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

<table>
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<tr>
<th>Application</th>
<th>Selection</th>
<th>Notes</th>
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</thead>
<tbody>
<tr>
<td>Entrance Doors</td>
<td>Wide Stile, 5&quot; nom. width to accept panic hardware without overhanging stile</td>
<td>5&quot; top rail</td>
<td>4&quot;-6&quot; mid rail 10&quot; bottom rail</td>
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<tr>
<td>Keyed Removable Mullions</td>
<td>Von Duprin, no substitutions</td>
<td>Refer to Hardware Section 08 71 00</td>
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<tr>
<td>Exterior Storefront Framing</td>
<td>Thermal barrier</td>
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<td>Interior Storefront Framing</td>
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<tr>
<td>Insulated Spandrel Panels as</td>
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<td>occurs</td>
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<tr>
<td>Insulated Glass Spandrel</td>
<td></td>
<td></td>
<td>Refer to Glazing Section 08 80 00</td>
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<tr>
<td>panels</td>
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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