

# Product Standards and Guide Specifications Large Missile & Non-Impact Multi-Sliding Doors

# 5520 Series

(Thermally Broken)

1995 CSI SECTION 08160 SLIDING METAL DOORS 2004 CSI SECTION 08 32 13 SLIDING ALUMINUM - FRAMED GLASS DOOR (Window Walls/Ribbon Walls)

### Part 1 - General

#### 1.01 Summary

- Section includes:
  - Sliding Metal Doors 1
- Related Sections:

#### 1.02 References

- American Architectural Manufacturers Association (AAMA)
- American Society for Testing and Materials (ASTM)
- Aluminum Association (AA)

### 1.03 System Description

- General: In addition to requirements shown or specified, comply with:
  - Applicable provisions of AAMA Windows and Sliding Glass Doors Manual for design, materials, fabrication and installation of component parts.
- Design Requirements: Arcadia 5520 Series (Thermal) Multi-Sliding Doors.
- Performance Requirements: Each assembly shall be tested by a recognized testing laboratory or agency in accordance with specified test methods.
  - Conformance to & ASTM E1886/1996 (Large Missile)
    - Air Infiltration: Accordance with ASTM E 283.
    - Water Resistance: Accordance with ASTM E 331. h

#### 1.04 Quality Assurance

- Single Source Responsibility:
  - Obtain entrances, storefronts, ribbon walls, window walls, curtain walls, window systems, and finish through one source from a single manufacturer.
- Provide test reports from AAMA accredited laboratories certifying the performances as specified in 1.03.

### 1.05 Warranty

Warranted against failure and/or deterioration of metals due to manufacturing process for a period of two (2) year providing the product was installed in accordance with Arcadia's installation instructions and maintained in accordance with Arcadia's operations and maintenance manual.

# Part 2 - Products

# 2.01 Manufacturers

- A. Acceptable Manufacturers:
  - Arcadia Architectural Products, Inc., 2301 E Vernon Ave, Vernon, CA. 323-771-9819, fax 323-908-5451
- Acceptable Products:
  - Arcadia, 5520 Series (Large missile impact) Sliding Doors.

## 2.02 Materials

- All doors shall be fabricated from aluminum extrusions of 6063-T5 alloy and temper with a minimum wall thickness of 0.100" for the sill member and a minimum of 0.072" for all other members, including frame, sash and optional sash dividers. The aluminum shall be free of defects which impair strength and appearance.
- B. Component parts and accessories shall be of aluminum alloy, stainless steel or non-metallic materials, which will neither deteriorate nor promote corrosion.
- The thermal break barrier shall provide a thermal separation throughout the perimeter of the frame and sash. The thermal barrier shall be continuous and consist of a low thermal conductive material (polyurethane) poured into a special pocket in the aluminum extrusion that cures hard and strong. The underside of this pocket is then fully "de-bridged" or ripped so as to separate the connected aluminum wall leaving the polyurethane as the only bond between the outside and inside walls of the extrusion. In some instances the underside of this pocket is partially removed in a skipping pattern where every 18-20" of aluminum is fully debridged and in between, a 1-2" bridge in the aluminum remains. This is called "Skip Debridging". Either method constitutes a "Thermally Broken Product"

- Sill shall have a full-length roll-formed 0.025" thick, stainless steel track can
- Operable sash shall be equipped with two steel tandem ball bearing (all stainless steel tandem rollers and housings
- Locking device Adams-Rite maximum security lock MS+1950 fully stainless steel.
- Operating panels shall have an extruded 3/4" diameter 8" O.C. aluminum wire pull handle set in either clear or black anodize finish - other colors available.
- Fixed and/or sliding sash members shall be constructed to allow for either factory or field glazing. Sash glazing shall be accomplished using a "marine" style reusable, wraparound black flexible PVC or EPDM material per commercial standard CS230-60 without the need for separate glazing beads or putty style bedding compounds. The glazing channel shall be provided with the unit for either 1" insulating glass or 3/16" or 1/4" single glass.
- I. All assembly and installation screws shall be 18-8 or 410 stainless steel.
- Screens made of extruded aluminum frame and screened with 18 x 16 fiberglass mesh.

### 2.03 Finish

- Finish all exposed areas of aluminum and components as indicated (excluding hardware):
  - Clear Anodized Class I (215 R1-0.4-0.7 mils thick) meeting AAMA 611.89
- (or) Dark Bronze Anodized Class 1 (0.7 mils thick) meeting **AAMA 611 89**
- (or) Custom colors in a baked-on enamel or Duranar finish are also available - AAMA 2604.98 and AAMA 2605.98 subject to minimum square footage requirements.

# 2.04 Fabrication

- Standard frame is 4-1/4" depth.
  - Frame sections must have an integral extruded reglet at interior head, sill and jamb to accept an optional interior screen track.
- Jambs are milled and coped to the contour of the sill and head to ensure a weather resistant seal and must be back caulked.
- Frame corner joint shall be secured with two stainless steel screws which heads must be caulked.
- Profile of the fixed jamb and the latching jamb shall include two weatherstripped pockets to receive the fixed and latching stiles.
- Fixed and sliding panels shall have a nominal 1-1/2" depth and shall have overlapped joints of the mortise type to provide extra strength and interlocking mechanically fastened hairline
- Interlockers and latching stiles shall be heavy gauge tubular sections assuring precise alignment and to resist twisting under load conditions.

# Part 3 - Execution

# 3.01 Examinations

Examine conditions and verify substrate conditions are Α. acceptable for product installation.

# 3.02 Installation

Install in accordance with approved shop drawings and manufacturers installation instructions.

# 3.03 Field Quality Control

Contractor's responsibility to make all necessary final adjustments to attain normal operation of each doors its mechanical hardware

#### **END OF SECTION**