



03-15-12
Turbo-Seal®
Model Number TS6000R

SECTION 08300
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. LED – Light Emitting Diode.
- C. UL – Underwriters Laboratory Incorporated.

1.04 SYSTEM DESCRIPTION

- A. Electric 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, and electrical equipment, operation 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 indicating lubrication requirements and frequency, periodic adjustments required, scheduled maintenance suggested, manufacturers data sheets, and equipment interconnection diagrams.

1.07 REGULATORY REQUIREMENTS

- A. Electrical components NEMA approved and UL listed.

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 years parts, one year labor.
- B. Lifetime warranty on door counter-weights.
- C. Limited three year or three million cycle warranty on door panel material, whichever comes first.

PART 2 – PRODUCTS

2.01 PRODUCTS

- A. Rytec Corporation Model TS6000R.
- B. No substitutions permitted.



2.02 MATERIALS

- A. Door Panel: 2.0 mm thick, 2-ply Rilon™ material. Rilon material to be multi-layered, woven, dimensionally stable, puncture resistant, polymer impregnated monofilament polyester fabric. Material to be laterally stiff and vertically flexible.
- B. Side Frames: 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 front and rear full height vinyl seal to seal against fabric material. Side frames will come equipped with heat tape. Dual electric 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. Dual cut-off switches shut off motor when bottom bar is impacted. Provide safety edge to allow door to reverse to its full open limit when coming into contact with an obstruction above floor line during downward travel. No exposed junction box on bottom bar. Hypalon loop hugs contour of floor for tight seal; “Rat Flap” standard. Bottom bar pre-assembled on door at factory.
- D. Counterweight System: Dual guided counterweights custom-sized to provide proper balancing of the door. System to include polyester belting and UHMW spools.
- 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.
- F. Travel Speed: Up to 100 inches per second.
- G. Electrical Controls
 1. Ryttec 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. Defrost System: Tec-Light™ infra-red heat lamps standard. Optional unheated blower or two-speed heated blower.
- J. 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.
- A. 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