SECTION 08 41 13 - ALUMINUM-FRAMED ENTRANCES AND STOREFRONTS

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes:

1. Aluminum-framed storefronts with glazing retained mechanically with gaskets on four sides.
   a. Interior storefront and entrances for the following areas:

      1) Interior Liquor Store doors.

1.2 SUBMITTALS

A. Product Data: For each type of product indicated.

B. Shop Drawings: Include plans, elevations, sections, details, and attachments to other work.

C. Samples: For each exposed finish. Provide minimum 3-inch (76.2-mm) by 5-inch (127-mm) color sample applied to aluminum sheet of same gage as specified herein.

1.3 QUALITY ASSURANCE

A. Installer Qualifications: Acceptable to manufacturer and capable of preparation of data for aluminum-framed systems including Shop Drawings based on testing and engineering analysis of manufacturer's standard units in assemblies similar to those indicated for this Project.

B. Modification of Details: Drawings are based on one manufacturer's standard aluminum system. Other standard system of equivalent nature are acceptable when differences do not materially detract from design concept or intended performances as judged solely by Owner Representative.

1.4 WARRANTY

A. Warranty information for aluminum-framed entrances and storefronts is specified in Division 01 Section "Product Warranties."

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Manufacturers:

1. EFCO Corporation
2. Kawneer North America.
3. Oldcastle BuildingEnvelope
4. Tubelite, Inc.
5. YKK AP America Inc.

2.2 MATERIALS

A. Aluminum: Alloy and temper recommended by manufacturer for type of use and finish indicated.

1. Sheet and Plate: ASTM B 209 (ASTM B 209M).
2. Extruded Bars, Rods, Profiles, and Tubes: ASTM B 221 (ASTM B 221M).
3. Extruded Structural Pipe and Tubes: ASTM B 429.
4. Structural Profiles: ASTM B 308/B 308M.

2.3 FRAMING

A. Framing Members: Manufacturer's standard extruded-aluminum framing members of thickness required and reinforced as required to support imposed loads.

1. Construction: nonthermal (interior).
2. Glazing System: Retained mechanically with gaskets on four sides with snap-on retainers without visible screws.
3. Glazing Plane: Center.
4. Fabrication Method: Field-fabricated stick system.
5. Frame Sizes: As detailed on Drawings or if not detailed, as follows:

    a. Depth: 4-1/2 inches (114.3 mm).
    b. Sightline: 2 inches (50.8 mm) sightline.

2.4 GLAZING

A. Glazing: As specified in Division 8 Section "Glazing."

B. Glazing Gaskets: Manufacturer's standard compression types, replaceable, molded or extruded, that maintain uniform pressure and watertight seal.

C. Spacers and Setting Blocks: Manufacturer's standard elastomeric types.

2.5 DOORS

A. Doors: Manufacturer's standard glazed doors, for manual swing operation.

1. Door Construction: 1-3/4-inch (44.5-mm) overall thickness, with minimum 0.125-inch-(3.2-mm-) thick, extruded-aluminum tubular rail and stile members. Mechanically fasten corners with reinforcing brackets that are deep penetration and fillet welded or that incorporate concealed tie rods.

2. Door Design
   a. Interior Doors: Medium stile; 3-1/2-inch (88.9-mm) nominal width.
3. Glazing to be full height unless otherwise specified on the door schedule.
4. Glazing Stops and Gaskets: Snap-on, extruded-aluminum stops and preformed gaskets.

2.6 DOOR HARDWARE

A. General: Provide the following swinging door hardware in sizes and types recommended by entrance system and hardware manufacturers for entrances and uses indicated.

1. Interior Swinging Doors:

   a. Offset-Pivot Hinges: BHMA A156.4, Grade 1; Door manufacturer's standard heavy duty top, bottom, and intermediate offset pivots.
   b. Closers: BHMA A156.4, Grade 1, with accessories required for a complete installation, sized as required by door size.
   c. Push/Pull: 1-inch (25.4-mm) diameter pull with 9-inch (228.6-mm) o.c. mounting, both sides as standard with door manufacturer.
   d. Door Gasketing: BHMA A156.22; air leakage not to exceed 0.50 cfm per foot (0.000774 cu. m/s per m) of crack length as tested according to ASTM E 283; with resilient or flexible seal strips that are easily replaceable and readily available from stocks maintained by manufacturer.
   e. Finishes: As specified in Division 01 Section "Exterior Finishes and Colors" or in Hardware Schedule.

2.7 ALUMINUM FINISHES

A. Anodized Finish: AAMA 611, AA-M12C22A41 or AA-M12C22A42/A44, Class I, 0.018 mm or thicker.

1. Colors: As specified in Division 01 Sections "Décor Interior Finishes and Colors" and "Exterior Finishes and Colors."

PART 3 - EXECUTION

3.1 INSTALLATION

A. General:

1. Fit joints to produce hairline joints free of burrs and distortion.
2. Rigidly secure nonmovement joints.
3. Install anchors with separators and isolators to prevent metal corrosion and electrolytic deterioration.
4. Seal joints watertight, unless otherwise indicated.

B. Metal Protection:

1. Where aluminum will contact dissimilar metals, protect against galvanic action by painting contact surfaces with primer or by applying sealant or tape or installing nonconductive spacers as recommended by manufacturer for this purpose.
2. Where aluminum will contact concrete or masonry, protect against corrosion by painting contact surfaces with bituminous paint.

C. Install components plumb and true in alignment with established lines and grades, without warp or rack.

D. Install glazing as specified in Division 08 Section "Glazing."

E. Entrances: Install to produce smooth operation and tight fit at contact points.

F. Install perimeter joint sealants as specified in Division 07 Section "Joint Sealants" and to produce weathertight installation.

G. Erection Tolerances: Install aluminum-framed systems to comply with the following maximum tolerances:

1. Location and Plane: Limit variation from true location and plane to 1/8 inch in 12 feet (3 mm in 3.7 m); 1/4 inch (6 mm) over total length.
2. Alignment:

   a. Where surfaces abut in line, limit offset from true alignment to 1/16 inch (1.5 mm).
   b. Where surfaces meet at corners, limit offset from true alignment to 1/32 inch (0.8 mm).

3. Diagonal Measurements: Limit difference between diagonal measurement to 1/8 inch (3 mm).

END OF SECTION 08 41 13