



620/24 Therm-Master /Rolling Steel-Backed Insulated Door

1/9/2007

Part 1 - GENERAL

1.01 DESCRIPTION

- A. **Type:** Therm-Master Rolling Steel Insulated Doors to be manufactured by Porvene Doors, Inc.
- B. **Operation:** to be electric or chain hoist operated.
- 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. **Slats:** cold roll formed in continuous lengths of 20 GA. (front) and 24GA. (back) galvanized steel. Galvanized according to A.S.T.M. A653-G60¹ and finished with baked epoxy primer and baked polyester topcoat.
- B. **Endlocks:** each end of alternate slats to be fitted with endlocks to provide a wearing surface in the guides and to maintain slat alignment. Fastened with 1/4" rivets.
- C. **Windload:** door construction designed to satisfy a *non-operational* windload in the closed lock position of windloads up to 20 PSF (0.96KPA) or 87 MPH (140 KPH). Consult factory for available sizes and corresponding windloads.
- D. **Bottom Bar:** curtain to be reinforced with a bottom bar consisting of two 2" X 2" X 1/8" (50.8mm x 50.8mm x 3.18mm) structural steel angles with P.V.C. bulb astragal.
- E. **Insulation:** to be polyisocyanurate. Aluminum facer on both sides of insulation. Effective thermal insulating area to be R=5.4, (U=0.185).

2.02 BARREL ASSEMBLY

- A. **Barrel:** to be a steel pipe of diameter and wall thickness to restrict maximum deflection to 0.03" per foot (2.5mm/m) of door width.
- B. **Springs:** to be oil tempered, grease packed, helical torsion type designed to cycle 20,000 times with an overload factor of 25%. Springs are to be mounted on a cold rolled steel inner shaft. High cycle spring life is optional.
- C. **End Bearings:** to be self-lubricating ball bearings or oil impregnated bronze bushings.

2.03 BRACKET PLATES

- A. **Bracket Plates:** to be 1/4" (6.35mm) minimum thickness steel plates to sustain and enclose ends of door assembly.

- B. **Drive End Bracket Plate:** to be fitted with self-aligning sealed ball bearing.

2.04 OPERATION

- A. **Drive:** to be roller chain reduction or (optional) electric motor.
- B. **Hand Chain:** to be galvanized machine link. Pull not to exceed 35 lbs. (156N).

2.05 GUIDE ASSEMBLY

- A. **Wall Angles:** to be 3/16" (4.76mm) minimum thickness structural steel angles.
- B. **Guides:** to be structural steel angles 3/16" (4.76mm) minimum thickness with removable head stops.
- C. **Guide Depth:** to provide slat penetration adequate to satisfy specified wind loading.
- D. **Guide Weatherseal:** Non-coil side to be vinyl weather seal.

2.06 HOODS

- A. **Hoods:** to be 24 gauge galvanized steel with baked epoxy primer and baked polyester topcoat to enclose coil. 8" P.V.C. baffle to be riveted inside of hood.
- B. **Hood Support Bracket:** to be 1/4" (6.35mm) thick steel brackets for strengthening hoods on doors over 16'-0" (4877mm) wide.

2.07 LOCKING

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

2.08 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 authorized representative according to Porvene Doors, Inc. standards and instructions.

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