[Note: items in brackets [] are options or comments, to be deleted or to replace other text as necessary.]

SECTION 08160

ALUMINUM SLIDING GLASS DOORS

# PART 1 - GENERAL

1.1 SECTION INCLUDES

A. SGD-770 aluminum sliding door

1.2 RELATED SECTIONS

A. Section 07190 - Vapor and Air Barriers

B. Section 07900 - Joint Sealants

1.3 REFERENCES

1. AAMA - American Architectural Manufacturers Association
2. AAMA 103.3-93 “Procedural Guide for Aluminum and Vinyl Prime

Windows and Glass Doors, Insulating Storm Products for Windows and

Glass Doors and Thermal Performance of Windows and Glass Doors”

1. AAMA 1302.5-76, paragraph 3.1.1 Test A through 3.1.5 Test B “Voluntary

Specifications for Forced-Entry Resistant Aluminum Prime Windows”

B. ANSI - American National Standards Institute

1. ANSI/AAMA/NWWDA 101/I.S.2-97 "Voluntary Specification for Aluminum, Vinyl (PVC) and Wood Windows and Glass Doors"

C. ASTM - American Society for Testing and Materials

1. ASTM C 1036-91 "Standard Specification for Flat Glass"

2. ASTM E 283-96 "Standard Test Method for Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors"

3. ASTM E 330-96 "Standard Test Method for Structural Performance of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference"

4. ASTM E 331-96 "Standard Test Method for Water Penetration of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference"

1. ASTM E 547-96 "Standard Test Method for Water Penetration of Exterior Windows, Curtain Walls, and Doors by Cyclic Static Air Pressure Differential"
2. ASTM F 588-85 “Standard Test Methods for Resistance of Window

Assemblies to Forced Entry Excluding Glazing”

1. Florida Building Code
2. Protocol TAS-201 “Impact Test”
3. Protocol TAS -202 “Air, Water, Structural Test”
4. Protocol TAS -203 “Cyclic Wind Load Test”

1.4 SYSTEM DESCRIPTION

1. Configuration: aluminum sliding glass door, \_\_\_ panel, \_\_\_ track, by-pass [ [1] [2] pocket,] \_\_\_ moveable panels (X panels), [ \_\_\_ fixed panels (O panels)]. [Countertop unit.] [Box screen]. Standard stack [Reverse stack] [Double interlock].
2. Frame: \_\_\_\_\_ jamb depth.

1. Glazing: exterior glazed, with aluminum glazing bead, 7/16” laminated] [1” laminated insulating 1/4” glass, 5/16” air 7/16” laminated].
2. [ Muntins: double applied colonial configuration (raised ogee muntins) [custom: specify pattern and number of lites] [grids between glass (flat GBG)] [classic simulated divided lite (double ogee raised on exterior and interior with flat GBG) ]

## Performance Requirements

1. When tested according to Miami-Dade County test protocols, meets the design pressures stated in the Miami-Dade County Notice(s) of Acceptance for this product.
2. Air Infiltration: 0.3 (ft^3)/min/ft maximum when tested per ASTM E 283 at a 1.57 psf static air pressure difference.

3. Water Resistance: no water leakage when tested per ASTM E 547 at a static air pressure difference of 15% of the positive design pressure.

4. Uniform Load Structural: after testing per ASTM E 330 with a load equal to 150% of the positive design pressure, the unit must be operable, with a maximum permanent deformation in any member of 0.4% of the member’s length.

1.5 SUBMITTALS

A. Submit according to provisions of Section 01300.

B. Product Data: provide manufacturer's standard details, specifications and catalog information, recommendations, and installation instructions.

1. Shop Drawings: include unit elevations, details of all aluminum door sections, typical anchorage and installation details, type of glazing and door finish, and interface with other products.
2. Finish Samples: manufacturer’s available colors.
3. Unit Samples: if required by Architect, provide scaled-down size operating samples of each unit type, to demonstrate design and construction of the unit and hardware.

1.6 QUALITY ASSURANCE

A. Manufacturer Qualifications: minimum five (5) years documented experience in the manufacture of aluminum doors as required for this project.

B. Installer Qualifications: workmen properly trained and skilled in the installation and handling of aluminum doors as required for this project.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Store and handle doors and accessories in accordance with the manufacturer’s instructions.

B. Protect the products from damage due to the elements, construction traffic, or other hazards, from the time of arrival through the completion of the project.

1. WARRANTY
2. Manufacturer’s Warranty: Furnish manufacturer’s Limited Lifetime Warranty on aluminum windows and doors.

**PART 2 - PRODUCTS**

2.1 MANUFACTURERS

1. PGT Industries, Inc. Series SGD-770 WinGuard sliding glass door.

2.2 MATERIALS

1. Main frame members: extruded from 6063-T6 alloy, nominal 0.080” wall thickness.
2. Door panel members: extruded from 6063-T6 aluminum alloy, various wall thickness.

1. Hardware: two steel [stainless steel] roller wheels [two sets of tandem roller wheels (4 wheels total)]. One stainless steel and tin-lead alloy lever-locking latch assembly [metal handle.] [keyed mortise lock]
2. Weatherstripping: double weatherstripped around each panel and screen with .187” x .230” fin weatherstrip.

## Glazing attachment with silicone adhesive.

1. Screens: tubular aluminum frame with fiberglass screen cloth, and vinyl spline.
2. [Muntins: double applied colonial configuration (raised muntins)] [Simulated Divided Lites:double applied colonial configuration (raised external muntin with internal muntin)] [custom: specify pattern and number of lites] ]
3. ACCESSORIES

2.4 FABRICATION

1. Main frame and panel joints constructed with butt joint fit and assembled with phillips pan head screws.
2. Handle and lock shipped separately, all other hardware factory installed.
3. All door frames shipped KD (knocked down)

2.5 FINISHES

A. Colors: Selected by Architect from the following:

1. Standard coating color charts.

2. Custom coating color charts.

3. Color Name and Number:

1. AAMA 2603/2604 finish: Pretreatment plus thermosetting polyester powder coating.
2. AAMA 2605 Duranar (or comparable) finish - pretreatment plus 2 coat, 50 and 70 percent Kynar base options.
3. Clear Anodized Finish: NAAMM AA-C2241, 204R1 – class II – Minimum 0.4 mils, in natural aluminum color.
4. ETERNA® Wood grain finish: Pretreatment plus base powder coat with preprinted film transfer with organic photosensitive pigments and cellulose resin thermoprint.

**PART 3 - EXECUTION**

3.1 EXAMINATION

A. Verify that openings provide an acceptable anchoring surface, being clean, level, plumb, and dimensionally within the manufacturer’s tolerance of clearance spacing.

B. Correct unacceptable openings as required prior to installation.

3.2 INSTALLATION

A. Install doors and accessories in accordance with approved shop drawings and manufacturer's recommendations.

B. Securely fasten frames and jambs, and set units level, plumb, and square with respect to the surrounding structure, without twist or bow.

C. Place insulation materials around shim spaces as required to ensure continuity of the thermal barrier of the structure.

D. Apply caulk all around between the aluminum frame and the structure, ensuring that a continuous airtight and watertight perimeter seal results. Leave exposed surfaces clean and free of caulk.

3.3 ADJUSTING AND CLEANING

A. Ensure that units freely operate in a normal fashion without scraping or excessive noise, and that door slabs make proper contact with weatherstripping perimeter seal. Adjust frame, door slab, or hardware as needed.

B. Leave units thoroughly clean and free of dirt or other construction residue.

END OF SECTION