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082250 - Fiberglass Reinforced Polymer (FRP) Doors

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SECTION 08 2250 – FIBERGLASS REINFORCED POLYMER (FRP) DOORS

1.1 SUMMARY

- A. The University prefers to use regional materials within a 500 mile radius of the campus.
- B. Section includes the following:
 - 1. Exterior fiberglass reinforced polymer (FRP) doors.
 - 2. Aluminum frames for FRP doors.

1.2 QUALITY ASSURANCE

- A. Fire Performance Characteristics: Provide Class 'A' fiber reinforced polymer faces with the following surface burning characteristics as determined by testing identical products per ASTM E 84 by UL or other testing and inspecting organizations acceptable to authorities having jurisdiction.
 - 1. Flame Spread: 25 or less.
 - 2. Smoke Developed: 450 or less.

1.3 MANUFACTURERS

- A. Manufacturers:
 - 1. Special-Lite, Inc.
 - 2. Tubelite, Inc.
 - 3. Commercial Door Systems.

1.4 MATERIALS

- A. Aluminum Members: ASTM B 221 for extrusions and ASTM B 209 for sheet and plate.
- B. Steel Reinforcement: ASTM A 36 for structural shapes, plates, and bars; ASTM A 611 for cold-rolled sheet and strip; or ASTM A 570 for hot-rolled sheet and strip.
- C. Fiberglass Reinforced Polymer Face Material: 0.120 inch min. thickness, with color integral through full thickness of face sheet. Provide pebble-like embossed finish for flush doors.
- D. Core Material: Urethane foam.
- E. Fasteners: Aluminum or stainless steel.

1.5 DOORS

- A. General: Provide standard flush style embossed panel doors, constructed of aluminum stiles and rails joined with steel tie rods, with polymer face sheets and foamed-in-place urethane inner core.

1. Manufacturers:
 - a. Special-Lite, Inc.
 - b. Tubelite Commercial Grade

1.6 FRAMES

- A. Frames: Provide tubular extruded aluminum frame members, 2 by 4-1/2 inches or 2 by 6 inches; with minimum 1/8 inch thick walls and closed back. Fabricate with mechanical joints using heavy inserted reinforcing plates and concealed tie-rods or j-bolts. Supply with 1/2 by 1-1/4 inch door stop, with heavy-duty weathering pile included.

- B. Products:

1. Model SL-245 FG (2 by 4-1/2 inch frame); Special-Lite.
2. Model SL-260 FG (2 by 6 inch frame); Special Lite.

END OF SECTION 08 2250