

PART 1 GENERAL

1.1 Related Sections

- .1 Section 05500 - Metal Fabrications: Steel (plate, angle and channel) door frames.
- .2 Section 09911 - Interior Painting.
- .3 Division 16 : Electrical power supply.

1.2 References

- .1 The Aluminum Association Inc. (AA)
 - .1 Aluminum Association Designation System for Aluminum Finishes- 1997.
- .2 American Society for Testing and Materials (ASTM)
 - .1 ASTM A 366M-97, Specification for Steel, Carbon, Cold-Rolled Sheet, Commercial Quality.
 - .2 ASTM D 523-99, Test Method for Specular Gloss.
 - .3 ASTM D 822-96, Practice for Conducting Tests on Paint and Related Coatings and Materials using Filtered Open-Flame Carbon-Arc Light and Water Exposure Apparatus.
- .3 Canadian General Standards Board (CGSB)
 - .1 CAN/CGSB-1.105-M91, Quick-Drying Primer.
 - .2 CGSB 1.121-93, Vinyl Pretreatment Coating for Metals (Vinyl Wash Primer).
 - .3 CGSB 1.181-99, Coating, Zinc-Rich, Organic, Ready Mixed.
- .4 Canadian Standards Association (CSA)
 - .1 CSA G164-M92, Hot Dip Galvanizing of Irregularly Shaped Articles.
- .5 Environmental Choice Program (ECP)
 - .1 ECP-40-91, Building Materials: Thermal Insulation.
 - .2 ECP-67-95, Recycled Water-Borne Surface Coatings
 - .3 ECP-76-98, Surface Coatings.

1.3 Design Requirements

- .1 Design exterior door assembly to withstand wind load of 1 kPa with a maximum horizontal deflection of 1/240 of opening width.
- .2 Design door panel assemblies with thermal insulation factor R-17.5.
- .3 Design door assembly to withstand minimum 100,000 Hi-cycles.

1.4 Shop Drawings

- .1 Submit shop drawings in accordance with Section 01330 - Submittal Procedures.
- .2 Indicate sizes, service rating, types, materials, operating mechanisms, glazing locations and details, hardware and accessories, required clearances and electrical connections.

1.5 Waste Management and Disposal

- .1 Separate and recycle waste materials.
- .2 Place materials defined as hazardous or toxic waste in designated containers.
- .3 Ensure emptied containers are sealed and stored safely for disposal away from children.
- .4 Remove from site and dispose of all packaging materials at appropriate recycling facilities.
- .5 Dispose of all corrugated cardboard packaging material in appropriate on-site bin for recycling in accordance with site waste management program.

PART 2 PRODUCTS

2.1 Doors

- .1 Fabricate 50 mm thick insulated panel doors of steel extruded sections as indicated.
- .2 Acceptable Product: Overhead Door Corporation, series 592 – Thermacore sectional doors or approved equal.
- .3 Dimensions: opening height and width dimensions as indicated on drawing A2-1.
- .4 Door: 0.016" thick roll-formed-in-place homogeneous CFC / HCFC free insulation.
- .5 Air infiltration not to exceed 0.08 cfm per square foot at 15 and 25 mph.
- .6 Finish: white exterior and interior baked on polyester.

2.2 Commercial Duty Hardware

- .1 Spring shaft is to be solid (not hollow tubing).
- .2 Greasable pillow block bearings.
- .3 Tracks to be continuous angle-mounted.
- .4 Track to be sized for 3" full floating ball bearing rollers with hardened steel races.

- .5 Operator plate on top section.
- .6 Jamb and header seal to consist of aluminum trim with blade type vinyl.
- .7 Bottom section to be sealed with bulb-type EDPM weather-seal or approved equal.

2.3 Accessories

- .1 Overhead horizontal track and operator supports: 16 ga. galvanized steel, type and size to suit installation with thermal break.
- .2 Hinges and fixtures: galvanized steel.

2.4 Operators

- .1 Cable fail-safe device.
 - .1 Able to stop door immediately if cable breaks on door free fall. Braking capacity to withstand door mass.

2.5 Electrical Operator

- .1 Lift-Master model APT trolley operators, 115 volt / single phase, 1/2 Hp, emergency disconnect, timer to close, photo electric safety reversing eyes, c/w (1) Lift-Master model 412 radio receiver, c/w (2) remote controls per unit, open / close / stop wall controls per unit, or approved equal.

PART 3 EXECUTION

3.1 Installation

- .1 Install doors and hardware in accordance with manufacturer's instructions.
- .2 Rigidly support rail and operator and secure to supporting structure.
- .3 Touch-up steel doors with primer where galvanized finish damaged during fabrication.
- .4 Install operator including electrical motors, controller units, pushbutton stations, relays and other electrical equipment required for door operation.
- .5 Lubricate and adjust door operating components to ensure smooth opening and closing of doors.
- .6 Adjust weatherstripping to form a weathertight seal.

END OF SECTION