



231 Model – Industrial Sheet Door

12/5/2003

Part 1 - GENERAL

1.01 DESCRIPTION

- A. **Type:** Industrial Sheet Doors to be manufactured by Porvene Doors, Inc.
- B. **Operation:** Hand chain operated or manual push-up depending on size.
- C. **Mounting:** to be interior face mounted on a prepared opening.

1.02 RELATED WORK

- A. Opening preparation, access panels, finish or field painting is in the scope of the work of other sections or trades.

Part 2 - PRODUCT

2.01 CURTAIN

- A. **Sheet:** 26 gauge galvanized steel roll formed in continuous corrugation. Galvanized according to A.S.T.M. A653-G60^{*} and finished with baked epoxy primer and baked polyester topcoat.
- B. **Side Stripping:** P.V.C. and nylon "Nylofelt" to be attached to curtain edges for doors under 14' (4267mm) width. Otherwise, tempered steel and rubber.
- C. **Windload:** Door construction designed to satisfy windload of 15 PSF (0.72KPA) or 77.5 MPH (124.7 KPH). (Consult factory for available sizes.)
- D. **Bottom Bar:** Curtain to be reinforced with a bottom bar consisting of a 2" X 2" X 3/16" (50.8mm x 50.8mm x 4.75mm) structural steel angle with E.P.D.M. astragal.

2.02 DRUM ASSEMBLY

- A. **Drum:** to be stamped from 18 gauge galvanized steel.
- B. **Torque tube:** to be formed with 26 gauge galvanized steel sheet for doors 20' wide and smaller, otherwise 24 gauge, rolled around and attached to stamped galvanized steel drums to resist deflection to 0.03" per foot (2.5mm/m) of door width.
- C. **Springs:** to be oil tempered, grease packed helical torsion type designed to cycle 12,500 times with an overload factor of 25%. Springs are to be mounted on a 1 5/16" (33.34mm) O.D. black steel pipe of minimum Schedule 40.

2.03 SUPPORT BRACKETS

- A. **Support Brackets:** to be 3/16" (4.76mm) thick structural steel angles and a 1/4" (6.35mm) thick steel diagonal brace welded in a triangular form to support ends of drum assembly.

2.04 OPERATION

- A. **Rope Pull:** to be 5/16" (7.94mm) polyester rope attached to bottom angle. Refer to price book for door sizes.
- B. **Chain Hoist:** to be cast iron pocket wheel drive with machine link hand chain. Refer to price book for door sizes.

2.05 GUIDE ASSEMBLY

- A. **Guides:** to be roll-formed 13 gauge galvanized steel channels for up to 14' (4267mm) wide doors, 12 gauge galvanized steel channels otherwise.
- B. **Guide Depth:** to provide sheet penetration adequate to satisfy specified wind loading.

2.06 LOCKING

- A. **Hand Chain Lock:** bracket, to be mounted on guide angle or wall for chain operated doors.
- B. **Curtain Lock:** to be hardened galvanized steel slide bolts attached to bottom angle suitable for padlocking. (Padlock by others.)

2.07 FINISH

- A. **Ungalvanized Surfaces:** to be shop coated with rust reducing black prime paint.

Part 3 - EXECUTION

3.01 INSTALLATION

- A. **Installation:** to be by Porvene Doors, Inc. authorized representative according to Porvene Doors, Inc. standards and instructions.

*A.S.T.M. A653 is the new designation of ASTM A527