



3-15-12
Turbo-Seal Self Repair®
Model Number TS6000-SR

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. Electrical Motor operated unit with manual override in case of 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, electrical equipment, operation instructions and 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. Recommended preventive maintenance program to be included indicating lubrication requirements and frequency, periodic adjustments required, scheduled maintenance suggested, manufacturer data sheets, and equipment interconnection diagrams.

1.07 REGULATORY REQUIREMENTS

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

1.08 QUALITY ASSURANCE

- A. Furnish high-speed roll 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.
- B. Lifetime warranty on door counterweights.
- C. Limited three-year warranty on 2-ply Rilon door panel material.

PART 2 – PRODUCTS

2.01 PRODUCTS

- A. Rytec Corporation Model TS6000-SR.
- B. No substitutions permitted.



2.01 MATERIALS

- A. Door Panel: 71 oz, 2mm thick, 2-ply Rilon™ material. Rilon to be multi-layered, woven, dimensionally stable, puncture resistant, polymer impregnated monofilament polyester fabric. Material to be laterally stiff and vertically flexible. Fabrics that are flexible both vertically and laterally will not be accepted. Door panel rolls off of the front of the roll tube ensuring a tight, adjustment-free seal at the header.
- B. Side Frames: To be self-supporting steel consisting of 11 gauge cold rolled sheet metal. Side frame covers to be 14 gauge cold rolled sheet metal. Side frames to incorporate fiberglass protrusions and four (4) front and rear full-height brush seals to seal against both sides of fabric material. Dual electric thru-beam photo eyes standard.
- C. Bottom Bar: Break-Away™ bottom bar consisting of a one-piece extruded aluminum member that releases in either direction without damage to the door. When bottom bar and door panel are displaced from side guides, signal is sent to controller to automatically re-set bottom bar and panel material into the side guides and re-set the door cycle. Dual pneumatic auto-reversing edge on bottom bar. No exposed junction box on bottom bar. Vinyl loop hugs contour of floor for tight seal. Break-Away, and reversing edge, signal is transmitted via wireless system. Doors with coil cords, or which require manual reset after break-away, will not be accepted.
- D. Counterweight System: Dual guided counterweights custom-sized to provide proper balancing of the door. System to include polyester belting and UHMW spools. Doors that use springs as a counterbalance system will not be accepted.
- 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. Motor and electrical components are factory wired to junction boxes in the head assembly. Motors using a clutch or brake to start or stop door movement will not be accepted.
- F. Travel Speed: Opens at up to 100 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 tools or access to the operator in order to adjust limits, will not be accepted.
- I. All components factory finished. Colors selected by owner.

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. Clean door and components.

END OF SECTION