

SERIES 500 - Fire Door

PART 1 - GENERAL

1.01 DESCRIPTION

A. Type: Rolling Steel Fire Door to be manufactured by Asta Door Corporation. Rated for $\frac{3}{4}$ hour 1-1/2 hour, 3 hour & 4 hour (4 hour available in 18 gauge only Model 518).

B. Operation: Chain hoist (up to 400 sq. ft) or motor (up to 600 sq. ft) operation.

C. Mounting: to be interior face or between jamb mounted on a prepared opening.

1.02 RELATED WORK

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

PART 2 - PRODUCT

2.01 CURTAIN ASSEMBLY

A. : Flat slats are steel cold roll formed in continuous lengths. Galvanized according to A.S.T.M. A653-G30 and finished with baked epoxy primer and/or baked polyester topcoat.

1. Model and size limitation:

- a. Model 522, 520 & 518 Flat Slat 22, 20 & 18 gauge chain hoist 16' (4.88m) wide x 16' (4.88m) high.
- b. Model 522 Flat Slat 22 gauge motor 18' (5.45m) wide x 24' (7.32m) high.
- c. Model 520 Flat Slat 20 gauge motor 24' (7.32m) wide x 24' (7.32m) high or 30' (9.14m) x 20' (6.1m)
- d. Model 518 Flat Slat 18 gauge motor 24' (7.32m) wide x 24' (7.32m) high or 30' (9.14m) wide x 20' (6.1m) high.
- e. *Note: Size cannot exceed 600 sq. ft*
- f. *Note: Not available in curved slat.*

2. U.L. Rating

- a. Model 522 – 22 gauge flat slat with a rating of $\frac{3}{4}$ hour, 1-1/2 hour and 3 hour.
- b. Model 520 – 20 gauge flat slat with a rating of $\frac{3}{4}$ hour, 1-1/2 hour and 3 hour.
- c. Model 518 – 18 gauge flat slat with a rating of $\frac{3}{4}$ hour, 1-1/2 hour, 3 hour and 4 hour.

B. Endlocks: each end of alternate slats to be fitted with endlocks to provide a wearing surface in the guides and to maintain slat alignment. Fastened with 1/4" rivets.

C. Bottom Bar: curtain to be reinforced with a bottom bar consisting of two 2" x 2" x 1/8" (50.8mm x 50.8mm x 3.18mm) structural steel angles with P.V.C. bulb astragal.

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 precision sealed ball bearing in cast iron housing.

2.04 OPERATION

A. Drive: chain hoist (standard) or motor operation.

B. Hand Chain: to be galvanized machine link. Pull not to exceed 35 lbs. (156 N).

2.05 RELEASES

A. Releases: 165-degree fusible links provided (standard). Fail-safe time delay releases, smoke detectors, audible and visual warning devices (optional). Closing speed regulated by governed closing device. Closing speed to be between 6" to 24" per second per NFPA 80.

2.06 GUIDE ASSEMBLY

A. Wall Angles: to be 3/16" (4.76mm) minimum thickness structural steel angles.

B. Guides: to be structural steel angles 3/16" (4.76mm) minimum thickness with removable headstops.

C. Guide Depth: to provide slat penetration adequate to satisfy listing requirements.

2.07 HOODS

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

B. Reinforcing: to be 1/4" (6.35mm) thick steel brackets for doors over 13'6" (4877mm) wide.

2.08 LOCKING

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

2.09 FINISH

A. Ungalvanized Surfaces: to be powder coated black, except malleable endlocks.

PART 3 – EXECUTION

3.01 INSTALLATION

A. Installation: to be by Asta Door Corporation authorized representative according to Asta Door Corporation standards and instructions. *NFPA 80 and model groups, mandate annual inspection and drop testing of fire doors to check for proper operation and full closure.*