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OVERLY
DOOR COMPANY

Specifications

Sound Retardant Oversize Swinging Metal Door Assemblies

Part 1 - General

1.1 Description

a) **Work Included:** Provide sound retardant oversize swinging door systems where shown on drawings & as specified herein.
b) **Related Work:** Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions, & Sections in Division 1 of these Specifications.

➔ Except for the items specifically listed in this Section, finish paint is furnished and applied under other sections of these Specifications.

1.2 Quality Assurance

a) **Experience:** Provide work of this Section designed and furnished by one manufacturer. Use a manufacturer who is ISO9001:2000 certified and has been engaged in the manufacture of Sound Retardant Metal Swinging Door systems for at least five (5) years immediately prior to the start of this work, and who has a history of successful production acceptable to the Architect.

1.3 Related Sections

a) **Section 09900:** Paints and Coatings

1.4 References

a) **ASTM A1008:** Standard Specification for Steel, Carbon, Cold-Rolled Sheet, Commercial Quality.
b) **ASTM A1011:** Standard Specification for Steel, Hot-Rolled Sheet and Strip, Commercial.
c) **ASTM A653:** Standard Specification for Steel Sheet, Zinc-coated (Galvanized) or Zinc-Iron alloy Coated (Galvannealed) by the Hot Dipped Process.
d) **ASTM B117:** Standard Method of Salt Spray (Fog) Testing
e) **ASTM D1735:** Standard Practice for Testing Water Resistance of Coating Using Water Fog Apparatus.
f) **ASTM E90:** Standard Test Method for Laboratory Measurement of Airborne Sound Transmission Loss in Building Partitions.
g) **ASTM E336:** Standard Test Method for Measurement of Airborne Sound Insulation in Buildings.
h) **ASTM E413:** Classification for Determination of Sound Transmission Class

1.5 Submittals

a) **Shop Drawings:** Submit a schedule of items to be provided under this Section along with shop drawings in sufficient detail to show fabrication, installation, anchorage and interface of the work of this section with the work of adjacent trades.
b) **Certification:** Provide certification that the door construction utilized has been tested at an independent laboratory in accordance with ASTM E90, and that the STC rating determined in accordance with ASTM E413, is not less than that specified in Part 2 of this Section. The laboratory referenced in the certification must be qualified under the National Voluntary Accreditation Program (NVLAP) of the U.S. Bureau of Standards. Certification must reference laboratory name, test report number, and date of test; substitution of test data not in accordance with ASTM E90 and E413 will not be acceptable.
c) **Secondary Requirements:**
    1. **Fire Resistance:** If required, certify that assemblies have been fabricated from non-combustable materials successfully fire tested by Underwriters Laboratories in accordance will UL10b, UL10C and UBC7-2 Standards for Safety.
    2. **Seismic Stability:** If required, submit calculations showing ability of door system to withstand pertinent seismic forces.
    3. **Bullet Resistance:** If required, certify that assemblies have been tested in accordance with Standard for Safety UL752 for the specified bullet resistance level required.
    4. **Blast/Pressure Resistance:** If required, certify by test reports or design calculations that assemblies meet the seating and/or unseating pressure requirements for the project.
d) **Installation Instructions:** Provide recommended installation procedures which, upon approval by the architect, will become the basis for acceptance or rejection of the actual procedures used for installation.
e) **Warranty:** Upon completion of the work of this Section, provide the Architect with two (2) copies of the manufacturer's standard written one (1) year warranty.

Part 2 - Products

2.1 Design

a) **Design Basis & Type:** Sound Retardant Metal Oversize Swinging Door System designs are based on those manufactured by Overly Door Company, Greensburg, PA 15601. Tel 800-979-7300, Fax 724-830-2871
b) **Performance:** Sound Retardant Metal Oversize Swinging Door System to be Overly Model No. ( ) or equal with STC rating of ( ) when tested as a personnel sized operable system in accordance with ASTM E90 and ASTM E413.
c) **Components:** Assemblies to be complete with metal frame, door(s), sealing system (based on model specified), MCL-3000 Cam-Lift hinges, multi-point manual camming latch device for active leaf, and chain/cane bolts for in-active leaf. If vision lights are specified for doors, metal loose stops (type based on model specified), glass and glazing shipped loose to be field installed.

2.2 Fabrication

a) **Materials:** Sound Retardant Metal Oversize Swinging Doors and Frames to be constructed from formed sheet steel or structural shapes and bars. Sheet steel shall be commercial quality, level, cold rolled steel conforming to ASTM A1008 or hot rolled, pickled and oiled steel conforming to ASTM A1011. Steel shapes shall comply with ASTM A36 and steel bars with ASTM A108, Grade 1018. Exterior units shall be fabricated from Galvannealed material conforming to ASTM A653 (A60) with a coating weight of not less than 0.60 ounces per square foot.
b) **Door Design:** Sound Retardant Metal Oversize Swinging Doors shall be no less than 3-1/4" nominal minimum thickness construction with sizes as indicated on Architect approved shop drawings. Face gauges, internal sound retardant core and perimeter door edge construction to be manufacturer's standard for the specified model. No lead or asbestos shall be permitted in door construction to achieve STC performance. Horizontal and/or vertical splices may be required based on overall size of door leafs.
c) **Frame Design:** Sound Retardant Metal Oversize Swinging Door Frames shall be fabricated from 8" channel iron minimum. Frames are to be provided knocked down with bolt together field splice in the head of the frame.
d) **Hardware Reinforcements:** Factory mortise, reinforce, drill and tap and doors and frames for all mortise hardware as required by hardware manufacturer's template. Provide necessary reinforcement plates as required for surface mounted hardware; all drilling and tapping to be done in field by installer. Provide dust cover boxes on all frame mortises.
e) **Hardware Mounting:** All hardware to be installed at the factory and then removed prior to shipment to prevent damage. All items to be clearly marked for re-installation in the field.
f) **Anchors:** Provide suitable anchors to properly install frames in partition types shown on Architects drawings.
g) **Painting & Cleaning:** After fabrication of frames, all tool marks and surface imperfections shall be removed and exposed faces of all welded joints dressed smooth. Chemically treat all surfaces to insure maximum paint adhesion and coat with a water-based rust-inhibitive primer.

Part 3 - Execution

3.1 Site Storage & Protection of Materials

a) **Receipt:** Upon receipt of product, all materials shall be thoroughly inspected and all discrepancies, deficiencies and/or damages shall be immediately reported to the supplier in writing.
b) **Storage:** Store all materials on planks or dunnage in a dry location in a vertical position, spaced by blocking to permit air circulation between units. Cover all material or store in a controlled area to protect from damage.

3.2 Installation

a) **Prior to installation**, secure the services of a qualified representative of the manufacturer to visit the job site and instruct the contractor's personnel in proper installation and adjustment of the assemblies or secure services of manufacturer's factory trained and authorized installer to perform installation of assemblies.

b) **Install work of this Section** in strict accordance with approved shop drawings and manufacturer's recommended installation instructions. Where installations require field welding, all work must be performed by certified welders in accordance with AWS D1.1/D1.3.

c) **Upon installation**, secure the services of a qualified representative of the manufacturer to visit the jobsite and inspect the complete installation of the door and frame assemblies, test all components thru a minimum of ten (10) cycles of operation and direct installer in correcting any non-conforming items found.

3.2 Field Testing

a) Secure the services of a qualified Independent Testing agency to test door and frame installations selected by Owner/Architect in accordance with ASTM E336. Installed product shall perform no less than five (5) FSTC rating points below the specified STC rating. Any installations which fail to meet these criteria shall be examined, re-worked and re-tested until compliance is obtained.