



Manchester

SERIES




QUAKER


RESIDENTIAL WINDOWS & DOORS

Manchester SERIES

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*Style, beauty and design flexibility –
the best choice for your new home.
Your windows should reflect your
own distinct style whether looking
inside or out on the world.*

——

≈ Windows On The World ≈

Your Manchester Series windows are designed and built to beautify your home inside and out. There should be no barriers to keep you from the sheer comfort of looking outdoors on a bright, sunny morning or peering through streetlit darkness at a blinding snowstorm. Your Manchester windows by Quaker will make your world the best place to be no matter what Mother Nature decides to deliver. You will no doubt appreciate the unequalled beauty and design of your Manchester Series making your windows on the world the best available.



≈ Our Company ≈

More than 65 years of the same quality, commitment and dedication are guaranteed to you with your purchase of Quaker windows and doors. Founded in 1949 and based in Freeburg, Missouri, the Quaker family-owned corporation was built on a business philosophy of quality and customer satisfaction that continues today. Marge and Harold "Bud" Knoll dedicated themselves to building a business destined to be a leader in the window and door industry.

Their vision continues at Quaker today with the same high level of detailed workmanship, responsive service and extreme commitment to quality and value.

No shortcuts are ever taken in our manufacturing process. State-of-the-art equipment demands the highest standards of operation. Our commitment to you is a window and door product of unmatched quality and exceptional value.

We constantly strive to build on our reputation for quality along with our history and passion for continual improvement and product development. Quaker's committed to making your new windows on the world the finest possible product available.

≈ Our Warranty ≈

Along with promising you the finest products available with quality workmanship and commitment to value, our warranty assures you of our willingness to stand behind all that we build. Manchester Series windows have one of the finest warranties available today. Ask your dealer for full warranty details or go to www.quakerwindows.com.



3/4" INSULATED GLASS

	Double Hung	Single Hung	Casement	Awning	Horizontal Slider	Picture Window
Clear	S	S	S	S	S	S
EnergyBasic Low-E	O	O	O	O	O	O
Energy 3S Low-E	O	O	O	O	O	O
Energy Plus™ Low-E	O	O	O	O	O	O
EnergyMax Low-E	O	O	O	O	O	O
EnergyTG (Triple Pane Glazing)	O	O	O	O	O	O
Obscure (privacy)	O	O	O	O	O	O
Tempered (safety)	O	O	O	O	O	O

Inquire about the dozens of other glass options available.

COLOR

White Vinyl	S	S	S	S	S	S
Beige Vinyl	O	O	O	O	O	O
Sandstone Vinyl	O	O	O	O	O	O
Dark Oak Wood Grain (interior only)	O	O	O	O	O	O
Painted Exterior (see page 9)	O	O	O	O	O	O

MAIN FRAME

3/4" Frame Depth	S	S	S	S	S	S
Wood Extension Jamb (stain grade)	O	O	O	O	O	O
Wood Extension Jamb (pre-finished white)	O	O	O	O	O	O
Fusion Welded Corners	S	S	S	S	S	S
Pre-Punched Nail Fin	S	S	S	S	S	S
Extruded J-Channel	S	S			S	S*

SASH FRAME

Fusion Welded Corners	S	S	S	S	S	S
Metal Reinforcements	S	S	S	S	S	
Full Interlock at Meeting Rail	S	S			S	

GRILLES

Internal (between-the-glass)						
Flat or Contoured, Single Color or Two-Tone	O	O	O	O	O	O
Applied (simulated divided lite)	O	O	O	O	O	O

GRILLE PATTERNS

Colonial, Queen Anne, Bungalow, Deco, and others	O	O	O	O	O	O
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S = STANDARD O = OPTIONAL

*Not standard for all Manchester picture windows.
See dealer for more information.

Quaker Window Products reserves the right to change any or all designs, features, or options without notice.

SIZING

Standard Sizes (see pages 12-15)

Custom Sizing

HARDWARE

Cam Locks (white finish)

Cam Locks (beige finish)

Cam Locks (sandstone finish)

Truth Encore® Crank Hardware (white finish)

Truth Encore® Crank Hardware (beige finish)

Truth Encore® Crank Hardware (sandstone finish)

Block & Tackle Balancers

Brass Rollers

Limited Travel Device

Egress Hardware

WEATHERSTRIPPING

Fin-Seal Weatherstripping

Bulb Weatherstripping

SCREEN

Screen Frame & Window Vinyl Color Match

BetterVue™ Fiberglass Mesh

Aluminum Mesh

Full Screen

Half Screen

FACTORY ASSEMBLED COMBINATION UNITS

Combination Units

Bay Units

Bow Units

20 YEAR WARRANTY

(Certain Limitations may apply)

	Double Hung	Single Hung	Casement	Awning	Horizontal Slider	Picture Window
SIZING						
Standard Sizes (see pages 12-15)	S	S	S	S	S	S
Custom Sizing	O	O	O	O	O	O
HARDWARE						
Cam Locks (white finish)	S	S			S	
Cam Locks (beige finish)	O	O			O	
Cam Locks (sandstone finish)	O	O			O	
Truth Encore® Crank Hardware (white finish)			S	S		
Truth Encore® Crank Hardware (beige finish)			O	O		
Truth Encore® Crank Hardware (sandstone finish)			O	O		
Block & Tackle Balancers	S	S				
Brass Rollers					S	
Limited Travel Device	O	O	O	O	O	
Egress Hardware			O			
WEATHERSTRIPPING						
Fin-Seal Weatherstripping	S	S			S	
Bulb Weatherstripping			S	S		
SCREEN						
Screen Frame & Window Vinyl Color Match	S	S	S	S	S	
BetterVue™ Fiberglass Mesh	S	S	S	S	S	
Aluminum Mesh	O	O	O	O	O	
Full Screen	S		S	S		
Half Screen	O	S			S	
FACTORY ASSEMBLED COMBINATION UNITS						
Combination Units	O	O	O	O	O	O
Bay Units	O	O	O			O
Bow Units	O	O	O			O
20 YEAR WARRANTY	S	S	S	S	S	S

YOU will find your Manchester Series windows can be functional on many fronts. Year round efficiency and Energy Star® performance levels are yours by adding one of Quaker's optional glass packages (see page 10 for test data). Further enhance your glass' expression with the addition of bronze or grey tint. Fin-sealed weatherstripping adds an extra shield against air infiltration. Immediately, you'll appreciate all of the Manchester's incredible utility features which make smooth operation and easy cleaning the norm. Sashes tilt in on hung units. Venting units use Truth® Encore™ hardware, which neatly tucks away to stay clear of blinds. All sliding units operate smoothly thanks to tandem-wheel brass rollers.

YOUR FAMILY will quickly come to appreciate your Manchester Series windows for the extra protection factor essentially allowing safety and security concerns to become a thing of the past. Dual locks are standard on all of our larger hung and sliding sizes. Limited travel devices can be added too. You may also wish to choose tempered glass to add safety from dangerous glass breakage. For added privacy in personal areas, Quaker offers obscure glass packages. Metal reinforcements provide extra strength and rigidity to prevent any concern of frame failure when Mother Nature erupts.

YOUR BUILDER will thank you for the time and money savings that Manchester Series windows afford. Every Manchester window comes standard with an extruded nailing fin. An extruded J-Channel is standard on almost every style, including arched windows. Inside, pre-applied wood jamb extensions (stainable/paintable/pre-finished) can be prepped for 4 9/16", 6 9/16" or custom depths. Outside, embolden your home's appearance by adding 3 1/2" or 5" vinyl casing around the circumference of your Manchester windows. For window combination units, avoid job-site hassle with Quaker's factory mulling option.



∞ Want the Essential Upgrade? ∞

Quaker's Crusader Series vinyl window is the definitive choice for strength, security, performance and beauty. Crusader Series windows meet DP-50 structural requirements, meaning they're designed for high wind areas such as the Great Lakes Region and Plains States. They still contain the same good looks and craftsmanship of our Manchester line, plus all options are still available. Crusader Series windows are available in Single Hung, Double Hung, Casement, Horizontal Slider and Picture Windows.



The Features You Want Most In A Window...

Standard Features

1. Integral nail fin with warm edge spacer
2. 3/4" Insulated glass
3. Block and tackle balance system for all hung models
4. Operating sashes on all hung units tilt in for convenient cleaning
5. Fin-sealed weatherstripping
6. Fusion welded corners on frame and sash
7. Attractive exterior with simulated brickmold appearance
8. Easy screen removal
9. Single-lever locking system on venting units
10. Truth™ Encore® hardware on venting styles

Available colors: (see page 8)

Hardware colors: (see page 4)

Glass options (see page 4)

Grids (see page 9)

Painted exterior colors (see page 8)

- Metal reinforcements inside all vital sash rails
 - Highest quality, pure vinyl
 - Warranty is one of the industry's best
- See your dealer for full warranty information or go to www.quakerwindows.com

*Extruded J-Channel not available on venting units



MANCHESTER Series



Specialty Looks - Two-Tone Painted Vinyl and Wood Grain Interior



In addition to 3 vinyl colors, Manchester Series windows offer the choice of painted exterior colors. Get White, Sandstone, or Beige for the interior and add one of our 12 painted exterior colors.

It's perfect in that it offers vinyl's thermal efficiency with the beautiful exterior expressions only found with aluminum clad windows.

With a heat-reflective paint finish, Manchester painted vinyl windows are so durable and maintenance-free, that they carry a 10-year warranty against cracking, peeling, chalking, blistering, flaking, delaminating or significant discoloration.

Fuse your Manchester windows into your home's surroundings by choosing our Dark Oak Wood Grain option. Available on the interior only, you can mix it with a white vinyl exterior or choose one of our painted exterior colors for a stunning look.

Colors shown may not accurately reflect actual color. Ask your Quaker dealer for an actual color sample.

Got a special exterior color in mind? The Manchester Series can provide custom painted exterior colors to match your home's facade.

Colors

White

interior / exterior

Beige

interior/ exterior

Sandstone

interior / exterior

Satin Creme

exterior

Dark Oak Wood Grain

interior (some limitations on exterior color combinations may apply)

Toffee

exterior

Holly

exterior

Redwood

exterior

Chestnut

exterior

Earthtone

exterior

Dark Bronze

exterior

Black

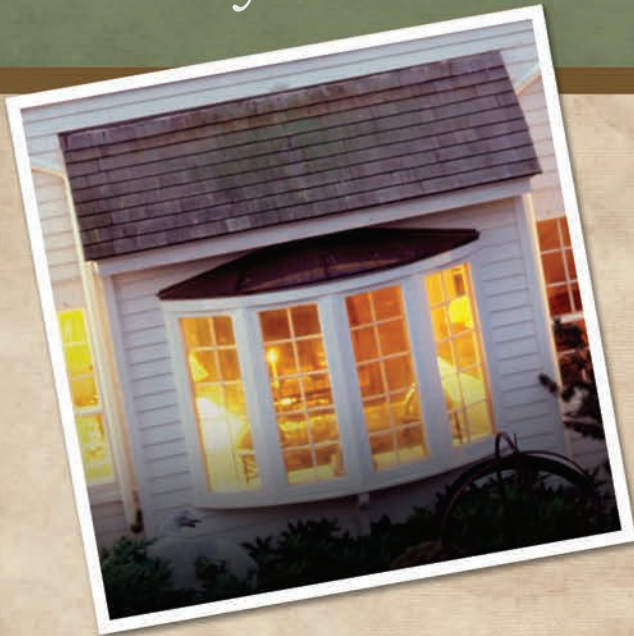
exterior

Metallic Grey

exterior



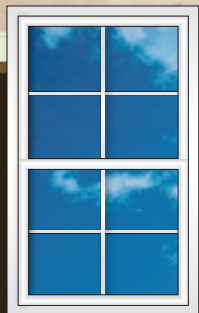
Bay & Bow Windows and Customizable Grid Options



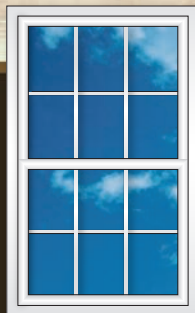
Bay and Bow units open up any room, offering the perfect combination of timeless beauty and solid, long-lasting construction.

Available In Different Variations

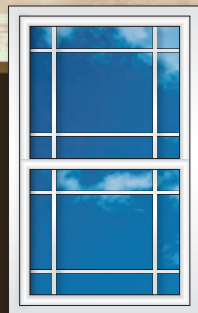
- 13°, 30° or 45°
- 3, 4 or 5 unit configurations
- Hung or venting combinations
- Available with almost every option offered



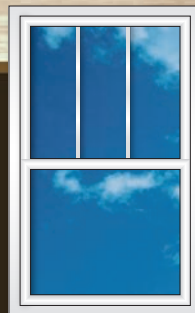
Custom



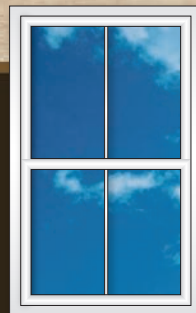
Colonial



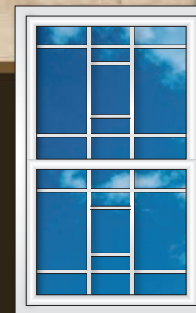
Queen Anne



Custom

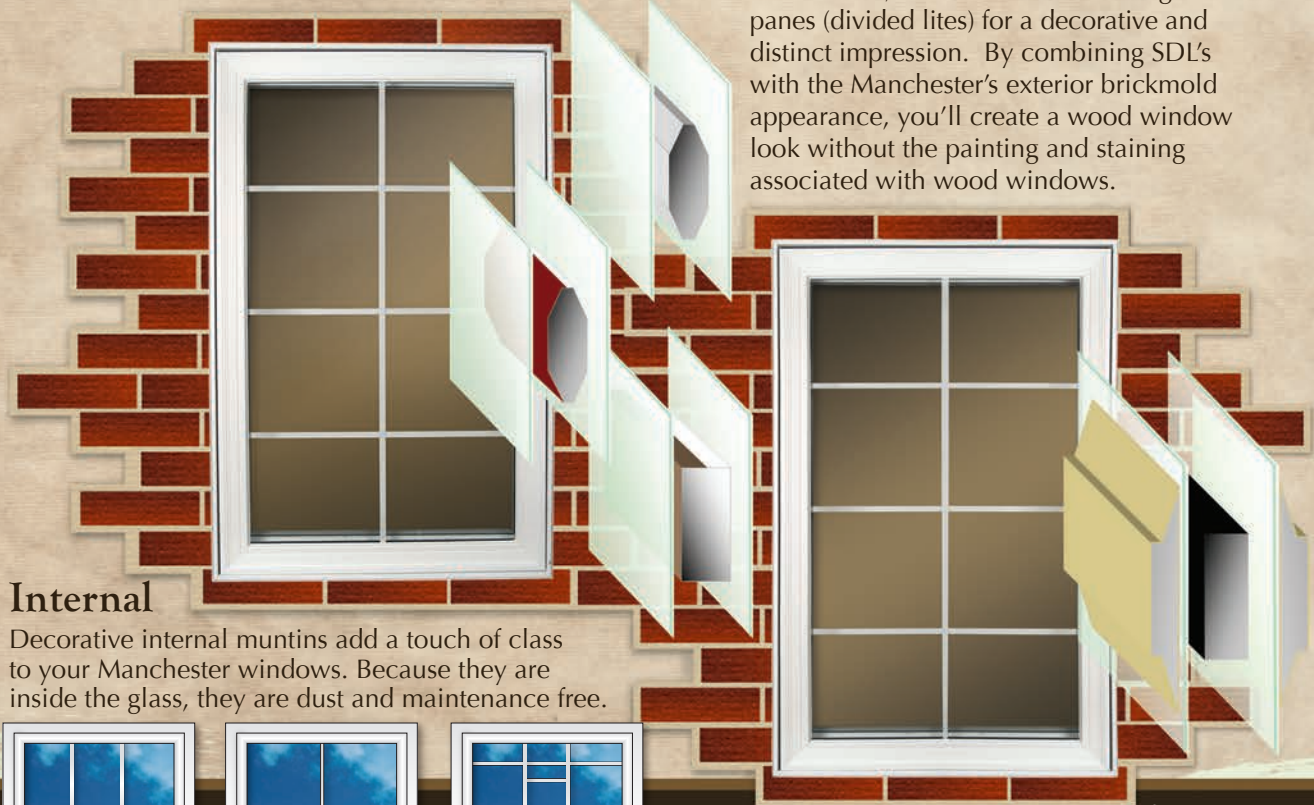


Custom



Custom

Flat muntin ~ single color
 $\frac{5}{8}$ " (standard) ~ $\frac{3}{4}$ " & 1" available
 Flat muntin ~ two-tone $\frac{5}{8}$ "
 Contoured muntin ~ single color & two-tone $\frac{3}{4}$ "



Internal

Decorative internal muntins add a touch of class to your Manchester windows. Because they are inside the glass, they are dust and maintenance free.

Simulated Divided Lites

Truly enhance your Manchester windows with Simulated Divided Lites (SDL). SDL's, with their 3-dimensional feel, simulate early window architecture, which used individual glass panes (divided lites) for a decorative and distinct impression. By combining SDL's with the Manchester's exterior brickmold appearance, you'll create a wood window look without the painting and staining associated with wood windows.

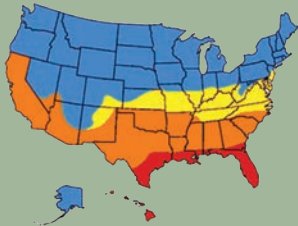
$\frac{7}{8}$ " Available

Grid Designs

Choose one of Quaker's standard designs, or opt for a "personal" or specific look.

An ENERGY STAR® Partner

Quaker is proud to have been an ENERGY STAR® partner since 2001. ENERGY STAR® is the trusted symbol of energy efficiency as it identifies highly efficient products. Choosing ENERGY STAR® windows and doors from Quaker means you're saving energy, saving money, and helping the environment too.



Climate Zone	U-Value	SHGC	Wind Infiltration
Northern	≤ 0.27	Any	≤ 0.30
(accepted Alternate #1)	= 0.28	≥ 0.32	≤ 0.30
(accepted Alternate #2)	= 0.29	≥ 0.37	≤ 0.30
(accepted Alternate #3)	= 0.30	≥ 0.42	≤ 0.30
North Central	≤ 0.30	≤ 0.40	≤ 0.30
South Central	≤ 0.30	≤ 0.25	≤ 0.30
Southern	≤ 0.40	≤ 0.25	≤ 0.30

Criteria shown effective as of Jan. 1, 2016

Quaker Window Products And The NFRC

The National Fenestration Rating Council (NFRC) is a non-profit, public/private organization created by the window, door, and skylight industry. The NFRC provides ratings on window, door, and skylight products to measure and compare the energy performance. Look for the NFRC label (below) on your Quaker windows and doors.

The NFRC Label Rates

- U-factor - how well a window keeps heat inside a building
- Solar Heat Gain - a window's ability to block warming caused by sunlight
- Visible Light Transmittance - how much light gets through a product

The NFRC Does Not

- Distinguish between a "good" window and a "bad" window
- Set minimum performance standards
- Mandate performance levels
- Ratings may vary depending upon styles and options.
- Periodic recertification is required, thus results may vary slightly.
- Quaker Window Products reserves the right to change any or all designs without notice.

ENERGY STAR® Qualified in Highlighted Regions

Quaker Window Products Co.

Mnchester/Advtdge Casement
CFD #CQWP-M-039-00081-00001
 Vinyl Frame * Double Glazed
 * Argon Filled * LowE DSB + Clear DSB

ENERGY PERFORMANCE RATINGS

U-Factor (U.S./I-P)	Solar Heat Gain Coefficient
0.28	0.24

ADDITIONAL PERFORMANCE RATINGS

Visible Transmittance	Condensation Resistance
0.45	62

Manufacturer stipulates that these ratings conform to applicable NFRC procedures for determining whole product performance. NFRC ratings are determined for a fixed set of environmental conditions and a specific product size. NFRC does not recommend any product and does not warrant the suitability of any product for any specific use. Consult manufacturer's literature for other product performance information.

www.nfrc.org
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For more info about the NFRC, go to www.nfrc.org



Thermal Performance Data

*ENERGY STAR® performance is based on Residential NFRC sizes: Glazing variations may cause values to vary slightly. For higher efficiencies, see your dealer for glazing options. Periodic re-testing is required. Test data may differ slightly.

Product	Glass Package	U-Value	SHGC	ENERGY STAR (January 1, 2016)
Manchester Awning	ENERGYBASIC	0.27	0.28	N, NC
	ENERGYPLUS	0.24	0.27	N, NC
	ENERGY 3S	0.27	0.18	N, NC, SC, S
	ENERGYMAX	0.24	0.18	N, NC, SC, S
	ENERGY TG (TRIPLE PANE)	Values and Energy Star qualification will vary depending upon the use of, type of and coats of Low-E		
Manchester Casement	ENERGYBASIC	0.27	0.28	N, NC
	ENERGYPLUS	0.23	0.27	N, NC
	ENERGY 3S	0.26	0.18	N, NC, SC, S
	ENERGYMAX	0.23	0.18	N, NC, SC, S
	ENERGY TG (TRIPLE PANE)	Values and Energy Star qualification will vary depending upon the use of, type of and coats of Low-E		
Manchester Casement Picture Window	ENERGYBASIC	0.27	0.32	N, NC
	ENERGYPLUS	0.22	0.32	N, NC
	ENERGY 3S	0.26	0.18	N, NC, SC, S
	ENERGYMAX	0.22	0.21	N, NC, SC, S
	ENERGY TG (TRIPLE PANE)	Values and Energy Star qualification will vary depending upon the use of, type of and coats of Low-E		
Manchester Double Hung	ENERGYBASIC	0.30	0.32	NC
	ENERGYPLUS	0.25	0.32	N, NC
	ENERGY 3S	0.29	0.22	NC, SC, S
	ENERGYMAX	0.25	0.21	N, NC, SC, S
	ENERGY TG (TRIPLE PANE)	Values and Energy Star qualification will vary depending upon the use of, type of and coats of Low-E		
Manchester Picture Window	ENERGYBASIC	0.27	0.34	N, NC
	ENERGYPLUS	0.23	0.34	N, NC
	ENERGY 3S	0.26	0.23	N, NC, SC, S
	ENERGYMAX	0.22	0.22	N, NC, SC, S
	ENERGY TG (TRIPLE PANE)	Values and Energy Star qualification will vary depending upon the use of, type of and coats of Low-E		
Manchester Single Hung	ENERGYBASIC	0.30	0.33	N
	ENERGYPLUS	0.26	0.32	N, NC
	ENERGY 3S	0.29	0.22	NC, SC, S
	ENERGYMAX	0.25	0.21	N, NC, SC, S
	ENERGY TG (TRIPLE PANE)	Values and Energy Star qualification will vary depending upon the use of, type of and coats of Low-E		
Manchester Horizontal Slider	ENERGYBASIC	0.30	0.33	N
	ENERGYPLUS	0.26	0.32	N, NC
	ENERGY 3S	0.29	0.22	NC, SC, S
	ENERGYMAX	0.25	0.21	N, NC, SC, S
	ENERGY TG (TRIPLE PANE)	Values and Energy Star qualification will vary depending upon the use of, type of and coats of Low-E		
Manchester Patio Door	ENERGYBASIC	0.29	0.33	N, NC
	ENERGYPLUS	0.24	0.32	N, NC
	ENERGY 3S	0.28	0.22	N, NC, SC, S
	ENERGYMAX	0.24	0.21	N, NC, SC, S
	ENERGY TG (TRIPLE PANE)	Values and Energy Star qualification will vary depending upon the use of, type of and coats of Low-E		

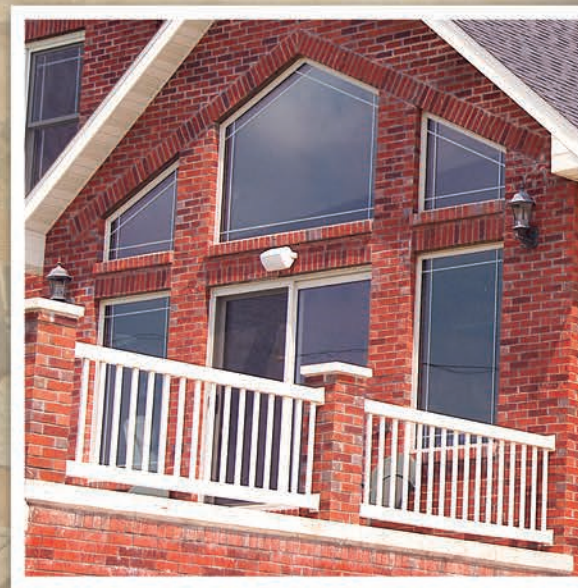
All values are NFRC certified and based on NFRC test sizes.

All testing done without grilles between the glass. The inclusion of grilles may cause the values to vary slightly. Values shown are current as of January 1, 2016. Periodic re-testing is required thus values shown could be different. For the most up-to-date thermal values, ask your dealer. Contact your dealer or Quaker for more information.

All products shown easily pass Energy Star's Wind infiltration criteria of <0.30 psf @ 25 mph. Contact your dealer or go to www.quakerwindows.com for exact air test data.



Photo Courtesy of L•O Profile Magazine



Size Limitations (Minimum & Maximum) For Manchester Series Windows

PRODUCT	MAX. WIDTH	MAX. HEIGHT	MIN. WIDTH	MIN. HEIGHT
Manchester DH (max. u.i. = 124")	51"	86"	15"	23"
Manchester SH (max. u.i. = 124")	51"	86"	15"	23"
Manchester Picture Window (max. u.i. = 170")	96"	96"	23"	23"
Manchester Casement	36"	72"	18"	24"
Manchester Awning	52"	48"	23"	16"
Manchester Horizontal Slider (max. u.i. = 138")	96"	72"	22"	13"
Manchester Center Vent & Manchester End Vent Sliders (max u.i. = 168")	110"	72"	40"	20"

More information on vinyl patio doors and geometrics are available upon request. Other parameters concerning size limitations, united inch (u.i.) limitations, and hardware restrictions may apply. Quaker Window Products reserves the right to change information without notice.

Due to u.i. and structural limitations, maximum width and height may not always be used together.

“Let your windows on the world reflect who you are – inside and out – they should be Quaker.”



QUAKER
RESIDENTIAL WINDOWS & DOORS

See your local authorized Quaker Windows dealer.



www.quakerwindows.com • July 2016

