

## 400 Series – Windload Certified / Standard Rolling Steel Door

### Part 1 - GENERAL

#### 1.01 DESCRIPTION

- A. Type:** Standard Windload Certified Rolling Steel Doors to be manufactured by Asta Door Corporation.
- B. Operation:** standard chain hoist operation, roller chains and sprockets. Hand chain galvanized machine link to pull 35 lbs. or less. Electric motor operation or crank optional.
- C. Mounting:** to be interior face mounted on a prepared opening, between jamb under lintel, between jamb face of wall or exterior.

#### 1.02 RELATED WORK

- A. Opening preparation, access panels, finish or field painting are in the scope of the work of other sections or trades.

### Part 2 - PRODUCT

#### 2.01 CURTAIN

- A. Slats:** Galvanized steel cold roll formed in continuous lengths. Galvanized according to A.S.T.M. A653-G90 and finished with baked polyester topcoat (finish colors listed below). Flat slat 2-5/8" x 5/8" or Curved slat 2-5/8" x 7/8"
1. Model 424- 24 gauge in flat or curved slat up to 20' (6.1m) wide x 16' (4.88) high
  2. Model 422- 22 gauge in flat or curved slat up to 24' (7.32m) wide x 24' (7.32m) high
  3. Model 420- 20 gauge in flat or curved slat up to 26' (7.92m) wide x 26' (7.92m) high or 40' (12.19m) wide x 14' (4.27m) high
  4. Model 418- 18 gauge in flat or curved slat up to 30' (9.14m) wide x 30' (9.14m) high or 44' (13.41m) wide x 18' (5.49m) high
- B. Windlocks:** each end of alternate slats to be fitted with malleable iron windlocks to maintain slat alignment. Continuous windlocks on larger size doors.
- C. Windload:** Design pressures based on the test of a 24' wide +28.8/-30.5 psf and 16' wide +55/-60 psf windload pressure. This applies to 24, 22, 20- and 18-gauge flat slats.
1. Windload Certified Up To 32' wide x 30' high
  2. Impact Rated Up To 24' wide x 16' high
- D. Bottom Bar:** 2" x 2" x 1/8" hot rolled steel bottom bar consisting of two structural steel angles bolted back-to-back with bottom astragal, painted black (powder coat optional).

#### 2.02 BARREL ASSEMBLY

- A. Barrel:** to be a steel pipe of diameter and wall thickness to restrict maximum deflection to .03" per foot (2.5 mm/m) of door width.
- B. Springs:** to be oil tempered, grease packed helical torsion type designed to cycle 25,000 times. Springs are to be mounted on a cold rolled steel inner shaft.
- C. End Bearing:** to be self lubricating ball bearings or oil impregnated bronze bushings.

#### 2.03 BRACKET PLATES

- A. Bracket Plates:** to be 1/4" (6.35mm) minimum thickness steel plate and enclose ends of barrel assembly.
- B. Drive End Bracket Plate:** to be fitted with a self-aligning sealed ball bearing.

#### 2.04 OPERATION

- A. Chain Hoist:** to consist of roller chains and sprockets.
- B. Hand Chain:** to be galvanized machine link. Pull not to exceed 35 lbs. (156 N).
- C. Electric Motor Operation:** to be front of hood mount or wall mounted.
- D. Crank Operation:** to be operated with an awning crank and crank handle

#### 2.05 GUIDE ASSEMBLY 3-PIECE STRUCTURAL STEEL ANGLES

- A. Wall Angles:** to be 1/4" (6.35 mm) minimum thickness structural steel angles.
- B. Guides:** to be structural steel angles 3/16" (4.76mm) minimum thickness with removable head stops and 30" (762mm) service cutout on both sides.
- C. Guide Depth:** to provide slat penetration adequate to satisfy specified windloading.
- D. Weather Seal (optional):** non-coil side to be vinyl weather seal or aluminum retainer with brush seal.

## **2.06 HOODS**

**A. Hoods:** to be 24-gauge galvanized steel with baked epoxy primer and/or baked polyester topcoat and enclose coil

**B. Reinforcing:** to be 1/4" (6.35mm) thick steel brackets for doors over 16'0" (4877mm) wide.

## **2.07 LOCKING**

**A. Hand Chain Lock:** lockable bracket, mounted on guide angle or wall, suitable for padlocking (padlock by others).

## **2.08 FINISH**

**A. Ungalvanized Surfaces:** to be shop coated with rust reducing black prime paint, except for the malleable iron endlocks.

**B. Curtain:**

1. Satin White Topcoat
2. Gray Topcoat
3. Tan Topcoat
4. Galvanized in 22 gauge only
5. Powder Coat Optional Ral. # \_\_\_\_\_

## **Part 3 - EXECUTION**

### **3.01 INSTALLATION**

**A. Installation:** to be by Asta Door Corporation authorized representative according to Asta Door Corporation standards and instructions.