Version 5.22.13

H-SERIES: HB200-1200 SPECIFICATIONS
Hangar, Bi-parting, Bottom Rolling Door Systems

OPTIONS ARE LISTED IN BOLD, PLEASE MODIFY THESE AREAS AS NEEDED BASED ON YOUR PROJECT

CONSULT MANUFACTURER FOR ADDITIONAL OPTIONS OR MODIFICATIONS.

PART 1- GENERAL

1.1 SCOPE OF WORK

A. Provide a xx wide by xx high, xx section, electrically operated, bi-parting, bottom rolling hangar door.

B. Includes the bottom rails, top guides and door sections complete with bottom wheels, top guide rollers, electrical motor operator with brake, electrical controls, draped cord electrical power feed, bumper pick-up system and weatherseals. All steel is prime painted with manufacturer's standard structural primer.

C. Work by others includes preparation of the building to receive the hangar door, field wiring, field finish paint, top guide supports and exterior and interior metal sheeting and insulation.

1.2 DESIGN CRITERIA

A. Door shall be designed to withstand a wind load of 25 pounds per square foot in the closed position. The top guide system shall be capable of accommodating a total of six (6) inches of live load deflection and five (5) inches of uplift.

1.3 SUBMITTALS

A. Design and submittal drawings shall be approved by the architect prior to hangar door fabrication.

B. Operation and maintenance manual shall be furnished to the owner.

1.4 DELIVERY, STORAGE AND HANDLING

A. Store delivered materials and equipment in dry locations with adequate ventilation, free from dust and water, and so as to permit access for inspection and handling.

B. Handle materials carefully to prevent damage.

1.5 WARRANTY

A. The door manufacturer shall provide a written standard limited warranty for material and workmanship.

PART 2-PRODUCTS

2.1 MANUFACTURER

A. Hangar door shall be as manufactured by Door Engineering and Manufacturing. 400 Cherry Street, Kasota, MN 56050, (800)-959-1352

2.2 MATERIALS

A. All door section framing members, both vertical and horizontal, shall be hot rolled standard structural steel sections equal to or exceeding ASTM A-36 and comply with AISC specifications. Cold formed "C", "Z" shapes may be used for grits or bracing.

B. Door section construction: Door sections shall be fabricated in sizes convenient for shipping and shall be of bolted and/or welded construction. Framing members shall be true to dimension and square in all directions. Diagonal bracing shall be provided so that the completed door section assembly will be adequately braced to withstand operational loads.

C. Weather seals on vertical edges, sill and head are attached at the factory. Vertical weather seals are bulb type sheet rubber EPDM (Ethylene, Propylene, Diene, Terpolymer) with a resilient urethane foam core. Vertical opposing bulb weather seals between the door sections shall seal against each other and not come in contact with the door sheeting. Head and sill weather seals are flap type sheet rubber EPDM (Ethylene, Propylene, Diene, Terpolymer). All weather seals shall be retained with full length binding strips attached with rust resistant fasteners.

D. Telescoping top guide rollers: Each door section shall be equipped with two telescoping top guide roller assemblies consisting of horizontal and vertical steel rollers with oil impregnated bronze bearings.

E. Bottom wheels: Each door section shall have two double flange solid steel wheels with a minimum tread diameter of 12 inches. Each wheel shall be equipped with tapered roller bearings capable of transmitting both vertical and horizontal loads. Bearings shall be provided with grease seals.

F. Top guide assemblies: Top guide assemblies consisting of wide flange beams and cross bracing shall be factory fabricated sub-assemblies to accommodate the telescoping top roller assemblies and the designed building live load and deflection and uplift.

G. Bottom rails: Bottom rails assemblies shall be factory fabricated sub-assemblies from a minimum ASCE 20 lbs. /yd. bottom rail with cross bracing and include leveling anchors.

2.3 OPERATING SYSTEM

A. The bi-parting hangar door shall be operated by an electric motor drive system mounted internally within the door framing of the leading door sections. The electric motor operator shall drive one of the bottom wheels of the door section. The non-powered door sections to be interconnected to the powered door section by means of a neoprene cushioned mechanical bumper pick-up system.

2.4 ELECTRIC OPERATOR

A. The electric motor operator shall consist of a factory installed electric brake motor, gear reducer, required sprockets, roller chains and chain tensioning devices. The operator shall be capable of emergency manual operation. Electric power shall be 208, 230 or 460 VAC, 60 Hz, three phase.

2.5 ELECTRIC CONTROLS

A. Electrical controls shall include a factory wired enclosure with disconnect switch, overload and under voltage protection, magnetic reversing starters and control voltage transformer mounted on the powered door section. Control circuits shall not exceed a nominal 110 volts.

B. A control station of constant pressure with "OPEN" and "CLOSE" pushbuttons shall be factory mounted need the leading edge of the power operated door section.

C. Limit switches shall be provided to stop the travel of the door sections in their fully open or fully closed positions. Limit switches shall be factory mounted on the powered door section. Actuating cams shall be field mounted on the top guide assemblies.

D. Electric power shall be brought to the powered door section with a multi-conductor SO electrical cable draped from the jamb of the door opening and then non-powered door sections to the powered door section.

E. All electrical wiring from the electric motor operator internal to the powered door section shall be factory wired in conduit to a junction box near the top of the door section.

PART 3- EXECUTION

3.1 PAINTING

A. Clean all steel surfaces after fabrication. Steel surfaces painted with manufacturer's standard structural primer.

3.2 INSTALLATION

A. Assemble and install the bottom rail assemblies, top guide assemblies and door sections in accordance with approved drawings and. All door openings, roof and floor shall be completely installed prior to the installation of the door. Permanent or temporary electric wiring shall be brought to the door opening before installation is started.

B. Doors shall be set plumb, level and square, with all parts properly fastened, mounted, etc. All moving parts shall be tested, adjusted and left in good operating condition.

3.3 ADJUSTING AND CLEANING

A. Inspection of the doors and complete operating test will be made by the installer in the presence of the general contractor or architect as soon as the erection is complete. Any defects noted shall be corrected. After door approval in the above test, the general contractor must assume the responsibility for any damage or rough handling of the door during construction until the building is turned over to the owner and final inspection is made.

B. Clean surfaces and repaint abraded or damaged primed surfaces to match factory-applied finish.

END OF SECTION