



SECTION 081116

ALUMINUM SLIDING GLASS DOORS

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. SGD-1000 Aluminum Sliding Door

1.2 RELATED SECTIONS

- A. Section 07190 - Vapor and Air Barriers
- B. Section 07900 - Joint Sealants

1.3 REFERENCES

- A. AAMA - American Architectural Manufacturers Association
 - 1. 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"
 - 2. 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"
5. ASTM E 547-96 "Standard Test Method for Water Penetration of Exterior Windows, Curtain Walls, and Doors by Cyclic Static Air Pressure Differential"
6. ASTM F 588-85 "Standard Test Methods for Resistance of Window Assemblies to Forced Entry Excluding Glazing"

D. Florida Building Code

1. Protocol TAS-201 "Impact Test"
2. Protocol TAS -202 "Air, Water, Structural Test"
3. Protocol TAS -203 "Cyclic Wind Load Test"

1.4 SYSTEM DESCRIPTION

Configuration: Aluminum sliding glass door, ___ panel, ___ track, _____
 _____ Configuration (X panels operable, O panels stationary), Standard
 stack [Reverse stack], Bypass [Interior pocket, Exterior pocket]. [Box screen].

A. Frame: [_____] jamb depth.

- | | |
|--------|---------|
| 1.2T | 4-1/2" |
| 2.2TWS | 5-3/4" |
| 3.3T | 6-7/8" |
| 4.4T | 9-1/4" |
| 5.5T | 11-5/8" |

C. Glazing: Interior glazed 9/16" laminated large missile [Exterior glazed 1-3/16" laminated insulated] glass.

D. [Muntins: Double applied colonial rased [ogee/flat] muntins (monolithic laminated glass) [Double applied colonial raised [ogee/flat] muntins with internal GBG (laminated insulated glass).

E. Performance Requirements:

1. When tested according to Florida Building Code test protocols for the High-Velocity Hurricane Zone (HVHZ), meets the design pressures stated in the Florida Product Approval for this product.
2. Air Infiltration: 0.3 (ft³)/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.
- C. 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.
- D. Finish Samples: manufacturer's available colors.
- E. 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: Company specializing in manufacturing products specified in this section with experience in fabrication and 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 manufacturer's unopened packaging until ready for installation.
- 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.

1.8 WARRANTY

- A. Provide Manufacturer's Warranty: Furnish a job-specific manufacturer's warranty on aluminum doors and/or windows specific to the products specified on project.
- B. Anodized aluminum to be warrantied for five years.

- C. Painted finishes to be warrantied for ten years.
- D. Laminated glass shall be warrantied against de-lamination for ten years.
[Insulated laminated glass shall be warrantied against de-lamination for ten years.
Sealed insulated glass unit shall be warrantied against seal failure for ten years.]

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturer: Velocity Impact Products, LLC., 2200 Ave L, West Palm Beach, FL 33404 Tel: 561-429-5740
Email: sales@velocityimpactproducts.com
Web: www.VelocityImpactProducts.com
- B. [Substitutions: Not permitted.]

2.2 MATERIALS

- A. Main frame members: extruded from 6063-T6 alloy. Various wall thickness.
- B. Sill members: extruded from 6063-T6 alloy. Various wall thickness.
- C. Door panel members: extruded from 6063-T6 aluminum alloy.
- D. Hardware: two sets of tandem roller wheels (4 wheels total) with polymer [stainless steel] rollers. Dual mortise lock with stainless steel hooks. One locking latch assembly, [metal handle], [keyed lock]
- E. Weatherstripping: double weatherstripped around each panel.
- F. Structural Glazing Sealant; structural silicone weatherproofing sealant; black.
- G. Screens: tubular aluminum frame with fiberglass screen cloth.
- H. [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]]
- I. [Reinforcing: extruded aluminum, to be concealed inside of vertical stile components.]

2.3 FABRICATION

- A. Main frame and panel joints constructed with butt joint fit and assembled with phillips pan head screws.
- B. Handle, thumb turn and accessories are shipped separately, all other hardware factory installed.
- C. All door frames shipped KD (knocked down).

2.4 FINISHES

- A. Colors: Selected from the following:
 - 1. Standard Color Charts.
 - 2. Custom Color Charts.
 - 3. Color Name and Number _____.
 - 4. Two-tone Color: _____ Exterior, _____ Interior.
- B. AAMA 2605 Duranar (or comparable) finish - pretreatment plus two-coat, 70 percent fluoropolymer.
- C. Anodized Finish: AAMA 611 Class 1 clear anodized.
- D. [Woodgrain 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. Separate dissimilar materials using nonconductive tape, bituminous paint, or other material not visible in the finished work.
- C. Securely fasten frames and jambs, and set units level, plumb, and square with respect to the surrounding structure, without twist or bow.
- D. Place insulated materials around shim spaces as required to ensure continuity of the thermal barrier of the structure.
- E. Apply sealant between the aluminum frame and the structure, ensuring that a continuous airtight and watertight perimeter seal results. Leave exposed surfaces clean and free of sealant.

3.3 ADJUSTING AND CLEANING

- A. Ensure that units freely operate in a normal fashion without scraping or excessive noise, and that door panels make proper contact with weatherstripping perimeter seal. Adjust frame, door panel, or hardware as needed.
- B. Remove temporary coverings and protection of adjacent work areas. Repair or replace damaged installed products. Clean installed products in accordance with manufacturer's instructions before owner's acceptance. Ensure product is free of dirt or other residue.
- C. Remove from project site and legally dispose of construction debris associated with this work.

3.4 PROTECTION

- A. Protect installed products until completion of project.
- B. Touch-up, repair or replace damaged products before substantial completion.

END OF SECTION