

SPEED-MASTER® 4600

Section 08330 – Rev. 4.2.15

PART 1 – GENERAL

A. SECTION INCLUDES

1. High-speed interior and limited exterior roll-up doors.
2. Wiring from electric circuit disconnect to operator to control station.

B. RELATED SECTIONS

1. None

C. REFERENCES

1. NEMA - National Electrical Manufacturers Association.
2. UL – Underwriters Laboratory Incorporated.

D. SUBMITTALS - 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 information.
3. Samples: Submit samples of door slat material upon request
4. Manufacturer's Installation: Indicate installation sequence and procedures, adjustment, and alignment procedures.

E. MAINTENANCE DATA

1. Scheduled maintenance program available to include periodic adjustments required, scheduled maintenance suggested, manufacturer's data sheets, and equipment inter-connection diagrams.

F. REGULATORY REQUIREMENTS

1. Electrical components UL listed.
2. Electrical control panel NEMA 4 approved.

G. QUALITY ASSURANCE

1. Furnish high-speed roll doors and all components and accessories by one manufacturer.
2. Installer Qualifications: Utilize an installer having demonstrated experience on projects of similar size and complexity, and trained and authorized by the door manufacturer to perform the work of this section.

H. FIELD MEASUREMENTS

1. Verify field measurements are as indicated on shop drawings.

I. COORDINATION

1. Coordinate the work with installation of electric power and locations and sizes of conduit.

J. WARRANTY

The motor is guaranteed against defects in materials and workmanship for a period of 5 full years (excludes catch system). All other mechanical and electrical components are warranted against defects for a period of 2 full years. Products with less than a 5/2 year warranty will not be accepted. During the warranty period, labor is covered for the first year.

PART 2 – PRODUCTS

2.0 ACCEPTABLE MANUFACTURERS:

A. MANUFACTURERS: Subject to compliance with requirements provide products of the following:

1. Manufacturer of High Speed Roll-Up Doors: Hörmann Flexon LLC, High Performance Doors, Starpointe Business Park, 117 Starpointe Boulevard, Burgettstown, PA 15021-9506 / Phone: (800)-365-3667 / (724) 385-9150 Fax: (724) 385-9151 / Website: www.hormann-flexon.com / Email: sales@hormann-flexon.com
2. Model: Speed-Master[®] Series – Model 4600

2.1 MATERIALS

A. GUIDE TRACKS

1. Vertical guide tracks must be a one-piece design with removable front covers and the following dimensions: 9-1/2" wide X 7" projection.
2. Guide tracks must be self-supporting, 12 gauge hot-dipped galvanized steel and include an energy chain. Lighter gauge guide tracks will not be accepted.

B. WEATHER SEALS

1. Twin brush seals must be provided for within the guide tracks.
2. Lintel brush seal shall be provided for the full width of the top of the door.
3. A vinyl loop seal shall be provided for the bottom of the door to ensure close fit with uneven floors.

C. DOOR PANEL

1. Panel material shall be "Bulldog XT", 1/8" thick, abrasion / puncture resistant, polyester reinforced 90 oz. per sq. yd., 2-ply PVC. Colors available include: Black, Blue, Orange, Gray, White. Panel materials must be able to maintain flexibility and stability from -20 degree to +120 degree Fahrenheit. Lighter weight material not accepted. Rubber material not accepted.
2. A minimum of one (1) panel section to be of high quality, clear PVC material by the full width of opening and of appropriate height off floor to accommodate vision for both pedestrian and vehicular traffic.
3. Each panel shall be of sectional design using interlocking 1/4" variable wall thickness, aluminum hinge profiles.
4. Profiles to serve as panel stabilizers, of sufficient number to accommodate existing conditions and shall be an integral part of panel construction.
5. Designed for exterior or heavy negative pressure applications.
6. Bottom profile must be designed to break away from the guide tracks in the event of impact.

D. EMERGENCY OPERATION

1. Via manual disconnect of power to the motor and chain hoist for manual opening of the door.

E. DRIVE SYSTEM

1. Opening speed shall be up to 24" per second.
2. Main roller assembly shall be spin tested. Ball bearings to be permanently lubricated type with drive shaft keyed directly into unitized motor/gearbox.
3. Door shall be equipped with a minimum 3-phase variable speed direct-drive motor of continuous duty and have positive brake release for manual override operation.
4. Drive system is NEMA 4.

F. CONTROL PANEL

1. Supply manufacturer's standard HFC1 3-phase hardwired control box, UL listed and equipped with a programmable

drive system, with variable speed operation, and includes soft opening and closing , 460 v / 3-phase / 60 Hz UL listed control box. Doors with contactor boxes will not be accepted.

2. Control box must include face mounted e-stop / re-set buttons and power disconnect.
3. Must include an adjustable time delay.
4. Standard power requirement is 460 v / 3 phase / 60 Hz (4 kw).
5. Must include cycle counter.
6. Must include self-monitoring and self-diagnostic features and LCD to provide quick and straightforward information.
7. Control panels that require a portable computer unit, additional components or other devices for programming and/or troubleshooting will not be accepted.
8. Maximum control box dimensions of 12" wide x 16" high x 5" deep allowing for applications with limited space.
9. Door to use encoder to regulate door travel limits. Door 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 to set the limits will not be accepted.

G. COUNTERBALANCE

1. Door shall require no counter-balance or panel tensioning system requiring cables, chains, straps, springs, or pulleys to be included. No exceptions.

H. LIGHT CURTAIN:

1. Light grid up to 8'0" is standard and built into the guide tracks. The light curtain system shall consist of a self contained transmitter detector and receiver detector. The transmitter and receiver are positioned on opposite sides of the door opening. The range can accommodate door openings from 3' up to 32'. The detectors are housed in an aluminum profile which is weather resistant with an IP 67 (occasional submersion) rating. The sensitivity automatically adjusts which compensates for misalignment and contamination during operation. No onsite set up or adjustments are required.
2. The light curtain system shall be installed inside the guide tracks and allow the door to close normally but reverse the door if any object breaks the light beam.

- I. All components factory finished.

PART 3 – EXECUTION

A. PREPARATION

1. Coordinate installation of high-speed roll up doors. Examine the conditions under which the doors are to be installed and do not proceed with the work until unsatisfactory conditions have been corrected.

B. INSTALLATION

1. General: Comply with manufacturer's detailed instructions for the installation of high-speed roll-up door.
2. Electrical field wiring by an electrician.

C. FINAL ADJUSTMENT

1. Make necessary adjustments for safe, efficient operation of high-speed roll-up doors.

END OF SECTION