



500 Series – Rolling Grille Door

1/9/2007

Part 1 - GENERAL

1.01 DESCRIPTION

- A. **Type:** Rolling Grille Doors to be manufactured by Porvene Doors, Inc.
- B. **Operation:** to be (Chain Hoist), (Awning Crank), (Motor Operated), or (Manual Push-up).
- C. **Mounting:** to be mounted interior face or between jamb on a prepared opening.

1.02 RELATED WORK

- A. Opening preparation, access panels, electrical wiring, structural steel, field painting, are in the scope of other sections or trades.

Part 2 - PRODUCT

2.01 CURTAIN

- A. **Curtain:** made from 1018 cold rolled 1/4" horizontal rods spaced 2" on center, and connected by 6063-T5 aluminum vertical links spaced 9" apart, and covered with 6063-T5 seamless aluminum spacer tubes.
- B. **End links:** designed to retain curtain in guides.
- C. **Bottom Bar:** curtain to be reinforced with extruded 6063-T5 aluminum semi hollow shape with anti-wear Nylon end-blocks for quiet operation.

2.02 SPRING COUNTERBALANCE

- A. **Counterbalance:** housed in 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 helical torsion type designed to last 12,500 cycles and include an overload factor of 25%. Springs are to be mounted on a cold rolled steel inner shaft. (High cycle spring life optional).
- C. **Spring Tensions:** adjustable spring tension wheel accessible from outside of end bracket plate.
- D. **End Bearings:** flange bearings, self-lubricated to minimize wear of pipe rotation around inner shaft. (Self-aligning, sealed ball bearings)

2.03 BRACKET PLATES

- A. **Bracket Plates:** are to support and enclose ends of barrel assembly and shall be no less than 1/4" (6.35mm) thick.
- B. **Drive End Bracket Plate:** fitted with a self-aligning sealed bearing.

2.04 OPERATION

- A. **Manual Push-Pull:** curtain to be free to raise and lower manually up to 10'x 10' maximum . Aluminum hook included to reach door in tall openings.
- B. **Drive Option:** chain hoist, awning crank (Optional) or motor operated (Optional).
- C. **Hand Chain:** to be galvanized machine link. Pull not to exceed 35 lbs. (156N).

2.05 GUIDE ASSEMBLY

- A. **Square Tubes:** (Optional) structural steel tubes 3"x3" or 4"x4".
- B. **Wall Angles:** structural steel angles of 3/16" (4.76mm) minimum thickness. (If required)
- C. **Guides:** to be extruded 6063-T5 aluminum semi-hollow shape fitted with a polyethylene insert for sound suppression and ease of operation.

2.07 HOODS (Optional)

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

2.06 LOCKING

- A. **Cylinder Lock:** (Optional) it consists of a keyed cylinder outside and thumb turn inside, protected by screened security columns. (Use electric interlock sensors for motor operated doors)
- B. **Hand Chain Lock:** lockable chain keeper, mounted on wall angle. (Chain hoist operated doors)
- C. **Slide Bolt Locks:** Stainless Steel finish suitable for padlocks. (Padlock by others)

2.07 FINISH

- A. **Aluminum Surface:** to be clear anodized except mill-finished links
- B. **Ungalvanized Surface:** to consist of a shop coat of rust inhibiting metallic primer on exposed ferrous surfaces .

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