

# MODEL BC – Chain Hoist Operated Service Door Galvanized Finish – Between Jamb Mount



## 1.0 GENERAL

### 1.1 Summary

- A. All Rolling Service 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. Exterior rolling service doors shall be designed to withstand at least a twenty (20) pounds per square foot windload. Endlocks/windlocks shall be installed on every slat for doors over 14'1" wide.
- B. All rolling service 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 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 proper gauge of steel shall be chosen as follows:
  - 1. 22 gauge with a [Curved Slat (measuring 2-1/4" high by 3/4" deep) [Flat Slat (measuring 2-1/4" high by 5/8" deep)] as designated by **SDI**.
  - 2. 20 gauge with a [curved] or [flat] slat as designated by **SDI**.
  - 3. 18-gauge curved slat (measuring 2-3/4" high by 3/4" deep) as designated by **SDI**.
- B. The finish on the door curtain shall be galvanized consisting of the following:
  - 1. Hot dipped galvanized G-90 coating consistent with ASTM A-525
- C. The bottom bar shall consist of extruded aluminum profile. The finish on the aluminum bottom bar shall be mill. Attached to bottom bar 3 3/4" vinyl looped astragal to weather-seal against floor.
- D. The between jamb 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 either minimum 1/2" fasteners or welds. The finish on the guide angles shall be 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 black paint.
- F. All gears shall be cast iron with teeth cast from machine cut patterns. The pinion gear shall not be less than a 3" pitch diameter. The gear ratio shall be designed for a maximum effort of not more than 30 pounds.
- G. 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. 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.

- H. 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.
- I. 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.

## 2.2 Operation

- A. 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 door shall be secured by means of a chain lock.

# 3.0 EXECUTION

## 3.1 Installation

- A. All **SDI** Rolling Service Doors shall be installed by an authorized **SDI** Distributor.

## 3.2 Warranty

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