



SECTION 08300
HIGH SPEED ROLLING DOORS

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. High-speed roll-up doors.
- B. Wiring from electric circuit disconnect to operator to control station.

1.02 RELATED SECTIONS

- A. None

1.03 REFERENCES

- A. NEMA - National Electrical Manufacturers Association.
- B. LED - Light Emitting Diode.

1.04 SYSTEM DESCRIPTION

- A. Motor type: AC drive, and variable speed with soft acceleration and braking. Mechanical release lever on side column allows door to be easily opened in the event of a power failure.

1.05 SUBMITTALS

- A. Submit the following:
 - 1. Shop Drawings: Indicate pertinent dimensioning, anchorage methods, hardware locations, and installation details.
 - 2. Product Data: Provide general construction, component connections and details, and electrical equipment, operation instructions, and information.
 - 3. Samples: Submit samples of door slat material.
 - 4. Manufacturer's Installation: Indicate installation sequence and procedures, adjustment, and alignment procedures.



1.06 MAINTENANCE DATA

- A. Scheduled maintenance program available to include lubrication requirements and frequency, periodic adjustments required, scheduled maintenance suggested, manufacturer's data sheets, and equipment inter-connection diagrams.

1.07 REGULATORY REQUIREMENTS

- A. Electrical components UL listed.
- B. Electrical control panel NEMA approved.

1.08 QUALITY ASSURANCE

- A. Furnish high-speed roll doors and all components and accessories by one manufacturer.
- B. Specific door model used must have a proven track record of successful installations in similar applications of no less than 3 years. References to be provided upon request.

1.09 FIELD MEASUREMENTS

- A. Verify field measurements are as indicated on shop drawings.

1.10 COORDINATION

- A. Coordinate the work with installation of electric power and locations and sizes of conduit.

1.11 WARRANTY

- A. One year parts, one year labor.

PART 2 - PRODUCTS

2.01 PRODUCTS

- A. Rytec Corporation Spiral FV.
- B. No substitutions permitted.



2.02 MATERIALS

- A. Door Panel: aluminum slat frames with clear polycarbonate windows are 9” high. Thickness of slats ranges from 1.2” – 2.4”, depending on overall size of door. Integral rubber weatherseal between each slat. Door slats are connected by hinge system to provide additional rigidity and security to door panel. Door curtain does not require a tensioning system for additional wind/pressure resistance. Doors which require the use of a tensioning system for additional wind/pressure resistance will not be accepted.
- B. Side Frames: Galvanized steel side frames with full height weatherseal on both sides to seal against door panel. Dual thru-beam photo-eyes mounted within door jamb. Doors using an external coil cord will not be accepted.
- C. Bottom Bar: Extruded aluminum bottom bar with electric, reversing edge that reverses the door upon contacting an object.
- D. Counterbalance: Up to six extension springs in each side column, depending on the size of the door. Springs assist the motor in opening the door. Mechanical release lever on side column allows door to be easily opened in the event of a power failure. Doors using torsion springs for counterbalance or doors with springs located within a barrel will not be accepted.
- E. Drive system: Minimum 2 HP motor with variable speed AC drive which allows for soft acceleration and braking. Doors using a motor with a clutch or pump will not be accepted.
- F. Travel Speed: Opens at up to 100 inches per second and closes at lower speed.
- G. Electrical Controls: Housed in a NEMA 4 rated enclosure with factory set parameters. Self-diagnostic features and a two-line, 32-character LCD display provide quick and straightforward installation and control adjustments. Programmable inputs and outputs accommodate special control applications without the need for additional electrical components. Control panels that require a portable computer unit, additional components or other devices for programming and/or troubleshooting will not be accepted.
- H. Door to use rotary encoder to regulate door travel limits. Limits to be self-adjusting, without the use of tools, from floor level at the control panel. Doors using mechanical limits switches or doors that require tools to set the limits will not be accepted.
- I. Door Track: Spiral rollup design features not metal-to-metal contact which results in whisper-quiet, low maintenance operation and eliminates wear on panel slats. Doors that roll up on a barrel or whose track design allows metal-to-metal contact will not be accepted.
- J. Windload: Door testing indicates the door is capable of withstanding winds up to and exceeding 75 mph (14 psf).
- K. All components factory finished.



PART 3 - EXECUTION

3.01 EXAMINATION

- A. Verify that opening sizes, tolerances, and conditions are acceptable.

3.02 INSTALLATION

- A. Install door unit assembly in accordance with manufacturer's instructions.
- B. Use anchorage devices to securely fasten assembly to wall construction and building framing without distortion or stress.
- C. Fit and align assembly including hardware; level to plumb to provide smooth operation.
- D. Coordinate installation of electrical service. Complete wiring from disconnect to unit components.

3.03 ADJUSTING

- A. Adjust door and operating assemblies.
- B. Test and adjust door(s), if necessary, for proper operation.

3.04 CLEANING

- A. Clean door and components.

END OF SECTION