



## Specifications FiberWall™ 458D & 658D Swinging Doors

### **Material:**

Door frames shall be made with tubular 4 5/8" or 6 5/8" pultruded fiberglass lineals. All door frame profiles shall have a nominal wall thickness of 2.3 mm (0.090") with minimum glass content of 60%. Frame cavities shall be filled with foam insulation, EPS – Density 20. Non-structural accessory members may be vinyl or aluminum and identified as such.

### **Construction:**

Injection molded glass-filled nylon corners shall be used for assembly and fastened in place with screws. Corners shall be sealed with silicone. Spray foam shall be used to fill the cavity inside the corner. Cavities at the base of the door jams are reinforced with composite blocks. Hinges and strike plates are mortised into the frame, with composite blocks for screw backing.

### **Weather-stripping:**

Doors shall have single weather-stripping on the door jambs and header, a proud-edge low-wick foam weatherstrip in a nylon jacket. In the case of outswing doors, the seal is also applied to the sill. In the case of inswing doors, a kerf-mounted, bronze-coloured vinyl sweep is attached to bottom of slab.

### **Hinges:**

Standard hinges are nickel plated steel 4" x 4" hinge with plated ball bearings. Hinges are available in steel, plated in different finishes. All hinges will have aluminum back-up plates to prevent the door panel from sagging with long-term use. On site, experienced installers should insert a shim behind each hinge before driving the long screws provided through each hinge and into the framing.

### **Strikes:**

Steel strike plates shall be factory installed, available in a variety of finishes. Strikes are installed for both the latch and deadbolt. On site, experienced installers should insert a shim behind the strike plate before driving the long screw provided through the strike plate and into the framing.

### **Sill:**

Sills are made of thermally broken aluminum, with anti-slip ribbing on the surface, available in a standard low-profile thickness of 1 ½". Sills are offered in a standard bronze finish with optional finishes also available. Sills are adjustable and available in a number of widths from 4 9/16" to 10" by using extensions. PVC caps are installed over adjustment screws to provide finish appearance. The sub sill consists of a composite material that is rot and insect proof. Outswing sills are the same as the inswing sills but the adjustable sill cap is replaced with a fixed bumper cap to allow the door panel to seal against the sill.

### **Door Panel:**

Door panels shall be fiberglass (or steel as requested) in 1 ¾" thickness. The interior void is filled with polyurethane foam to provide R-11 insulation value. A composite stile is used around the complete edge of the slab to provide a rot, water, & insect proof panel. Door panels are typically reinforced with wood, but sometimes additionally reinforced with steel. Panels are available in either a smooth or a wood-grain surface, sold pre-finished, or painted/stained by the factory.

### **Standard Drilling:**

Standard pre-drilling of the panel is 2 ¾" (optional 2 3/8") backset with 2 1/8" diameter holes drilled 5 ½" apart, measured from the centre points. Multi-point or custom drilling available by request.

### **Glazing:**

Standard doors are glazed with either dual (1" OD) or triple pane (1" or 1 5/8" OD depending on the system) tempered insulating glass units. Glass thickness shall be in accordance with applicable Building Codes, but not less than 3 mm (1/8"). DUXTON recommends the use of sealed insulating glass units certified by IGMAC or SIGMA. The full range of glazing options is available including IG grilles, low conductivity stainless steel spacers, and inert gas fills to reduce heat loss, UV transmission, and to manage solar heat gain and visible light transmittance as required.

### **Glazing Method:**

Laid in glazing using polyethylene closed cell adhesive tape on the glazing leg, and a glass stop locked in from the interior, providing a secure and leak-proof seal.

### **Finish Options:**

All exposed frame surfaces are coated with durable, 2-part Polymer enamel with a minimum dry film thickness of 1.5 mm with a gloss range from 20 to 55. Finish shall resist chipping, blistering, chalking, and discoloration under normal atmospheric conditions. Door panels are either coated in the same manner, or sold in a primed factory finish that must be properly sealed within 7 days by the customer.

**Oversized Unit Reinforcement:**

If required, reinforcement shall be steel plates measuring 64 mm x 5 mm (2 1/2" x 3/16") for FiberWall™ 458 OR 102 mm x 5 mm (4" x 3/16") for FiberWall™ 658, cut to the appropriate length. As required, steel reinforcements may have steel plates affixed to the top and bottom at 90 degree angles to serve as anchorage to the framing.

\*Due to constant product improvements, DUXTON reserves the right to change information herein without notice.

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