



® 4242 Baldwin Boulevard
Corpus Christi, Texas
USA 78405-3399
Tel: 800-531-3111, 361-888-5591
Fax: 800-531-3108, 361-888-6510
www.hortondoors.com
The Automatic Choice

ARCHITECTURAL SPECS

AUTOMATIC SLIDING DOORS

Elegant® Series 2500
All Glass Sliding Door System with
Electric Belt Drive Operator

A8e.1

Page 1 of 6, June 17

DIVISION 08 - OPENINGS **SECTION 08 42 29.23 SLIDING AUTOMATIC 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 automatic 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.
 - 6. Electrical: Division 26, applicable sections.

1.02 REFERENCES

- A. AMERICAN ARCHITECTURAL MANUFACTURERS ASSOCIATION (AAMA) 101: Appendix Dissimilar Materials.
- B. AMERICAN ASSOCIATION OF AUTOMATIC DOOR MANUFACTURERS (AAADM).
- C. AMERICAN ARCHITECTURAL MANUFACTURERS ASSOCIATION (AAMA) 1303.5: Voluntary Specifications for Forced-Entry Resistant Aluminum Sliding Glass Doors
- D. AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI):
 - 1. ANSI Z97.1: Safety Glazing Materials Used in Buildings - Methods of Test.
 - 2. ANSI A156.10 - 2011: For Power Operated Pedestrian Doors; Sliding Doors section.
 - 3. ANSI A156.5: Standard for Auxiliary Locks and Associated Products
- E. AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM);
 - 1. ASTM B221: Aluminum-Alloy Extruded Bars, Rods, Shapes and Tubes.
- F. BUILDING OFFICIALS AND CODE ADMINISTRATORS INTERNATIONAL (BOCA)
- G. INTERNATIONAL CONFERENCE OF BUILDING OFFICIALS / UNIFORM BUILDING CODE (ICBO/UBC)
- H. INTERNATIONAL CODE COUNCIL / INTERNATIONAL BUILDING CODE (ICC/IBC)
- I. NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) 101:
 - 1. NFPA 101: Code for Safety to Life from Fire in Buildings & Structures.
 - 2. NFPA 70: National Electrical Code (NEC).
- J. THE ALUMINUM ASSOCIATION (AA) Aluminum Finishes Manual.



® 4242 Baldwin Boulevard
Corpus Christi, Texas
USA 78405-3399
Tel: 800-531-3111, 361-888-5591
Fax: 800-531-3108, 361-888-6510
www.hortondoors.com
The Automatic Choice

ARCHITECTURAL SPECS

AUTOMATIC SLIDING DOORS

Elegant® Series 2500
All Glass Sliding Door System with
Electric Belt Drive Operator

A8e.2

Page 2 of 6, June 17

K. UNDERWRITERS LABORATORY, INC. (USA & CANADA) UL 325: Electrical Door, Drapery, Gate, Louver, and Window Operators and Systems.

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. CLOSEOUT SUBMITTALS: Submit the following:
 - 1. Owner's Manual.
 - 2. Warranty document as specified herein.
 - 3. AAADM inspection compliance form completed and signed by certified AAADM inspector prior to doors being placed in operation as proof of compliance with ANSI A156.10 - 2011.

1.04 QUALITY ASSURANCE AND PERFORMANCE REQUIREMENTS

- A. INSTALLERS QUALIFICATIONS: Installer shall be factory trained, certified by AAADM, 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.
- C. CERTIFICATIONS: Automatic sliding door systems and options shall be factory certified to meet performance design criteria in accordance with the following standards:
 - 1. ANSI A156.10 - 2011: For Power Operated Pedestrian Doors; Sliding Doors section.
 - 2. NFPA 101: Code for Safety to Life from Fire in Buildings & Structures.
 - 3. UL 325: Electrical Door, Drapery, Gate, Louver, and Window Operators and Systems.
 - 4. BOCA: Means of Egress, Power Operated Doors
 - 5. ICBO/UBC: Egress Through Lobbies
 - 6. ICC/IBC: Egress Section
- D. FORCED ENTRY RESISTANCE: Sliding doors shall meet requirement of AAMA 1303.5.
- E. OPERATING RANGE: -30° F to 130° F (-34° C to 54° C)
- F. OPENING FORCE REQUIREMENTS FOR EMERGENCY EGRESS:
 - 1. Slide-swing panels shall require no more than 50 lbf. (222 N) of force to swing open. Slide-swing panels shall be capable of swinging out 90° from any position of slide movement.
 - 2. Slide-swing panels and swing-out sidelites shall have torsion spring designed to re-close panel if pushed open in the direction of egress.
 - 3. If power fails, slide panels can be manually slid open with no more than 15 lbf (222 N) of force.
 - 4. Units are UL listed as an exit way and are compliant with NFPA 101.
- G. CLOSING FORCE REQUIREMENTS: Maximum force required to prevent sliding panel from closing = 28 lbf. (124.5 N) Adjustable Reversing Circuit will reopen door unit if closing path is obstructed.
- H. HEADER CAPACITY: Header shall be capable of supporting:
 - 1. Biparting: Up to 300 lbs. (136 kg) per slide panel over spans up to 14'-0" (4280mm) without intermediate supports.



® 4242 Baldwin Boulevard
Corpus Christi, Texas
USA 78405-3399
Tel: 800-531-3111, 361-888-5591
Fax: 800-531-3108, 361-888-6510
www.hortondoors.com
The Automatic Choice

ARCHITECTURAL SPECS

AUTOMATIC SLIDING DOORS

Elegant® Series 2500
All Glass Sliding Door System with
Electric Belt Drive Operator

A8e.3

Page 3 of 6, June 17

2. Single Slide: Up to 500 lbs. (227 kg) per slide panel over spans up to 9'-0" (2743mm) without intermediate supports

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: One 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 automatic sliding door(s) of type(s) and size(s) specified on plans and door schedule.

2.02 EQUIPMENT

- A. MANUFACTURED DOOR UNITS: Shall include operator, header with roller track, carrier assemblies, framing jambs, sliding door panel(s), sidelite(s), activation, safety devices and accessories required for complete installation.
 1. Configuration: Single Slide or Biparting
 2. Mounting Type: Perimeter mounted within rough opening with sliding panel(s) sliding along sidelite.
 3. Door Type:
 - a. Type 010: Sliding panel(s) 'X' shall slide along interior side.
 - b. Type 110: Slide-swing panel(s) 'SX' shall slide along exterior side.
 - c. Type 310: Slide-swing panel(s) 'SX' shall slide along interior side. Unit has Swing-out sidelite 'SO'.
- B. OPERATOR: The Electric Operating Mechanism shall be HD-Slide® Series 2001 Belt Drive. Maximum current draw shall not exceed 3.15 amps. The heavy duty operator shall be mounted and concealed within the header.
 1. Operating force shall be accomplished through a 1/8 HP DC permanent magnet motor with heavy duty worm gear transmission and 1800 RPM working with reinforced drive belt, attached 1/4" thick steel door hangers, and idler pulley (1/4 HP motor required for door panels weighing 500 lbs). Drive belt to be steel reinforced nylon, 1" (25.4 mm) wide. Idler pulley to be reinforced, metallic material.
 2. Master Control shall be 16 bit microprocessor controller with dual on-board seven-segment alphanumeric diagnostic display and position encoder. The encoder shall monitor revolutions of the operator shaft and send



® 4242 Baldwin Boulevard
Corpus Christi, Texas
USA 78405-3399
Tel: 800-531-3111, 361-888-5591
Fax: 800-531-3108, 361-888-6510
www.hortondoors.com
The Automatic Choice

ARCHITECTURAL SPECS

AUTOMATIC SLIDING DOORS

Elegant® Series 2500
All Glass Sliding Door System with
Electric Belt Drive Operator

A8e.4

Page 4 of 6, June 17

signals to microprocessor controller to define door position and speed. The control shall have minimum of 28 programmable parameters including the following functions as required by ANSI A156.10 - 2011:

- a. Adjustable opening and closing speeds.
 - b. Adjustable back-check and latching.
 - c. Adjustable braking.
 - d. Adjustable hold-open time between 1 to 30 seconds.
 - e. Adjustable Reversing Circuit will reopen door unit if closing path is obstructed.
 - f. Separate day and night modes of operation with security over-ride.
3. Finger Safety: When unit slides open, strike rail of sliding panel will stop short of adjacent sidelite; resulting opening is net slide.
4. On/Off Switch shall be supplied. When switched OFF, unit reverts to free manual operation (likewise during electrical power failure).

C. SECURITY AND SAFETY POWER FAIL OPTIONS:

1. Automatic lock: Automatically locks slide function of door when in closed position. Additional power supply for autolock not acceptable.
 - a. Autolock Fail Secure: If power fails the lock engages.
 - b. Autolock Fail Safe: If power fails the lock disengages.
2. Monitored Power Fail Options (battery back-up):
 - a. Software Selectable Power Fail Open: If power fails the door slides open.
 - b. Software Selectable Power Fail Close: If power fails the door slides closed.

D. HD-SLIDE® HEADER: Shall be 6" (152 mm) deep by 8" (203 mm) high, heavy duty aluminum construction with removable face plate and extruded support brackets for dead load and lateral strength.

E. CARRIER ASSEMBLIES AND HEADER ROLLER TRACK: Carrier assemblies shall support door panels with minimum four rollers per panel. Rollers will be non-metallic high quality ball bearing wheels 2" (51 mm) diameter. Anti-Derailing shall be accomplished by means of a continuous aluminum extrusion full length of slide panel travel. Overhead header roller track shall be continuous aluminum and replaceable.

F. SLIDING PANEL(S) AND SIDELITE(S): Shall be 1/2" (13 mm) thick tempered glass with polished vertical edges mounted in top and bottom horizontal aluminum rails. Weather-stripping retained in top and bottom rails and in clear acrylic extrusions mounted along vertical edges of sliding glass panel.

1. Optional extra wide fixed sidelite(s) of size and type indicated.
2. Optional Recessed sidelite and track and non-threshold application.

G. BREAKOUT PANELS: Slide-swing panels can swing out 90° from any position of slide movement and require no more than 50 lbf. (222 N) of force applied at the lock stile to open. Slide-swing panels shall utilize spring loaded ball detent.

1. Slide-swing panels and swing-out sidelites shall have torsion spring designed to re-close panel if pushed open in the direction of egress.
2. 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.
3. Units with breakout feature are UL listed as an exit away and are compliant with NFPA 101.

H. JAMBS/FRAME: Shall be aluminum. Jamb dimensions to be 1 3/4" (44mm) deep by 4 1/2" (114mm) wide. Optional 6" (152mm) wide with maximum height: 8'-8. Optional transom of size and type indicated, mounted on header.

I. THRESHOLD: Shall be aluminum, 1/2" (25 mm) tall by 4" (102 mm) wide. Optional 7" (178 mm) wide.



® 4242 Baldwin Boulevard
Corpus Christi, Texas
USA 78405-3399
Tel: 800-531-3111, 361-888-5591
Fax: 800-531-3108, 361-888-6510
www.hortondoors.com
The Automatic Choice

ARCHITECTURAL SPECS

AUTOMATIC SLIDING DOORS

Elegant® Series 2500
All Glass Sliding Door System with
Electric Belt Drive Operator

A8e.5

Page 5 of 6, June 17

J. **HARDWARE:** Provided and installed in bottom rail shall be Maximum Security Lock with 31/32" (25 mm) backset and Two-point keyed 1 5/32" (29 mm) standard size cylinder. Deadlock dropbolt into threshold.

2.03 RELATED EQUIPMENT

BASIC SENSOR SYSTEM: Shall be 24 VDC, class II circuit and shall be adjusted and installed in compliance with ANSI A156.10. System shall include the following:

- A. **ACTIVATION SENSORS:** Microwave or active infrared sensor shall be header-mounted each side of door unit for detection of traffic from each direction.
- B. **THRESHOLD PRESENCE SENSORS:**
 - 1. Header mounted sensors shall provide active infrared presence detection on each side of the door unit and shall remain active throughout the entire door opening and closing cycle.
 - 2. Hold-open beams: Two pulsed infrared photoelectric beams to be mounted in vertical rails of sidelite or in jambs. Sender/receiver arrangement parallels door opening.

2.04 RELATED WORK REQUIREMENTS

- A. **ELECTRICAL:** 120 VAC, 50/60 cycle, single phase, dedicated 20 amp circuit per operator. Non-North American voltages can be 240 VAC 50/60 cycle (operator must have 240 volt power supply).
- B. **GLASS AND GLAZING:** Glass stops, glazing vinyl and setting blocks for field glazing as per Safety Glazing standard ANSI Z97.1.2. Contractor to coordinate acquisition of glass in thickness and type in accordance with manufacturer's recommendations for prescribed design.

2.05 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 Medium Bronze: Arch. Class 1 Anodized Coating, AA-MI2C22A44.
 - 4. 311-R1 Light Bronze: Arch. Class 1 Anodized Coating, AA-MI2C22A44.
 - 5. Champagne: Arch. Class 1 Anodized Coating, AA-MI2C22A44.
 - 6. Gold: Arch. Class 1 Anodized Coating, AA-MI2C22A44.
 - 7. Paint Coating:
 - a. Powder Coat: 100% V.O.C. free fluoropolymer resin-based. Standard and custom colors available including wood grain finish.
 - b. Wet Paint: Standard and custom colors available.
 - 8. Clad with stainless steel or muntz metal (brass alloy): #7 mirror finish or #4 brushed finish.
- C. **FRAME CONSTRUCTION:** Butt joints, mechanically secured with screws and formed alum. corner brackets.
- D. **OPERATOR CONSTRUCTION:** Electromechanical, modular type construction.



® 4242 Baldwin Boulevard
Corpus Christi, Texas
USA 78405-3399
Tel: 800-531-3111, 361-888-5591
Fax: 800-531-3108, 361-888-6510
www.hortondoors.com
The Automatic Choice

ARCHITECTURAL SPECS

AUTOMATIC SLIDING DOORS

Elegant® Series 2500
All Glass Sliding Door System with
Electric Belt Drive Operator

A8e.6

Page 6 of 6, June 17

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:** Installer shall be factory trained, certified by AAADM, and experienced to perform work of this section. 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.
- D. **ELECTRICAL:** General or electrical contractor to install all wiring to operator on a separate circuit breaker routed into header. General or electrical contractor also to install all necessary power and low voltage wiring for proper operation of associated security systems.

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:** AAADM certified technician to inspect and adjust installation. Comply with ANSI A156.10-2011.
- 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.

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

END OF SECTION