STORM FRONT™

Specifications

Hurricane Resistant Storefronts
- Series IG500
- Series IG600

SECTION 08 41 13 ALUMINUM STOREFRONTS

SERIES	FACE WIDTH	DEPTH	GLAZING INFILLS	GLAZING METHOD
IG500	2-1/2" (63.5)	5" (127)	9/16" (14)	Exterior
IG600	2-1/2" (63.5)	5" (127)	1-5/16" (33)	Exterior

I. GENERAL DESCRIPTION

Work Included: Furnish all necessary materials, labor, and equipment for the complete installation of aluminum framing as shown on the drawings and specified herein. *(Specifier Note: It is suggested that related items such as aluminum entrance doors, glass, and sealants be included whenever possible).*

Work Not Included: Structural support of the framing system, interior closures, trim. (Specifier list other exclusions). Related Work Specified Elsewhere: *(Specifier list).*

QUALITY ASSURANCE

Drawings and specifications are based on the Series *(Specify)* IG500 / IG600 system as manufactured by U.S. Aluminum. Whenever substitute products are to be considered, supporting technical literature, samples, drawings, and performance data must be submitted 10 days prior to bid in order to make a valid comparison of the products involved. Test reports certified by an independent test laboratory must be made available upon request.

PERFORMANCE REQUIREMENTS

Air Infiltration: Shall be tested in accordance with ASTM E 283-91. Infiltration shall not exceed:

Dade County Protocol TAS 202-94
- IG500 Storefront - 1.00 cfm/ft² @ 6.24 psf = (5.08 L/s/m²)
- IG500 Pair of Doors - 1.00 cfm/ft2 @ 6.24 psf = (6.10 L/s/m²)

Outside Dade County
- IG500 / IG600 Storefront - 1.00 cfm/ft2 @ 6.24 psf = (5.08 L/s/m²)
- IG500 / IG600 Pair of Doors - 1.00 cfm/ft² @ 6.24 psf = (5.08 L/s/m²)

Water Infiltration: Shall be tested in accordance with ASTM E 331-93. No water penetration at test pressure of:

Dade County Protocol TAS 202-94
- IG500 Storefront - 12 psf
- IG500 Pair of Doors - 12 psf (Water resistant threshold)

Outside Dade County
- IG500 / IG600 Storefront - 12 psf
- IG500 / IG600 Pair of Doors - 12 psf (Water resistant threshold)

Structural Performance: Shall be tested in accordance with ASTM 330-96 and based on:
- Maximum deflection of L/175 of the span. 3/4" (19.1) max.
- Allowable stress with a safety factor of 1.65. The system shall perform to this criteria under a windload of (Specify) psf

Dade County Protocol TAS 220-94
- IG500 Storefront
  - Design 65 psf (159 mph)
  - Structural +/- 97.5 psf (195 mph)
- IG500 Pair of Doors
  - Design 65 psf (159 mph)
  - Structural +/- 97.5 psf (195 mph)

Outside Dade County
- IG500 Storefront
  - Design 65 psf (159 mph)
  - Structural +/- 97.5 psf (195 mph)
  - Design 75 psf (171 mph)
  - Structural +/- 112.5 psf (210 mph)
- IG500 Pair of Doors
  - Design 65 psf (159 mph)
  - Structural +/- 97.5 psf (195 mph)
  - Design 75 psf (171 mph)
  - Structural +/- 112.5 psf (210 mph)

Forced Entry Resistance: Shall be tested with a 300 lb. force applied to the active door panel simultaneously with a 150 lb. force applied in both perpendicular directions to the 300 lb. force.

Dade County Protocol TAS 220-94
- IG500 Pair of Doors

Outside Dade County
- IG500 / IG600 Pair of Doors

Large Missile Impact Test - Shall be tested in accordance with:

Dade County Protocol TAS 201-94 with a 9 lb. 2x4 traveling at 50 fps.

Dade County
- IG500 Storefront
- IG500 Pair of Doors

Outside Dade County
- IG500 / IG600 Storefront
- IG500 / IG600 Pair of Doors

Cycle Load Test - Shall be tested in accordance with:

Dade County Protocol TAS 201-94 for 9,000 cycles.

Dade County
- IG500 Storefront
- IG500 Pair of Doors
- IG500 / IG600 Storefront
- IG500 / IG600 Pair of Doors

II. PRODUCTS MATERIALS

Extrusions shall be 6063-T5 alloy and temper (ASTM B221 alloy T5 temper). Fasteners, where exposed, shall be aluminum, stainless steel or zinc plated steel in accordance with ASTM A 164. Perimeter anchors shall be aluminum or steel, providing the steel is properly isolated from the aluminum. Glazing gaskets shall be E.P.D.M. elastomeric extrusions.

FINISH

Aluminum extrusions shall be given a caustic etch followed by an anodic oxide treatment to obtain …*(Specify one of the following):*

_____#11 Clear anodic coating
_____#22 Dark Bronze anodic coating
_____#33 Black anodic coating

A Fluoropolymer paint coating conforming with the requirements of AAMA 2605. Color shall be *(Specify a U. S. Aluminum standard color).*

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SECTION 08 41 13 ALUMINUM STOREFRONTS

FABRICATION

The framing system shall provide for flush glazing on all sides with no projecting stops. Vertical and horizontal framing members shall have a nominal face dimension of 2-1/2" (63.5). Overall depth shall be 5" (127). Entrance framing members shall be compatible with glass framing in appearance. Provide for internal drainage of infiltrated water into an extruded aluminum subsill channel where it is drained to the exterior through weep slots.

GLAZING

Dade County

- IG500 Storefront - 9/16" (14) Heat strengthened with SentryGlas® Plus interlayer
- IG500 Pair of Doors - 9/16" (14) Heat strengthened with SentryGlas® Plus interlayer

Outside Dade County

- IG500 Storefront and IG500 Pair of Doors. Glazing must meet Impact and Cycle Testing requirements according to Local Building Codes.
- IG600 Storefront and IG600 Pair of Doors. 1-5/16" (33) Glazing must meet Impact and Cycle Testing requirements according to Local Building Codes.

SEALANTS

All metal-to-metal joints shall use DOW 795 Silicone. Door seal gaskets shall require small joint sealer.

III. EXECUTION INSTALLATION

All glass framing shall be set in correct locations as shown in the details and shall be level, square, plumb, and in alignment with other work in accordance with the manufacturer's installation instructions and approved shop drawings. All joints between framing and the building structure shall be sealed in order to secure a watertight installation.

PROTECTION AND CLEANING

After installation the General Contractor shall adequately protect exposed portions of aluminum surfaces from damage by grinding and polishing compounds, plaster, lime, acid, cement, or other contaminants. The General Contractor shall be responsible for final cleaning.

Project: Automotive Dealership, Atlanta, GA