

# MODEL BCF – Chain Hoist Operated Fire Door Galvanized Finish – Between Jamb Mount



Innovative door products

## 1.0 GENERAL

### 1.1 Summary

- A. All Rolling Fire Doors shall be as manufactured by Service Door Industries, Mississauga, Ontario, Canada. Furnished materials shall include all curtains, bottom bars, guides, brackets, hoods, operating mechanisms and any special features.
- B. Work not to be included by **SDI** includes design of, material for and preparation of door openings but not limited to structural or miscellaneous iron work, access panels, finish painting, electrical wiring, conduit and disconnect switches.

### 1.2 Quality Assurance

- A. All rolling fire doors shall be constructed in accordance with Warnock-Hersey testing agency requirements and shall bear a [3/4 hour] [1-1/2 hour] [3 and 4 hours] rating label.
- B. All rolling steel fire doors shall be designed to a standard maximum of 25 cycles per day and an overall maximum of 20,000 operating cycles for the life of the fire door.

## 2.0 PRODUCTS

### 2.1 Materials

- A. The door curtain shall be constructed of interconnected strip steel slats conforming to ASTM A-526. The curtain slat shall be 22-gauge steel in a [(2-1/4" high by 3/4" deep) curved] [(2-1/4" high by 5/8" deep) flat] slat as designated by **SDI**.
- B. The finish on the door curtain shall be:
  - 1. Hot dipped galvanized G-90 coating consistent with ASTM A-525
- C. The bottom bar shall consist of two 1/8" steel angles mechanically joined together. The finish on the bottom bar shall be one (1) coat of black paint.
- D. The guides shall consist of 4 steel angles bolted together with 3/8" fasteners to form a channel for the curtain to travel. The wall angle portion shall be continuous and fastened to the surrounding structure with minimum 1/2" fasteners. The finish on the guide angles shall be one (1) coat of black paint.
- E. The brackets shall be constructed of steel not less than 1/4" thick and shall be bolted to the wall angle with minimum 1/2" fasteners. The finish on the brackets shall be one (1) coat of black paint.
- F. The barrel shall be steel tubing of not less than 4" in diameter. Oil tempered torsion springs shall be capable of correctly counter balancing the weight of the curtain and shall have both a main and an auxiliary spring. The barrel shall be designed to limit the maximum deflection to .03" per foot of opening width. The springs shall be adjusted by means of an exterior wheel.
- G. The hood shall be fabricated from 24-gauge galvanized steel and shall be formed to fit the curvature of the brackets. The finish on the hood shall be galvanized.
- H. The fascia shall be fabricated from 24-gauge galvanized steel and shall be formed to fit the back side of the brackets. The finish on the fascia shall be galvanized finish.

## 2.2 Operation

- A. All chain operated fire doors shall have an automatic closing device and Whisper Governor to control the downward speed of the door which shall become operational upon the fusing of a 160-degree fusible link. The door shall have an average closing speed of not less than six (6) inches per second and not more than twenty-four (24) inches per second as indicated in NFPA Bulletin 80. The Whisper Governor shall be fail-safe, maintenance-free, fully enclosed and warranted for the life time of the door. Once the door has closed, it should be able to be reset by one person on one side of the door only.
- B. Chain operated doors shall open and close with a maximum of 30 pounds of effort utilizing an endless chain and cast-iron reduction gears.

## 2.3 Locking Mechanisms

- A. The chain hoist operated fire door shall be secured by means of a hand chain lock. Metal cleat fastened to wall.

# 3.0 EXECUTION

## 3.1 Installation

- A. All **SDI** Rolling Fire Doors shall be installed in accordance with NFPA Bulletin 80 by an authorized **SDI** Distributor.

## 3.2 Warranty

- A. All **SDI** Rolling Fire Doors shall be warranted for a period of twenty-four (24) months against defects in workmanship and materials.