

791 Seminole Window Restoration & Replacement

Presented by the Grabowskis

East Elevation



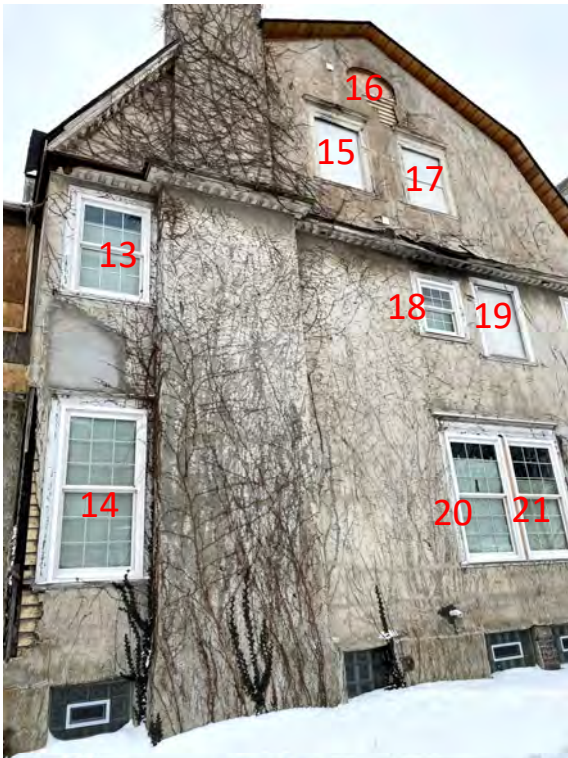
East Left



East Right



North Corner



North Mid



North Rear



West



West Porch



Facing 779 Seminole



**Window
Schedule**

**Grabowski
Residence
791
Seminole,
Detroit, MI
48214**



Oakwood Design
31805 Bond Blvd.
Farmington Hills, MI
248-254-3420

Ref.	Floor	Room	Elevation	Proposed	Configuration	Pair	Site Measure	Install Notes
1	3	Family Room	East	Restore	Leaded glass casement		n/a	Replace Glass in Original Frame
2	2	Bedroom 2	East	New	6 over 1 double hung	#3	40x65.5	Interior Frame Repair
3	2	Bedroom 2	East	New	6 over 1 double hung	#2	40x65.5	
4	1	Living Room	East	New	6 over 1 double hung	#5	44.125x73.875	Interior Frame Repair, Interior Stain
5	1	Living Room	East	New	6 over 1 double hung	#4	44.125x73.875	Interior Frame Repair, Interior Stain
6	2	Bedroom 2	East	Restore	Leaded Glass half round top single hung		n/a	
7	2	Master Bdrm	East	New	4 over 1 double hung	#9,10	22.125x65	
8	3	Family Room	East	Restore	Leaded glass		n/a	Replace Glass in Original Frame
9	2	Master Bdrm	East	New	6 over 1 double hung	#10	40.375x65	
10	2	Master Bdrm	East	New	6 over 1 double hung	#9	40.375x65	
10b	2	Master Bdrm	East	New	4 over 1 double hung	#9,10	22.125x65	No Pocket Board
11	1	Dining Room	East	New	6 over 1 double hung	#12	44.125x73.875	Interior Stain
12	1	Dining Room	East	New	6 over 1 double hung	#11	44.125x73.875	Interior Stain
13	2	Master Bdrm	North	New	6 over 1 double hung		36.125x56.125	
14	1	Dining Room	North	New	6 over 1 double hung		36.125x73.875	Interior Stain
15	3	Family Room	North	Restore	Leaded top sash, over 1 double hung	#17	36.25x53.25	Replace Glass & Relocate from South #39
16	4	Attic	North	Restore	Elliptical Leaded original, fixed		n/a	Restore Glass & Relocated from #41 South
17	3	Family Room	North	Restore	Leaded top sash, over 1 double hung	#15	36.25x53.25	Replace Glass & Relocate from South #40
18	2	Master Bath	North	New	3 over 1, double hung		31x39.375	No Pocket Board, Obsured Glass
19	2	Bedroom 3	North	New	6 over 1 double hung	#22	38x56	
20	1	Great Room	North	New	6 over 1 double hung	#21	42.25x73.5	
21	1	Great Room	North	New	6 over 1 double hung	#20	42.25x73.5	
22	2	Bedroom 3	North	New	6 over 1 double hung	#18	38x56	
23	1	Powder Room	North	New	3 over 1, double hung		30.125x49.125	Obscured Glass
24	2	Bedroom 4	North	New	6 over 1 double hung	#26	30.125x56.25	Interior Frame Repair
25	1	Great Room	North	New	6 over 1 double hung	#27	32x54	
26	2	Bedroom 4	North	New	6 over 1 double hung	#24	30.125x56.25	
27	1	Great Room	North	New	6 over 1 double hung	#25	32x54	
28	3	Family Room	West	New	3 over 1, double hung		37.875x32.25	
29	2	Bedroom 4	West	New	6 over 1 double hung		30.125x56.25	
30	1	Mudroom	West	New	6 over 1 double hung		28.25x49.625	
31	2	Rear Stairs	South	New	6 over 1 double hung		32x67.5	Tempered Glass
32	1	Basement Stairs	South	New	4 over 1 double hung		26x62.25	
33	2	Main Stair	West	Restore	half eclipse original fixed	#34,35	n/a	
34	2	Main Stair	West	Restore	Leaded glass casement	#35	n/a	
35	2	Main Stair	West	Restore	Leaded glass casement	#34	n/a	
36	1	Rear Hall	West	New	8 over 1, double hung		42x54.75	
37	2	Bedroom 5	West	New	6 over 1 double hung	#38	40x56	
38	2	Bedroom 5	South	New	6 over 1 double hung	#37	38.125x56	
39	3	Family Room	South	New	6 over 1 double hung	#40	36.25x53.25	
40	3	Family Room	Facing 779 Seminole	New	6 over 1 double hung	#39	36.25x53.25	

41	4	Attic	Facing 779 Seminole	Convert to Vent	Eliptical Leaded original, fixed		n/a	Relocate to #16, convert to vent
42	2	2nd Floor Bath	Facing 779	New	3 over 1, double hung		31.125x39.375	No Pocket Board, Obsured Glass
43	1	Living Room	Facing 779	New	6 over 1 double hung		40.125x73.5	Interior Stain
44	2	Bedroom 2	Facing 779	New	6 over 1 double hung		38.25x56.125	

Window Summary	
Leaded Restoration	9
New Historically Appropriate	35
Convert to Vent	1
Total Opening Count	45

REPLACING YOUR OLD WOOD WINDOWS WITH
NEW WOOD WINDOWS IS NO LONGER OUT OF THE QUESTION.

ClassicFit SERIES *HistoricFit* SERIES

Wood Replacement Windows by



Quaker's wood clad replacement windows, the Classic Fit™ Series & Historic Fit™ Series, are a triumphant blend of imaginative and diverse designs teamed with an absolute demand for energy-efficiency. Truly the perfect fit every time.

ClassicFit.
SERIES
HistoricFit.
SERIES



FEATURES & OPTIONS

Some options mentioned may incur an upcharge.
Not all options are listed or shown. Inquire with your Quaker dealer



If you require a wood replacement window with more attention to historic details, you'll want to choose our Historic Fit[®] Series. Slimmer sightlines and enlarged viewing areas allow the Historic Fit[™] to give your project, large or small, the timeless look it deserves.

Aluminum clad exterior is nearly maintenance free and available in 12 Popular colors, 18 Impressive colors, 7 Resemble colors and Unlimited Custom colors. Got a color in mind? Let us know.

Warm, natural interior is courtesy of radiata pine wood. Alder wood is optional. Ask about custom pre-finished interiors in any color. Also available: Primed interior.

Insulated glass with warm-edge spacer sustains a year-round energy-efficient barrier. Add optional high-efficiency coatings like Low-E or our own Energy Plus[®] glazing package to increase your window's overall effectiveness. For your home's private areas, ask for Obscure glass. Include Tempered Glass where additional safety is required.

Operation is simple and convenient with smooth operating cam locks and one-touch tilt latches

Tailor your windows with grids. Between-the-glass, Applied for a Simulated Divided look or Removable Wood Grids are available.

Better-View[™] fiberglass mesh screens are as good as any on the market. Superior insect protection. Easy to remove. Excellent airflow. Great visibility.

For over 65 years, we've promised to stand behind our products with one of the best warranties in the industry. Consult your dealer for full details.

U-Value: .31

R-Value: 3.23

Solar Heat Gain: 0.26

Values shown are for Double Hung model. They were achieved with optional Low-E & argon gas. Better thermal performance may be available through other optional glazing packages. Consult with your dealer for more information.

Get more information on *Classic Fit*[™] and *Historic Fit*[™] wood replacement windows from your authorized Quaker Window dealer:

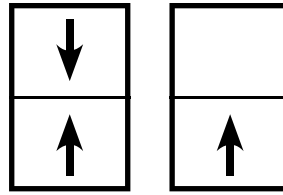


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01-2015





**Classic Fit Series
R-50
4 3/4" Frame Depth
Double Hung/Single Hung**

CLASSIC FIT SERIES DOUBLE HUNG/SINGLE HUNG

The Quaker Classic Fit Series Double Hung/Single Hung pocket window is ideal for a variety of replacement applications including - Energy Efficient, Apartments, Assisted Living, Schools and Housing Authority.

FEATURES

- ◇ Commercial Framing System
 - 4 3/4" main frame (overall)
 - 3 1/4" pocket depth
- ◇ Enhanced Design
 - Extruded clad exterior, pine interior
- ◇ Glazing
 - 3/4" insulated glass
- ◇ Hardware
 - Two block and tackle balancers and vinyl step jamb liners
 - Self-aligning cam-type locks
- ◇ Screen
 - Extruded aluminum screen frame with BetterVue™ mesh

OPTIONS

- ◇ Available Configurations
 - Double Hung
 - Single Hung
- ◇ Muntin Choices
 - Internal, wood removable or simulated divided lites available
- ◇ Hardware
 - Integral plough in every operable sash for lift-up or pull-down purposes
 - Lift assist hardware (top and/or bottom sash)
 - Limited travel hardware
 - Exterior jambliner cover
- ◇ Screen
 - Extruded aluminum screen frame with aluminum wire mesh
 - Extruded aluminum screen frame with sunscreen mesh
 - Extruded aluminum screen frame with stainless steel 0.009" thickness mesh
- ◇ Glazing
 - Capillary tubes
 - Argon gas
 - Wide variety of glazing, tinting and thickness options
- ◇ Mulling
 - Wide variety of structural mulls

BENEFITS

- ◇ The capacity to match exterior colors for unique project facades
- ◇ The ability to facilitate large sizes for taller and wider window openings

PERFORMANCE

- ◇ Structural & Thermal (test reports or thermal simulations available upon request)

Model	Double Hung/Single Hung
AAMA/WDMA/CSA 101/IS.2/A440-08 Rating	R-50
Structural Load P.S.F.	75.19
Air at 50 MPH (cfm/ft ²)	0.04
Water (No Penetration) P.S.F.	7.52
U-Value (with Low-E and Argon)	0.27-0.31
SHGC (with Low-E and Argon)	0.12-0.28

Window test size: 36" x 84"
Operating Force: 22 lbf (maintain motion), 3 lbf (locks)



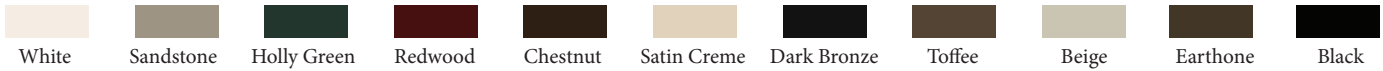
Our products are tested to the standards of and certified by the American Architectural Manufacturer's Association, the National Fenestration Rating Council and the Window & Door Manufacturers Association.



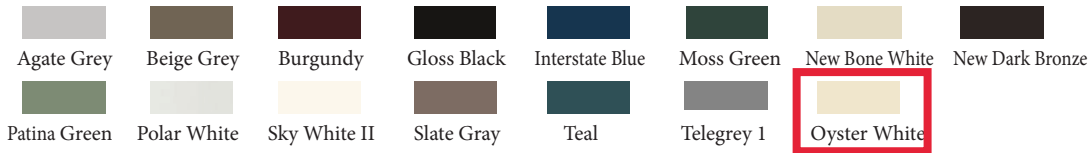
ARCHITECTURAL PAINT COATINGS AND FINISHES

◇ Baked on powder coat finish meets ANSA/AAMA 2604 specs and is available in unlimited colors

- 11 Popular Colors



- 15 Impressive Colors



- 7 Resemble Colors (painted finish resembling anodized)



- Unlimited Custom Colors

◇ ANSA/AAMA 2605 powder coat finishes

◇ AAMA 611-98 Class I clear and tinted anodized finishes

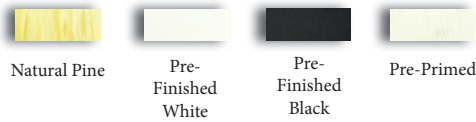
* Printed colors shown here may not accurately depict actual painted colors. Color samples are available upon request.

INTERIOR FINISHES

◇ Standard interior is Natural Pine wood

◇ Interior painted finish is available in Pre-Finished white or Pre-Finished black. Custom painted colors available

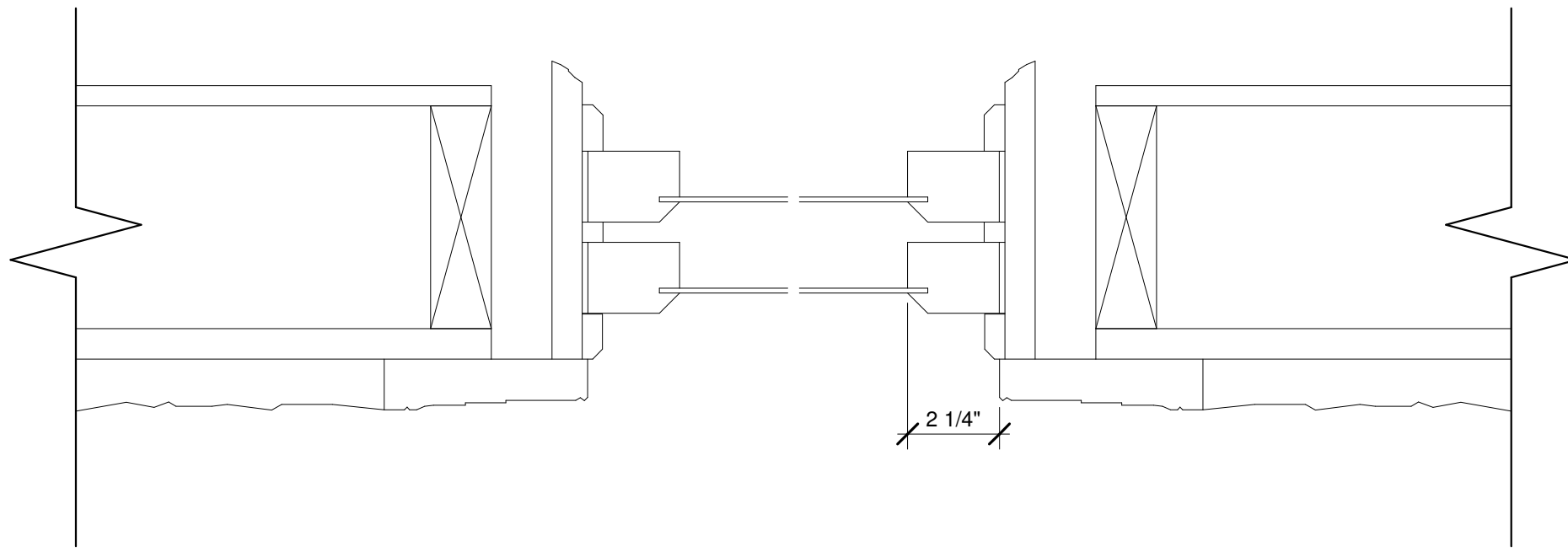
◇ Pre-primed interior is an option



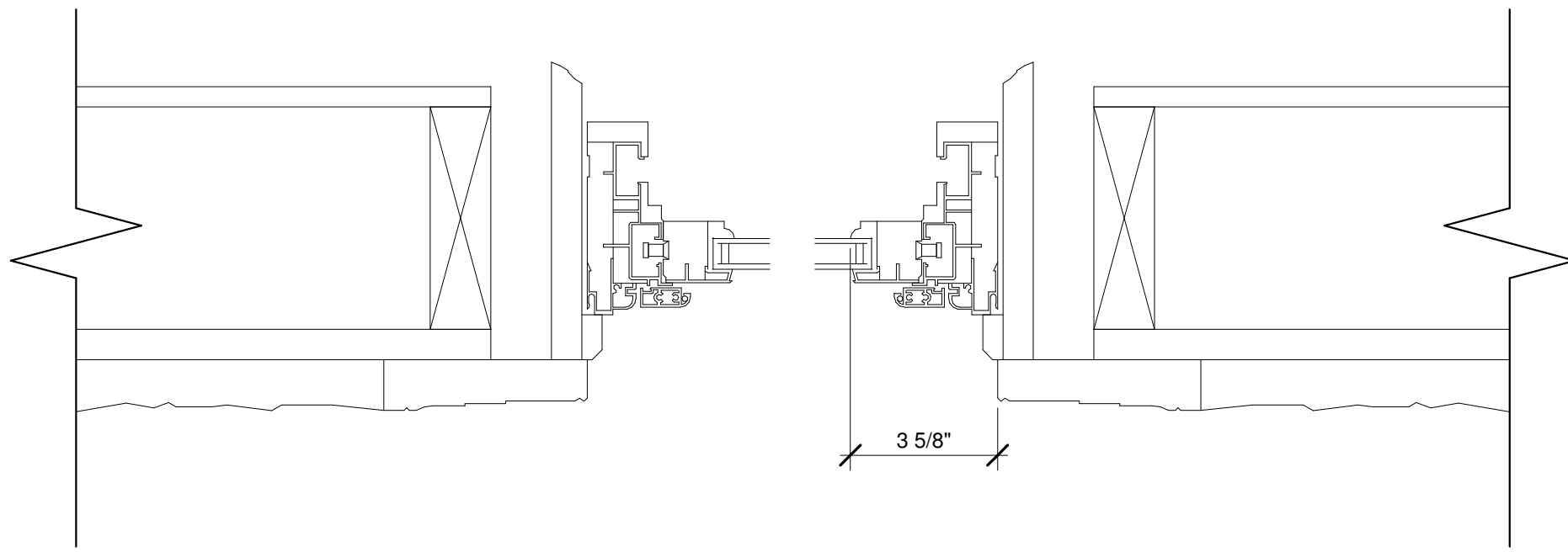
Our products are tested to the standards of and certified by the American Architectural Manufacturer's Association, the National Fenestration Rating Council and the Window & Door Manufacturers Association.



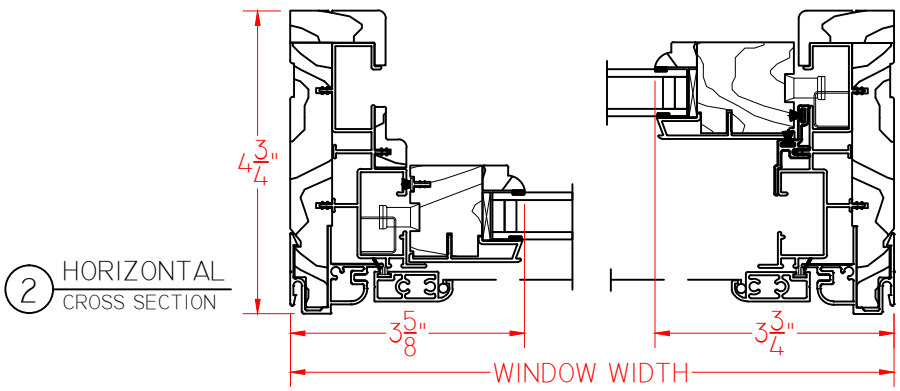
QUAKER
COMMERCIAL WINDOWS AND DOORS



1 **WINDOW DETAIL - EXISTING**
3" = 1'-0"

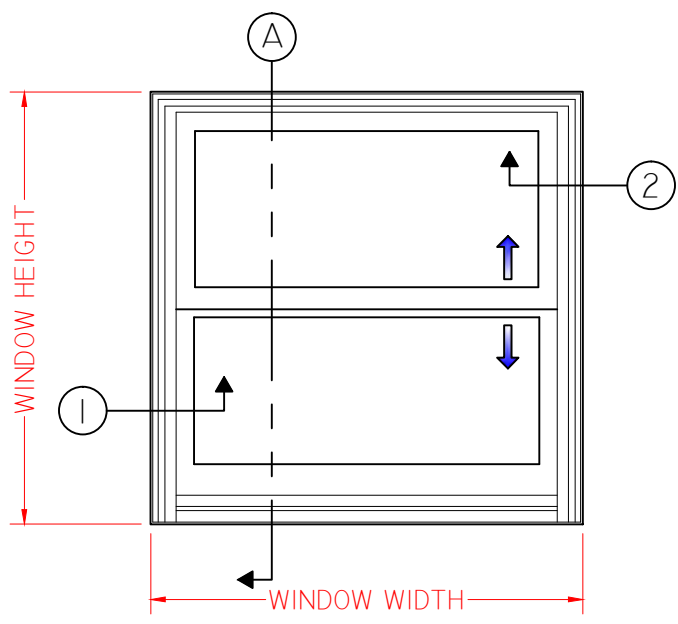
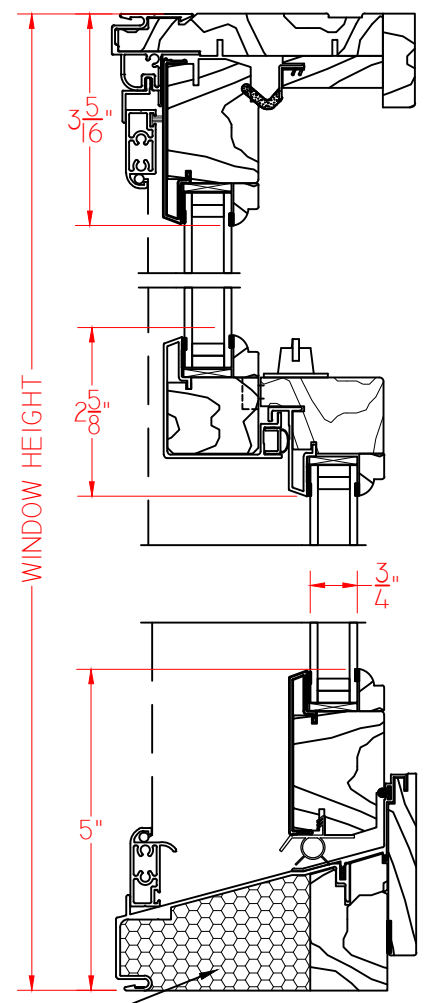


2 **WINDOW DETAIL - QUAKER**
3" = 1'-0"



① HORIZONTAL CROSS SECTION

Ⓐ VERTICAL CROSS SECTION



ELEVATION SCALE 3/4" = 1'-0"

INSTALLER TO FILL CAVITY WITH FIBERGLASS INSULATION BEFORE SETTING WINDOW



Installation Guidelines

For Quaker Window Products Classic Fit replacement product line (Double Hung, and Fixed Windows)

Installer:

- **Read these instructions completely before starting any installation.** Failure to install and maintain our product according to these instructions will void any warranty, written or implied.
- These instructions are consistent with ASTM 2112 “Standard Practice for Installation of Exterior Windows, Doors and Skylights” into common wall constructions. Contact your architect or construction professional for installation into other building designs or constructions methods.
- The installer is responsible for consulting the contractor, structural engineer, architect, or consumer, for proper installation according to local codes and/or ordinances.



Warning:

- Proper eye and hearing protection must always be worn when installing, removing or performing adjustments to Quaker window and door products.
- Use power tools properly! To avoid personal injury, always follow manufacturers’ instructions for safe operation of power tools.
- If broken, glass can fragment causing injury. All Quaker products are available with safety glass. In many areas, local building codes require safety glass in certain locations and/or applications. Unless Quaker’s stipulations dictate safety glass or safety glass is specifically ordered, Quaker windows are not provided with safety glass. Before installing, Quaker recommends consulting local building codes for more definitive information.

Caution:

- Lead-based paint may be present in older homes, and the removal of windows may cause this paint to be disturbed. In order to minimize exposure to lead-based paint dust, please consult www.epa.gov/lead.
- Care must be taken to properly recycle or dispose of old materials. Any recyclable materials should be separated from non-recyclable or hazardous materials. Please consult with local or state authorities regarding proper disposal of non-recyclable or hazardous materials.
- Some codes require the use of pressure treated lumber to line rough openings. Corrosion resistant materials, such as stainless steel or hot-dip galvanized steel, must be used for fasteners and anchors having direct contact with pressure treated lumber.

Important:

- Quaker reserves the right to change the information contained in these guidelines without notice.
- Maintain a minimum of ¼” between the exterior window frame and any trim, siding or masonry to allow for expansion.
- Window nailing flanges and drip caps (integral or applied) do not take the place of window flashing. All windows and doors must be properly flashed and sealed around the perimeter.
- Use of Quaker products in barrier EIFS systems (synthetic stucco) is not recommended. To do so will void all warranties (written or implied) and Quaker Window Products Co., Inc. will not be held responsible for any claims or damages resulting from water infiltration.
- Do not drill through window sill to install alarm wires.
- If using muriatic acid or brick wash cleaning solutions, please follow the manufacturer’s instructions found on the product label or on the manufacturer’s website.

Handling and Storage:

- Do not store units outside, or in a hot environment.
- When carrying window, always keep it in a vertical position. **Do not carry flat**, doing so could result in damage to the unit.
- Stack units as straight as possible to avoid bowing. Do not lay flat!



These instructions are for installing Quaker's Classic Fit products into an existing wood window frame. Contact your Quaker window and door supplier for more information on installing units in other wall conditions. Please visit our website at www.quakerwindows.com or call at 1-800-347-0438 for additional literature and information.

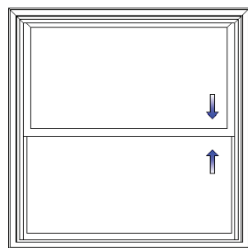
Tools required by installer:

- Safety Glasses
- Utility knife
- Hammer
- Caulk Gun
- Level
- Pliers
- Tape measure
- Putty knife
- Pry bar

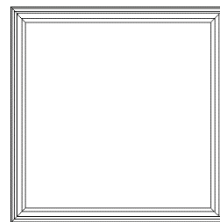


Materials required by installer:

- Insulation
 - Fiberglass or similar strips
 - Minimally expanding low pressure polyurethane window and door spray foam. **(Must be compliant with AAMA 812-04)**
- Shims
 - Made of cedar or synthetic material
- Screws
 - #8 wood screw or masonry screw 2" long (screw size may vary per wall/framing needs)
- Silicone Sealant
 - 100% silicone ASTM C920 compliant
 - Neutral cure (modified oxime) only
 - Some sub-states made need to be primed before sealing. Consult the sealant supplier.



Double Hung



Picture window



Step 1: Inspect unit before installation

- A. Remove all shipping packaging material (blocks, pads, protectors, stretch wrap) and dispose/recycle properly.
- B. Inspect unit for any damage or defects, and make sure the unit operates properly.
- C. Verify that the window unit is the correct size and configuration (Fig. 1 & 2).
- D. Contact the nearest Quaker distributor if there is a problem. Provide the sales order number on the warranty sticker (see <http://quakerwindows.com/wp-content/uploads/2013/04/Warranty-sticker-locations01-30-2015.pdf> for sticker locations).

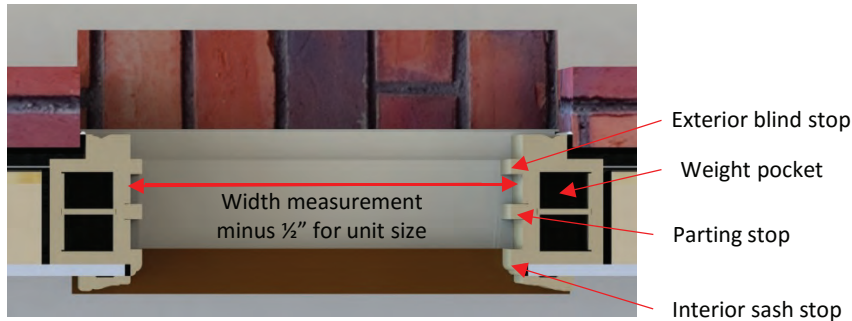


Fig. 1



Fig. 2

Note: Take measurements at three locations (head, middle, sill for width and left, middle, right for height). Use the smallest of the three measurements to ensure the replacement window can be installed square, level, plumb in both directions, and with a straight sill.

Step 2: Remove the existing sashes

- A. Unlock the window. If the sashes are painted shut, use a utility knife to cut the joint between the sashes and frame stops until the sashes are free.
- B. Score paint or varnish along all interior sash stops with a sharp utility knife. Remove interior sash stops at jamb and head using putty knife and pry bar (Fig. 3 & 4). **Be careful** when removing stops so you can reuse them after replacement window is installed.

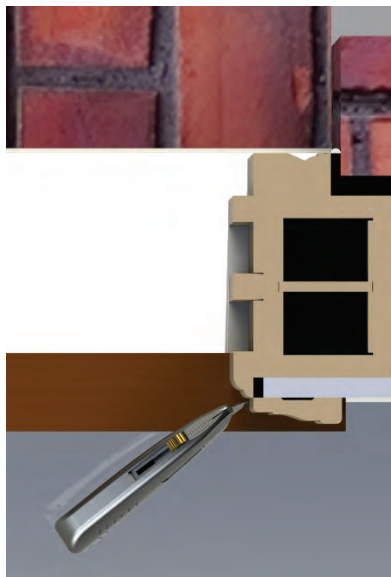


Fig. 3



Fig. 4

Step 2: Remove existing sashes (cont.)

- C. Cut the balance cords on the bottom sash and remove the sash and dispose of it properly. Allow weights to fall to the bottom of the weight pockets (Fig. 5).
- D. Remove the jamb and head parting stops (if applicable) by pulling or prying them out of the frame (Fig. 6).
- E. Lower the top sash and cut the balance cords. Remove the top sash and dispose of it properly.
- F. Remove the balance chord pulleys (Fig. 7).
- G. Remove any remaining jamb liner material (if applicable).
- H. Insulate the weight pockets and any openings or voids (if desired).



Fig. 5



Fig. 6



Fig. 7

Step 3: Opening preparation

- A. Inspect the existing window frame. Repair or replace any deteriorated parts.
- B. Clean the opening of all dirt, debris or excess paint. **Note: If using aluminum coil exterior trim, apply it to the sill now.**
- C. Apply flashing tape to the sill. Cut one piece of tape 12" longer than the sill to allow for 6" up each side jamb. Extend the tape up the vertical leg of the stool and trim tape going up the jamb. Make sure the tape doesn't extend past the exterior blind stop, and lap the tape over any coil trim at the sill (Fig. 8)
- D. Check the sill for level or for bowing and shim as needed to level sill (Fig. 9). Place shims about 1/2" from each side and in center with minimum spacing of 16". Attach shims to prevent movement after they are level.



Fig. 8



Fig. 9

Step 4: Window preparation

- A. Drill pilot holes (if necessary) in the new window frame.
 - Plan ahead for all holes especially the top. Make sure top pilot hole will not be in the same locations as the weight pulleys.
 - Use a 1/8" drill, and minimum of 3 holes per jamb (Fig. 10).
 - Place holes in center of inside balancer track minimum of 2" from corners, and one in center of the check rail. Tilt the bottom sash in or remove it to place the center pilot hole.
- B. Dry fit the window in the opening.
- C. Measure the distance from the bottom of the window to the existing sill. Remove the window from the opening (Fig. 11)
- D. Cut the sill adapter to the correct height. Use a sharp utility knife to score the sill adapter along the groove. Bend and break off the excess sill adapter material and install on window (Fig. 12-13).

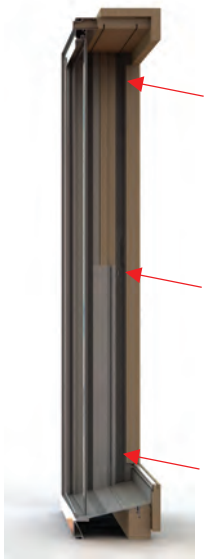
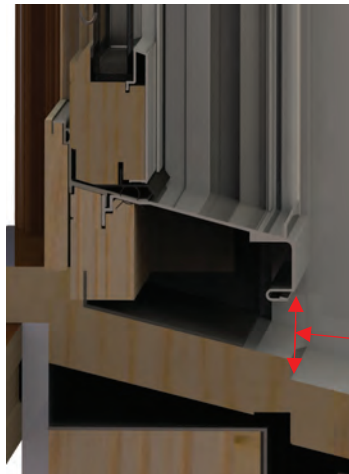


Fig. 10



Measure this distance

Fig. 11



Fig. 12



Fig. 13

Step 5: Installing the window

- A. Apply a continuous bead of sealant to the interior face of the exterior blind stops at the head and both jambs (Fig. 14).
- B. Place a bead of sealant where the existing stool meets the existing window sill (Fig. 15).
- C. Insert window into the opening. Set the bottom of the window in first and tilt top into place. Make sure the window is centered in opening and press firmly against sealant on blind stops.
- D. Place a shim at each of the pilot hole locations, and insert a screw into one top corner to hold window in place (Fig. 16). Remove sash stop at head of window and replace when screws are tightened.
- E. Check for plumb, level, square and window operation. Make any necessary adjustments to shims and finish installing frame screws (Fig. 17). Raise bottom sash to install bottom screws, and tilt bottom sash in to install center screws.



Fig. 14

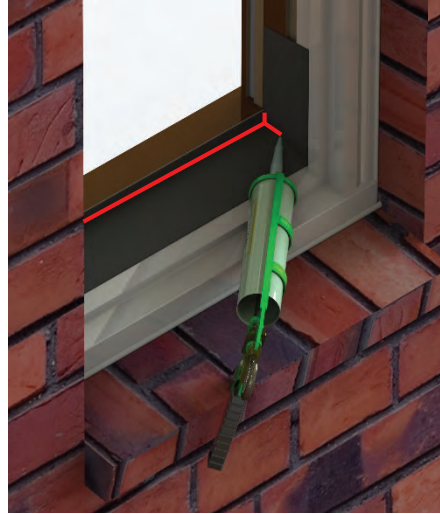


Fig. 15



Fig. 16



Note: When installing all installation screws make sure to tighten screw so the screw head is flush or slightly dimpled in so screw doesn't interfere with balance shoe.



Fig. 17



Step 6: Interior sealant and finish

- A. Insulate between the window frame and the rough opening using minimally expanding window and door spray foam or fiberglass insulation that is compliant with AAMA 812-04. Read and follow the manufacturers' recommendations for application and use (Fig. 18).
- B. Operate window unit to ensure proper operation. Sash will not operate correctly if window is out of square, over-shimmed or over-insulated.
- C. Allow foam to fully cure before installing interior trim.
- D. Install interior stops that were remove earlier or cut new stops (Fig. 19).



Fig. 18



Fig. 19



Fig. 20

Step 7: Sealing the Exterior

- A. If total frame replacement in brick or siding was preformed maintain a minimum of ¼" between the window frame, trim, siding, or masonry. Failure to do so will forfeit all warranties (written or implied).
- B. Apply backer rod (if needed) and a continuous bead of sealant between the window frame and exterior finish material on all four sides of unit. Make sure to clean all surfaces before applying 100% neutral cure silicone sealant (some surfaces may need to be primed so check with sealant supplier) (Fig 20).

Care and Use

An inspection of your windows should be made annually. Visit the Quaker website <http://quakerwindows.com/wp-content/uploads/2013/05/Quaker-Window-Care-Maintenance.pdf> or contact your local independent Quaker distributor for information on the care and use of your product. Ask for the Window Care & Maintenance Guide.