

**MOLDED FIBERGLASS REINFORCED PLASTIC (MFRP)  
COLD STORAGE INFITTING DOORS AND CASINGS**

**PART 1 - GENERAL**

**1.1 SUMMARY**

A. This section details the following:

1. Molded Fiberglass Reinforced Plastic (MFRP) Cold Storage Infitting Doors and associated hardware
2. Cold Storage Infitting Casings

**1.2 RELATED SECTIONS**

A. Related sections include:

1. Division 6 – Rough Carpentry
2. Division 8 - Finish Hardware
3. Division 8 – Glazing
4. Division 16 – Electrical (for heated doors and controlled entry applications)

**1.3 QUALITY ASSURANCE**

A. Regulatory information:

1. Doors to be acceptable based on review of chemical constituents against appropriate USDA and FDA regulations, for incidental food contact, if applicable to this project.
2. Comply with applicable requirements of the laws, codes, ordinances, and regulations of Federal, State, and local authorities having jurisdiction. Obtain necessary approvals from such authorities.

B. Qualifications:

1. **Manufacturer Qualifications:** A company specialized in the manufacture of molded fiberglass reinforced plastic (MFRP) doors and casing as specified herein with a minimum of 30 years documented experience and with a record of successful in-service performance for the applications as required for this project.
2. **Installer Qualifications:** An experienced installer who has completed fiberglass door and casing installations similar in material, design, and extent to those indicated and whose work has resulted in construction with a record of successful in-service performance.

C. Source Limitations:

1. **Doors and Casings:** Obtain MFRP doors and cold storage casings from a single manufacturer.
2. **Hardware:** Shall be provided and installed (to the maximum extent possible) in compliance with hardware specifications below.
3. **Glazing:** Shall be furnished and installed by door and casing manufacturer in accordance with related section, Division 8, Glazing

**1.4 SUBMITALS**

A. Submit shop drawings and product data under provisions of Section 01300.

B. Indicate door and casing finish and construction, door elevations, casing configuration, swing, jamb depth and associated hardware.

- C. Submit manufacturer's product literature, fabrication descriptions and installation instructions as needed and/or under provision of Section 01300.

## **1.5 DELIVERY, STORAGE, AND HANDLING**

- A. Packing: Package door opening assemblies in manufacturer's standard containers.
- B. Shipping: All products shall be on contracted and fully insured delivery services.
- C. Acceptance: All packages shall be inspected for damage. Any damage to a package must be noted on delivery receipt or if product is noticeably unusable it must be rejected at point of delivery.
- D. Storage: Door assemblies shall kept covered until ready to be moved inside a building to prevent damage to the packaging thus making handling more difficult. Store product upright.
- E. Handling: Product is extremely heavy multiple people will be required for any lifting operations.

## **1.6 WARRANTY**

- A. Manufacturer's Warranty: Weiland offers a limited lifetime warranty on molded fiberglass door panels against failure due to corrosion from the specified environment and delamination of the fiberglass exterior from the internal door collar. Refer to full warranty document for more details.
- B. Hardware is warranted by the hardware manufacturer.

## **PART 2 – PRODUCTS**

### **2.1 ACCEPTABLE MANUFACTURERS and FINAL ASSEMBLY**

- A. The following companies shall have the authority to manufacture and assemble the specified doors.
  - 1. Weiland, Inc., Madison, Nebraska. Telephone: (402) 454-2106. Fax: (402) 454-6508. Website: [www.weilanddoors.com](http://www.weilanddoors.com).
  - 2. Basis of Design for hardware shall be signified by an asterisk (\*) in the hardware section below.

### **2.2 DOOR SPECIFICATION**

- A. Fiberglass door exterior to be built starting with 25 mils of premium white gel coat (custom colors available upon request) molded into a continuous layer of fiberglass that completely surrounds all sides of the interior structure of the door. The entire door is to be molded at once for truly seamless fiberglass. Fiberglass thickness (not including gel coat) to be at least 1/8" on the face of the door and 11/32" on the edge of the doors.
- B. The internal door structure shall be recycled, impact resistant, corrosion resistant extruded polymer closer, hinge, and exit device backing. No organic backing material shall be allowed due to the potential for water and bacteria infiltration at door penetration points. The remaining door core shall be 2 lb. / cu foot closed cell polyurethane foam (balsa wood and honeycomb cores are not acceptable).

## **2.3 CASING SPECIFICATION**

### **A. METAL CLAD FRAMES**

1. Fabricated specifically for insulated metal panel wall or other wrap-around style installations.
2. Casings to be clad with stucco embossed 304-2B stainless steel, stucco embossed white painted galvanized steel. 304-4 (brushed) smooth stainless steel is available upon request.
3. Jamb Depth: Up to 6" standard. Custom depths available upon request. Refer to frame schedule for exact sizes.
4. Face Dimension: 5 1/2" standard.
5. High Density Polyethylene (HDPE) core is standard. Wood is available upon request.

## **2.4 MATERIALS**

- A. Fasteners: To the maximum extent possible all fasteners shall be Stainless Steel.
- B. Trim: To the maximum extent possible all trim and hardware pieces shall be Stainless Steel unless a lesser grade is acceptable by architect, owner, and contractor.
- C. Gasketing: Perimeter gasket shall be D-Profile EPDM. There shall be dual sweeps and the material shall be nylon inserted neoprene for all flush sill doors. High sill doors shall have only the D-Profile EPDM.

## **2.5 HARDWARE**

Hardware shall be installed on the door to the maximum extent possible.

- A. Hinges: Hinges shall be strap style out of Stainless Steel with a cam rise. The cam shall be concealed with no metal grinding on metal.
- B. Exit Devices:
1. Refrigeration latch shall be Kason 778 Stainless Steel with custom Stainless Steel Inside Safety Release. Bump Bars shall be Stainless Steel. Plastic rods and glow in the dark release shall be available as required.
  2. Wide Stile Devices: Provide heavy duty Commercial Grade 1 touch bar device for cooler applications
    - i. "9000 Series", Dorma USA, Inc.
  3. Weatherized Devices: Provide heavy duty Commercial Grade 1 touch bar and exterior devices for freezer applications
    - i. "V40 Series-Weatherized", Detex
    - ii. "Advantex Series", Detex
  4. Electronic Exit Controls
    - i. "9600 Series", HES
    - ii. "ES62F Series, Dorma USA, Inc
- C. Closer: Shall be all Stainless Steel tension barrel closer and shall be installed on the door as required.

D. Kickplates: Shall be a minimum of 18 ga., Stainless Steel

E. Vision Panels:

1. Glazing

- i. ½” Solid Polycarbonate with no special treatment
- ii. ½” Clear, Tempered, Insulated Glass with or without poly-coating treatment
- iii. 1” Clear, Tempered, Insulated Glass with or without poly-coating treatment. \*\*Requires longer lead-time to special order.

2. Frames

- i. Insulated, Stainless Steel Frame
- ii. Insulated, White Painted Galvanized Frame

F. Heat: For freezer door applications

1. 120V, 10 Watts per linear foot heater wire around entire perimeter of door and/or casing

## **PART 3 - EXECUTION**

### **3.1 INSTALLATION CONDITIONS**

- A. Verify installation conditions as satisfactory to receive work of this section. Do not install until unsatisfactory conditions are corrected. Beginning work constitutes your acceptance of conditions as satisfactory.
- B. Verify opening size, dimensions and tolerances.
- C. Verify wall construction is substantial enough to support the weight and swinging of the door.
- D. Verify correct voltage and amperage is available for freezer door applications.

### **3.2 PREPARATION**

- A. Protect surrounding areas and surfaces to prevent damage during work of this section.

### **3.3 INSTALLATION**

- A. Site tolerances: Maintain plumb and level tolerance specified in manufacturer's installation instructions.
- B. Install door-opening assemblies in accordance with shop drawings and manufacturer's installation instructions, using installation methods and materials specified in installation instructions.
- C. Field alteration of doors or frames to accommodate field conditions is strictly prohibited.

### **3.4 ADJUSTING**

- A. Adjust doors in accordance with door manufacturer's maintenance instructions to swing open and shut without binding.
- B. Adjust door hardware, particularly latches, to ensure the door seals against the casings.

### **3.5 CLEANING**

- A. Clean surfaces of door opening assemblies and exposed door hardware in accordance with manufacturer's maintenance instructions.

### **3.6 PROTECTION OF INSTALLED PRODUCTS**

- A. Protect door opening assemblies and door hardware from damage by subsequent construction activities until final inspection.

END OF SECTION