick high temperature.
 9. Automatic Closure Device: Integral automatic spring closure device for each door, will close and latch all doors from an open position of approximately 90 degrees.
 10. Interior Latch Release: Mechanism to allow for panel to open from interior side-standard on all panels.
- F. Inward Opening Fire Rated Access Panels for horizontal applications only, Babcock-Davis FRU series
1. 1. Maximum sizes: 24 inch x 36 inch or 30 inch x 30 inch.
 2. Door: Fabricate from 18-gauge galvanized steel, insulated sandwich type construction.
 3. 22-gauge liner.
 4. Frame: Fabricate from 16-gauge galvanized steel.
 - a. .75 inch flange at perimeter
 5. Hinge: Concealed continuous piano hinge
 6. Latching/Locking Mechanism: Factory installed ¼ inch allen key, self latching.

SELECT ONE OF THE FOLLOWING TWO FINISHES:

7. Finish:
 - a. White electrostatically applied rust inhibitive prime coat.
 - b. Options: Type No. 304 stainless steel with No. 4 satin finish.
 8. Insulation: 1 ½ inches thick high temperature.
 9. Automatic Closure: Gravity self closing.
 10. Interior Latch Release: Mechanism to allow for panel to open from interior side-standard on all panels.
- G. Recessed access panels, Babcock-Davis R series
1. Door: Fabricate from 16-gauge cold rolled sheet steel recessed 5/8 inch for in-fill of material.
 2. Frame: Fabricate from 16-gauge cold rolled sheet steel of configuration to suit material application.
 - a. RW- Wallboard surfaces – 22-gauge galvanized drywall bead at perimeter.
 - b. RP- Plaster surfaces – 22-gauge galvanized plaster bead at perimeter.
 - c. RA - Acoustical surfaces - no surface frame.
 3. Hinge: Concealed pivoting rod.
 4. Latching: Key operated cylinder cam lock with 2 keys per lock, keyed alike.

OPTIONS:

- a. Preparation to accept a 1 1/8 inch mortise cylinder. Cylinder and Core specified in Division 8 Section "Door Hardware".
 - b. Other options as specified.
5. Finish: Gray baked on powder coat finish.
- H. Security, insulated fire rated access panels, Babcock-Davis S series – walls only
1. Door: Fabricate from 14-gauge cold rolled sheet steel, insulated sandwich type construction.
 2. Frame: Fabricate from 16-gauge cold rolled sheet steel of configuration to suit material application.
 - a. ST- All surfaces - 1 inch flange at perimeter.
 - b. SW- Wallboard surfaces – 22-gauge galvanized drywall bead at perimeter.

- c. SP- Plaster surfaces – 22-gauge galvanized plaster bead at perimeter.
- 3. Hinge: Concealed pin type for concealed frame. Flush continuous piano type for exposed frame and on panels larger than 36 inches in height.
- 4. Latching:
 - a. Preparation to accept a 1 1/8 inch mortise cylinder. Cylinder and Core specified in Division 8 Section “Door Hardware”.
 - b. Detention dead-bolt lock preparation. Lock specified in Division 8 Section “Door Hardware”.

SELECT ONE OF THE FOLLOWING FINISHES: GRAY BAKED ON POWDER COAT IS STANDARD

- 5. Finish:
 - a. Gray baked on powder coat finish.
 - b. Galvanized, bonderized steel with gray baked on powder coat finish.
 - c. Type No. 304 stainless steel with No. 4 satin finish.
 - 6. Automatic closure device: Integral automatic spring closure device for each door.
 - 7. Interior latch release: Mechanism to allow for panel to open from interior side.
- I. Medium security access doors, Babcock-Davis M series
- 1. Door: Fabricate from 12-gauge cold rolled sheet steel.
 - 2. Frame: Fabricate from 12-gauge cold rolled sheet steel of configuration to suit material application.
 - a. MT- All surfaces - 1 inch flange at perimeter.
 - b. MW- Wallboard surfaces – 22-gauge galvanized drywall bead at perimeter.
 - c. MP- Plaster surfaces – 22-gauge galvanized plaster bead at perimeter.
 - 3. Hinge: Concealed continuous piano type.
 - 4. Latching/Locking Mechanism: Pinned allen head security cam latches - standard.

OPTIONS:

- a. Pinned allen head security screws.
- b. Preparation to accept a 1 1/8 inch mortise cylinder. Cylinder and core specified in Division 8 Section “Door Hardware”
- c. Heavy-duty detention deadbolt lock preparation. Lock specified in Division 8 Section “Door Hardware”.

SELECT ONE OF THE FOLLOWING FINISHES: GRAY BAKED ON POWDER COAT IS STANDARD.

- 5. Finish:
 - a. Gray baked on powder coat finish.
 - b. Galvanized, bonderized steel with gray baked on powder coat finish.
 - c. Type 304 stainless steel with #4 satin finish.
- J. High security access panels, Babcock-Davis HS series
- 1. Door: Fabricate from 10-gauge cold rolled steel.
 - 2. Frame: Fabricate from 2 inch by 2 inch by 3/16 inch steel angle.
 - 3. Hinge: Heavy-duty steel butt hinge welded to the door and frame (surface mounted).

OPTIONS:

- a. Continuous piano type.
- 4. Frame: Masonry anchors welded to frame.
- 5. Latching/Locking Mechanism: Pinned allen security screws – standard.

OPTIONS:

- a. Preparation to accept a 1 1/8” mortise cylinder. Cylinder and core specified in Division 8 Section “Door Hardware”

b. Heavy-duty detention deadbolt lock preparation. Lock specified in Division 8 Section "Door Hardware".

6. Finish: Gray baked on powder coat finish.

K. Maximum security access panels, Babcock-Davis TS series

1. Door: Fabricate from 7-gauge hot rolled steel.
2. Frame: Fabricate from 2 inch by 3 inch by 3/16 inch steel angle.
3. Hinge: Heavy-duty steel butt hinge welded to the door and frame (surface mounted).

OPTIONS:

- a. Continuous piano type.
4. Frame: Masonry anchors welded to frame.
5. Latching/Locking Mechanism: Heavy-duty detention lock preparation - standard. Lock specified in Division 8 Section "Door Hardware".

OPTIONS:

- a. Other options as specified.
6. Finish: Gray baked on powder coat finish.

L. Exterior insulated access panel, Babcock-Davis XT series

1. Door: Fabricate from 20-gauge galvanized steel, insulated sandwich type construction.
2. Hinge: Stainless steel continuous piano type.

OPTIONS:

- a. Type No. 304 stainless steel – door only.
3. Frame: Fabricate from 6063-T5 extruded aluminum.
4. Latching/Locking device: 1 or 2 dual acting handles, depending on door size.

OPTIONS:

- a. Lockable handle for exterior only.
5. Flange: 0.080 6063-T5 extruded aluminum 1.25 inch flange.
6. Finish: Paint grip.
7. Insulation: 2 inch thick fiberglass.
8. Gasket: Extruded santoprene.

M. Special lightweight access panel, Babcock-Davis LW series

1. Door: Fabricate from 26-gauge pre-finished embossed galvanized steel.

OPTIONS:

- a. 0.063 aluminum door panel
2. Frame: 0.045 6063-T5 extruded aluminum with rolled 1-5/16 inch flange
3. Hinge: Zinc plated continuous piano type.

OPTIONS:

- a. Aluminum continuous piano type.
4. Latching/Locking device: Screwdriver cam latch – standard.

OPTIONS:

- a. Key operated cylinder lock with 2 keys per lock, keyed alike.
5. Insulation: 3/4 inch polystyrene with 3.8 R-value at 75 degrees F temperature.
6. Finish: White embossed steel.

OPTIONS:

- a. Mill finish with 0.063 aluminum panel inserts.

2.4 OPTIONS

THE FOLLOWING MORTISE OPTION MAY BE USED ON N SERIES, I SERIES, U SERIES, S SERIES (WALL ONLY), M SERIES, AND HS SERIES.

- A. Mortise cylinder preparation to receive 1 1/8 inch mortise cylinder lock. Lock specified in Division 8 Section "Door Hardware".

2.5 FABRICATION

- A. Manufacture each access panel assembly as an integral unit ready for installation.
- B. Welded construction: Furnish with a sufficient quantity of 1/4 inch mounting holes to secure access panels to types of supports indicated.
- C. Recessed panel: Form face of panel to provide specified recess for application of finish material. Reinforce panel as required to prevent buckling.
- D. Furnish number of latches required to hold door in flush, smooth plane when closed.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Comply with Section [01700] [_____].
- B. Verify that rough openings for door and frame are correctly sized and located.
- C. Verify mechanical and electrical requirements for ceiling or wall access panels.

3.2 PREPARATION

- A. Advise installers of work relating to access panel installation including rough opening dimensions, locations of supports, and anchoring methods. Coordinate delivery with other work to avoid delay.

3.3 INSTALLATION

- A. Install access door and frame units per manufacturer's written instructions.
- B. Install frames plumb and level in opening. Secure rigidly in place.
- C. Position units to provide convenient access to concealed Work requiring access.

DELETE THE FOLLOWING PARAGRAPH IF NO FIRE-RATED UNITS ON PROJECT.

- D. Fire-rated units: Include UL or Warnock-Hersey labels.

3.4 ADJUST AND CLEAN

- A. Adjust panel after installation for proper operation.
- B. Remove and replace panels or frames that are warped, bowed, or damaged.

END OF SECTION