

# SPECIAL PROVISIONS FOR ACCESS DOORS AND FRAMES

Black Hawk County BRM-CHBP-8155(770)--NB-07

Effective Date September 21, 2021

THE STANDARD SPECIFICATIONS, SERIES 2015, ARE AMENDED BY THE FOLLOWING MODIFICATIONS AND ADDITIONS. THESE ARE SPECIAL PROVISIONS AND THEY SHALL PREVAIL OVER THOSE PUBLISHED IN THE STANDARD SPECIFICATIONS.

#### PART 1 GENERAL

#### 1.1 SUMMARY

Section includes gatewell access doors and frames.

### 1.2 SUBMITTALS

- A. Product Data: For each type of product include construction detail materials, individual components and profiles, and finishes.
- B. Shop Drawings:
  - 1. Include plans, elevations, sections, details and attachments to other work for each gatewell. Where access doors are typical to more than one gatewell, indicate which gatewells are typical and submit one package for those gatewells.
  - 2. Detail fabrication and installation of access doors and frames for each type of substrate.
- C. Product Schedule: Provide complete access door and frame schedule, including types, locations, sizes, latching or locking provisions, and other data pertinent to installation.
- D. Hatches sizing on all gatewells shall be coordinated with gate or valve manufacturer. Contractor shall provide, in writing, a statement detailing the compatibility of gate or valve removal with clear opening size of the hatch. An accurate sizing of the hatch cannot be determined without a chosen gate and valve manufacturer. Sizing provided in the schedule of this specification is preliminary and is intended for bidding purposes only.

## PART 2 PRODUCTS

2.1 FLOOR ACCESS DOORS AND FRAMES

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
  - 1. Acudor Products, Inc.
  - 2. Babcock-Davis
  - 3. Bilco Company (The)
  - 4. Milcor, Inc.
  - 5. ENGINEER approved equivalent.
- B. Floor Doors, General: Equip each door with adjustable counterbalancing springs, heavy-duty hold-open arm that automatically locks door open at 90 degrees, release handle with red vinyl grip that allows for one-handed closure, and recessed lift handle.
- C. Watertight Aluminum Floor Door: Single or double-leaf opening. Extruded-aluminum gutter frame with NPS 1 1/2 drainage coupling and 1/4 inch thick, diamond-pattern, aluminum tread plate door; watertight; loading capacity to support AASHTO H20 concentrated wheel load, without impact.
- D. Hardware: Provide the following:
  - 1. Hinges: heavy-duty, aluminum or stainless-steel butt hinges with stainless-steel pins.
  - 2. Latch: Stainless-steel slam latch.
  - 3. Lock: Keyed deadbolt lock.
  - 4. Hardware Material: Stainless steel, including latch and lifting mechanism assemblies, hold- open arms, and all brackets, hinges, pins and fasteners.
- E. Insulation: Urethane with liner pan.
- F. Safety Accessories: Safety net.

## 2.2 MATERIALS

- A. Steel Plates, Shapes and Bars: ASTM A38/A 36M.
- B. Aluminum Extrusions: ASTM B221, Alloy 6063-T6.
- C. Aluminum-Allow Rolled Tread Plate: ASTM B362/B 632M, Alloy 6061-T6.
- D. Aluminum Sheet: ASTM B209, alloy and temper recommended by aluminum producer and finisher for type of use and finish indicated, and with not less than strength and durability properties of Alloy 5005-H15; with minimum sheet thickness according to ANSI H35.2.
- E. Frame Anchors: Same type as door face.
- F. Inserts, Bolts and Anchor Fasteners: Hot-dip galvanized steel according to ASTM A 153/A 153M or ASTM F 2329.

### 2.3 FABRICATION

- A. General: Provide access door and frame assemblies manufactured as integral units ready for installation.
- B. Metal Surfaces: For metal surfaces exposed to view in the completed Work, provide materials with smooth, flat surfaces without blemishes. Do not use materials with exposed pitting, seam marks, roller marks, rolled trade names, or roughness.

- C. Doors and Frames: Grind exposed welds smooth and flush with adjacent surfaces. Furnish attachment devices and fasteners of type required to secure access doors to types of supports indicated. Provide mounting holes in frames for attachment of units to metal or wood framing.
- D. Latching Mechanisms: Furnish number required to hold doors in flush, smooth plane when closed.
  - 1. For cylinder locks, furnish two keys per lock and key all locks alike.
  - 2. For recessed panel doors, provide access sleeves for each locking device. Furnish plastic grommets and install in holes cut through finish.
- E. Extruded Aluminum: After fabrication, apply manufacturer's standard protective coating on aluminum that will come in contact with concrete.

#### 2.4 FINISHES

- A. Comply with NAAMM's "Metal finishes Manual for Architectural and Metal Products" for recommendations for applying and designing finishes.
- B. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.
- C. Appearance of Finished work: Noticeable variations in same piece are not acceptable. Variations in appearance of adjoin components are acceptable if they are within the range of approved samples and are assembled or installed to minimize contrast.
- D. Aluminum Finishes:
  - 1. Mill finish.
  - 2. Clear Anodic Finish: AAMA 611, AA-M12C22A31, Class II, 0.010 mm or thicker.

#### PART 3 EXECUTION

### 3.1 EXAMINATION

- A. Examine substrates for compliance with requirements for installation tolerances and other conditions affecting performance of the work.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 INSTALLATION

- A. Comply with manufacturer's written instructions for installing access doors and frames.
- B. Install doors flush with adjacent finish surfaces or recessed to receive finish material.

## 3.3 ADJUSTING

- A. Adjust access doors and hardware, after installation, for proper operation.
- B. Remove and replace access doors and frames that are warped, bowed or otherwise damaged.

# PART 4 METHOD OF MEASUREMENT AND BASIS OF PAYMENT

# 4.1 METHOD OF MEASUREMENT

Each type and size of access door and frame installed will be counted.

# 4.2 BASIS OF PAYMENT

## A. Access Hatch:

- 1. Payment will be the contract unit price for each size of access.
- 2. Payment is full compensation for furnishing and installing the access door and all appurtenant items.