

## Series FD300 – Fire Door

### Part 1 - GENERAL

#### 1.01 DESCRIPTION

**A. Type:** Rolling Steel Fire Door to be manufactured by Asta Door Corporation. Rated for 3/4hr, 1-1/2hr and 3hrs.

**B. Operation:** Manual push-up, chain hoist (standard) or motor operation. (Simple test feature not available on manual push-up doors)

**C. Mounting:** to be interior face mounted on a prepared opening.

#### 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. Curtain:** Interlocking curtain slats roll-formed from 22, 20 or 18 gauge galvanized steel. Lateral slat movement and curtain wear controlled by galvanized malleable cast endlocks fastened to every other slat. Windlocks are added as dictated by door size and windload requirements. Flat slats, (FS) cover 2-1/2" high by 3/4" deep. Curved slats (CS) cover 2-5/8" high by 7/8" deep.

**B. Windload:** Designed to withstand a minimum of 20 lbs per square foot and maximum of 40 lbs per square foot of windload deflection to an amount that prevents curtain from buckling or being blown out of the guides.

**C. Bottom Bar:** Fabricated from steel angles bolted back to back. Tubular bottom astragal (optional).

#### 2.02 BARREL ASSEMBLY

**A. Barrel:** Fabricated from minimum 4-1/2" O.D. pipe. Deflection under full load not to exceed 0.03" per foot of span. Barrel provided with threaded rings or lugs welded to the barrel assembly for curtain attachment.

**B. Springs:** Spring tension assembly supported within barrel by precision ball bearings. Curtain weight counterbalanced by oil-tempered, helically wound torsion springs, grease packed and mounted to steel torsion shaft with cast spring plug. Spring assembly for 20,000 cycle life springs (standard). Higher cycles (optional).

#### 2.03 HEAD PLATES

**A. Head Plates:** Headplates for mounting curtain, hood and barrel assemblies fabricated from minimum 1/4" steel plates plate. Drive side of barrel to be provided with precision sealed ball bearing in cast iron housing.

#### 2.04 OPERATION

**A. Drive:** Manual push-up, chain hoist (standard) or motor operation. (Simple test feature not available on manual push-up doors)

#### 2.05 RELEASES

**A. Releases:** 165-degree fusible links provided (standard). Fail-safe time delay releases, smoke detectors, audible and visual warning devises (option). Closing speed regulated by centrifugal or viscous governor. Closing speed to be between 6" to 24" per second per *NFPA 80*.

#### 2.06 GUIDE ASSEMBLY

**A. Guides:** Fabricated from three (minimum 3/16") structural steel angles bolted together to form guide channel. Guide angles include curtain stops and flared guides. Hot dipped or cold sprayed galvanized guides (optional)

#### 2.07 HOOD

**A. Hood:** Fabricated from minimum 24 gauge galvanized steel sheet shaped to fit within the headplates. Intermediate hood support (s) furnished as required.

#### 2.08 LOCKING

**A. Locking:** Manual push-up doors furnished with interior slide bolts locks with padlock provision standard. Chain hoist operated doors furnished with chain hoist keeper suitable for padlocking.

#### 2.09 FINISH

**A. Surfaces:** Curtain slats and hood are hot-dipped galvanized, per *ASTM A653 A*, with baked on epoxy primer and polyester finish coat available solid grey, grey and white, tan, and white or powder coating (optional). Guides and headplates shop painted black. Bottom bars to be shop painted black or galvanized.

### Part 3 - EXECUTION

#### 3.01 INSTALLATION

**A. Installation:** Asta Door Corporation Doors shall be installed and adjusted by 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.