



3-15-12
Fast-Fold Freezer®
Model Number FF6RGS

SECTION 08300
HIGH-SPEED FOLDING DOORS

PART 1 – GENERAL

1.01 SECTION INCLUDES

- A. High-speed folding 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. UL – Underwriters Laboratories.
- C. LED – Light Emitting Diode.

1.04 SYSTEM DESCRIPTION

- A. Electric Motor operated unit to be chain driven with adjustable limit switches.

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 general information.
 - 3. Samples: Submit 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 electric power and locations and sizes of conduit.

1.11 WARRANTY

- A. One years parts, one year labor.
- B. Limited five year warranty on GS Track and Roller assembly.
- C. Limited ten year warranty on optional BFGS Track and Roller assembly.



PART 2 – PRODUCTS

2.01 PRODUCTS

- A. Rytec Corporation Model FF6RGS.
- B. No substitutions permitted.

2.02 MATERIALS

- A. Door Panel: Four center panels to be 3/8” thick, transparent, low-temp Puralon™ with light inhibitor, capable of withstanding temperatures down to –20 degrees Fahrenheit. Two outside panels are insulated. Center four door panels to be mounted on four center suspended rotor arms.
- B. Door Seal: Durable, integral panel hinges minimize warm air infiltration. Panels connected by insulated vertical Velcro™ seams. Optional overlapping leading edge magnetic closures available.
- C. Roller System: Door equipped with Tec-Trak™ I roller system with a minimum of sixteen Model GS, 1-7/8”, Ryflex™ floating rollers. Roller assembly to deflect up to 7 degrees in the vertical plane in order to maintain full roller surface bearing contact with track. Door to have a minimum of 7.12” of constant roller bearing surface contact. Rollers to be carburized, hardened and fully sealed with ball bearings. Optional 2-1/4” BFGS roller sizes available.
- D. Roller Track: Roller track to be cold formed alloy steel. Roller Track assembly to be integral and mount to the face of a 6” structural channel.
- E. Side Frames: Insulated side frames with thermal break covers made of 16 gauge cold rolled sheet metal welded to structural angle. All exposed metal surfaces to be primed and painted. Door fully modular with no welding required for installation. Door side frames to be insulated with a minimum of 2 inches of insulation. Thermal brake included.
- F. 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.
- G. Travel Speed: Door to open at up to 84” per second and close at up to 42” per second.
- F. Electrical Controls
 - 1. Rytec controller housed in a UL/cUL Listed NEMA 4-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 access to the operator in order to adjust limits will not be accepted.
- I. Defrost System: Three defrost systems available: 1) Standard Patented Tec-Light system, 2) Tec-Lights with unheated blower, and 3) Heated blower system.
- K. 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 doors, if necessary, for proper operation.

3.04 CLEANING

- A. Clean door and components.

END OF SECTION