



BRIGHTON SERIES (R40, LC50)
OUT-SWINGING PATIO DOOR
5 7/8" FRAME DEPTH (OVERALL)

FEATURES

1.) Available Configurations

- Swinging Patio Door
- X, O, OO, OOO, XX, XO, OX, XOO, OOX, OXO
- 6'8", 6' 10", 8' OR 9' Heights

2.) Main frame / Sash

- Extruded aluminum clad exterior
- Hinged from the center post hinge or jamb side (2 door units only)
- Aluminum dark bronze anodized sill with PVC interior threshold with an oak impression
- Wood interior ready to paint or stain
- Pre-finished white or primed interior (optional)

3.) Commercial Framing System

- 5 7/8" frame depth (overall)
- Fin to interior 4 9/16" standard
- Frame depth can be adjust to fit any wall depth from 4 9/16" to 7 1/16"

4.) Type of hardware

- Standard polished brass multi-point hardware and adjustable hinges.
- Keyed alike hardware (optional)
- Optional hardware finishes (includes hinges): matte black, brushed chrome, antique nickel, rustic umber/faux bronze, white satin nickel, oil rubbed, antique brass, polished chrome.

5.) Performance

- HGD-R40(2 door units bi-hinge, active/active)
- HGD-LC50 (2 door units, fixed/active)

6.) Glazing

- 3/4" insulated glass with Low-E (argon gas)
- Drop-glazed sash
- Wide variety of glazing, tinting and thickness options

7.) Muntin choices

- Internal "Dust-Free" muntins
- Simulated divided lites
- Removable wood muntins

8.) Finish

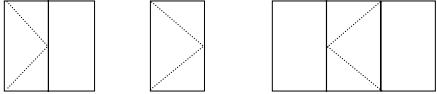
- Primed interior
- Pre-finished white interior
- Exterior colors available in white, toffee, dark bronze, beige, chestnut, earthtone, holly, green, black, redwood and satin crème
- Custom colors available for additional upcharge

11.) Specialty

- ADA threshold ramps for handicap accessibility



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5 3/4" FRAME DEPTH (OVERALL)

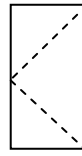
MODEL	Out-swinging Patio Door
SERIES	Brighton Series
CLASS	HGD-R40 (2 door units, active/active), HGD-LC50 (2 door units, fixed/active)
OPERATION	 Other options available
MAXIMUM SIZE	AAMA structural test size is 6'-3" x 7'-11" (R40)(2 door units, active/active) minimum. AAMA structural test size is 6' x 7'-11" (LC50)(2 door units, fixed/active) minimum. For minimum and maximum sizes contact Quaker Window Products.
GLAZING THICKNESS	3/4" Insulated glass
MULLING	Mulls to sidelite and transom units
FINISHES	Baked-on powder coat finish meets AAMA 2604 specs and is available in 11 standard colors. Optional finishes: 2605 (equal to 70% Kynar) powder coat finish. Clear and color Anodized finishes.
MUNTINS	Internal "Dust-Free" muntins-available in flat or contoured, single color or two tone appearance, simulated divided lites or removable wood muntins.
SCREENS	
OPERATING FORCE(LBS)	
CURVED SHAPES	Available on stacked units

PERFORMANCE

The performance numbers listed below represent independent laboratory test on Quaker Windows at the time of publication. Please contact Quaker Window for the most recent performance data.

Model	NWWDA Rating I.S. 2-97	Structural Load P.S.F.	Air At 25 MPH (cfm/ft ²)	Water (No Penetration) PSF	CRF Condensation Resistance Factor	U-value
Swinging Door(2 door unit, active/active)	HGD-R40	60.15	0.09	6.02		.36
Swinging Door(2 door unit, fixed/active)	HGD-LC50	75.2	0.03	7.52		.36

Note: Numbers listed are subject to change without notice.
 U-value tests were conducted with Low-E and Argon



QUAKER WINDOW PRODUCTS CO, INC.
**BRIGHTON SERIES – OUT-SWINGING PATIO
DOOR**

**HGD-R40(2 door units, active/active),
HGD-LC50 (2 door units, fixed/active)
(5 7/8” Frame Depth)**

Quaker Window Products reserves the right to change any and all designs without notice. Due to periodic re-certification requirements, results shown may vary slightly.

PART 1 - GENERAL

**1.01 TESTING AND PERFORMANCE
REQUIREMENTS**

C. Specific Performance Requirements:

Windows shall conform to specified AAMA/NWWDA 101/I.S.2-97 and 101/I.S.2/NAFS-02 **HGD-R40** requirements at a minimum test size of **6’-3”x 7’-11”** (2 door units bi-hinge, active/active) (3/4” I.G.-1/8” tempered panes) and following, whichever are the more stringent:

1. **Air Infiltration Test:** With the panel in a closed and locked position, the sliding glass door shall be subjected to an air infiltration test in accordance with ASTM E 283. Air infiltration shall not exceed **(0.09 cfm/ft²)**.

2. **Water Resistance Test:** The glazed unit shall be mounted in its vertical position continuously supported around perimeter and the panel placed in the fully closed and locked position. The sliding glass door unit shall be subjected to a water resistance test in accordance with ASTM E 331 and ASTM E 547, using a static pressure of **6.02 psf** with no uncontrolled water leakage.

Testing shall be performed on sliding glass doors both with and without an available insect screen.

3. **Uniform Load Structural Test:** Per ASTM E 330. At the conclusion of tests, there shall be no glass breakage, permanent damage of fasteners, hardware parts or any other damage causing the sliding glass door to be inoperable at **60.15 psf**.

**1.01-A TESTING AND PERFORMANCE
REQUIREMENTS**

C. Specific Performance Requirements:

Windows shall conform to specified AAMA/NWWDA 101/I.S.2-97 and 101/I.S.2/NAFS-02 **HGD-LC50** requirements at a minimum test size of **6’x 7’-11”** (2 door units, fixed/active)(3/4” I.G.-1/8” tempered panes) and following, whichever are the more stringent:

1. **Air Infiltration Test:** With the panel in a closed and locked position, the sliding glass door shall be subjected to an air infiltration test in accordance with ASTM E 283. Air infiltration shall not exceed **(0.03 cfm/ft²)**.

2. **Water Resistance Test:** The glazed unit shall be mounted in its vertical position continuously supported around perimeter and the panel placed in the fully closed and locked position. The sliding glass door unit shall be subjected to a water resistance test in accordance with ASTM E 331 and ASTM E 547, using a static pressure of **7.52 psf** with no uncontrolled water leakage.

Testing shall be performed on sliding glass doors both with and without an available insect screen.

3. **Uniform Load Structural Test:** Per ASTM E 330. At the conclusion of tests, there shall be no glass breakage, permanent damage of fasteners, hardware parts or any other damage causing the sliding glass door to be inoperable at **75.2 psf**.

1.02 QUALITY ASSURANCE

A. Standards: Except as otherwise indicated, requirements for aluminum windows, terminology and standards of performance and fabrication workmanship are those specified and recommended in ANSI/AAMA 101 and applicable general recommendations published by AAMA and the AA.

PART 2 - PRODUCTS

2.01 MATERIALS

A. Aluminum Extrusions: All extruded sections shall be of 6063-T6 aluminum. Alloy and temper recommended by window manufacturer for strength, corrosion resistance, and application of required finish, but no less than 22,000 psi ultimate tensile strength, a yield of 16,000 psi. Comply with ASTM B 221.

B. Hardware: Hardware having component parts which are exposed shall be of aluminum, stainless steel, or other non-corrosive materials compatible with aluminum. Cadmium or zinc-plated steel where used must be in accordance with ASTM Specification A 165 or A 164.

C. Weatherstripping: Provide double weatherstripping using silicone-coated woven pile with polypropylene fin center where specified with AAMA 701.

D. Glass:

1. All glazing shall be glazed at the factory as follows:

a) All units shall be constructed to an overall minimum thickness of 3/4" with two lites of DSB (1/8"), 3/16" or 1/4" (as size and loading requires)

2. Glazing Options: Optional glazing such as tinted, laminated, tempered, reflective, low-E, argon-filled and others are available upon request.

2.02 FABRICATION

A. Swinging Door Members: All window members, including grille bars, shall be of aluminum. (Excluding all interior wood components).

1. All aluminum main frame extrusions shall have a minimum wall thickness of 0.055"/0.062" (mainframe/panels)

2. Depth of frame and sash shall not be less than 5 7/8".

B. Assembly: The aluminum clad swinging door shall be assembled in a secure and workmanlike manner to perform as hereinafter specified. Exterior aluminum frame corners were miter cut, sealed with closed cell foam gaskets and fastened with corner keys and one screw per corner at the head and at the sill. The interior wood frame members were assembled with the aluminum framing and fastened together using #6 X 1" screws. Wood frame corners were rabbit-cut and secured with three (3) 7/16" X 1 1/2" crown staples per corner at the head and square cut with two (2) #10 X 2" screws in each corner of the sill.

C. Panel Construction: Panel corners were square cut and held in place with four (4) ribbed hardwood dowels per corner on the bottom rail and two (2) ribbed dowels per corner on the top rail. Exterior surfaces were clad with aluminum extrusion with lapped and sealed corners.

D. Finishes

Organic Coating: Baked-on powder coat finish that meets AAMA 2604.

1. Other finishes available upon request

E. Glazing

1. Units shall be "drop glazed" with a wood stop on the interior glass. The exterior is set in glazing tape and cap sealed with silicone.

PART 3 - EXECUTION:

3.01 INSTALLATION:

A. Comply with manufacturer's specifications and recommendations for installation of door units, hardware, operators and other components of work. In no case shall attachment to existing structure or to components of the door system be through or debridge the thermal barriers of the replacement doors.

B. Set units plumb, level and true to line, without warp or rack of frames or panels. Anchor securely in place. Separate aluminum and other corrodible surfaces from sources of corrosion or electrolytic action. Doors must be securely blocked and fastened.

C. Wedge insulation between frames of new windows and construction to remain, or between frames and new blocking as applicable. Compress fiberglass to not less than 50 percent of original thickness.

D. Set sill members and other members in bed of compound as shown, or with joint filler or gaskets as shown, to provide weathertight construction. Seal units following installation and as required to provide a weathertight system.

E. Fasteners: Aluminum, stainless steel, or other materials warranted by manufacturer to be non-corrosive and compatible with aluminum window members, hardware and other components of the swinging doors.

3.04 OPERATION AND MAINTENANCE:

A. Adjust operating sash and hardware to provide tight fit at contact points and at weatherstripping. Adjust also for smooth operation and a weathertight closure.

B. Clean aluminum surfaces promptly after installation of windows, exercising care to avoid damage to the finish. Remove excess glazing and sealant compound, dirt and other substances.

1. Lubricate hardware and moving parts

2. For frame and sash cleaning, use a common window cleaner or mild detergent solution with a regular cloth. After cleaning, be sure to thoroughly rinse all surfaces with clean water to remove any detergent residue.

C. Clean glass promptly after installation of windows. Remove glazing and sealant compound, dirt and other substances.

1. Use a common window cleaner with a lint-free cloth or chamois.

2. Do Not Use:

a) Caustic or abrasive cleaner or any silicon-based solvents on the frame or sash surfaces, as they may damage or discolor the finish

b) Petroleum-based lubricants as they may discolor the finish

c) Insecticides (bug spray) on or near window surface. Contact of insecticides with the finish could damage or discolor the window surface.

D. Initiate all protection and other precautions required to ensure that window units will be without damage or deterioration at time of acceptance.

Revised 2/13

BRIGHTON CLAD

CLAD PATIO DOOR - OUTSWING

SECTION DETAILS

SCALE: 1 1/2" = 1'-0"

