

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.