

SECTION 08 41 13 - ALUMINUM-FRAMED ENTRANCES AND STOREFRONTS

PART 1 GENERAL

1.1 SUBMITTALS

- A. Action Submittals:
1. Shop Drawings: Illustrate products, installation, and relationship to adjacent construction.
 2. Product Data: Manufacturer's descriptive data and product attributes for entrances and storefronts.
 3. Samples: [Selection samples.] [Verification samples.]
- B. Informational Submittals:
1. Certificate of Compliance: Certification that installed products meet specified design and performance requirements.

1.2 SYSTEM DESCRIPTION

- A. Design Requirements:
1. Design wind pressure: In accordance with [ASCE 7.] [Building Code.] [____.]
 2. Movement: Ambient temperature range of [120] [____] degrees F and a surface temperature range of [160] [____] degrees F.
 3. System design to be performed by qualified professional engineer licensed in State of [____].
- B. Performance Requirements:
1. Air infiltration:
 - a. Entrances: Maximum [1.0] [____] CFM for 3'-0" x 7'-0" door or 6'-0" x 7'-0" pair of doors, tested to ASTM E283/E283M at static pressure differential of [1.57] [____] PSF.
 - b. Storefront: Maximum [0.06] [____] CFM per square foot, tested to ASTM E283/E283M at static pressure differential of [6.2] [____] PSF.
 2. Water infiltration; storefront: No uncontrolled water leakage, tested to ASTM E331 at minimum static air pressure differential of [10.0] [____] PSF.
 3. Uniform structural loading: No glass breakage or permanent damage to fasteners or system components, tested to ASTM E330/E330M at [1.5] [____] times design pressure.
 4. Thermal transmittance due to conduction (Uc): Maximum [0.60] [____] tested to AAMA 1503 on two 6'-0" x 6'-0" units with 1 inch thick clear insulating glass.
 5. Condensation resistance factor (CRF): Minimum [50.] [____] tested to AAMA 1503.

1.3 QUALITY ASSURANCE

- A. Installer Qualifications: Firm specializing in work of this Section with minimum [2] [____] years' experience.
- B. Bullet Resistant Entrances and Storefront: Ballistic Level [1.] [2.] [3.] [4.] [5.] [6.] [7.] [8.] tested to UL 752.

1.4 WARRANTIES

- A. Manufacturer's [2] [____] year warranty against water leakage through storefront system.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Following manufacturers are acceptable if products meet specified requirements:
1. Standard entrances and storefront:
 - a. EFCO. www.efco.com

Commented [ZD1]: Utilize this section to specify aluminum-framed glazed entrance doors and storefronts.

Aluminum-framed curtain walls are specified in SimpleSpecs Section 08 44 13 - Aluminum-Framed Curtain Walls.

Aluminum framed entrances are typically available in narrow, medium, and wide stile configurations. Some manufacturers offer ultra-thin stiles and doors with heavier walls and corner construction for heavy use applications. In general, the wider the stiles the more traffic an entrance can withstand.

Aluminum storefronts are available in a wide range of profiles, with center-glass, 1-3/4 x 4-1/2 and 2 x 4-1/2 inch being the most common. Almost all systems are flush glazed; there are no exposed glazing stops.

Aluminum storefronts are suitable for use primarily in low-rise buildings. They are not engineered to withstand the wind loads that occur on mid- and high-rise structures. When used in hurricane zones internal steel reinforcing or thickened walls of framing members may be required.

Aluminum storefronts are available either thermally broken or non-broken. For exterior locations, the applicable energy code will dictate which must be used. Non-broken systems are also suitable for interior locations.

Finishes for exterior aluminum must provide resistance to weathering and ultraviolet degradation. Class II anodizing and lower quality painted coatings may not be suitable for exterior use.

Commented [ZD2]: Retain for bullet resistant entrances and storefront.

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- A. Anchors: Series 316 stainless steel.
- B. Glass and Glazing Accessories: Specified in Section 08 80 00.

2.4 FABRICATION

- A. Entrances Doors: Narrow stile, nominal [2] [] inch vertical stiles and top rail and [4] [] inch bottom rail [, thermally broken].

**** OR ****

- B. Entrances Doors: Medium stile, nominal [3-1/2] [] inch vertical stiles and top rail and [6-1/2] [] inch bottom rail [, thermally broken].

**** OR ****

- C. Entrances Doors: Wide stile, nominal [5] [] inch vertical stiles and top rail and [6-1/2] [] inch bottom rail [, thermally broken].

- D. Storefront: Flush glazed, designed to receive [1/4] [1] [] inch glass by means of elastomeric gaskets; [1-3/4] [2] [] inch face width x [4-1/2] [] inch depth, [front] [center] [back] [multi-plane] glass application [, thermally broken].

2.5 FINISHES

- A. Aluminum: AAMA 611, Architectural Class I anodized, [clear.] [light bronze.] [medium bronze.] [dark bronze.] [black.]

Commented [ZD11]: Retain for an anodized finish.

**** OR ****

- B. Aluminum: AAMA 2605, fluoropolymer coating, minimum 70 percent PVDF resins, [] [custom] color [to be selected from manufacturer's full color range].

Commented [ZD12]: Retain for a high-performance PVDF coating system with excellent weatherability and color retention.

**** OR ****

- C. Aluminum: AAMA 2604, fluoropolymer coating, minimum 50 percent PVDF resins, [] [custom] color [to be selected from manufacturer's full color range].

Commented [ZD13]: Retain for an intermediate PVDF coating system with good weatherability and color retention.

- D. Ferrous Metals: [Hot dip galvanized.] [Prime painted.]

PART 3 EXECUTION

3.1 INSTALLATION

- A. Install in accordance with manufacturer's instructions and approved Shop Drawings.
- B. Install glass as specified in Section 08 80 00.
- C. Installation Tolerances:
 1. Maximum variation from plumb or level: [1/8] [] inch in 3 feet or [1/4] [] inch in any 10 feet, whichever is less.
 2. Maximum misalignment of members abutting end to end: [1/32] [] inch.

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3. Sealant space between system and adjacent construction: $\frac{1}{2}$ [] inch plus or minus $\frac{1}{8}$ [] inch.

END OF SECTION

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