1.1 Design Guidelines


2. Design entries to minimize accumulation of rain, snow and ice. Main building entries shall have at least a 20 foot deep walk off area. Walk off area may be a combination of covered canopy, entry vestibule and floor mats.

3. Provide a vestibule/airlock at all main building entrances.

4. Provide power door operators at all main entrances. See Section 08460.

5. Minimum door width is to be 3'-0" x 7"-0" at all doors.

6. High traffic doors such as revolving doors or automatic sliding doors should be considered for main building entries.

7. Avoid center mullions at groups of interior corridor doors.

8. Design of entries should consider protection from exposure to wind.

9. Bronze or grey colors are preferred at tinted glazing. Provide clear glass at door glazing.

10. Consider effect of daylighting and solar orientation on building energy use. See Division 16 for photometric and occupancy sensors.

1.2 Performance Standards

1. Wind Loading: Design system per applicable codes and per ASTM E330. Deflection limit is to be 1/200 or limit of glass, whichever is less.

2. Air Infiltration: Limit to 0.06 cfm/min/sq. ft. measured in accordance with AAMA 501.2 and ASTM E283.

3. Water Leakage: None; to be measured in accordance with AAMA 501.2.

4. System Drainage: Provide internal drainage system to weep accumulated moisture to exterior.

5. Condensation Resistance Factor (CRF): CRF value is to be a minimum of 45 in accordance with AAMA 1503.


7. Energy Efficiency Standard: Maximum U value for unit is to be 0.65. Perform a building
life cycle analysis to determine if lower values are cost effective.

8. Warrantee: 5 years

9. System to be fabricated and installed by a firm with a minimum 3 years experience with the specified products. Installers are to be approved by the manufacturer.

PART 2 PRODUCTS

2.1 System Description

Storefronts:

1. Extruded aluminum 6063-T5 frames and storefront framing, nominal wall thickness .125”.

2. Thermally broken framing at storefront framing.

3. 1” insulated storefront glazing. See Section 08810. Door glazing ¼” laminated tempered glass. Comply with applicable code requirements for safety glazing.

4. Sealants: Perimeter and glazing sealants; See Section 07900.

5. Hardware: See Section 08710. Provide 12” high kickplates except at residence halls where 24” high kickplates are required.

6. Specified system shall be provided thru a single source.

Doors:

1. Door sections to be 1 ¾” tubular shapes of extruded aluminum, 603-T5 alloy with 4” styles, 4” top rail and 12” – 16” bottom rail. For residence halls use 24” bottom rail.

2. Joinery shall be 3/8” diameter cadmium plated steel tie rods bolted through the stiles. Where applicable a minimum of three rods will be installed in each door.

3. Minimum wall thickness of the face is .100”. End wall thickness at the hinge and lock stiles to be .187” minimum.

4. Meeting stiles of pairs of doors to have Schlegel No. 5045 wool pile weather-stripping. Optional finishes include special anodized colors as well as painted finishes.

5. Fluted #10 pattern to be extruded in face (typical). Smooth face is optional.

6. Glass stops to be extruded angles with minimum wall thickness of .125” and to be removable from the inside.

7. Doors to accept glass from ¼” laminated tempered glass.

8. Glazing in sidelites and transoms to be 1” tempered insulated glass.
2.2 Acceptable Manufacturers

1. Kawneer
2. Efco
3. Amarlite
4. Cross
5. Thompson