

**Product Information** 

### Green Mountain Window and Door Co.

### Milestone Casement v2.1

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### NOTE

All specifications and data are subject to change without notice.

Allow 1/16" tolerance on all measurements.

Some options and accessories are not covered in this manual. Contact your Green Mountain Representative for further assistance



### **Unit Specifications**

### Frame:

- Pine wood interior and exterior standard. Options include South American Mahogany, Philippine Mahogany (Marenti), Douglas Fir, Western Red Cedar, Teak, or other. Optional species can be specified for specific parts only (sill, sill nose, casing, etc.)
- ➤ Frame width: 4 9/16"
- Frame thickness: 1 3/16"
- ➤ Sill: 10 degree bevel, 1" standard sill nose. Optional 2" "historic" sill nose
- Pine exterior parts are dipped in a water repellent preservative.

### Sash:

- Pine wood interior and exterior standard. Options include South American Mahogany, Philippine Mahogany (Marenti), Douglas Fir, Western Red Cedar, Teak, or other.
- Sash thickness: 1 3/4"
- > Pine exterior parts are dipped in a water repellent preservative.

### Interior and exterior finish:

- Bare wood interior white primed exterior standard
- > Pre-finished exterior options. See your Green Mountain Window Representative for colors and availability.

### **Hardware:**

- > Standard cam handle and keeper: Sand cast oil rubbed bronze. Consult your Green Mountain dealer for optional finishes.
- ➤ Heavy duty four bar adjustable hinge, opens to 52°. A 90° Egress hinge is optional.

### Weatherstrip:

- Foam filled bulb weatherstrip on frame.
- ➤ Leaf weatherstrip on sash.

### Jamb extension:

- Applied jamb extension available to match virtually any wall thickness
- Standard thickness: 21/32"

### **Insect Screens:**

- Pull open interior mount hinge screen with loose pin hinges for removal.
- > Standard wood framed screen with charcoal fiberglass mesh screening. Species and finish to match window. Optional mesh: charcoal aluminum, bright aluminum, or bright bronze. Screen pull made of sand cast bronze in oil rubbed bronze.

### **Glass:**

- Double strength glass sealed with Gray Duraseal warm edge spacer. Standard overall glass thickness on wood exterior units is ½" with wood exterior glazing bead. Optional 11/16" glass thickness with white vinyl exterior glazing bead.
- > Glazing method: silicone wet seal interior and exterior
- ➤ Glazing types: single glass, insulating glass
- > Option for black Duraseal warm edge spacer
- Standard insulating glass options include: (see NFRC ratings for performance comparison)
  - o 1/2" regular insulating glass
  - o 1/2" Low E with Argon gas fill
  - o 1/2" Low E with Krypton gas fill
  - o 11/16" regular insulating glass (white vinyl glazing bead on exterior)
  - o 11/16" Low E with Argon (white vinyl glazing bead on exterior)
- Other glass options: tempered, laminated, obscure, mouth blown restoration (wavy), tinted, UL rated, any specified

### **Optional Divided Lites:**

- Options include: 5/8" white flat airspace grille, 5/8" white profiled airspace grille, 7/8" removable stick grille (interior only), 7/8" removable full surround grille (interior only), 5/8" true divided lite (single glass only), 5/8" simulated divided lite (SDL) with or without spacer bar, 7/8" SDL with or without a spacer and 1 1/4" SDL with or without a spacer bar. Gray SDL spacer is standard with gray SDL tape. Optional black spacer and tape is used when black glass spacer is chosen.
- > See "section details: divided lites for muntin profiles" for standard cuts. Custom configurations are available



### NFRC Values, Energy Star Rating Information and DP Ratings

**NFRC** ratings are to be announced. Please contact your Green Mountain Window Dealer.

A note on comparing NFRC ratings: the above ratings are based on NFRC 100-97 & 200 test standards. The 2004 NFRC test procedure typically yields better energy ratings for the same window. Many window companies have already retested their windows and are publishing the new better rating. Green Mountain Window will be retesting this product. Please contact your Green Mountain Window Representative for updates.

ANSI/AAMA/WDMA 101/I.S. 2-97 defines five performance classes: residential (R), light commercial (LC), commercial (C), heavy commercial (HC), and architectural (AW).

Performance Class	Design Pressure	Structural Test Pressure	Water Resistance Test
	_		Pressure
	Lb/ft <sup>2</sup>	Lb/ft <sup>2</sup>	Lb/ft <sup>2</sup>
С	30	45	4.5

<sup>&</sup>lt;sup>†</sup> ENERGY STAR compliant for northern and central regions



### Egress and Clear Opening Information

Size	Clear Opening Width**	Clear Opening Height	Square Foot Opening with Egress Hinges	Square Foot Opening with Standard Hinges
16 - 24	10 1/9 or 7 7/9	18 7/8	1.33	1.03
16 x 24 16 x 32	10 1/8 or 7 7/8 10 1/8 or 7 7/8	26 7/8	1.55	1.03
16 x 36	10 1/8 or 7 7/8	30 7/8	2.17	1.69
16 x 40	10 1/8 or 7 7/8	34 7/8	2.45	1.91
16 x 48	10 1/8 or 7 7/8	42 7/8	3.01	2.34
16 x 56	10 1/8 or 7 7/8	50 7/8	3.58	2.78
16 x 60	10 1/8 or 7 7/8	54 7/8	3.86	3.00
16 x 64	10 1/8 or 7 7/8	58 7/8	4.14	3.22
16 x 72	10 1/8 or 7 7/8	66 7/8	4.70	3.66
20 x 24	14 1/8 or 11 7/8	18 7/8	1.85	1.56
20 x 32	14 1/8 or 11 7/8	26 7/8	2.64	2.22
20 x 36	14 1/8 or 11 7/8	30 7/8	3.02	2.55
20 x 40	14 1/8 or 11 7/8	34 7/8	3.42	2.88
20 x 48	14 1/8 or 11 7/8	42 7/8	4.21	3.54
20 x 56	14 1/8 or 11 7/8	50 7/8	4.99	4.20
20 x 60	14 1/8 or 11 7/8	54 7/8	5.38	4.53
20 x 64*	14 1/8 or 11 7/8	58 7/8	5.77	4.86
20 x 72*	14 1/8 or 11 7/8	66 7/8	6.56	5.51
24 x 24	18 1/8 or 15 7/8	18 7/8	2.38	2.08
24 x 32	18 1/8 or 15 7/8	26 7/8	3.38	2.96
24 x 36	18 1/8 or 15 7/8	30 7/8	3.88	3.40
24 x 40	18 1/8 or 15 7/8	34 7/8	4.39	3.84
24 x 48	18 1/8 or 15 7/8	42 7/8	5.40	4.73
24 x 56*	18 1/8 or 15 7/8	50 7/8	6.40	5.61
24 x 60*	18 1/8 or 15 7/8	54 7/8	6.91	6.05
24 x 64*	18 1/8 or 15 7/8	58 7/8	7.41	6.50
24 x 72*	18 1/8 or 15 7/8	66 7/8	8.42	7.37
28 x 24	22 1/8 or 19 7/8	18 7/8	2.90	2.61
28 x 32	22 1/8 or 19 7/8	26 7/8	4.13	3.71
28 x 36	22 1/8 or 19 7/8	30 7/8	4.74	4.26
28 x 40	22 1/8 or 19 7/8	34 7/8	5.36	4.81
28 x 48*	22 1/8 or 19 7/8	42 7/8	6.59	5.92
28 x 56*	22 1/8 or 19 7/8	50 7/8	7.82	7.02
28 x 60*	22 1/8 or 19 7/8	54 7/8	8.43	7.57
28 x 64*	22 1/8 or 19 7/8	58 7/8	9.05	8.13
28 x 72*	22 1/8 or 19 7/8	66 7/8	10.28	9.23
32 x 24	26 1/8 or 23 7/8	18 7/8	3.42	3.13
32 x 32	26 1/8 or 23 7/8	26 7/8	4.88	4.46
32 x 36	26 1/8 or 23 7/8	30 7/8	5.60	5.12
32 x 40*	26 1/8 or 23 7/8	34 7/8	6.33	5.78
32 x 48*	26 1/8 or 23 7/8	42 7/8	7.78	7.11
32 x 56*	26 1/8 or 23 7/8	50 7/8	9.23	8.44
32 x 60*	26 1/8 or 23 7/8	54 7/8	9.96	9.10
32 x 64*	26 1/8 or 23 7/8	58 7/8	10.68	9.76
32 x 72*	26 1/8 or 23 7/8	66 7/8	12.31	11.09
36 x 24	30 1/8 or 27 7/8	18 7/8	3.95	3.65
36 x 32	30 1/8 or 27 7/8	26 7/8	5.62	5.20
36 x 36*	30 1/8 or 27 7/8	30 7/8	6.46	5.98
36 x 40*	30 1/8 or 27 7/8	34 7/8	7.30	6.75
36 x 48*	30 1/8 or 27 7/8	42 7/8	8.97	8.30
36 x 56*	30 1/8 or 27 7/8	50 7/8	10.64	9.85
36 x 60*	30 1/8 or 27 7/8	54 7/8	11.48	10.62
36 x 64*	30 1/8 or 27 7/8	58 7/8	12.32	11.40
36 x 72*	30 1/8 or 27 7/8	66 7/8	13.99	12.95

<sup>\*</sup>These units meet national egress codes for fire evacuation. Local codes may vary.

\*\*Clear Opening is with Egress hinges and Standard Hinges, respectively.



**Measurement Conversions** 

"Size" used for conversion purposes is the unit name.

Example: 32x24 Casement has a "size" of 32 wide and 24 high.

**Casement:** 

<u>Width</u> <u>Height</u>

For Daylight Opening: "Size" – 6 7/16" "Size" – 6 7/16"
For Frame Size: No Conversion Necessary No Conversion N

For Frame Size: No Conversion Necessary No Conversion Necessary For Rough Opening: "Size" + 1" "Size" + 1 1/4"

Clear Opening: Standard Hinges: Frame – 8 1/8" Frame – 5 1/8"

Egress Hinges: Frame -5.7/8"

Rough Openings of Mulled Units:

Double Wide Unit: (Single RO x2) -1" No Conversion Necessary
Triple Wide Unit: (Single RO x3) -2" No Conversion Necessary
Four Wide Unit: (Single RO x4) -3" No Conversion Necessary

**Picture Windows:** 

<u>Width</u> <u>Height</u>

For Daylight Opening: "Size" – 6 7/16" "Size" – 6 7/16"

For Frame Size: No Conversion Necessary No Conversion Necessary

For Rough Opening: "Size" + 1" "Size" + 1 1/4"

Rough Openings of Mulled Units:

Double Wide Unit: (Single RO x2) -1" No Conversion Necessary
Triple Wide Unit: (Single RO x3) -2" No Conversion Necessary
Four Wide Unit: (Single RO x4) -3" No Conversion Necessary

**Casement Transoms:** 

<u>Width</u> <u>Height</u>

For Daylight Opening: "Size" – 6 7/16" "Size" – 6 7/16"

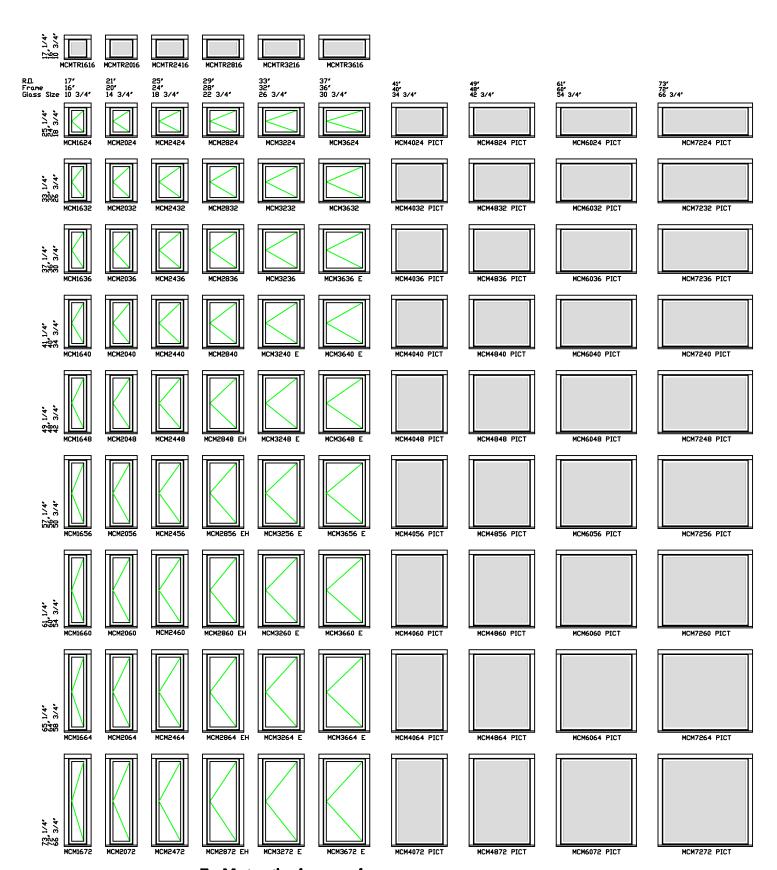
For Frame Size: No Conversion Necessary No Conversion Necessary

For Rough Opening: "Size" + 1" "Size" + 1 1/4"

*Note:* If transom is to be mulled directly above a Casement, add the frame height of the transom to the rough opening height of the Casement for overall rough opening.

Rough Openings of Mulled Units:

Double Wide Unit: (Single RO x2) -1" No Conversion Necessary
Triple Wide Unit: (Single RO x3) -2" No Conversion Necessary
Four Wide Unit: (Single RO x4) -3" No Conversion Necessary

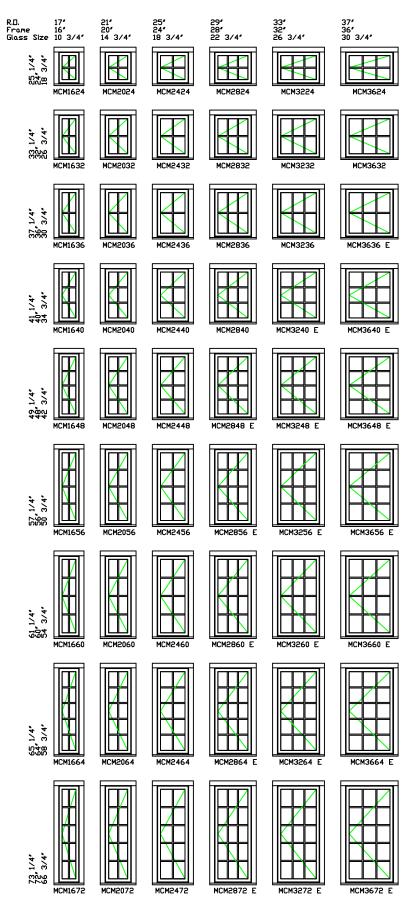


E = Meets national egress codes.

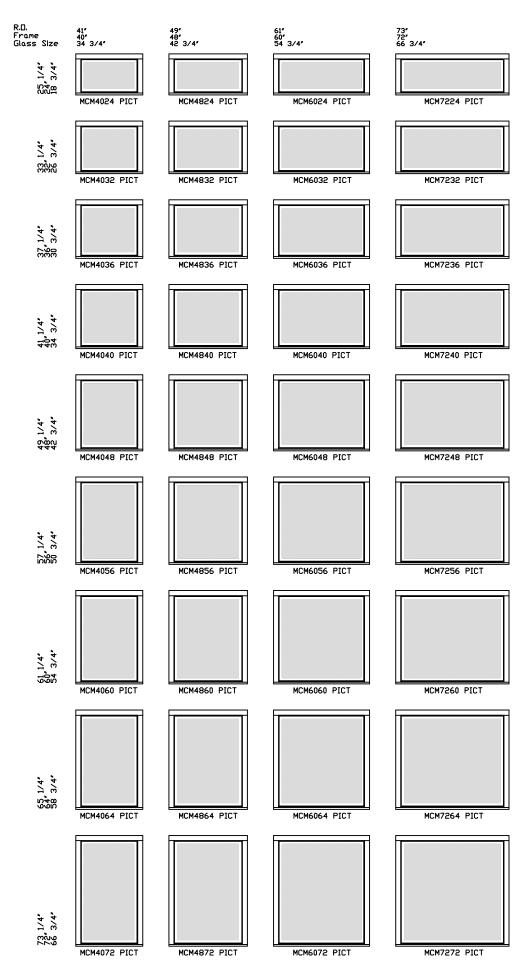
EH = Meets egress codes only with egress hinges.

All units depicting hinges can be either left hinge, right hinge, or stationary center.

Ex: Left hinge has hinge on left side of frame from the exterior view.



E = Meets national egress codes.
 EH = Meets egress codes only with egress hinges.
 All units depicting hinges can be either left hinge, right hinge, or stationary center.
 Ex: Left hinge has hinge on left side of frame from the exterior view.



Note: All frame heights listed do not include 3/4" sub sill.

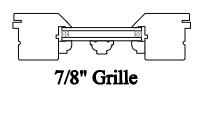
### Casement Cross Section with Jambs Vertical Cross Green Mountain Window 92 Park Street, Rutland, Vermont Horizontal Cross Mullion 1.9

# Casement Picture Cross Section with Jambs Vertical Cross Green Mountain Window 92 Park Street, Rutland, Vermont Horizontal Cross

1.10

## **Casement Transom Cross Section with Jambs** Vertical Cross Green Mountain Window 92 Park Street, Rutland, Vermont **Horizontal Cross** Mullion

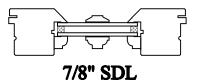
1.11











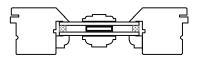




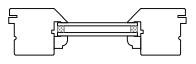
5/8" SDL with Spacer Bar



1 1/4" SDL



1 1/4" SDL with Spacer Bar

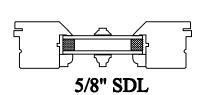


I. G., No Lites Wood Bead

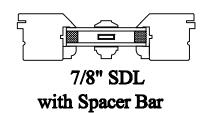




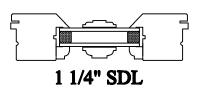


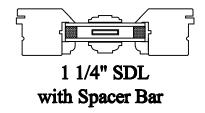








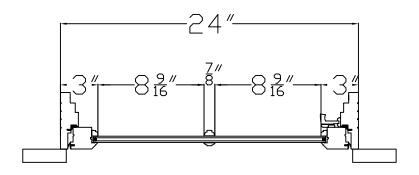


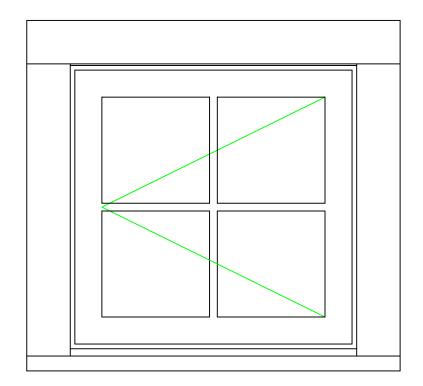


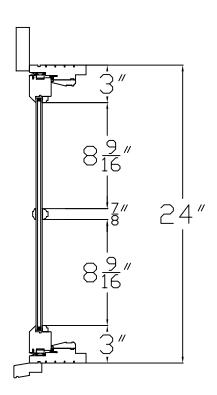


I. G., No Lites Wood Bead

### Green Mountain Window Co.

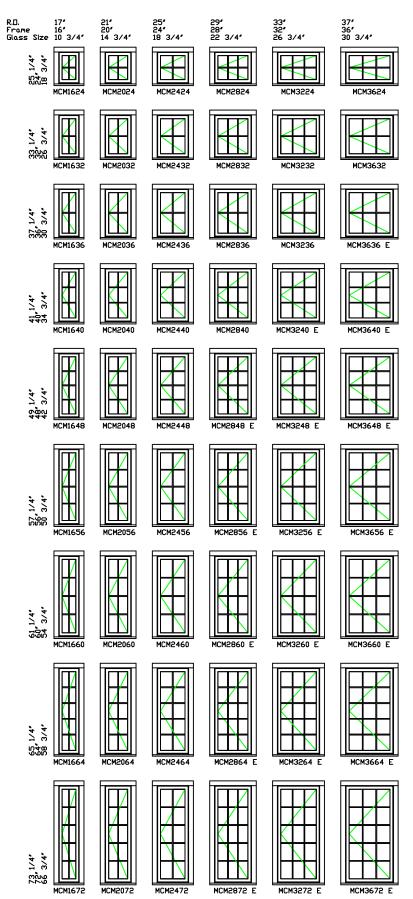




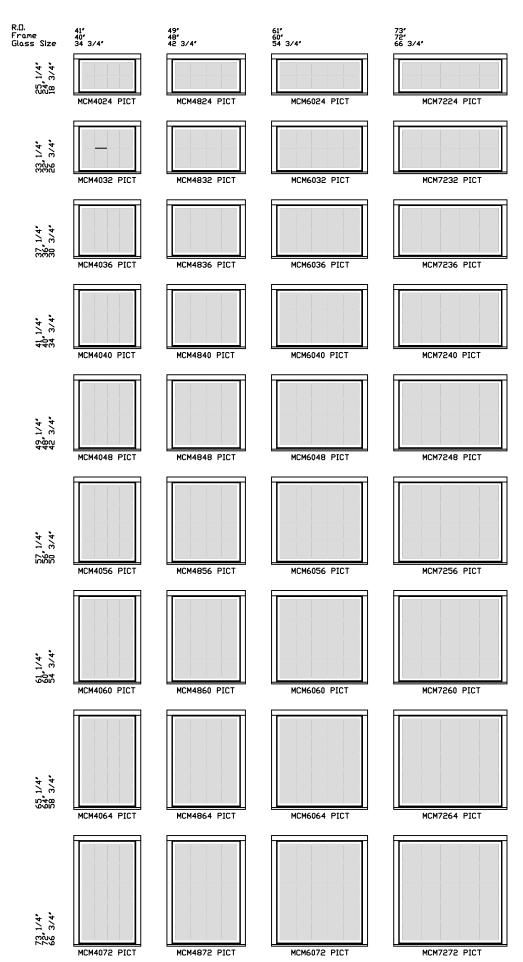


### MCM 2424

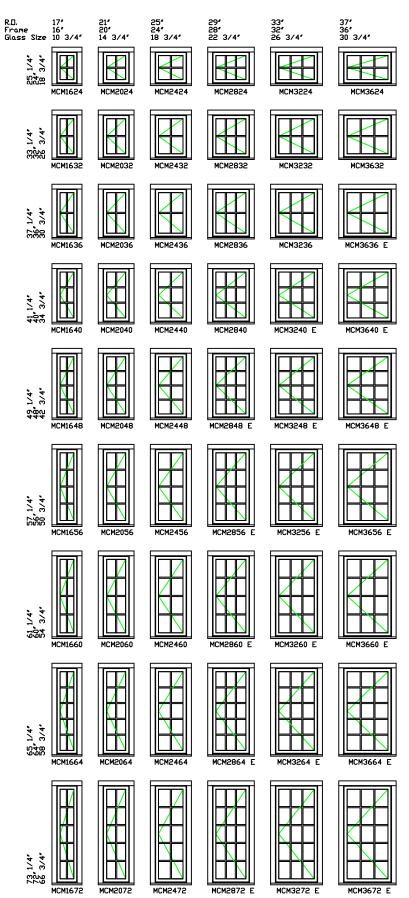
Note: The example above only applies to a 24 x 24 with 7/8" muntins in a two wide, two high pattern. For all other sizes and configurations: Determine the overall daylight opening of each sash (without lites) with the formulas on 1.5. Then multiply the number of bars by the bar width and deduct that number from that overall daylight. Divide this number by the number of lites for daylight of each lite.



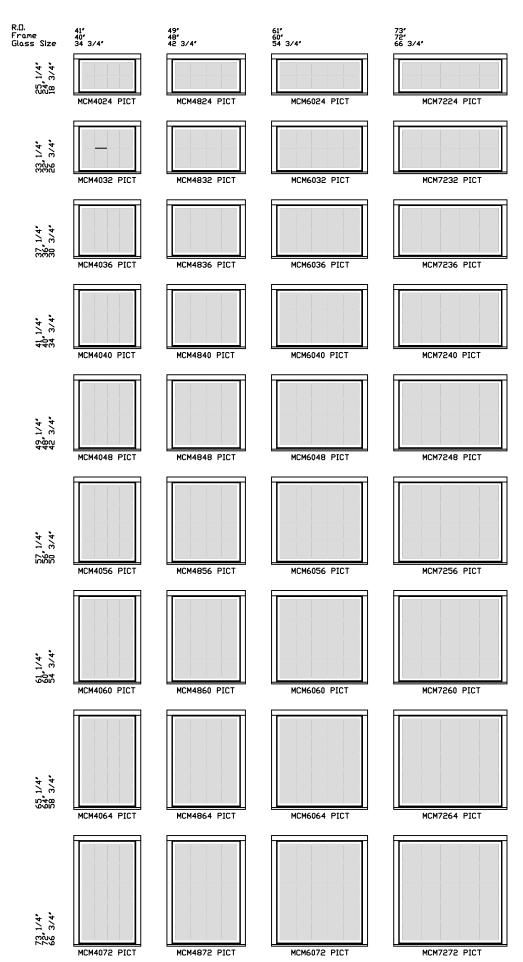
E = Meets national egress codes.
 EH = Meets egress codes only with egress hinges.
 All units depicting hinges can be either left hinge, right hinge, or stationary center.
 Ex: Left hinge has hinge on left side of frame from the exterior view.



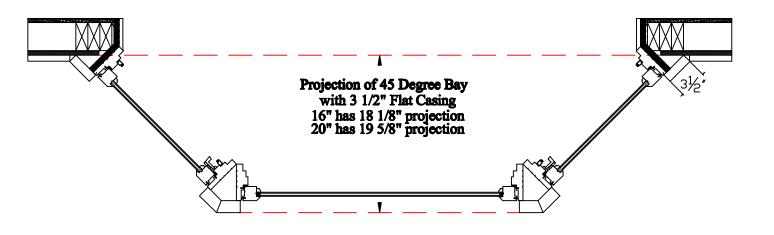
Note: All frame heights listed do not include 3/4" sub sill.

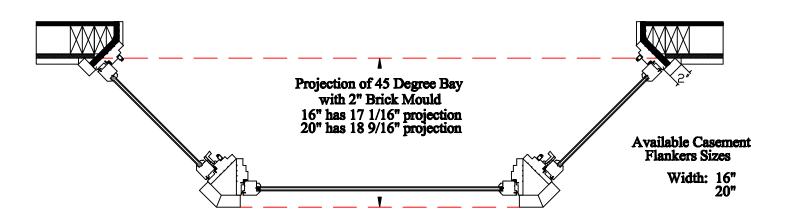


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 All units depicting hinges can be either left hinge, right hinge, or stationary center.
 Ex: Left hinge has hinge on left side of frame from the exterior view.



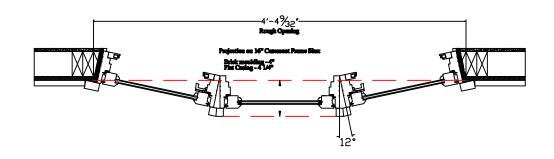
Note: All frame heights listed do not include 3/4" sub sill.

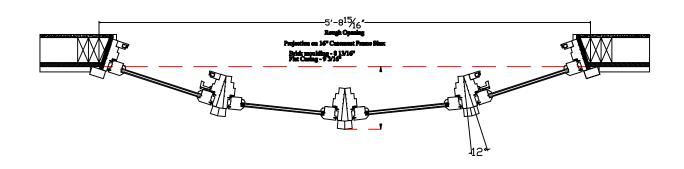


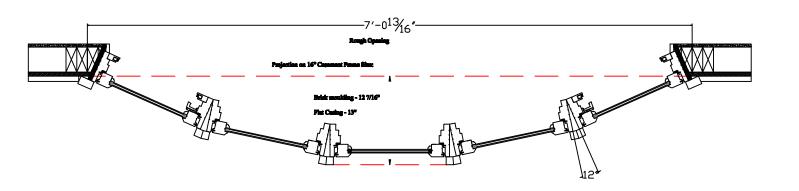


### **Available Picture Window Sizes**

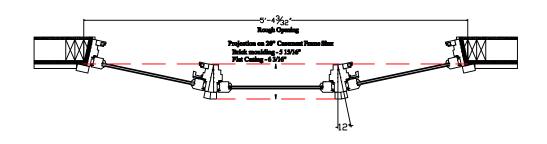
Width:	32" 36" 40" 48" 60" 72"	Height:	24" 32" 36" 40" 48" 56" 60"
			72"

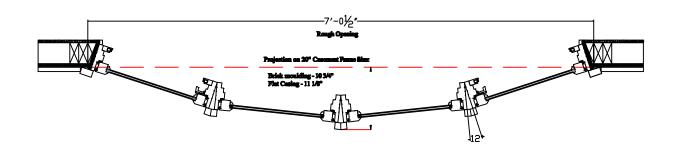


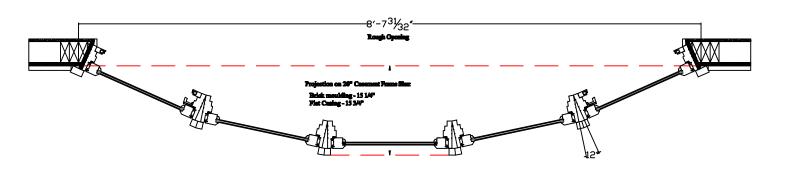




Pland units are same size as counting units







Fixed units are some also as counties units