

Intensive/Critical Care Unit Sliding Doors

Section revised and reissued by Addendum No. A-02

PART 1 - GENERAL

1.1 Summary

- .1 Section includes:
 - .1 D02; single slide, automatic sliding door, smoke barrier type.

1.2 Administrative Requirements

- .1 Conduct a pre-installation meeting in accordance with Section 01 31 19.

1.3 Submittals

- .1 Submit required submittals in accordance with Section 01 33 00.
- .2 *Product* data sheets:
 - .1 Submit manufacturer's *Product* data sheets for *Products* proposed for use in the work of this section.
- .3 Shop drawings:
 - .1 Submit engineered shop drawings.
 - .2 Clearly indicate each type of frame and screen, extrusion profiles, method of assembly, section and hardware reinforcement and mounting plates, locations of exposed fasteners, finishes, glazing systems, glass type, accessories, and as required to completely represent the proposed door system.
- .4 Samples:
 - .1 Submit samples in accordance with Section 01 33 00.
 - .2 Submit samples of colour and finish prepared as specified on respective metal components.
 - .3 Identify samples as to treatment, thickness, alloy, framing composition, colour, manufacture, performance standard and portion of the work to which they apply.
 - .4 Fabrication shall not proceed without written acceptance of samples from *Consultant*.

1.4 Closeout Submittals

- .1 Submit closeout submittals in accordance with Section 01 78 00.
- .2 Operation and maintenance instructions:
 - .1 Submit manufacturer's operation and maintenance instructions for incorporation into the operation and maintenance manuals.

1.5 Quality Assurance

- .1 Qualifications:
 - .1 Execute the work of this section using workers skilled in the respective duties for which they are employed, and with minimum 3 years' experience in application of *Products*, systems, and assemblies specified.

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1.6 Warranty

- .1 Warrant work of this section in accordance with Section 01 78 36.
- .2 Extended warranty:
 - .1 System:
 - .1 Labour, materials, and workmanship for work of this section.
 - .2 The warranty is a total system warranty, and includes hardware, sealants, hanging and fitting, and finishing.
 - .3 Duration: 2 years.
 - .2 Glass and glazing: in accordance with Section 08 80 00.

PART 2 - PRODUCTS

2.1 Performance/Design Requirements

- .1 Design light gauge aluminum *Products* to CSA CAN3-S157-M83.
- .2 Design mullions for maximum deflection of 1/175.
- .3 Air infiltration rating: Maximum leakage rate at ambient temperature shall not exceed 5.2 L/s/m² of opening at 747 Pa (1 cfm/ft² of opening at 0.3" of water). At 400°F the rate of leakage shall not exceed 5.2 L/s/m² of opening at 747 Pa (1 cfm/ft² of opening at 0.3" of water).

2.2 Materials

- .1 Framing: Extruded aluminum, Aluminum Association alloy AA6063-T6 alloy and temper, to the following minimum thicknesses:
 - .1 Structural header sections: 5 mm (3/16").
 - .2 Structural frame sections: 3 mm (1/8").
 - .3 Structural panel sections: Commercial grade.
- .2 Glass: Tempered glass in accordance with Section 08 80 00.
 - .1 Thickness: 12 mm (1/2").
- .3 Glazing materials: In accordance with Section 08 80 00.
- .4 Weatherstripping: durable, non-absorbing material resistant to deterioration by aging and weathering.
- .5 Frame sealant: One component elastomeric chemical curing, compatible with insulated glass unit sealants, to ASTM C920-18.
- .6 Fasteners; aluminum framing: Commercial Quality steel screws, zinc plated and case hardened.
- .7 Fasteners; concrete/masonry: Commercial Quality zinc plated steel concrete screws or bolts.
- .8 Galvanic/dissimilar metal corrosion inhibitor (isolation coating): in accordance with Section 01 73 00 and written requirements of manufacturers of metals affected.

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- .9 Sealing of perimeter frame joints: in accordance with Section 07 92 00.

2.3 Finishes

- .1 Exposed aluminum surfaces; where indicated: Mill finished aluminum.
- .2 Exposed aluminum surfaces; anodized to AAMA 611-24:
- .1 Clear anodized to AA Designation AA-M12C22A31.

2.4 Door Units

- .1 Automatic sliding entrance doors shall include operator, header and track, jambs, sliding door panel, and sidelite.
- .2 Mounting:
- .1 Within rough opening with sliding panel sliding along sidelite.
- .3 Units will be single-slide.
- .4 Acceptable *Products*; 'Profiler-ICU Smoke Rated' as manufactured by Horton Automatics, types as follows:
- ~~.1 Type 110: Slide-swing panel shall slide along exterior side of fixed sidelite. Non-threshold application.~~
- .5 Header: Shall be aluminum with removable face plate. Transom of size and type indicated mounted on header. Header size to be:
- .1 102 mm (4") deep by 63 mm (2-1/2") high.
- .6 Header track: Shall be aluminum, nylon covered and replaceable. Rollers will be steel, high quality ball bearing wheels 32 mm (1-1/4") diameter. Anti-Derailing shall be accomplished by means of a continuous aluminum extrusion full length of slide panel travel.
- .7 Sliding panels and sidelites:
- .1 Panel construction:
- .1 Corner block type with 4.8 mm (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. Gasketing material is high temperature silicone and is to be captured in extruded aluminum door panel. Floor Smoke Seal is high temperature brush. Seals shall be factory installed to maintain UL 1784-15 rating.
- .2 Slide-swing doors to be supplied with adjustable glass setting block to allow for adjusting of door to meet site conditions eliminating the need for additional shims.
- .2 Fabricate from aluminum, 44 mm (1-3/4") deep with narrow stile horizontal and vertical rails. Weather-stripping to be along perimeter of sliding panel and swingout sidelite. Concealed guides to stabilize bottom of sliding panel.

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- .3 Emergency egress: Slide-swing panels shall swing out 90° from any position of slide movement and require no more than 222 N (50 lbf) of force applied at the lock stile to open. Swing-slide panels and swing-out sidelites shall have torsion spring designed to re-close panel if pushed open in the direction of egress, and shall include intermediate horizontal rail. Breakout mechanism shall provide support across full width of the door, in normal operating mode. In breakout mode, torsion assembly shall support weight of the door to minimize drop during emergency egress. Units with emergency egress feature are UL listed as an exit way and are compliant with NFPA 101-2009.
- .8 Frames and jambs:
 - .1 Fabricated from aluminum, butt joints, neatly and mechanically secured by means of screws and formed aluminum corner brackets, dimensions as follows:
 - .1 44 mm (1-3/4") deep by 102 mm (4") wide.
- .9 Hardware: Positive latching shall be provided as follows:
 - .1 ~~Type 340~~—The slide-swing panel shall be provided with positive latch that will latch this panel in place when closed. A lever handle shall be provided on each side of the sliding panel to unlock the door. The swing-out sidelite shall be provided with positive latch that will latch this panel in place when closed. A lever handle shall be provided on exterior side of sidelite to unlock the panel.
- .10 Make allowances for deflection of structure and temperature movement. Ensure that structural loads are not transmitted to aluminum work.
- .11 Fit intersecting members to flush, hairline, and weather tight joints and mechanically fasten together.
- .12 Conceal fastenings from view, unless otherwise indicated.
- .13 Fabricate items fitting to the building from measurements taken on the *Work* as verified from the *Work* as built. Full responsibility for the proper coordination of the different components of the cladding and doors rests with this section.
- .14 Fabricate and assemble work of this section by skilled glazing installers. Do forming operations prior to finishing.

2.5 Fabrication

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PART 3- EXECUTION

3.1 Examination

- .1 Take dimensions at the *Place of the Work* to ensure that adjustments in fabrication or installation are incorporated, that allowance is made for possible deflection of structure at heads and that clearance to other constructions have been maintained.
- .2 Ensure that anchors and inserts, installed by others are adequate to meet specified requirements.

3.2 Installation

- .1 Install work plumb, square, level, free from warp, twist and superimposed loads.
- .2 Secure work in required position.
- .3 Install hardware in accordance with templates.
- .4 Adjust operable parts for correct function.
- .5 Install in accordance with the requirements of the building code.
- .6 Fasten jambs at 450 mm (18") o/c maximum spacing with corrosion resistant anchors, and aluminum anchor plates as required.
- .7 Explosive actuated or powder actuated fasteners will not be permitted.
- .8 *Provide* galvanic/dissimilar metal corrosion inhibitor (isolation coating) in accordance with Section 01 73 00 and written requirements of manufacturers of metals affected.

3.3 Glazing

- .1 Glaze aluminum doors with specified glazing tapes, blocks, and spacer shims in accordance with Section 08 80 00.

3.4 Sealant

- .1 Apply sealant between frame members, sills and adjacent construction as a part of the work of this section and in accordance with Section 07 92 00.

3.5 Field Quality Control

- .1 Conduct quality control in accordance with Section 01 45 00.
- .2 Manufacturer's field review to be in accordance with Section 01 45 00.

END OF SECTION