### **SECTION 08360**

## **FULL VISION SECTIONAL OVERHEAD DOORS**

#### PART 1 - GENERAL

#### 1. SUMMARY

A. Section includes Sectional Full Vision Overhead Doors.

### 2. RELATED SECTIONS

- A. 03 30 00 Cast-In-Place Concrete.
- B. 04 20 00 Unit Masonry Assemblies.
- C. 05 50 00 Metal Fabrications.
- D. 06 10 00 Rough Carpentry.
- E. 07 90 00 Joint Seals.
- F. 08 70 00 Door Hardware and Locks.
- G. 09 90 00 Paints and Coatings.
- H. 11 15 00 Parking Control Equipment: Remote door control.
- I. 16 05 00 Electrical service and connections for powered operators.

#### REFERENCES

#### A. ASTM International:

- ASTM B221 Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles and Tubes.
- 2. ASTM E330 Standard Test Method for Structural Performance of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference.
- 3. Door and Access Systems Manufacturers Association International:
  - a. DASMA 102 Specification for Sectional Overhead Type Doors.
- 4. ASTM D638-03 Standard Test Method for Tensile Properties of Plastics.
- 5. ASTM D790-03 Standard Test Method for Flexural Properties of Unreinforced and Reinforced Plastic and Electrical Insulating Materials.

# 4. SUBMITTALS

- A. Submit under provisions of Section 01 30 00 Administrative Requirements.
- 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.
- 4. Operation and maintenance data.
- 5. Nameplate data and rating for motors.
- C. Shop Drawings: Include opening dimensions and required tolerances, connection details, anchorage spacing, hardware locations, and installation details.
- D. Selection Samples: Upon request furnish color samples or section sample.

#### 5. SYSTEM DESCRIPTION

- A. Upward-acting Sectional Overhead Doors for vehicle passage which are factory-prefabricated and counter-balanced.
  - 1. Panels: Sealed Double Pane Tempered Glass or Acrylic Glazing.

## QUALITY ASSURANCE

- A. Provide doors, tracks, counter-balance mechanisms, hinges, rollers, and mounting hardware from one manufacturer for each type of door. Provide secondary components from source acceptable to manufacturer of primary components.
- B. Perform Work in accordance with DASMA 102, Application Type; Commercial.

## 7. QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing products specified in this section with minimum ten years' experience.
- B. Installer: Company specializing in performing Work of this section with minimum three years' experience in commercial overhead door installation and service.

## 8. WARRANTY

- A. Furnish five-year manufacturer's standard written warranty against material or manufacturing defect.
- B. Furnish one-year contractor's warranty.

## PART 2 - PRODUCTS

#### 2.01 APPROVED MANUFACTURERS

- A. Polycarbonate Sectional Doors:
  - 1. American Garage Door Supply, Inc. "UltraClear Series Gold Model".
  - 2. Substitutions: Not permitted.

## 2.02 ARCHITECTURAL SERIES GLAZED ALUMINUM SECTIONAL OVERHEAD DOOR

#### A. Sections:

- 1. 2-inch thick 6063-T6 extruded aluminum framed sections.
  - a. Aluminum frame exterior surfaces to be beveled with tongue and groove meeting rail for optimum moisture drainage and weather tight seal.

- b. Bottom section rail to be 4" tall heavy duty to provide enhanced rigidity.
- 2. Stiles to have minimum of .120" thick mounting surfaces for face hardware attachment.
- 3. Sections constructed of 5/8" thick two layer sealed insulated tempered glass panels or 5/8" thick two-layer sealed acrylic panels, set with resilient glazing channel
- 4. Sections assembled with fasteners constructed of stainless steel with flush head.
- 5. Bottom section to include vinyl astragal secured with an aluminum-extruded retainer.
- 6. All edges of the glass or acrylic panels wrapped in a neoprene tape to provide a weather tight seal.
- 7. All exposed aluminum surfaces to receive an anodized finish that is in conformance with Aluminum Association Designation AA-M10C22A41. Color shall be "Clear". The anodized coating shall meet all standards set forth by AAMA 611.

#### B. Tracks:

- 1. Tracks shall be three inch and a minimum of 12 Ga. galvanized steel construction and designed to utilize all available headroom.
  - a. Vertical tracks to have mounting angle.
  - b. Track bolts to be galvanized steel.
  - c. Horizontal tracks supplied with full length reinforcement angle, min. 14 Ga.

#### C. Counterbalance Mechanism:

- 1. Cross-header shaft shall be two-piece solid keyed, 303 or 304 grade stainless steel.
- 2. Helical-wound torsion springs to be galvanized steel with specialty coated aluminum die cast spring fittings with 1000 hour resistance in a salt spray test.
  - a. Standard Cycle Spring: 10,000 cycles.
  - b. High Cycle Spring: 25,000 cycles.
  - c. High Cycle Spring: 50,000 cycles.
  - d. High Cycle Spring: 100,000 cycles.
  - e. Maximum cycles in a single shaft line
- 3. Counter-balance assemblies to include specialty coated: coupler and die-cast aluminum cable pick up drums able to withstand 1000 hour in a salt spray test.
- 4. Pick-up cable constructed with 7 x 19 stainless steel and engineered with a 5 to 1 safety factor.
- 5. All shaft bearing plates and head plates constructed of 12 Ga. stainless steel material with stainless steel greaseable bearings.
- 6. Headplates provided on high lift and vertical lift track configurations.

# D. Hardware and Rollers:

- 1. Graduated end roller hinges, top and bottom fixtures and center hinges are a minimum of 12 Ga. stainless steel construction.
- 2. Roller shafts have stainless steel stems, wear-resistant UHMW polyethylene tires, and double-sealed precision ball bearings.
- 3. All hinge fasteners are 300 or 400 series plated stainless steel with stainless steel/rubber bonded washer.

# E. Accessories:

- 1. Perimeter Weatherstripping: Extruded aluminum retainer; full height of the jamb, fitted with resilient flexible weatherstripping, placed in moderate contact with the door panels.
- 2. Head Weatherstripping: Dual-contact vinyl seal on full length of the top section.
- 3. Provide pusher springs (compression bumpers) on low headroom and standard lift track doors if equipped with jackshaft operators.

## 3. DOOR OPERATOR

1. "Fill in as required"

## PART 3 - EXECUTION

### 3.01 EXAMINATION

A. Verify wall openings are ready to receive work and opening dimensions and tolerances are within specified limits.

## 3.02 PREPARATION

- A. Contractor shall be responsible for ordering all parts, including track hanging materials, required to produce a complete operating system.
  - 1. Contractor shall be responsible for corrosion resistance of all parts, mounting and fastening hardware, electric operator, and electrical enclosures and connections.
  - 2. Prepare opening to permit correct installation of the door unit(s).

# 3.03 INSTALLATION

- A. Anchor assembly to wall construction or building framing without distortion or stress.
- B. Securely brace door tracks suspended from structure. Secure tracks to structural members only.
- C. Fit and align door assembly including counter-balance hardware.
- D. Install perimeter weather stripping.

# 3.04 ADJUSTING

Adjust door assembly to smooth operation and in full contact with weather stripping.

# 3.05 CLEANING

A. Remove temporary labels, coatings and visible markings.

# 3.06 PROTECTION OF INSTALLED CONSTRUCTION

A. Do not permit construction traffic through overhead door openings during adjustment and cleaning.