082250 - Fiberglass Reinforced Polymer (FRP) Doors

Sandra Hickey
sandra.hickey@unh.edu

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Recommended Citation
Hickey, Sandra, "082250 - Fiberglass Reinforced Polymer (FRP) Doors" (2015). Division 08 – Openings. 3.
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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.