

08 40 00 – Aluminum Entrances, Storefront & Curtain Wall

DIVISION 8 - Openings



STATEMENT OF PURPOSE & BACKGROUND

- Scope:
 - Furnishing and installing aluminum thermally-broken entrances, storefront and curtain wall systems with hardware and related components.
- Statement of goals:
 - Entrances, Storefront and Curtain Wall systems shall be thermally-broken, and be glazed with insulated glass with low-emissivity coating to meet district standards for energy efficiency.
 - Match character and style of existing building as appropriate.
- Revision history of section:
 - 11/24/2015
 - 03/02/2018
 - 05/07/2021

SELECTION AND APPLICATION CRITERIA

Application	Selection	Notes
Entrance Doors	Wide Stile, 5" nom. width to accept panic hardware without overhanging stile	5" top rail 4"-6" mid rail 10" bottom rail
Keyed Removable Mullions	Von Duprin, no substitutions	Refer to Hardware Section 08 71 00
Exterior Storefront Framing	Thermal barrier	
Interior Storefront Framing		
Insulated Spandrel Panels as occurs		Match storefront framing
Insulated Glass Spandrel panels		Refer to Glazing Section 08 80 00

OUTLINE SPECIFICATION

- Part 1 General
 - Performance Criteria
 - Provide products from a single manufacturer.
 - Warranty: Manufacturer to provide written warranty for repair or replacement of product failure in materials or factory workmanship for two (2) years from the date of Substantial Completion.
 - Special Finish Warranty: Manufacturer to provide written warranty for repair or replacement of aluminum that shows

evidence of deterioration of factory-applied finishes within ten (10) years for anodic finish from the date of Substantial Completion.

- Glass: Written warranty of thermal and physical integrity of insulating glass units for ten (10) years from date of Substantial Completion.
 - Thermal movement: Allow for thermal movements resulting from ambient temperature range of 120 degrees F.
 - Wind Loads: Provide capacity to withstand the following loadings without deformation and without deflection greater than 1/175 of span: Uniform pressure of 20 psf inward or outward.
 - Air Infiltration Rate: Tested in accordance with ASTM E283.
 - Water Infiltration Rate: Tested in accordance with ASTM E331.
- Part 2 Products
 - Acceptable Manufacturers:
 - Tubelite
 - Specialite
 - Oldcastle
 - Cronstroms (CMI)
 - Kawneer
 - Fabrication:
 - Weld in concealed locations to greatest extent possible.
 - Physical and thermal isolation of glazing from framing members
 - Conceal fasteners and anchors from view to greatest extent possible.
 - Frame reinforcement for door hardware:
 - Door closer reinforcement:
 - Provide 3/16" steel reinforcement plates or angle, within frame members at door heads, to run continuous full width of frame opening for door and which is full internal depth of frame.
 - Reinforcement to be used for anchorage of door closer or automatic operator and/or overhead stop/hold open device.
 - Mullion reinforcement: provide 3/16" thick steel reinforcement for mullions with double doors. Reinforcement plate to be centered and anchored within frame top jamb.
 - Protection at dissimilar materials: factory-apply an asphaltic type coating to steel reinforcing.
 - Glazing: Refer to Glazing Section 08 80 00.
 - Finishes: Anodized only, no painted finishes.
 - Clear Anodized
 - Dark Bronze Anodized
 - Thermally broken exterior framing; non-thermally broken interior framing.

- Hinges: New construction to use Butt ball bearing hinges only; 4 per door required.
 - Continuous hinges may be used in retrofit applications only. Pin and barrel, and Gear type are both acceptable in retrofit applications only.
 - All doors leading to exterior (exit doors) will be number-labeled on the interior as well as on the exterior side. The numbering sequence and number installation will be by Owner.
- Part 3 Execution
 - Per Consultant and / or manufacturer specification.

End of Section