

SECTION 083000
HIGH-SPEED ROLLING DOORS

PART 1 – GENERAL

1.01 SECTION INCLUDES

- A. High performance motorized roll up doors.

1.02 RELATED SECTIONS

- A. None

1.03 REFERENCES

- A. NEMA – National Electrical Manufacturers Association.
- B. UL – Underwriters Laboratories.
- C. CSA – Canada Standards Association.
- D. USDA – United States Department of Agriculture.
- E. FDA – United States Food and Drug Administration.

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, 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. 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.
- C. Door construction to be compliant with USDA guidelines.

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 limited warranty on mechanical components, including motor assembly
- B. One-year limited warranty on electrical components
- C. One year for labor



PART 2 – PRODUCTS

2.01 PRODUCTS

- A. Ryttec Corporation Model CR5500.
- B. No substitutions permitted.

2.02 MATERIALS

- A. Classified by Underwriters Laboratories to meet USDA hygiene standards for meat and poultry applications.
- B. Door Panel: USDA/FDA-compliant 2-ply multifilament fabric. Fabric surface smooth for easy cleaning and wash down. Laterally stiff and vertically flexible, the material is inherently resistant to negative pressure. Available in white or blue color.
- C. Side Frames: Fully bolt-together, 304 stainless steel sideframes with #2B finish. Patented stainless steel covers with #4 finish can be removed for easy cleaning and wash down. One set NEMA 4X thru-beam photo eyes internally mounted in side frame; another set field installed.
- D. Head Assembly: Stainless steel roll drum, with stainless steel piano hinge, connects to fabric. No excess fabric on drum when door is in the closed position. By switching door to “cleaning mode”, drum rotates an additional quarter revolution to allow for fast and easy cleaning. Hinged drip guard fully encloses drum assembly, but swings out of the way during cleaning mode, providing full access during wash down.
- E. Bottom Bar: Clean-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. Pneumatic auto-reversing edge below bottom bar. No exposed junction box on bottom bar. Bottom bar is sloped and troughed to direct washdown drainage to the sides.
- F. Drive System: Three phase, variable speed AC Drive, with food-grade wash down motor, 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.
- G. Travel Speed: Operates at up to 50 inches per second.
- F. 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.
- I. Door to use absolute rotary encoder to regulate door travel limits. Limits to be adjustable, without tools, from the control box at floor level. Doors using mechanical limits switches or doors that require access to the operator in order to adjust limits will not be accepted.
- 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.
- C. Fit and align assembly including hardware; level to plumb to provide smooth operation.
- K. 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 Clean-Roll® Owner's Manual.

END OF SECTION