



## SECTION 08360

### 1. GENERAL

#### 1.1. SECTION INCLUDES

- A. Overhead folding doors.

#### 1.2. RELATED SECTIONS

- A. Section 03300 - Cast-In-Place Concrete: Prepared opening in concrete. Execution requirements for placement of anchors in concrete wall construction.
- B. Section 04810 - Unit Masonry Assemblies: Prepared opening in masonry. Execution requirements for placement of anchors in masonry wall construction.
- C. Section 05500 - Metal Fabrications: Steel frame and supports.
- D. Section 06114 - Wood Blocking and Curbing: Rough wood framing and blocking for door opening.
- E. Section 07900 - Joint Sealers: Perimeter sealant and backup materials.
- F. Section 08710 - Door Hardware: Cylinder locks.
- G. Section 16130 - Raceway and Boxes: Empty conduit from control station to door operator.
- H. Section 16150 - Wiring Connections: Electrical service to door operator.

#### 1.3. REFERENCES

- A. [AS1170.2:2002](#) - Structural Design Actions - General Principles.
- B. [AS4100-1990](#)- SAA Steel Structures Code.
- C. AS 1288 - Glass in Buildings - Selection and Installation.
- D. AA-6063-T6 - Standards for Aluminum Alloy and Temper.
- E. ASTM A513, Type 1 – Steel Tubes.
- F. ASTM A1008 – Sheet Steel for Covers.
- G. ASTM A36 – Steel Bars.
- H. ASTM A36 – Sheet Steel for Tracks/Channels.

#### 1.4. PERFORMANCE REQUIREMENTS

- A. Wind Loads: Design and size components to withstand loads caused by pressure

and suction of wind acting normal to plane of wall as calculated in accordance with applicable code.

1. Design pressure of \_\_\_\_\_ lb/sq ft (\_\_\_\_\_ kPa).
2. Maximum deflection of 1/300 of opening width.

- B. Single-Source Responsibility: Provide doors, tracks, motors, and accessories from one manufacturer for each type of door. Provide secondary components from source acceptable to manufacturer of primary components.

#### 1.5. SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Product Data: Manufacturer's data sheets on each product to be used, including:
1. Preparation instructions and recommendations.
  2. Storage and handling requirements and recommendations.
  3. Installation methods.
- C. Shop Drawings: Indicate plans and elevations including opening dimensions and required tolerances, accessories and anchors, jamb details, connection details, anchorage spacing, hardware locations, and installation details.
- D. Selection Samples: For each finish product specified, two complete sets of color chips representing manufacturer's full range of available colors and patterns.
- E. Verification Samples: For each finish product specified, two samples, minimum size 6 inches (150 mm) square, representing actual product, color, and patterns.
- F. Manufacturer's Certificates: Certify products meet or exceed specified requirements.
- G. Operation and Maintenance Data.
- H. Submit written agreement in manufacturer's standard form signed by manufacturer and installer agreeing to repair or replace defective doors that are warped, twisted, bowed or damaged as a result of defective product.

#### 1.6. QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section with minimum five years documented experience.
- B. Installer Qualifications: Authorized representative of the manufacturer with minimum five years documented experience.
- C. Products Requiring Electrical Connection: Listed and classified by Underwriters Laboratories, Inc. acceptable to authority having jurisdiction as suitable for purpose specified.

#### 1.7. DELIVERY, STORAGE, AND HANDLING

- A. Store products in manufacturer's unopened labeled packaging until ready for installation.
- B. Store materials in a clean, dry, ventilated, weathertight, secure location.
- C. Protect materials from soiling, abuse, loss and moisture damage.

#### 1.8. PROJECT CONDITIONS

- A. Pre-Installation Conference: Convene a pre-installation conference just prior to

commencement of field operations, to establish procedures to maintain optimum working conditions and to coordinate this work with related and adjacent work.

- B. Environmental Conditions: Prior to and during installation, environmental conditions shall be in accordance with door manufacturers latest published recommendations for temperature, rain, wind, humidity, ventilation, and illumination.

## 1.9. WARRANTY

- A. Manufacturer warrants to the original purchaser within one year from date of installation, if a product sold under this warranty proves to be defective in material or workmanship through normal use and service according to maintenance and operations instructions, as verified by inspection by persons authorized by Renlita Overhead Doors, Renlita Overhead Doors will replace or repair (at Renlita Overhead Doors option) the defective product.
- B. Manufacturer warrants the steel frame against rust, in painted non-damaged condition for a period of two years from original purchase. This warranty does not apply to scratched, dented, damaged or corroded areas of the frame.

## 2. PRODUCTS

### 2.1. MANUFACTURERS

- A. Acceptable Manufacturer: This Section is based on the products of Renlita Doors North America, LLC, which is located at [2430 Albert Broadfoot St Bonham, TX 75418](#). ASD. Tel: [903-583-7500](#). Fax: [903-583-7544](#). Web: [renlitausa.com](#).
- B. Substitutions: Not permitted.

### 2.2. Folding Overhead Doors

- A. Bi-Fold Doors: Vertically gliding door with no floor tracks.
  - 1. Approved Product: Sovereign Bi-Fold
  - 2. Curtain: Constructed from 2-1/2 inch by 1-1/2 inch (65 mm by 40 mm) top and side rails and 1-1/4 inch by 1-1/2 inch (32 mm by 40 mm) mid rails.
- B. Panels: Panels shall be secured by glazing bead, santoprene or PVC wedges.
  - 1. Panel Heights: As indicated on Drawings.
  - 2. Panel Heights: Even division of the open height equaling \_\_\_\_\_ rows, not to exceed 24 inches per panel height.
- C. Brackets and Tracks: Mono section configuration.
- D. Side Guides: 5-1/2 inch by 2-3/8 inch (140 mm by 60 mm) extruded aluminum sections with twin 1/8 inch (3 mm) tracks.
- E. Hardware/Hinges: Cast stainless steel constructed hinges with teflon inserts to ensure quiet and low friction operation.
- F. Operation: Door shall be balanced by the use of torsion springs connected to a rotating shaft. The shaft ends are attached to cable drums which lift/lower the curtain via a flexible cable.
  - 1. Electrical.
- G. Size:
  - 1. Height: \_\_\_\_\_ feet (\_\_\_\_\_ meters).

2. Width: \_\_\_\_\_ feet (\_\_\_\_\_ meters).

H. Locking:

1. Centrally mounted, two way mortise key lock.
2. Integrated motor controlled lock assembly (Liftmaster 3800 or 3900 Motors)

2.3. FINISHES

A. Finish, Ferrous Metals: All surfaces except working machine parts shall receive the following factory applied finish:

1. Powder coating.
2. Abrasive clean to SSP-SP6

B. Finish, Aluminum: Provide the following factory applied finish:

1. Clear anodized aluminum.
2. Abrasive clean to SSP-SP6
3. Powder coating.

C. Finish, Color:

1. As designated in Door Schedule
2. As selected from manufacturer's full range of available colors.
3. Custom color.
4. Manufacturer/Color: \_\_\_\_\_.

2.4. MOTORS\*\* NOTE TO SPECIFIER \*\* Retain one of the following two paragraphs. Delete this Article if no motorized doors. Coordinate with Division 11 for control systems and Division 16 for electrical work.

A. Chamberlain Liftmaster 3800 Series Jackshaft Operator.

1. On board logic controllers.
2. Motor: 115V 60 hz. single phase, 8 amp
3. Sealed motor system.
4. No railings or trolleys; ultra quiet.
5. Battery backup.
6. Mounts beside or above door.
7. Warranty: 5 years.

B. Industrial Jackshaft Operator: Chamberlain Liftmaster Series J Industrial Jackshaft Operator.

1. Maintenance warning system notifies users when scheduled maintenance is due.
2. Motor: 1/2 HP switchless motor with the following:
  - a. 115 volt.
  - b. 208/230 volt.
  - c. Single phase.
  - d. Three phase.
  - e. Separated high voltage wiring.
  - f. Diagnostic LEDs.
3. Photo eye safety sensors.
4. Edge Sensors: Motor reverses if door bottom contacts an obstruction.
5. Biometric Keyless Entry System: Finger print keypad operates motor.
6. Warranty: 2 years.

C. Doors shall be electronically operated with control systems as specified in Section 11150.

D. Provide electrical service and wiring connection as specified in Division 16 for future electric operation.

### 3. EXECUTION

#### 3.1. EXAMINATION

- A. Do not begin installation until openings have been properly prepared.
- B. Verify wall openings are ready to receive work and opening dimensions and tolerances are within specified limits.
- C. Verify electric power is available and of correct characteristics.
- D. If preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

#### 3.2. PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

#### 3.3. INSTALLATION

- A. Inserts and Anchorages: Furnish inserts and anchoring devices suitable for the installation of the units and consistent with the manufacturer's installation requirements. Coordinate delivery with other work to avoid delay.
- B. Install overhead doors, operating equipment, hardware, seals, stops, anchors, inserts, supports and track in accordance with approved shop drawings and the manufacturer's printed instructions.
- C. Coordinate installation with adjacent work to ensure proper clearances and allow for maintenance.
- D. Anchor assembly to wall construction and building framing without distortion or stress.
- E. Securely brace door tracks suspended from structure. Secure tracks to structural members only.
- F. Fit and align door assembly including hardware.
- G. Coordinate installation of electrical service. Complete power and control wiring from disconnect to unit components.

#### 3.4. CLEANING AND ADJUSTING

- A. Lubricate, test and adjust door assembly to smooth operation free from warp twist or distortion and in full contact with weatherstripping.
- B. Clean doors, frames and glass.
- C. Remove temporary labels and visible markings.

#### 3.5. PROTECTION

- A. Do not permit construction traffic through overhead door openings after adjustment and cleaning.
- B. Protect installed products until completion of project.

- C. Touch-up, damaged coatings and finishes and repair minor damage before Substantial Completion.

### 3.6. MAINTENANCE

- A. Post Installation Maintenance:
  - 1. Contractor and installer shall provide Owner with complete company name, address phone number, fax number and assigned contact for emergency repairs and scheduled maintenance for the installed door(s).
- B. Training/Instruction for Owner for Operation and System Maintenance:
  - 1. Manufacturer shall instruct Owner's representative in regular tenant provided maintenance and operation of installed doors.

END OF SECTION