

# MODEL HS200 – Motor Operated (Safe Drive)

## High Speed Fabric Door

### Face of Wall Mount



#### 1.0 GENERAL

##### 1.1 Summary

- A. All Rolling High Speed 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 ironwork, access panels, finish painting, conduit, electrical wiring and disconnect switches.

##### 1.2 Quality Assurance

- A. Exterior rolling high-speed doors shall be designed to withstand at least a twenty (20) pounds per square foot wind load.
- B. All rolling high speed doors shall be suitable for high cycle operation.

#### 2.0 PRODUCTS

##### 2.1 Materials

- A. The door curtain shall be constructed of ArmourSeal Resist 45 oz reinforced Rip-Stop, kid finish PVC material with a 36" clear PVC full vision widow at the 5' level.
  - B. The clear vision panel shall be connected to the curtain by continuous clear anodized aluminum hinges that act as a reinforcing strip to prevent blow out. The reinforcing strips shall have a PVC cover to conceal the fasteners and prevent wear on the curtain during operation.
- C. The bottom bar shall be an aluminum extrusion with enclosed steel flat bar to act as a reinforcement during impact. The bottom bar shall reset itself when it is impacted out of the front of the guide and the door is given a signal to open.
- D. The guides shall consist of two formed steel channels bolted together with 3/8" fasteners to form a groove for the curtain 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 black powder coat.
- 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 coat.
- F. The barrel shall be steel tubing of not less than 6" in diameter. The barrel shall be designed to limit the maximum deflection to .03" per foot of opening width. The finish on the barrel shall be prime paint.
- G. The hood shall be 24 gauge clear anodized, embossed aluminum and formed to fit the shape of the brackets.

##### 2.2 Operation

- A. The door shall be operated at a speed of 36" per second to open and 18" per second to close by a Safe Drive operator with gear reducer in oil bath and anti back drive feature, to prevent the door curtain from falling due to mechanical failure. The motor operator shall include an encoder type limit switch and an electrically interlocked emergency chain operator. A 3 button push-button station on the panel lid shall activate the motor operator. The motor shall be

sized as required by the door [ 230 volts three phase] [460 volts three phase] [575 volts three phase]. The motor operator shall be direct mounted to the door bracket as shown on drawings. No sprockets and chain drive components will be permitted. All motor operators and electrical components shall be UL listed. All programming and limit adjustment shall be completed using the Safe Drive panel display from the floor level.

- B. The High Speed Door shall include the "Air Wave Technology" safety edge system as manufactured by **SDI** and shall include the following features:

1. The safety edge shall be installed on the bottom bar of the door and shall automatically reverse the door if the device detects an obstruction in the downward travel of the door. The edge shall not have to be completely compressed to signal the door to open.
2. The safety edge shall consist of a rubber boot attached below the bottom bar with an electrical switch secured to the back of the bottom bar. The safety edge shall operate with airwave technology and shall not rely on pneumatic pressure or electrical strip contacts to operate properly. The safety edge shall create an airwave that shall be detected and reverse the direction of the rolling door.
3. The operation of the safety edge shall not be subject to interferences by temperature, barometric pressure, water infiltration, or cuts in the rubber boot.

#### 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** High Speed doors shall be warranted for a period of twelve (12) months from the time of shipment against defects in workmanship and materials.