

HORTON AUTOMATICS - ARCHITECTURAL SPECIFICATIONS, 5/2005

EASYFLOW™ ELEGANT™ SERIES 9500E ALL GLASS MANUAL REVOLVING DOOR

DIVISION 8 - DOORS AND WINDOWS SECTION 08470 - REVOLVING ENTRANCE DOORS

Specifier Note: Coordinate and edit articles and paragraphs below to suit project requirements. Add section numbers and titles per CSI "MasterFormat" and specifier's practice. Consult with manufacturer regarding performance requirements for units applicable to project, as well as, related equipment and accessories required.

PART I - GENERAL

1.01 SUMMARY

- A. WORK INCLUDED: Furnish complete manual aluminum door system, as specified, that has been manufactured, fabricated and installed to maintain performance criteria stated by manufacturer without defects, damage or failure.
- B. RELATED WORK:
1. Masonry: Division 4, applicable sections.
 2. Electrical: Division 16, applicable sections.
 3. Storefront: Glass; Hardware: Division 8, applicable sections.
 4. Perimeter Sealants: Insulation: Division 7, applicable sections.

1.02 REFERENCES

- A. [AMERICAN ARCHITECTURAL MANUFACTURERS ASSOCIATION \(AAMA\)](#):
1. [101: Appendix Dissimilar Materials](#)
 2. 605.2: Specification for High Performance Organic Coatings on Architectural Extrusions and Panels.
- B. [AMERICAN NATIONAL STANDARDS INSTITUTE \(ANSI\)](#):
1. ANSI 156.27: Power and Manual Operated Revolving Pedestrian Doors
 2. [ANSI Z97.1](#): Safety Glazing Materials Used in Buildings - Methods of Test.
- C. [AMERICAN SOCIETY FOR TESTING AND MATERIALS \(ASTM\) B221](#): Aluminum-Alloy Extruded Bars, Rods, Shapes and Tubes.
- D. [THE ALUMINUM ASSOCIATION \(AA\)](#): Aluminum Finishes Manual
- E. INTERNATIONAL REVOLVING DOOR ASSOCIATION (IRDA)

1.03 SUBMITTALS

- A. PRODUCT DATA: Submit manufacturer's complete product and installation data.
- B. SHOP DRAWINGS: Submit drawings showing layout, profiles, product components including anchorage, accessories, finish and glazing details (where required).
- C. QUALITY ASSURANCE AND CLOSEOUT SUBMITTALS: Submit the following:
1. Manufacturer's Operation and Maintenance Data.
 2. Warranty document as specified herein.

1.04 QUALITY ASSURANCE

- A. INSTALLERS QUALIFICATIONS: Installer shall be factory trained and experienced to perform work of this section.
- B. MANUFACTURER'S QUALIFICATIONS: Manufacturer to have minimum (5) five years successful experience in the fabrication of automatic doors of the type required for this project. Manufacturer capable of providing field service representation during installation, approving acceptable installer and approving application method.

1.05 WARRANTIES

- A. MANUFACTURER'S WARRANTY: Units to be warranted against defect in material and workmanship for a period of one year from the Date of Substantial Completion. Electronic speed control shall be warranted for a period of three years from the Date of Substantial Completion. Manufacturer's warranty is in addition to, and not a limitation of, other rights owner may have under Contract Documents.
- B. DISTRIBUTOR'S WARRANTY: One year warranty - labor and transportation charges for defective parts replacement. Three year Distributor's Warranty for electronic speed control.

1.06 PROJECT CONDITIONS

FIELD MEASUREMENTS: Verify actual dimensions/openings by field measurements before fabrication and record on shop drawings. Coordinate with fabrication and construction schedule to avoid construction delays.

1.07 DELIVERY, STORAGE AND HANDLING

- A. ORDERING: Comply with factory's ordering instructions and lead time requirements.
- B. DELIVERY: Deliver items in factory's original, unopened, undamaged containers with identification labels intact.
- C. STORAGE AND PROTECTION: To provide protection from exposure to harmful weather conditions and vandalism.

PART II - PRODUCTS

2.01 MANUFACTURER

HORTON AUTOMATICS, a division of Overhead Door Corporation, shall manufacture manual revolving door(s) of type(s) and size(s) specified on plans and door schedule.

2.02 EQUIPMENT

- A. MANUFACTURED DOOR UNITS: Shall be EasyFlow™ Elegant™ Series 9500 Manual Revolving Door in four wing construction.
- B. SPEED CONTROL: Precision machined steel casting underfloor speed control with precision machined 100:1 ratio gear train, steel case, adjustable and replaceable brake blocks. The speed control device is limited to 12 RPM (refer to ANSI standard 156.27) and provides a smooth and effective braking action with brake shoes operating in an oil bath. Round cover plates supplied to conceal control.
- C. COLLAPSING MECHANISM: Door design shall be equipped with mechanical breakaway and bookfold in case of emergency as required by Codes. Wings can be broken away with 80-130 lbs (355-578 N) of force (adjustable).

- D. ENCLOSURE: The enclosure shall be 9/16" (14 mm) thick curved laminated glass and shall be constructed so that proper clearance shall be maintained and weather seal ensured.
1. Walls: Shall be be recessed mounted to minimize visual sight-lines. Optional surface mount wall system also available.
 2. Ceiling: Ceiling shall be 3/4" (19 mm) thick heat-strengthened laminated glass and be fastened to the walls using clips (stainless steel or bronze to most closely match finish).
- E. PANEL/DOOR WING: Shall be 1/2" (13 mm) thick tempered clear glass mounted in upper and lower aluminum rails. Glass shall be mechanically secured into rails with adjustable pins. Weather-stripping retained in upper and lower aluminum rails and in clear acrylic extrusion mounted along vertical strike edge of glass panel. Surface applied self-adhesive weatherstripping not acceptable.
1. Bumper assembly shall be provided at top strike-end corner to cushion collapsing door wings.
 2. Push plates (2 per wing) in similar finish shall be affixed to both sides of wing.
 2. Option: Push bar(s) of size and type indicated.
- F. HARDWARE: Provided shall include:
1. Locks with five pin cylinders and concealed bolts provided on two door wings.
 2. Door Hangers: Adjustable top & bottom brass hanger and pivot assembly shall be provided for each door wing.
 3. Center Shaft: 1-1/2" (38 mm) diameter steel shaft with connections to top and bottom bearings, speed control and door wings.

2.03 RELATED WORK REQUIREMENTS

GLASS AND GLAZING: Field glazing shall be as per Safety Glazing standard ANSI Z97.1.2. General contractor to coordinate acquisition of glass, not already provided by manufacturer, in thickness and type in accordance with manufacturer's recommendations for prescribed design as follows:

- A. DOOR WING: Material will be flat safety glass in clear, 1/2" (13 mm) tempered.
- B. ENCLOSURE:
1. Walls: Material will be curved safety glass in clear or tinted, 9/16" (14 mm) laminated.
 2. Ceiling: Material will be be flat, heat-strengthened safety glass in clear or tinted, 3/4" (19 mm) laminated.

2.04 MATERIALS, FINISHES AND FABRICATION

- A. EXTRUDED ALUMINUM: For door wing top and bottom rail sections shall be ASTM B221, 6063-T5 alloy and temper, anodized, Commercial grade.
- B. FINISHES (for all exposed metal surfaces): Shall be one of the following:
1. 204-R1 Clear: Arch. Class II Clear Anodized Coating, AA-MI2C22A31.
 2. 313-R1 Dark Bronze: Arch. Class II Anodized Coating, AA-MI2C22A32.
 3. 312-R1 Light Bronze: Arch. Class II Anodic Coating, AA-MI2C22A32.
 4. 315-R1 Black: Arch. Class II Anodic Coating, AA-MI2C22A32.
 5. Special Paint Coating: Color as selected.
 6. Cladding: Shall be stainless steel or muntz metal (brass alloy) in #8 mirror finish or #4 brushed satin finish.

PART III - EXECUTION

3.01 EXAMINATION

SITE VERIFICATION OF CONDITIONS: Installer must verify that base conditions previously installed under other sections are acceptable for product installation according to with manufacturer's instructions. Notify the Contractor in writing of conditions detrimental to the proper and timely completion of work. Do not start work until all negative conditions are corrected in a manner acceptable to the installer and manufacturer.

3.02 INSTALLATION

- A. **GENERAL:** Install door units plumb, level and true to line, without warp or rack of enclosure or sash with manufacturer's prescribed tolerances. Provide support and anchor in place.
- B. **DISSIMILAR MATERIALS:** Comply with AAMA 101, Appendix Dissimilar Materials by separating aluminum materials and other corrodible surfaces from sources of corrosion or electrolytic action contact points.
- C. **WEATHER-TIGHT CONSTRUCTION:** Install enclosure with joint filler or gaskets and sealant. Coordinate installation with wall flashings and other components of construction.

3.03 CLEANING, ADJUSTMENT AND PROTECTION

- A. **CLEANING:** After installation, installer to take following steps:
 - 1. Remove temporary coverings and protection of adjacent work areas.
 - 2. Remove construction debris from construction site and legally dispose of debris.
 - 3. Repair or replace damaged installed products.
 - 4. Clean product surfaces and lubricate operating equipment for optimum condition and safety.
- B. **ADJUSTMENT:** Installer to adjust door wing hangers for optimum condition and safety.
- C. **ADVISE CONTRACTOR:** of precautions required through the remainder of the construction period, to ensure that doors will be without damage or deterioration (other than normal weathering) at the time of acceptance.

END OF SECTION