

## SECTION 084313 - STEEL FRAMED STOREFRONTS

### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. Section includes:
  - 1. Galvanized Steel-framed storefront, with vision glass.
  - 2. Galvanized Steel doors and frames.
- B. Related Sections:
  - 1. Section 08 80 00 - Glazing: -Glass and glazing accessories.
  - 2. Section 080671 - Door Hardware Schedule
  - 3. Section 087100 - Door Hardware

#### 1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings: Include plans, elevations, and sections showing locations and details of each new unit and its corresponding location in the building on annotated plans and elevations.
- C. Samples: For each exposed product and for each color and texture specified.
- D. Performance Requirements: Wind Loads, Water Penetration Resistance on Manufactured Assembly, Air Leakage Laboratory Test.

### PART 2 - PRODUCTS

#### 2.1 FRAMING FOR INSULATING GLAZING

- A. Flush Exterior-Set Style, Thermally-Broken:
  - 1. Basis of Design: French Steel Company; Tuscan Series/Classic Series, Thermally Broken.
  - 2. Vertical Mullion Dimensions: 1.25 inches wide by 3 inches deep.
  - 3. Muntin Dimensions: Standard 1" T-Bar STORM WINDOWS
    - a. System Three Resins, inc.
- B. Substitutions: See Section 01 60 00 - Product Requirements.

1. For any product not identified as "Basis of Design", submit information as specified for substitutions.

## 2.2 SWINGING DOORS

- A. Narrow Stile with Insulated Glazing:
  1. Basis of Design: French Steel Company; Tuscan Series, Thermally Broken
  2. Thickness: 1 inch
- B. Substitutions: See Section 01 60 00 - Product Requirements.
  1. For any product not identified as "Basis of Design", submit information as specified for substitutions.

## 2.3 STEEL-FRAMED STOREFRONT

- A. Steel-Framed Storefront: Pre-hung, Factory fabricated, Factory-glazed, Factory finished galvanized tubular steel framing members with high-density closed cell foam infill, and related flashings via Henry's FortiFlash System, anchorage and attachment devices.
  1. Glazing Rabbet: For 1 inch insulating glazing.
  2. Finish: 5-Layer Oven-Baked Fluorocarbon Paint Finish.
    - a. Factory finish all surfaces that will be exposed in completed assemblies.
    - b. Touch-up surfaces cut during fabrication so that no unfinished galvanized steel is visible in completed assemblies, including joint edges.
  3. Finish Color: Matte Black.
  4. Fabrication: Joints and corners flush, hairline, and weatherproof, accurately fitted and secured; prepared to receive anchors and hardware; fasteners and attachments concealed from view; reinforced as required for imposed loads.
  5. Construction: Eliminate noises caused by wind and thermal movement, prevent vibration harmonics, and prevent "stack effect" in internal spaces.
  6. System Internal Drainage: Drain to the exterior by means of a weep drainage network any water entering joints, condensation occurring in glazing channel, and migrating moisture occurring within system.
  7. Movement: Allow for movement between storefront and adjacent construction, without damage to components or deterioration of seals.
  8. Perimeter Clearance: Minimize space between framing members and adjacent construction while allowing expected movement.
  9. Air and Vapor Seal: Maintain continuous air barrier and vapor retarder throughout assembly, primarily in line with inside pane of glazing and inner sheet of infill panel and heel bead of glazing compound.
- B. Performance Requirements:
  1. Wind Loads: Design and size components to withstand the specified load requirements without damage or permanent set, when tested in accordance

with ASTM E330/E330M, using loads 1.5 times the design wind loads and 10 second duration of maximum load.

- a. Member Deflection: Limit member deflection to flexure limit of glass in any direction, with full recovery of glazing materials.
2. Water Penetration Resistance on Manufactured Assembly: No uncontrolled water on interior face, when tested in accordance with ASTM E331 at pressure differential of 8 psf.
3. Air Leakage Laboratory Test: Maximum of 0.06 cu ft/min sq ft of wall area, when tested in accordance with ASTM E283 at 6.27 psf pressure differential across assembly.

## 2.4 COMPONENTS

- A. Galvanized Steel Framing Members: Tubular steel sections, thermally broken with interior section insulated from exterior, drainage holes and internal weep drainage system.

Framing members for interior applications need not be thermally broken.

2.1. Glazing Stops: Sloped/Squared/Putty

- B. Glazing: As specified in Section 08 80 00.
- C. Swing Doors: Glazed galvanized steel.

1.      Finish: Same as storefront.

## 2.5 MATERIALS

- A. Galvanized Steel
- B. Fasteners: Stainless steel.
- C. Glazing Gaskets: Boot/Gasket Dry Glaze with Exterior Cap Bead to suit application to achieve weather, moisture, and air infiltration requirements.

## 2.6 FINISHES

- A. French Steel Oven-Baked 5-Layer Factory Finish, Applied to Zinc Coating:
  1. Fluorocarbon Primer,
  2. Fluorocarbon Paint System: Two-component system consisting of a base and hardener.
    - a. **\*\*Base Component:\*\*** Three-Layer Fluoropolymer resin (PVDF), pigments, solvents, additives.
    - b. **\*\*Hardener Component:\*\*** Isocyanate hardener.

3. Fluorocarbon Clear Coat.

B. Color: Matte Black.

C. Touch-Up Materials: As recommended by coating manufacturer for field application.

## 2.7 HARDWARE

A. See Hardware Set: 1.0 in Specification Section 080671.

B. For each door, include weatherstripping, sill sweep strip, and threshold. Prepare doors and frames for hardware specified and coordinate with Electronic Operation.

Other Door Hardware: Storefront manufacturer's standard type to suit application.

For each door, include butt hinges, pivots, push handle, pull handle, exit device, narrow stile handle latch, and closer.

END OF SECTION 084313