SECTION 08300
HIGH-SPEED FOLDING DOORS

PART 1 – GENERAL

1.01 SECTION INCLUDES

A. High-speed folding doors.

1.02 RELATED SECTIONS

A. None

1.03 REFERENCES

A. NEMA – National Electrical Manufacturers Association.

B. UL – Underwriters Laboratories.

C. PSI – Pounds per Square Inch.

D. CFM – Cubic Feet per Minute.

E. NPT – National Pipe Thread.

1.04 SYSTEM DESCRIPTION

A. Pneumatic operated unit to be provided with single point electrical connection at control box and internal disconnect.

B. 120V single-phase power and compressed air to operator and control station.

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 pneumatic 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. 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 NEMA approved and UL listed.

1.08 QUALITY ASSURANCE

A. Furnish high-speed folding 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 pneumatic power, 110 volt a.c. single phase electric power and locations and sizes of conduit.

1.11 WARRANTY

A. One years parts, one year labor.

PART 2 – PRODUCTS

2.01 PRODUCTS

A. Rytec Corporation Model FF4A.

B. No substitutions permitted.

2.02 MATERIALS

A. Door Panel: Four 3/8” thick clear Puralon™ panels with UV light inhibitor and vertical Velcro™ seams. (1/2” thick Puralon™ panels optional).

B. Head Assembly: Door head assembly to consist of 11 gauge formed steel. Head assembly to incorporate four independent arms of 3 x 1 ½ x 1/8 inch wall structural tube. Head assembly to be fully enclosed.

C. Roller System: Door to have Tec-Trak™ IA roller system capable of flexing on the vertical plane. Door to have floating hinge system connected to all four arms at the joint. Door to have a minimum of two integral roller assemblies consisting of eight 1-½ inch nylon rollers with bearings. Trolley assembly to incorporate a spherical bearing and to be fully capable of deflection on the vertical plane of up to 7 degrees while maintaining full roller surface contact with track.

D. Roller Track: Roller tracks to consist of 11 gauge steel tubing.

E. Side Frames: Side frames to be fully assembled, consisting of 3 x 1 ½ x 1/8 inch structural steel tubing. Side frames to include mounting plates at upper and lower corners. Door to be fully modular with no welding required for installation.

F. Drive System: Door to operate with two aluminum air actuators and two torque drive arms. Door capable of operating on standard shop air (70-90 PSI).

G. Travel Speed: Pneumatic cylinder drive system allows for adjustment of opening and closing speed up to 72” per second.

H. Electrical Controls: Door to have a NEMA 12 enclosure with internally mounted filter/regulator with automatic drain trap, directional control valve with air exhaust muffler, speed control valves, automatic close timer, and cycle counter. Door controller to have a 3/8” NPT connection point for customer supplied air hook up, a single point electrical connection at control box, and an internal disconnect.

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 air and electrical service. Complete all plumbing and wiring.

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