



**Product** Shall be FiberWall™ Series 458 Casement or Awning Window Assemblies, as manufactured by DUXTON Windows & Doors. Frames are 117.5 mm (4 5/8") deep.

**Material** All frame and sash profiles are made from pultruded fiberglass, having a nominal wall thickness of 2.3 mm (0.090") with minimum glass content of 60%. Fastening positions have an increased nominal wall thickness of 4.76 mm (0.1875") to securely mount hardware. Non-structural accessory members may be vinyl or aluminum and identified as such.

**Construction** Frame and sash corners are connected with molded reinforced polymer components and mechanically secured. The frame has a closed-back for added strength and resistance to moisture penetration. The sash has a double wall beneath the glazing stop to fit an extended corner key for added strength. Joints are factory sealed with silicone and neatly fitted together. Frame and sash cavities shall be filled with foam insulation, EPS – Density 20.

**Finish** All exposed surfaces are coated with durable, Isocyanate-free, 2-part Polymer enamel with a minimum dry film thickness of 1.5 mm with a medium gloss of 20 - 55. Finish shall resist chipping, blistering, chalking, discoloration and aging under normal atmospheric conditions.

**Hardware** The concealed hinge shall have an E-Gard coated heavy gauge steel arm and a stainless steel track. Heavy-duty stainless steel roller hinges are available for larger units. The locking mechanism shall be multi-point sequentially locking bar. The hardware tower consists of a double wall for added rigidity and long-term durability.

Weather-stripping The FiberWall™ 458 Operator shall have triple weather-stripping that is applied continuously around corners (not mitered). All seals shall be made from a durable EPDM closed-cell sponge rubber as used in the automotive industry which offers superior compression recovery and air tightness.

**Glass** All windows are glazed with 22 mm (7/8") for dual pane, 35 mm (1 3/8") for triple pane, and can be glazed up to 50.8 mm (2") for custom 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 available include internal grills, warm edge stainless steel spacers, inert gas fills, and low emissivity coatings to reduce heat loss, control solar heat gain, and visible/UV transmission.

**Glazing Method** Laid in glazing using polyethylene closed cell adhesive tape on the exterior and an aluminum glass stop on the interior with an EPDM rubber spline providing a secure and positive seal for the glass.

**Insect Screens** Roll-formed aluminum frame with friction fit corner keys. Screen mesh shall be fiberglass, or aluminum if requested. Screens are mounted on the interior of operating windows and are removable. An overlapping spring-loaded screen is available for white interior frames.

**Installation** Shall be performed by experienced installers in accordance with manufacturer's instructions and CSA-A440.4. Window shall be plumb and square after installation is complete and sealed to both interior and exterior walls with a high quality sealant around the perimeter of the frame. It shall be the responsibility of the installer to make all necessary final adjustments to ensure normal and smooth operation.