

**Don Young Company, Inc.**  
**8220 SERIES SINGLE HUNG ALUMINUM WINDOW, LC-PG50**  
**TECHNICAL SUPPORT SPECIFICATIONS**

**GENERAL:**

Single hung window with thermal break LC-PG50, complete with hardware and weather seals as manufactured by Don Young Company, Inc. shall meet or exceed the performance requirements for air infiltration, water penetration, structural loading, forced entry resistance, and deglazing in accordance with AAMA/WDMA/CSA 101/LS.2/A440-05, "voluntary specifications for aluminum windows and glass doors."

**MATERIALS:**

- A. ALLOYS-** Aluminum shall be of commercial quality and of proper alloy for window construction to be free from defects, impairing strength, and /or durability. All extruded sections shall be of 6063-T-5 aluminum alloy with a minimum ultimate tensile strength of 22,000 PSI and minimum yield strength of 16,000 PSI.
- B. WINDOW MEMBERS-** Main frame and sash members shall have a nominal thickness of .062". Sill frame members shall have a nominal thickness of .078". Main frame shall be 2 3/4" in depth. All frame and sash members shall utilize high density, low thermal conductive poured polyurethane material and shall structurally combine the inner and outer frame and sash sections. This is a pure thermally divided window (not thermally stitched or connected window).
- C. FASTENERS-** All screws, bolts, rivets, or other fastening devices used in this product shall be of sufficient strength and quality to perform their designated functions.
- D. HARDWARE-** Shall be of aluminum, stainless steel, or other corrosion-resistant base material compatible with aluminum.
- E. WEATHERSTRIPPING-** Shall conform to A.A.M.A. 701 and 702. Weather seals at the sides of operating sash and at the interlocking meeting rails shall be high density pile with a Mylar fin seal. Bottom rail of bottom sash shall have dual rows of vinyl bulb type seals.

**CONSTRUCTION:**

- A. ASSEMBLY-** The windows shall be assembled in a secure and workmanlike manner allowing proper vertical movement of the lower sash. Main frame shall be of butt joint construction mechanically joined from correctly machined and fabricated sections. The main frame at the junction of the sill, head, and frame heights shall be sealed on the exterior joints with a high-grade sealant, meeting A.A.M.A. specification 803.3. Design of sill shall provide free drainage to the exterior by means of a tapered sill surface.
- B. SASH-** Sash members shall be butt type joined at corners with screws into integral screw ports which can be easily removed for repair or glazing. Sash shall interlock with fixed meeting rail in the closed position. Sash shall be thermally broken as outlined in materials section above. Operating sash will tilt to inside for easy cleaning.
- C. GLAZING-** Glass shall be factory glazed from the interior using extruded aluminum glazing beads and a soft vinyl gasket in conjunction with a back bedding compound at the exterior glass stops. Standard factory glazing for single glazing shall be DSB or 3/16" as required or specified. Dual glazing (sealed insulated glass) shall consist of two pieces of DSB glass with an overall unit depth of 3/4".
- D. BALANCES-** Spiral sash balances of appropriate size and capacity to hold a sash stationary at any open position shall be used for the weight of the sash to be counter-balanced. All sash balances shall be easily removable from the inside.
- E. HARDWARE-** Locking arrangement at the meeting rail shall be cam type giving a positive lock. Tilt sash locks located at each window jamb include a "child-resistant" type secondary lock to prevent accidental tilt-in of the lower sash. Locks shall provide reasonable security against forced entry in accordance with A.A.M.A. 1302.5, performance level 10.
- F. AIR INFILTRATION AND WATER RESISTANCE-** Air infiltration shall be in accordance with ASTM E 283 not to exceed 0.30 when tested @ 1.57 PSF. Water resistance shall be in accordance with ASTM E 547 with no leakage to interior.
- G. FINISH-** Standard finishes will be mill finish or electro statically applied powder coat as specified, for Bronze, White, Tan or Silver finishes.
- H. SCREENS-**Standard half screens shall have rolled aluminum frames with corners firmly joined. Screen fabric shall be fiberglass, held securely to frame by a vinyl spline. Half screens are removable from inside. Optional full screens are available. All insect screens are intended to provide reasonable insect control and are not for the purpose of providing retention of objects or persons from the interior.

**ERECTION:** (By others)

Windows shall be installed square, plumb, and level in a secure manner to assure neat and weather tight construction in accordance with the mfg's recommendations. Contractor will be responsible for the protection of windows during the course of construction and for cleaning all portions of window after painting and finishing of building is completed. Contractor will also be responsible for proper flashing of window for water drainage. Mastic or caulking compound shall be supplied by others and applied neatly to provide a water tight installation. Final adjustment shall be made by erectors to hold main frame in plumb position.