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International Door, Inc.

HORIZONTAL SLIDING DOOR

SINGLE SLIDE AND/OR BI-PARTING SPECIFICATIONS

Doors and operating equipment of International Door, Inc. are described herein. Products of similar quality of other manufacturers will be considered, but must be approved in writing by the architect/engineer prior to bid.

WORK INCLUDED:

Provide all labor, equipment, materials and services required to execute and complete all items of work in connection with furnishing and installing the doors described herein. All work shall be in accordance with the specifications and drawings.

GENERAL:

1) All doors, operators and accessories shall be fabricated utilizing new material throughout and shall be installed by the manufacturer or by a duly authorized agent.

2) Details of door frames, furnished by others, shall be studied and any change in the structure from that shown on the bid drawings, which may be required for the installation of doors, shall be submitted with the proposal. Otherwise, all such changes shall be made as part of the work covered herein, and at not extra cost to the owner.

3) All additional material necessary for the proper installation of doors and operators, and all drilling and tapping of steel, drilling of masonry, and other materials shall be a part of the work provided by the contractor. All mounting and fastening devices necessary for the installation and operation of electric door operators shall be provided and attached.

4) All doors shall be accurately fitted with proper clearances, hung and trimmed complete with hardware as specified herein. All door shall be reinforced horizontally to withstand wind pressures of 20 p.s.f. with the deflection limited to the span divided by 120, and to prevent sagging when the door is in either the open or closed position.

5) Door shall be provided with manual and electric operators as indicated; they shall be complete with all accessories and installed ready for use.
DOOR AND INSULATION:

1) Horizontal sliding doors shall be of steel construction, and of singe-slide or bi-parting type as indicated.

2) Stiles and rails shall be of structural steel sections, no smaller that three inch channels, with all joints welded and ground smooth. Bracing shall consist of horizontal and vertical structural sections, to adequately stiffen the door panels.

3) Door panels shall be faced on the exterior side with sheet metal, not less that 14 guage, welded to stiles, rails and bracing members from the inside. There shall be no exposed welds on exterior panels. All exterior doors shall be fully insulated with nominal 1-1/2# density fiberglass thermal insulation, full thickness of panel as indicated; door shall be covered on the inside with sheet steel, not less than 16 guage, and welded to stiles, rails and bracings. All interior welds are to be ground smooth.

4) Vision lites shall be provided in the door panels as indicated, for glazing with 1/4” thick plexiglas. Edges of opening for vision lites shall be properly reinforced. A continuous glazing bead and stop shall be provided.

5) Unless otherwise specified, the plexiglas shall be provided and installed by the door contractor.

6) Doors can be manufactured as sound/acoustically rated units up to STC 53. Door panels will incorporate special sound deadening material for interior of the door leaves and full perimeter sound seals.

HARDWARE AND ACCESSORIES:

1) All hardware shall be heavy duty, industrial type.

2) Bottom guides, top tracks, brackets, safety devices and all other hardware necessary for the complete and proper operation of the door shall be provided.

3) Each door leaf is to be supported from the top guidetrack on machined steel rollers equipped with pre-lubricated, sealed for life, double row, precision ball bearings. The bottom rail of the door shall be extended beyond the opening and supported by a floor mounted guide located beyond the opening so that the floor is flush and clear of all obstructions across the full width of the opening.

4) Door with motor operators shall have fail-safe safety edges.

5) Weather-stripping shall be provided and installed along the sides, top, bottom and meeting edges of each panel. Weatherstrip material shall be cloth inserted neoprene.

INSTALLATION:

Installation of the doors and operators shall be by the door manufacturer or a duly authorized agent. Door contractor is responsible for accurately hanging and trimming the door with proper clearances, complete with hardware as specified herein.
PAINTING:

1) All exposed and unexposed surfaces of doors and door hardware, except mechanical parts usually not painted, shall be shop painted. All exposed parts of operators, either manual or electric, shall be shop painted.

2) Shop painting shall consist of one (1) coat of gray metallic primer, applied and thoroughly dried before leaving manufacturer.

3) Field touch-up painting of all damaged or marred areas, all unpainted surfaces and weld spots shall be done with the same paint as used in the shop. All surfaces shall be in proper condition to receive field painting by others.

ELECTRIC OPERATOR:

1) Door manufacturer shall furnish and install electric operator for doors noted on drawings as being electrically operated.

2) Operator shall be of heavy duty type furnished by door manufacturer.

3) Each door operator shall include an electric motor, solenoid disc brake for stopping motor when current is off limit switch for automatically stopping the door when fully opened or closed, all necessary attachment devices, hardware and all other mechanical and electrical elements as required. The speed reduction unit shall be separate from the motor and shall be belt driven.

4) Electric operators shall be designed and installed so that the door can be operated by hand in an emergency.

5) Electric operators shall open and close the door with smooth acceleration and deceleration, easily and quietly, without jarring, at a rate of one (1) foot per second, under all conditions of wind pressure.

6) Door contractor shall provide and attach all fastening devices and members to door jambs or to the building structure necessary for the installation and operation of the operator. All drilling of steel, masonry, or other building material, for securing door jambs to the building structure shall be part of the work specified herein.

7) A guard shall be provided at the “V-belt” between the motor and gear reducer assembly.

8) The motor operator shall power the door with drive sprockets and idlers equipped with prelubricated, sealed-for-life, double row, precision ball bearings. Use self-lubricating, precision roller chain to connect motor operator to door leaf.

MOTORS:

1) Door manufacturer’s operators shall be furnished with a 460 volt, 3 phase, 60 hertz a.c. electric motor of suitable horsepower as required to prevent overloading the motor under any operating conditions.

2) Door manufacturer’s operators shall be equipped with a spring engaged, solenoid released, disc brake to stop the motor when the current is off.
LIMIT SWITCHES:

1) Door manufacturer shall provide and install heavy duty, oil-tight limit switches with a rating of ten (10) amperes, 120 volts A.C., which shall automatically stop the door when either fully opened or closed.

2) Final adjustment of the limit switches is to be done by the electrical contractor.

“FAIL-SAFE” SAFETY-EDGE:

1) Door manufacturer shall provide and install a rubber encased, reverse action, safety mechanism on the leading edge of each door leaf of the electrically operated doors. This mechanism shall consist of a “U-shaped” neoprene astragal boot containing a stainless steel contract plate and a phosphor-bronze coiled contact spring conductor, each extending the full height of the door. The system is continuously energized at twelve (12) volts and operates through the electrical system to stop the closing travel of the door on contact with and abstraction, providing an instantaneous reversal of the door travel to the full open position.

2) A three (3) conductor cord from an electrical junction box on the door leaf is provided for the safety edge; it is connected by the electrical contractor.

EMERGENCY OPERATION:

1) Operators shall be designed and installed so that the doors may be opened and closed by hand operated chain pulley.

2) The hand operating mechanism shall be arranged so that the motor may be removed without interfering with the hand operator or altering the timing or adjustment of the limit switches.

3) A hand shift lever shall be installed within easy reach of the floor to make the hand operator engage, solenoid brake release, and motor circuit disconnect by way of an interlock switch.

4) While the door is in motor operation, the hand operator shall be made inoperative by a clutch device.

ELECTRICAL WORK:

1) Electrical power required for standard operators is 480 volt, 3 phase, 3 wire, 60 hertz, and is to be provided by the electrical contractor.

2) Door contractor to provide (for installation by electrical contractor) push-button or automatic door control systems as manufactured by International Door, Inc.

3) The electrical contractor shall provide and install power, control wiring conductors, conduit, conduit supports, and all connections required to make the equipment operable.

4) Connection and adjustment of limit switches and safety edges shall also be part of the electrical contractor’s work and shall be done according to drawings and/or instructions provided by the door manufacturer.