

## **Type FK - Crank Operated Service Door**

### **Gray Prime Finish - Face of Wall Mounted**

#### 1.0 GENERAL

##### 1.1 Summary

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

##### 1.2 Quality Assurance

- A. Exterior rolling service doors shall be designed to withstand at least a twenty (20) pounds per square foot windload. Windlocks shall be installed on 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 50,000 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 slats measuring 2-1/4" high by 5/8" deep flat slat as designated by Service Door Ind. if the door width does not exceed 18'4" and the door height does not exceed 18'4".
- B. The finish on the door curtain shall be consisting of the following:
  - 1. Hot dipped galvanized G-90 coating consistent with ASTM A-525
  - 2. Bonderized coating for prime coat adhesion
  - 3. Corrosion inhibiting primer .2 mils per side
  - 4. Thermosetting gray polyester top coat with a minimum thickness of .6 mils each side
- 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 rust-inhibiting prime paint.
- D. The guides shall consist of 3 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, both on 36" centers. The finish on the guide angles shall be one (1) coat of rust-inhibiting prime 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 rust-inhibiting prime 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. 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 finish on the hood shall be as indicated in the curtain section.

##### 2.2 Operation

- A. Crank operated doors shall open and close utilizing a awning crank eyebolt and shaft precision cast iron reduction gears.

#### 3.0 EXECUTION

##### 3.1 Installation

- A. All Service Door Ind. doors shall be installed by an authorized Service Door Ind. Distributor.

##### 3.2 Warranty

- A. All Service Door Ind. doors shall be warranted for a period of 1 year from the time of shipment against defects in workmanship and materials.