



## 234 Model – Insulated-Wind-Lock™ Sheet Door

1/8/2007

### Part 1 - GENERAL

#### 1.01 DESCRIPTION

- A. **Type:** Insulated Wind-Lock Sheet Doors to be manufactured by Porvene Doors, Inc.
- B. **Operation:** Hand chain operated using cast reduction drive.
- 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<sup>\*</sup> and finished with baked epoxy primer and baked polyester topcoat.
- B. **Side Stripping:** wide tempered steel and P.V.C. banding to be attached to curtain edges.
- C. **Windload:** door construction designed to satisfy a *non-operational* windload in the closed lock position of windloads up to 60 PSF (2.87KPA) or 155 MPH (249.4 KPH). Consult factory for available sizes and corresponding windloads.
- 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 4.76mm) structural steel angle with E.P.D.M. astragal.
- E. **Wind-Lock™:** to be 10 gauge galvanized Wind-Lock 75° clips riveted to door curtain edge.
- F. **Insulation:** to be aluminum foil polyethylene bubble insulation with wear-resistant polyester treatment, laminated to corrugated sheet.

#### 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 under, otherwise 24 gauge, rolled around and fastened 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) 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. **Chain Hoist:** to be cast iron pocket wheel gear-reduced drive with machine link hand chain.  
(Electric Operation is Not Recommended)

#### 2.05 GUIDE ASSEMBLY

- A. **Guides:** to be roll-formed 12 gauge galvanized steel channels with welded 13 gauge Wind-Lock™ 105° insert.
- B. **Guide Depth:** to provide sheet penetration adequate to satisfy specified windloading.

#### 2.06 WEATHERSEAL

- A. **Side Draft Stop:** to be closed cell ethafoam attached to edge of curtain.
- B. **Top Draft Stop:** to be E.P.D.M. seal attached to top of curtain to seal against header.

#### 2.07 EFFICIENCY

- A. **Rating:** overall efficiency rating of R=5.24 (U=0.191).

#### 2.06 LOCKING

- A. **Hand Chain Lock:** retaining bracket, to be mounted on guide angle or wall intended 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