# ATTACHMENT J

#### **SECTION 08346**

#### **ARMORY DOORS**

#### PART 1 - GENERAL

#### 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

# 1.2 SUMMARY

- Section includes steel armory door assemblies, complete with door, frame, and associated door hardware.
- B. Related Sections:
  - Division 03 Section "Cast-in-Place Concrete" for building anchors into concrete construction for armory door frames.

# 1.3 SUBMITTALS

- A. Product Data: For each type of product indicated. Include construction details, material descriptions, dimensions of individual components and profiles, finishes, and operating characteristics for armory door assemblies.
- B. Shop Drawings: For armory door assemblies. Include plans, elevations, sections, details, and attachments to other work. Show operational clearances and coordination of adjustable frame with designed wall thicknesses.
- C. Setting Drawings: For anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors that are to be embedded in concrete.
- D. Samples for Initial Selection: For units with factory-applied color finishes.
- E. Samples for Verification: For each type of exposed finish required, in manufacturer's standard sizes.
- F. Qualification Data: For qualified Installer.
- G. Product Test Reports: Based on evaluation of comprehensive tests performed by a qualified testing agency, for armory door assemblies.
- H. Operation and Maintenance Data: For armory door assemblies to include in emergency, operation, and maintenance manuals. In addition to items specified in Division 01 Section "Operation and Maintenance Data," include keying and combination information.

# 1.4 QUALITY ASSURANCE

- A. Installer Qualifications: Manufacturer's authorized representative who is trained and approved for installation of units required for this Project.
- B. Source Limitations: Obtain armory door assembly all from single source from single manufacturer.

#### C. Standards:

- Comply with U.S. General Services Administration (GSA) standard No. AA-D-600D with Amendment 2.
- D. Preinstallation Conference: Conduct conference at Project site.

# 1.5 DELIVERY, STORAGE, AND HANDLING

- Deliver armory door assemblies wrapped and crated to provide protection during transit and Project-site storage. Use vented plastic.
- B. Deliver keys to Owner by registered mail or overnight package service.
  - Obtain Owner's mailing address from Architect.

# 1.6 PROJECT CONDITIONS

A. Environmental Limitations: Do not deliver or install armory door assemblies until spaces are enclosed and weathertight, wet work in spaces is complete and dry, and temporary HVAC system is operating and maintaining ambient temperature and humidity conditions at occupancy levels during the remainder of the construction period.

# 1.7 COORDINATION

A. Coordinate installation of anchorages for armory door frames. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to Project site in time for installation.

# PART 2 - PRODUCTS

# 2.1 MANUFACTURERS

- A. Subject to compliance with requirements, provide one of the following vault door assemblies:
  - Diebold General Services Administration-Approved Class 5 High Security Armory Door (Basis Of Design).
  - 2. Equivalent products as manufactured by Schwab Corporation.

# 2.2 MATERIALS

- A. Steel Plate, Shapes, and Bars: ASTM A 36/A 36M.
- B. Steel Sheet: ASTM A 1008/A 1008M, Commercial Steel (CS), Type B.
- C. Stainless-Steel Sheet: ASTM A 666, Type 304.
- D. Aluminum Extruded Bar and Tube: ASTM B 221.
- E. Aluminum Plate and Sheet: ASTM B 209.

# 2.3 VAULT DOOR AND FRAME ASSEMBLY

- A. Door: Fabricated from all-welded, insulated steel sheet construction; with jambs and head shaped to interlock with frame.
  - 1. Type: Armory door.
  - 2. Clear Opening Size: As indicated on Drawings.
- B. Frame: Beveled entrance frame, tapered no more than 10 degrees, fabricated from steel sheet of thickness required by UL listing, and designed for non-grout installation; with removable rear architrave and adjustable wall flange to accommodate wall thicknesses indicated, fabricated from steel sheet and finished to match frame.

# 2.4 HARDWARE AND ACCESSORIES

- A. General: Provide hardware components as required for specified UL listing.
- B. Hinges: No fewer than three roller-thrust-bearing hinges of design, size, and weight required for smooth operation of door and to allow full, clear door opening; with hinge cover(s).
- C. Door Bolts: Permanently lubricated, not less than 11/16 inches in diameter, and fabricated from nickel-plated steel. On each vertical side of door, provide five door bolts that engage frame when extended. Bolts shall automatically retract when handle is operated and automatically extend when door closes.
- D. Handle: Manufacturer's standard.
- E. Combination Lock: Manufacturer's UL Group 1 mechanical lock.
  - 1. Provide drill-resistant metal plate for protection of lock case and locking mechanism.
- F. Relocking Device: UL 140 listed, designed to automatically lock door bolts when door is subjected to mechanical or torch attack.
- G. Escape Mechanism: Provide emergency operation of lock from vault side of door by means of inside door release fabricated from stainless-steel rod.
- H. Sill: Reinforced formed-steel or flat-steel plate.

# 2.5 FABRICATION

- A. Fabricate armory door assemblies rigid, neat in appearance, and free of defects, warp, or buckle. Accurately form metal to required sizes and profiles, with minimum radius for thickness of metal. Weld exposed joints continuously; grind, fill, dress, and make smooth, flush, and invisible. Where practical, fit and assemble units in manufacturer's plant. To ensure proper assembly at Project site, clearly identify work that cannot be permanently factory assembled before shipment.
- B. Factory-prepare armory door assemblies and frames to receive hardware and accessories, including cutouts, reinforcements, mortising, drilling, and tapping.

#### 2.6 GENERAL FINISH REQUIREMENTS

- A. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating 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 adjoining components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.

#### 2.7 PAINT FINISHES

A. Finish: Manufacturer's standard factory-applied, baked-on paint finish applied to door, frame, and wall flanges. Include manufacturer's prime and finish coats on all metal components.

#### PART 3 - EXECUTION

#### 3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
- B. For the record, prepare written report, endorsed by Installer, listing conditions detrimental to performance of the Work.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

# 3.2 PREPARATION

A. Provide temporary shoring or bracing of floors while transporting armory door assemblies to final location, as required to prevent surface damage to floors or deflections in excess of design loads.

#### 3.3 INSTALLATION

- Install armory door assemblies complete with doors, frames, and accessories and according to requirements of armory door assemblies' UL listing.
- B. Set armory door frames accurately in position; plumbed, aligned, and braced securely until permanent anchors are set. After wall construction is complete, remove temporary braces and spreaders, leaving surfaces smooth and undamaged.

# 3.4 ADJUSTING AND CLEANING

- A. Adjust vault door hardware and operating mechanism to function smoothly, and lubricate as recommended by manufacturer.
- B. Remove and replace work that cannot be successfully cleaned and repaired to permanently eliminate evidence of damage, including dented and bent units.
- C. Touchup Painting: Immediately after erection, clean field welds, bolted connections, and abraded areas of shop paint; paint exposed areas with same material as used for shop painting to comply with SSPC-PA 1 for touching up shop-painted surfaces.

**END OF SECTION**