Openings
Aluminum Entrances and Storefronts (08 41 13)
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Part 1 – General

- This section is in reference to the University standard for aluminum storefront framing for window walls and exterior manual-swing entrance doors and door-frame units.

Part 2 – Product

- Basis-of-Design Product: Subject to compliance with requirements, provide Vistawall 6"HP-175 1-3/4" x 6" system.
- Wall or comparable product by one of the following:
  - Kawneer North America; an Alcoa company.
  - TRACO
  - EFCO Corporation

Materials:

- Aluminum: Alloy and temper 6063-T5, as recommended by aluminum window manufacturer for strength, corrosion resistance, and application of required finish, but not less than 22,000psi (150 MPa) ultimate tensile strength, not less than 16000psi (11 OMPa) minimum yield strength, and not less than 0.062inch (1.6mm) thickness at any location for the main frame and sash members.
- Steel Reinforcement: Manufacturer's standard zinc-rich, corrosion-resistant primer, complying with SSPC- PS Guide No. 12.00; applied immediately after surface preparation and pretreatment. Select surface preparation methods according to recommendations in SSPC-SP COM and prepare surfaces according to applicable SSPC standard.
- Structural Shapes, Plates, and Bars: ASTM A 36/A 36M
- Cold-Rolled Sheet and Strip: ASTM A 1008/A 1008M
- Hot-Rolled Sheet and Strip: ASTM A 1011/A 1011 M

Framing Systems:

- Brackets and Reinforcements: Manufacturer's standard high-strength aluminum with non-staining, non-ferrous shims for aligning system components
- Fasteners and Accessories: Manufacturer's standard corrosion-resistant, non-staining, non-bleeding fasteners and accessories compatible with adjacent materials
- Concrete and Masonry Inserts: Hot-dip galvanized cast-iron, malleable-iron, or steel inserts, complying with ASTM A 123/A 123M or ASTM A 153/A 153M
- Framing System Gaskets and Sealants: Manufacturer's standard, recommended by manufacturer for joint type

Entrance Door Systems:

- Entrance Doors: Manufacturer's standard heavy-duty glazed entrance doors for manual-swing operation
- Door Construction: 2-inch (50.8-mm) overall thickness, with minimum 0.188-inch- (4.8-mm-) thick, extruded-aluminum tubular rail and stile members. Mechanically fasten corners with reinforcing brackets that are deeply penetrated and fillet welded or that incorporate concealed tie rods
- Thermal Construction: High-performance plastic connectors separate aluminum members exposed to the exterior from members exposed to the interior
- Door Design: Wide stile; 5-inch (127-mm) nominal width
- Accessible Doors: Smooth surfaced for width of door in area within 10 inches (255 mm) above floor or ground plane
• Glazing Stops and Gaskets: Snap-on, extruded-aluminum stops and preformed gaskets
• Provide nonremovable glazing stops on outside of door
• Entrance Door Hardware: As specified in Division 08 Section "Door Hardware"

Part 3 – Execution

• Form or extrude aluminum shapes before finishing.
• Weld in concealed locations to greatest extent possible to minimize distortion or discoloration of finish.
• Remove weld spatter and welding oxides from exposed surfaces by descaling or grinding.
• Fabricate components that, when assembled, have the following characteristics:
  o Profiles that are sharp, straight, and free of defects or deformations
  o Accurately fitted joints with ends coped or mitered
  o Means to drain water passing joints, condensation within framing members, and moisture migrating within the system to exterior
  o Physical and thermal isolation of glazing from framing members
  o Accommodations for thermal and mechanical movements of glazing and framing to maintain required glazing edge clearances
  o Fasteners, anchors, and connection devices that are concealed from view to greatest extent possible
• Mechanically Glazed Framing Members: Fabricate for flush glazing without projecting stops.
• Structural-Sealant-Glazed Framing Members: Include accommodations for using temporary support device to retain glazing in place while structural sealant cures.
• Entrance Door Frames: Reinforce as required to support loads imposed by door operation and for installing entrance door hardware.
  o Exterior Doors: Provide compression weather stripping at fixed stops, provide weather sweeps applied to door bottoms
  o Exterior Door Pairs: Provide sliding-type weather stripping retained in adjustable strip and mortised into door edge
  o Entrance Doors: Reinforce doors as required for installing entrance door hardware
  o Entrance Door Hardware Installation: Factory install entrance door hardware to the greatest extent possible. Cut, drill, and tap for factory-installed entrance door hardware before applying finishes.

Aluminum Finishes:
• Color Anodic Finish: AAMA 611, AA-M12C22A42/A44, Class I, 0.018 mm or thicker
• Color: Coronado "Suffolk white", semi-gloss, mix 22-99-7 unless otherwise specified in project manual