

## **ALUMINUM ENTRANCE AND STOREFRONT SYSTEMS**

### **General**

In general, follow the guidelines below when specifying aluminum entrances and frames. Unless otherwise indicated, these guidelines are not intended to restrict or replace professional judgment.

Consider curtain wall framing for extensive exterior applications, particularly in areas where dimensions and configuration would require reinforcement. Typically, specify curtain wall for framing exceeding 12 feet in height. Specify systems meeting all performance requirements on SID-D.

### **Related Sections**

U-M Design Guideline Sections:

[SID-D Energy Conservation](#)

[SID-F Codes and Regulatory Agencies](#)

[08710 Finish Hardware](#)

[08800 Glazing](#)

[Architectural Preferred Manufacturer List](#)

UM Master Specifications

[Section 08410 Aluminum Entrances and Storefronts](#)

### **Design Requirements for Aluminum Entrances**

**Construction** - In general, manufacturer's standard products (with the exception of hardware) are acceptable, provided they comply with the following requirements:

- Storefront System Construction: Thermally broken.
- Door Opening Frames: Applied stops only; blade stops are not acceptable.
- Doors: Medium stile (3-1/2 inch nominal) or wide stile (5 inches or more) doors. Medium stile is preferred. Do not specify thin or narrow stile doors. Comply with current barrier-free code for bottom rail height.

**Glazing** - Specify glazing per design guideline 08800 and as follows:

- Exterior storefront and doors exposed to weather: Insulating glass to match window or curtain wall systems.
- Interior storefront and doors: Single pane glazing, unless insulating glass required for acoustic properties.

- Minimum glass thickness for single panes or individual components of insulating glass used in door and storefront systems should be 1/4 inch.
- Specify factory-glazed doors where feasible.

Finish - Typically match window or curtain wall system finish.

- For most new and replacement work, specify 2-coat 70% polyvinylidene fluoride coating. Require 3-coat systems for organic coatings applied to doors.
- For anodized finishes, specify AAMA 611 Class 1 finish, clear or color anodized, as suited to project.

Hardware - Do not use door manufacturer's "standard" hardware for aluminum entrance doors. Comply with requirements of Guideline 08710 "Finish Hardware" and Preferred Manufacturer's List.