SECTION 08335

COILING SECURITY SHUTTERS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Coiling Security Shutters.
- B. Mechanical Operators.
- C. Electrical Operators.

1.2 RELATED SECTIONS

- A. Section 06100 Rough Carpentry.
- B. Section 06200 Finish Carpentry.
- C. Section 16050 Basic Electrical Materials and Methods.

1.3 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Product Data: Manufacturer's product literature.
- C. Selection Samples: Manufacturer's full range of available colors in material specified.
- D. Shop Drawings: Indicate type of curtain, number of panels, housing, rails, storm rails, and operators.

1.4 QUALITY ASSURANCE

- A. Manufacturer's Qualifications: Minimum five years of documented experience producing products of the type specified in this section.
- B. Installer's Qualifications: Minimum three years of documented experience installing products of the type specified in this section.
- C. Certifications: Provide shutters rated and certified.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Pack and load shutters using reasonable and customary precautions against damage in transit; do not use materials for packing or blocking that may stain, damage, or discolor shutters.
- B. Store in original packaging under cover until installation.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturer: QMI Roll Shutter Supply; 933
 North Oaklawn Avenue, Elmhurst, Illinois 60126; ASD.
 Tel: (800) 446-2500; Fax: (630) 782-1911.
- B. Requests for substitutions will be considered in accordance with provisions of Section 01600.
- C. Substitutions: Not permitted.

2.2 COMPONENTS

- A. Curtains: Extruded double walled polyvinyl chloride slats.
 - 1. Slat Height: 1.45 inches (37 mm).
 - 2. Slat Height: 1.57 inches (40 mm).
 - 3. Slat Height: 2.06 inches (52 mm).
 - 4. Slat Height: 1.91 inches (49 mm).
 - 5. Reinforcing Bars: Manufacturer's standard galvanized steel reinforcing bars in every third slat.
 - 6. Color: White.
 - 7. Color: Ivory.
 - 8. Color: Beige.
 - 9. Color: Grey.
 - 10. Color: As selected from manufacturer's full line.
- B. Curtains: Prefinished roll-formed aluminum slats.
 - 1. Slat Height: 1.57 inches (40 mm).
 - 2. Slat Height: 2.06 inches (52 mm).
 - 3. Insulation: Standard density.
 - 4. Insulation: High density.
 - 5. Color: White.
 - 6. Color: Ivory.
 - 7. Color: Beige.
 - 8. Color: Grey.
 - 9. Color: Brown.

- C. Curtains: Extruded double walled aluminum slats.
 - 1. Slat Height: 1.57 inches (40 mm).
 - 2. Slat Height: 2.06 inches (52 mm).
 - 3. Slat Height: 2.40 inches (61 mm).
 - 4. Color: White.
 - 5. Color: Ivory.
 - 6. Color: Beige.
 - 7. Color: Bronze.
 - 8. Color: Brown.
 - 9. Color: As selected from manufacturer's full line.
- D. Curtains: Roll-formed steel slats with CFC-free foam insulation.
 - 1. Slat Height: 1.57 inches (40 mm).
 - 2. Slat Height: 2.06 inches (52 mm).
 - 3. Color: White.
 - 4. Color: Brown.
- E. Housing: Square shutter upper box housing made from 0.040 inch (1.0 mm) pre-finished rolled formed aluminum with cast aluminum end caps; size as specified by manufacturer.
 - 1. Color: White.
 - 2. Color: Brown.
 - 3. Color: Beige.
 - 4. Color: Cream.
 - 5. Color: As selected from manufacturer's full line.
- F. Side Rails: Extruded 6063-T5 aluminum acid etched with baked enamel finish, and lined with insulating woven polypropylene runners.
 - 1. Color: White.
 - 2. Color: Brown.
 - 3. Color: Beige.
 - 4. Color: Cream.
 - 5. Color: As selected from manufacturer's full line.
- G. Mullions: Provide intermediate vertical mullions to allow curtain width to maximum allowed by manufacturer.
- H. Storm Bars: Extruded 6063-T6 aluminum acid etched with baked enamel finish and lined with insulating woven polypropylene runners; removable.
 - 1. Color: White.
 - 2. Color: Brown.
 - 3. Color: Beige.

- 4. Color: Cream.
- 5. Color: Grey.
- 6. Color: As selected from manufacturer's full line.
- I. Operator: Manual recoil strap.
- J. Operator: Manual strap with 3-1 ratio crank.
- K. Operator: Manual crank with self-lubricating hardened steel gears.
 - 1. Removable pole operator.
 - 2. Fixed pole operator.
- L. Operator: Manual push-up with spring assist.
- M. Operator: Electric motor; 120V, 60hz, single phase, size as recommended by shutter manufacturer; with solenoid activated breaking and thermal protection; UL labeled; concealed in housing, actuated by:
 - 1. Single pole, double throw rocker switch.
 - 2. Remote actuator.
 - 3. Key switch.
 - 4. Sun sensor.
 - 5. Provide manual override in case of power outage, with removable crank.
 - 6. Locate actuators where indicated on drawings.
- N. Locking: Automatic spring lock.
 - 1. Additional slide bolts in bottom slat.
 - 2. Keyed deadbolt in base slat.
 - 3. Keyed deadbolt in curtain.
- O. Fasteners: Stainless steel.

PART 3 EXECUTION

3.1 EXAMINATION

A. Verify openings are in accordance with approved shop drawings.

3.2 INSTALLATION

- A. Install coiling security shutters plumb and level in accordance with code, approved shop drawings, and manufacturer's printed installation instructions.
- B. Surface mount shutters.
- C. Flush mount shutters.

D. Installation of actuators for operator and connection of electrical components are specified in Section 16050.

END OF SECTION