



10-18-17  
Rytec Spiral VP-DD Door  
Spiral VP Direct Drive

SECTION 083000

HIGH-PERFORMANCE SPECIALTY ROLL-UP DOORS

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. High-Performance Specialty doors.
- B. Wiring from electric circuit disconnect to operator and control station.

1.02 RELATED SECTIONS

- A. None

1.03 REFERENCES

- A. NEMA - National Electrical Manufacturers Association.

1.04 SYSTEM DESCRIPTION

- A. Motor type: AC drive, and variable speed with soft acceleration and braking.

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 preventative maintenance 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-performance specialty 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. High Performance Specialty doors, Five year limited warranty on mechanical components, Two year limited warranty on electrical components and 20-year extended warranty on rollers, hinges and door track.

## PART 2 - PRODUCTS

### 2.01 PRODUCTS

- A. Rytec Corporation Spiral VP-DD.
- B. No substitutions permitted.

### 2.02 MATERIALS

- A. Door Panel: Double-walled, aluminum slats 6 inches high or optional aluminum slat frames with clear polycarbonate windows 9" high. Thickness of slats ranges from .78" – 2.4", depending on overall size of door. Vision or ventilated slats are also available options. Integral rubber weather seal 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: Powder coated steel side frames with full height weather seal on both sides to seal against door panel. "Intelligent" Advanced<sup>3</sup> Light Curtain System mounted directly in door line (to 6'0" above finished floor). Doors using an external coil cord will not be accepted.



- C. Bottom Bar: Extruded aluminum bottom bar with extruded rubber seal.
- D. Drive system: Minimum .5 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.
- E. Travel Speed: Opens at 12 inches per second.
- F. Electrical Controls: Housed in a NEMA 4X rated enclosure with factory set parameters. Self-diagnostic features and a two-line, 32-character scrolling 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.
- G. 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.
- H. Door Track: Performance aluminum track design features no metal-to-metal contact which results in ultra-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.
- I. Wind load: Door to be certified by an independent testing agency to be able to withstand wind loads of 90 mph.
- J. 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