

SECTION 083000
HIGH-SPEED ROLLING DOORS

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. High-speed rolling doors.
- B. Wiring from electrical disconnect to operator to control station.

1.02 RELATED SECTIONS

- A. None

1.03 REFERENCES

- A. NEMA - National Electrical Manufacturers Association.
- B. UL - Underwriters Laboratories.

1.04 SYSTEM DESCRIPTION

- A. Electrical Motor operated unit.

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, operation instructions, cleaning instructions and general information.
 - 3. Samples: Submit color samples of door panels for selection by owner.



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 data sheets, and equipment inter-connection diagrams.

1.07 REGULATORY REQUIREMENTS

- A. Electrical components UL listed.
- B. Electrical enclosure NEMA approved.

1.08 QUALITY ASSURANCE

- A. Furnish high-speed rolling doors and all components and accessories by one manufacturer.

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 model PR5000.
- B. No substitutions permitted.

2.02 MATERIALS

- A. Door Panel: 32-ounce replaceable vinyl panel sections connected by integral extruded panel connecting ribs. Door panel to have modular design to allow easy panel section replacement. Standard full-width, replaceable vision panel constructed of 2 mm PVC.
- B. Side Frames: Fully bolt-together side frames with removable, 304 stainless steel #4 finish covers for easy cleaning. Full-height weather seal to seal against panel material. One set of photo eyes mounted to side frame ; one set field installed.
- C. Head Assembly: Carbon steel roll drum with Steel-It paint. Roll drum features stainless steel end plates and stainless-steel shafts with full-width header seal. Stainless steel roll drum and motor cover optional.
- D. Bottom Bar: Quik-Set™ Break-Away™ stainless steel bottom bar releases in either direction without damage to the door. Dual cut-off switches shut off motor when bottom bar is impacted. Standard soft pneumatic auto-reversing edge on bottom bar. No exposed junction box on bottom bar. Vinyl loop hugs contour of floor for tight seal.
- E. Drive System: Three-phase, variable speed AC Drive provides soft acceleration and deceleration. Independent opening and closing speeds provide flexibility to meet any application. Motors using a clutch or brake to start or stop door movement will not be accepted.
- F. Travel Speed: Opens at 50 inches per second.
- G. Electrical Controls
 - 1. Rytec controller housed in a UL/cUL Listed NEMA 4X-rated enclosure with factory set parameters.
 - 2. Parameter changes and all door configurations can be made from the face of the control box, no exposure to high voltage. Control panels that require opening of the control box and reaching inside to make parameter changes will not be accepted.
 - 3. Controls include a variable speed AC drive system capable of infinitely variable speed control in both directions.
 - 4. Programmable inputs and outputs accommodate special control applications (traffic lights, horns, actuation devices, timing sequences, etc.) without the need for additional electrical components.
 - 5. Self-diagnostic scrolling two-line vacuum fluorescent display provides expanded informational messages for straightforward installation, control adjustments and error reporting.
 - 6. Complete history of door, at least two years, is logged and encrypted onto a USB flash drive. All errors have a time and date stamp for reference. Control panels not logging up to two years of door history will not be accepted.



- H. Door to use absolute rotary encoder to regulate door travel limits. Limits to be adjustable, without the use of tools, from floor level at the control panel. Doors using mechanical limits switches or doors that require access to the operator in order to adjust limits will not be accepted.
- I. 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 doors, if necessary, for proper operation.

3.04 CLEANING

- A. Follow detailed cleaning instructions outlined in Owners Manual.

END OF SECTION