

# MODEL BCI – Chain Hoist Operated – Insulated Galvanized Finish – Between Jamb Mount



## 1.0 GENERAL

### 1.1 Summary

- A. All Rolling Insulated Service Doors shall be as manufactured by **SDI**. 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 insulated service doors shall be designed to withstand a twenty (20) pounds per square foot wind-load. Wind-locks shall be installed on every slat for doors over 14'1" wide.
- B. All rolling insulated 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 slats shall be designated by **SDI** (measuring 3" high by 7/8" deep) consisting of a 22-gauge exterior slat and a 22-gauge interior slat separated by 13/16" of rigid insulation. The curtain insulation shall not produce a flame spread greater than 25 and a smoke generation greater than 50.
- 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 be extruded aluminum with weighted steel flat bar. 4" diameter vinyl looped bottom astragal continuous along the bottom. The finish on the bottom bar shall be mill finish.
- D. The guides shall consist of 4 steel angles bolted together with 3/8" fasteners to form a channel for the curtain to travel. Extruded vinyl snap-on weatherstripping shall be furnished continuously along the interior and exterior leg of each guide. The wall angle portion shall be continuous and fastened to the surrounding structure with either minimum 1/2" fasteners or welds, both on 36" centers. The finish on the guide angles shall be black powder coating 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 powder coating 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 6" in diameter. Oil tempered torsion springs shall be capable of correctly counter balancing the width 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. The finish on the barrel shall be one (1) coat of rust-inhibiting prime paint.

- H. The hood shall be fabricated from 24-gauge galvanized steel and shall be formed to fit the curvature of the brackets. The hood shall have a brush lintel weatherstrip to control air infiltration. The finish on the hood shall be galvanized finish.
- 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 finish.

## 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 door shall be secured by means of a chain lock.

# 3.0 EXECUTION

## 3.1 Installation

- A. All **SDI** Rolling Insulated Service doors shall be installed by an authorized **SDI** distributor.

## 3.2 Warranty

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