HORTON AUTOMATICS - ARCHITECTURAL SPECIFICATIONS, 1/2008

ICU Bi-fold/Bi-Swing™
Manual Folding & Swinging Door System Intensive Care Unit, Patient Access

DIVISION 08 - OPENINGS
SECTION 08 42 43 – INTENSIVE CARE UNITS / CRITICAL CARE UNIT ENTRANCES

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 intensive care 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. Concrete: Division 03, applicable sections.
   2. Masonry: Division 04, applicable sections.
   3. Thermal and Moisture Protection: Division 07, applicable sections.
   5. Openings: Division 08, applicable sections.

1.02 REFERENCES

A. AMERICAN ARCHITECTURAL MANUFACTURERS ASSOCIATION (AAMA): 101 Appendix Dissimilar Materials.

B. AMERICAN NATIONAL STANDARDS INSTITUTE (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. NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) 101: Code for Safety to Life from Fire in Buildings & Structures.

E. THE ALUMINUM ASSOCIATION (AA): Aluminum Finishes Manual.

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 experienced (as determined by contractor) to perform work of this section who has specialized in the installation of work similar to that required for this project and who is acceptable to product manufacturer.

B. MANUFACTURER’S QUALIFICATIONS: Manufacturer to have minimum (5) five years successful experience in the fabrication of intensive care 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. Manufacturer's warranty is in addition to, and not a limitation of, other rights owner may have under Contract Documents.

B. DISTRIBUTOR'S WARRANTY: 1 year warranty: Labor & transportation charges for defective parts replacement.

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 AND DELIVERY: Comply with factory's ordering instructions and lead time requirements. Delivery shall be in factory's original, unopened, undamaged containers with identification labels intact.

B. STORAGE AND PROTECTION: 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 intensive care fold/swing door(s) of type(s) and size(s) specified on plans and door schedule.

2.02 EQUIPMENT

A. MANUFACTURED DOOR UNITS: Shall be manual Bi-fold/Bi-swing™ and include aluminum header with manual pivot and concealed double-acting closer, breakout/track mechanism, top roller guide, top pivot, bottom pivot, folding (hinged) door panels with fingerguards, swing door panel and jambs with fingerguards, Unit shall be a three panel configuration. One panel will be double-acting swing door and two will be folding panels. Folding panels can be configured to fold toward the interior or exterior.

B. HEADER: Shall be aluminum, 4" (102 mm) deep by 1 3/4" (44 mm) high.
   1. Swing-side portion of header shall enclose a double-acting closer with optional 90° Hold-open feature.
   2. Fold-side portion of header shall enclose a manual pivot.

C. DOOR PANELS: Shall be aluminum, 1-3/4" (44 mm) deep with narrow stile vertical and horizontal rails. Pivot rails shall have adjustable dual weather-stripping. Hinge points are protected with a 1" (25mm) Santoprene™ fingerguard for both seal and safety. Standard glazing prep to be for 1/4” (6 mm) glass.
   1. Folding panels: the folding action shall be accomplished with a top roller guide secured to the Strike-end door panel that slides in a track extruded as part of the breakout system. Folding panel closest to the jamb shall have pull plate located mounted on fold side. No bottom track shall be required.
      a. Emergency Egress: Unit can swing out (break out) 90° from any position of door's travel and requires no more than 50 lbf. (222 N) of force applied 1” from the edge of at the strike stile to open. Units are compliant with NFPA 101.
   2. Swing panel shall be double-acting swing to 90°.
   3. Door panel options:
      a. Pull handle, aluminum, 10” (254) high, on swing panel..
      b. 2 1/2” wide horizontal muntin (standard muntin bar) in lieu of push bar.
      c. Custom horizontal muntins from 1/2” to 10” wide.
      d. Custom bottom rails up to 6” wide.
      e. Prep for glazing 5/16" (16 mm) to 1" (25 mm) with 65 lb. (30 kg) weight limit per folding panel.

D. JAMBS/FRAME: Shall be aluminum. Jamb dimensions to be 1 3/4" (44 mm) deep by 4" (102 mm) wide. Optional transom of size and type indicated mounted on header.

2.03 MATERIALS, FINISHES AND FABRICATION

A. EXTRUDED ALUMINUM: ASTM B221, 6063-T5 alloy and temper, anodized:
   1. Structural Header Sections: Minimum 3/16" (5 mm) thickness.
   2. Structural Frame Sections: Minimum 1/8" (3 mm) thickness.
   3. Structural Panel Sections: Commercial grade.

B. FINISHES (for all exposed aluminum surfaces): Shall be one of the following:
   1. 204-R1 Clear: Arch. Class 2 Clear Anodized Coating, AA-MI2C22A31.
   2. 313-R1 Dark Bronze: Arch. Class 1 Anodized Coating, AA-MI2C22A44.
   3. 312-R1 Light Bronze: Arch. Class 1 Anodized Coating, AA-MI2C22A44.
   4. 315-R1 Black: Arch. Class 1l Anodized Coating, AA-MI2C22A44.
   5. Special Paint Coating: Color as selected.
   6. Clad with stainless steel or muntz metal (brass alloy): #7 or #4 finish.

C. PANEL CONSTRUCTION:
   1. Corner block type with 3/16” steel backup plate construction, mechanically secured with minimum of four hardened steel screws. Sash consists of snap-in glass stops, snap-in glazing beads and vinyl gaskets.
   2. Weatherstripping material captured in extruded aluminum door panel. Door nosing weatherstrip to be spring-loaded adjustable astragal type. Surface applied self-adhesive weatherstripping not acceptable.
   3. Panels to be supplied with adjustable glass setting block to allow for adjusting of door to meet site conditions eliminating the need for additional shims.

D. FRAME CONSTRUCTION: Butt joints, mechanically secured by means of screws & formed aluminum brackets.

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 frames 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 header and framing members in a bed of sealant or with joint filler or gaskets. 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. 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.

Note: Horton Automatics reserves the right to make product improvements and change specifications without notice.

END OF SECTION