

SPEED-GUARDIAN™ 4000

Section 08330 - Rev. 4.2.15

PART 1 – GENERAL

A. SECTION INCLUDES

1. High-speed security 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 High Performance Doors / Starpointe Business Park / 117 Starpointe Boulevard / Burgettstown, PA 15021 / Phone: (800)-365-3667 / (724) 385-9150 Fax: (724) 385-9151 Website: www.hormann-flexon.com / Email: sales@hormann-flexon.com
2. Model: Speed-Guardian™ Series – Model 4000

2.1 MATERIALS

A. GUIDE TRACKS

1. Minimum 10 gauge galvanized steel guide tracks with extruded aluminum internal leading edges. Consult factory for selection of optional guide track paint colors.
2. Must include synthetic side rollers to allow for precision guiding of door panel and no contact between door panels and guide tracks. No exceptions.
3. Must include non-contact circular guide, allowing door panel sections to roll-up securely into the circular guide track without any contact, reducing noise and wear. Telescoping panels not accepted.

B. WEATHERSEALS

1. Must include full perimeter EDPM double seal.
2. Must include synthetic thermal breaks between each panel section to provide for additional energy efficiency and workplace comfort. No exceptions.

C. DOOR PANEL

1. Standard Panel Material: Secure 1-5/8" total thickness by 10" high constructed of hot-dipped galvanized steel with a urethane foam core.
2. Finished exterior panel surface to be Micrograin® in a White Aluminum color (RAL 9006).
3. Finished interior panel surface to be stucco-textured.
4. R-Value of the standard panel sections to be no less than 13.6.
5. Vision Sections: Optional vision sections shall be 7" high acrylic, double-pane, with vertical reinforcement and Duratec® synthetic glazing. Single-pane vision sections not accepted. Vision sections without a Duratec® glazing not accepted.
6. Thermal breaks: Unique synthetic hinges between each door panel provide for additional energy efficiency and workplace comfort.
7. Bottom panel consists of a double walled beam with EPDM rubber profile.

D. EMERGENCY OPERATION: via spring compression and chain hoist.

E. DRIVE SYSTEM

1. 3 phase direct drive motor /AC drive of sufficient power as to raise door at rated speed.
2. Direct drive motor is self monitoring and has a patented built in catch system, has sealed bearings and is maintenance free.
3. Drive system is NEMA 3S (dust tight, rain tight, sleet tight, outdoor rated).
4. Maximum opening speed of up to 80 inches per second and closing speed of 18 inches per second.

F. CONTROL PANEL

1. Supply manufacturer's standard UL approved and NEMA 4 rated HFC1 hardwired control box, which is a programmable 4 kW drive 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 a frequency drive with integrated soft start and soft stop to reduce wear and tear on the door system. Doors without a soft start / stop will not be accepted.
4. Must include an adjustable time delay.
5. Standard power requirement is 460 v or 230 v / 3 phase / 60 Hz (4 kw).



6. Must include cycle counter.
7. NEMA 4 rated enclosure with factory set parameters.
8. Must include self-monitoring and self-diagnostic features an LCD to provide quick and straightforward information.
9. Control panels that require a portable computer unit, additional components or other devices for programming and/or troubleshooting will not be accepted.
10. Maximum control box dimensions of 12" wide x 16" high x 5" deep allowing for applications with limited space.
11. Door to use encoder to regulate door travel limits. Door travel limits to be adjusted 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. Must include multiple extension springs, maximum 6 per side column depending on the door size to for minimize wear and tear of motor due.
2. Number 80 chain is connected to and lifts door by bottom panel, which reduces wear and tear on panels and thermal breaks. No exceptions.

H. LIGHT CURTAIN: An integral 8 foot high light curtain including multiple thru-beam style photo cells must be included and upon an object breaking the plane of the light curtain, instantly reverse the door panel. Doors without an 8 foot light curtain not accepted.

I. WINDLOAD: Door to have a rating up to 120 MPH.

J. All components factory finished.

PART 3 - EXECUTION

A. PREPARATION

Coordinate installation of steel security 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 security roll-up door.
2. Electrical field wiring by electrician.
3. Make necessary adjustments for safe, efficient operation of steel security roll-up doors.

END OF SECTION