

## TYPE W-APS & W-APD FLOOD RESISTANT VAULT ACCESS DOOR SPECIFICATION

### I. PART ONE - GENERAL

#### 1.01 SUMMARY

- A. Work included: Furnishing and installing factory fabricated vault access doors
- B. Related Work: N/A

#### 1.02 REFERENCES

- A. American Society for Testing and Materials (ASTM), 100 Bar Harbor Drive, West Conshocken, PA 19428-2959; (610) 832-9585, fax (610) 832-9555
  - 1. ASTM A 36-93a: Standard Specification for Structural Steel

#### 1.03 SUBMITTALS

- A. Product Data: Provide manufacturer's product data for all materials in this specification.
- B. Shop Drawings: Show profiles, accessories, location, and dimensions.
- C. Samples: Manufacturer to provide upon request; sized to represent material adequately.
- D. Contract Closeout: Vault access door manufacturer shall provide the manufacturer's Warranty prior to the contract closeout.

#### 1.04 PRODUCT HANDLING

- A. All materials shall be delivered in manufacturer's original packaging.
  - Store materials in a dry, protected, well-vented area. Product to be stored in original packaging.
  - The contractor shall thoroughly inspect product upon receipt and report damaged material immediately to delivering carrier and note such damage on the carrier's freight bill of lading.
  - Remove protective wrapping immediately prior to installation.

#### 1.05 SUBSTITUTIONS

- A. Proposals for substitution products shall be accepted only from bidding contractors and not less than (10) working days before bid due date. Contractor guarantees that proposed substitution shall meet the performance and quality standards of this specification.

#### 1.06 JOB CONDITIONS

- A. Verify that other trades with related work are complete before installing vault access door(s).
- B. Mounting surfaces shall be straight and secure; substrates shall be of proper width.
- C. Refer to the construction documents, shop drawings, and manufacturer's installation instructions.
- D. Observe all appropriate OSHA safety guidelines for this work.

#### 1.07 WARRANTY/GUARANTEE

- A. Manufacturer's standard warranty: Materials shall be free of defects in material and workmanship for a period of (10) Ten years from the date of purchase. Should a part fail to function in normal use within this period, manufacturer shall furnish a new part at no charge.

### II. PART TWO - PRODUCTS

#### 2.01 MANUFACTURER

- A. U.S.F. Fabrication, Inc. 3200 W. 84 St. Hialeah, FL 33018 1.800.258.6873, Fax: 1.305.882.1577, Web: [www.usffab.com](http://www.usffab.com)

#### 2.02 ACCESS DOOR

- A. Furnish and install where indicated on plans vault access door W-APS or W-APD:
  - For W-APS, size width x length, Width denotes hinge side. The vault access door shall be single leaf.
  - For W-APD, size width x length, Length denotes hinge side. The vault access door shall be double leaf with a removable flood resistant beam in the center between the 2 door leaves.
- B. Performance Characteristics:
  - Covers: Shall be reinforced for an ASTM Load Level 2 (300 psf) pedestrian load capable of holding up to 25 ft. of water with a maximum deflection of 1/150th of the span.
  - The entire assembly shall be designed to be flood resistant so as to allow no more than 4" of water to enter the vault below when subjected to 24" of standing water for a period of 24 hrs.

- Operation of the cover(s) shall be smooth and easy with controlled operation throughout the entire arc of opening and closing.

C. Cover(s):

- Shall be 1/4" (6.3 mm) aluminum diamond plate.
- Underside of cover(s) shall include a 9/16" diameter EPDM gasket securely attached in a continuous groove. Gaskets attached to the frame will not be acceptable.
- Cover(s) shall close flush with the frame with flood tight 316 stainless steel cam locks.

D. Frame:

- Shall be 3/8" (6.3mm) extruded aluminum with 3/16" X 1 1/2" strap anchors welded around the entire outside perimeter of the frame.
- Area of the frame that will come in contact with concrete shall be coated with bituminous paint.

E. Entire Assembly:

- Shall be designed to be cast-in flush with the surrounding area: products that do not sit flush will not be allowed.

F. Lift Assist:

- Shall be equipped with stainless steel gas shocks for lift assist and to retard downward motion when closing. Torsion bar type lift assist will not be allowed.

G. Hinges:

- 316 Stainless-steel hinges shall be through bolted to the cover with tamperproof Type 316 stainless steel bolts and locknuts and shall be through bolted to the frame with Type 316 stainless-steel bolts and locknuts.

H. Lift Handles:

- A Flush, ADA compliant, flood tight lifting handle shall be provided for each door leaf.

I. Hold-open arms:

- Each door shall be equipped with a 316 stainless steel hold-open arm with a secondary latch that insures that the hold-open arm properly engages when the door is brought to its full upright and locked position. Hold-open devices that require the manual insertion of pins will not be allowed.

J. Hardware:

- Shall be Type 316 stainless-steel throughout.

K. Finishes:

- Entire door assembly shall have a clear anodized finish.

**III. PART THREE - EXECUTION**

**3.01 INSPECTION**

A. Verify that the vault access door installation will not disrupt other trades. Verify that the substrate is dry, clean, and free of foreign matter. Report and correct defects prior to any installation.

**3.02 INSTALLATION**

- A. Submit product design drawings for review and approval to the engineer, architect or specifier before fabrication.
- B. The installer shall check as-built conditions and verify the manufacturer's vault access door details for accuracy to fit the application prior to fabrication. The installer shall comply with the vault access door manufacturer's installation instructions.
- C. The installer shall furnish mechanical fasteners consistent with the vault access door manufacturer's instructions.