

CHAPTER 25

WOOD TILT PACS

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NOTE:

Specifications and technical data are subject to change without notice.

Allow 1/16" (2) tolerance on all measurements.

Metric measurements are shown in parenthesis.

For accessories dimensions and applications see the Accessories section of this manual.

For technical assistance about Marvin products you may call our Architectural Hotline 1-800-346-3363 or visit our website: www.Marvin.com.

WOOD TILT PACS

UNIT FEATURES

Sash:

- Pine wood interior and exterior standard. Optional mahogany or vertical grain Douglas fir
- Double Hung tilt-pac Sash thickness: 1 5/16" (33)
- Magnum and Historical Magnum Sash thickness: 1 3/4" (44 mm)
- Double Hung Top rail width: 2 15/32" (63). Bottom rail width: 3 3/4" (95). Stile width: 1 25/32" (45)
- Magnum Double Hung Top rail width: 2 1/4" (57). Bottom rail width: 3 7/8" (98). Stile width: 2 1/4" (57)
- Historical tilt-pac Top rail width: 2 1/32" (52). Bottom rail width: 3 1/2" (89). Stile width: 2 1/32" (52)
- Bottom rail Bevel 14 degrees
- Removable exterior glazing stops
- Historical Magnum has Finger pulls on bottom rail

Interior and exterior finish:

- Treated bare wood or white primed (pine only)

Operating Hardware:

- Lock: High pressure zinc die-cast cam lock and keeper. Optional: keyed lock. Two locks on glass sizes of 36 inches (914 mm) and wider. Color: Satin Taupe. Optional: Bronze, White, Plated brass
- Balance System: Magnum and Historical Magnum: Double coil spring block and tackle with nylon cord and fiber filled nylon clutch
- Balance System: Double hung: coil spring block and tackle with nylon cord and fiber filled nylon clutch
- Jamb Track: All wood tilt-pacs: Vinyl extrusion, foam backing. Color: Beige or White
- Sash retainer plate: Magnum and Historical Magnum: Polycarbonate thermoplastic. Color: Bronze, White.(Double hung: Optional Sash retainer plates)
- Sash lifts: All wood tilt-pacs: Optional. High pressure zinc die-cast. Color: Satin Taupe. Optional: Bronze, White, or Brass

Weatherstripping:

- Weather-strip: Magnum and Historical Magnum: Continuous, leaf weather strip at head jamb parting stop which seals against top sash; dual durometer double leaf at check rail; bulb type dual durometer weather strip at bottom rail. Color: Beige
- Weather strip: Double hung: Dual durometer double leaf at check rail; bulb type dual durometer weather strip at bottom rail. Color: Beige

Insect Screens:

- Wood screen. Optional aluminum screen: Full screen standard, half screen optional. Both are shipped loose. Color: Stone White, Bahama Brown, Bronze, Pebble Gray. Select and Custom colors
- Screen mesh: 18 by 16 charcoal fiberglass, optional screen mesh: Charcoal aluminum wire, Black aluminum wire, Bright aluminum wire, Bright bronze wire

Wood Combination Storm Sash and Screen:

- Rigid track utilized to hold storm and screen panels
- Storm panel. Color: Bronze, Bahama Brown, Pebble Gray, and Stone White
- Hardware: Spring loaded locking pins to hold movable storm panel in position. Heavy metal clips to lock upper and lower storm panels together. Turn latches hold non-movable storm screen panels

Removable Interior Grilles - (Double hung and Magnum Double hung):

- Bar: Pine wood; 3/4" (19) or 1 1/8" (29) wide
- Pattern: Rectangular, custom lite layouts available, contact your Marvin representative

Simulated Divided Lite (SDL):

- Bar (interior and exterior): 7/8" (22) or 1 1/8" (29) wide bars. Pine wood standard, optional mahogany or vertical grain Douglas fir. Finish to match interior and exterior
- Pattern: Rectangular, custom lite layouts available, contact your Marvin representative
- Installation method: Factory applied with acrylic foam tape

Authentic Divided Lite (ADL):

- Bar (interior and exterior): single glazed 7/8" (22) wide bars, insulated glass 1 7/16" (37) wide bars (Double Hung) and 1-11/16" (43) wide bars (Magnum Double Hung): available in standard pine and optional mahogany or vertical grain Douglas fir. Finish to match interior and exterior
- Pattern: Rectangular, custom lite layouts available, contact your Marvin representative

Glass and Glazing:

- Glazing method: Double Hung and Magnum Double Hung. Insulated or single glazed, single glazed with energy panel. Insulated glass hermetically sealed
- Glazing method: Historical Double hung. Single glazed, single glazed with interior energy panel
- Glazing seal: Silicon glazed
- Glazing type: Clear glass, optional glass types: Low E II hard-coat, Laminated, Tempered, Obscure, Bronze tint, Gray tint, and Reflective Bronze
- Insulated glass will be altitude adjusted for higher elevations, argon gas not included

Accessories:

- Sash retainer plates: Polycarbonate thermoplastic. Color: Bronze, White
- Sash lifts: High pressure zinc die-cast. Color: Bronze, White, or Brass

NOTE:

Values shown in parenthesis represent metric equivalents
For product specifications please refer to the CSI Product Specifications, contact your Marvin representative

WOOD TILT PACS

MINIMUM AND MAXIMUM MEASUREMENTS / MEASUREMENT CONVERSIONS

Minimum and Maximum Measurements					
Glazing Type	Minimum Glass Size Width	Minimum Glass Size Height	Maximum Glass Size Width	Maximum Glass Size Height	PER SASH Maximum Glass Size not to exceed Square Feet
Double Hung Tilt Pac					
Insulated Glass	8" (203)	8" (203)	44" (1117)	48" (1219)	10.0 Sq. Feet (0.93 Sq. Meters)
Single Glaze	8" (203)	8" (203)	44" (1117)	48" (1219)	12.0 Sq. Feet (1.11 Sq. Meters)
Magnum Double Hung Tilt Pac					
Insulated Glass	12" (304)	12" (304)	60" (1524)	60" (1524)	18.5 Sq. Feet (1.72 Sq. Meters)
Single Glaze	12" (304)	12" (304)	60" (1524)	64" (1625)	18.5 Sq. Feet (1.72 Sq. Meters)
Magnum Historic Tilt Pac					
Single Glaze	12" (304)	12" (304)	60" (1524)	64" (1625)	18.5 Sq. Feet (1.72 Sq. Meters)

NOTE:

When glass height exceeds 48" top sash will be stationary and bottom sash will have limited travel. MAXIMUM SASH WEIGHT 70 LBS per sash.

Measurement Conversions - Double Hung Tilt Pac										
Size Referenced	Daylight Opening (DLO)		Glass Size (GS)		Outside Measurement Top Sash		Outside Measurement Bottom Sash		Sash Opening (SO)	
Daylight Opening each sash (DLO)	Dimension Needed									
			Width	+ 1 1/16" (27)	Width	+ 3 9/16" (90)	Width	+ 3 9/16" (90)	Width	+ 5 1/16" (129)
			Height	+ 1 1/16" (27)	Height	+ 4 5/32" (106)	Height	+ 5 9/16" (141)	Height	DLO X 2 + 8 1/8" (206)
Glass Size (GS)	Width	- 1 1/16" (27)			Width	+ 2 1/2" (64)	Width	+ 2 1/2" (64)	Width	+ 4" (102)
	Height	- 1 1/16" (27)			Height	+ 3 3/32" (7)	Height	+ 4 1/2" (114)	Height	GS X 2 + 6" (152)
Outside Measurement Top Sash	Width	- 3 9/16" (90)	Width	- 2 1/2" (64)			Width	0	Width	+ 1 1/2" (38)
	Height	- 4 5/32" (106)	Height	- 3 3/32" (79)			Height	+ 1 13/32" (36)	Height	SASH HT X 2 - 3/16" (5)
Outside Measurement Bottom Sash	Width	- 3 9/16" (90)	Width	- 2 1/2" (64)	Width	0			Width	+ 1 1/2" (38)
	Height	- 5 9/16" (141)	Height	- 4 1/2" (114)	Height	- 1 13/32" (36)			Height	SASH HT X 2 - 3" (76)
Sash Opening (SO)	Width	- 5 1/16" (129)	Width	- 4" (102)	Width	- 1 1/2" (38)	Width	- 1 1/2" (38)		
	Height	SO / 2 - 4 1/16" (103)	Height	SO / 2 - 3" (76)	Height	SO / 2 + 3/32" (2)	Height	SO / 2 + 1 1/2" (38)		

WOOD TILT PACS

MEASUREMENT CONVERSIONS

Measurement Conversions - Magnum Double Hung Tilt Pac											
Size Referenced	Daylight Opening (DLO)		Glass Size (GS)		Outside Measurement Top Sash		Outside Measurement Bottom Sash		Sash Opening (SO)		
Daylight Opening each sash (DLO)	Dimension Needed										
			Width	+ 1 1/16" (27)	Width	+ 4 1/2" (114)	Width	+ 4 1/2" (114)	Width	+ 6 13/16" (173)	
		Height		+ 1 1/16" (27)	Height	+ 3 31/32" (101)	Height	+ 5 19/32" (142)	Height	DLO X 2 + 8" (203)	
Glass Size (GS)	Width	- 1 1/16" (27)			Width	+ 3 7/16" (87)	Width	+ 3 7/16" (87)	Width	+ 5 3/4" (146)	
	Height	- 1 1/16" (27)			Height	+ 2 29/32" (74)	Height	+ 4 17/32" (115)	Height	GS X 2 + 5 7/8" (149)	
Outside Measurement Top Sash	Dimension Given										
											Width
		Height	- 3 31/32" (101)	Height	- 2 29/32" (74)			Height	+ 1 5/8" (41)	Height	SO X 2 - 1/16" (2)
Outside Measurement Bottom Sash	Dimension Given										
											Width
		Height	- 5 19/32" (142)	Height	- 4 17/32" (115)	Height	- 1 5/8" (41)			Height	SO X 2 - 3 3/16" (81)
Sash Opening (SO)	Dimension Given										
											Width
		Height	SO / 2 - 4" (102)	Height	SO / 2 - 2 15/16" (75)	Height	SO / 2 + 1/32" (1)	Height	SO / 2 + 1 19/32" (40)		

NOTE:
Conversions represent units without dividers. Contact Marvin's for additional conversions.

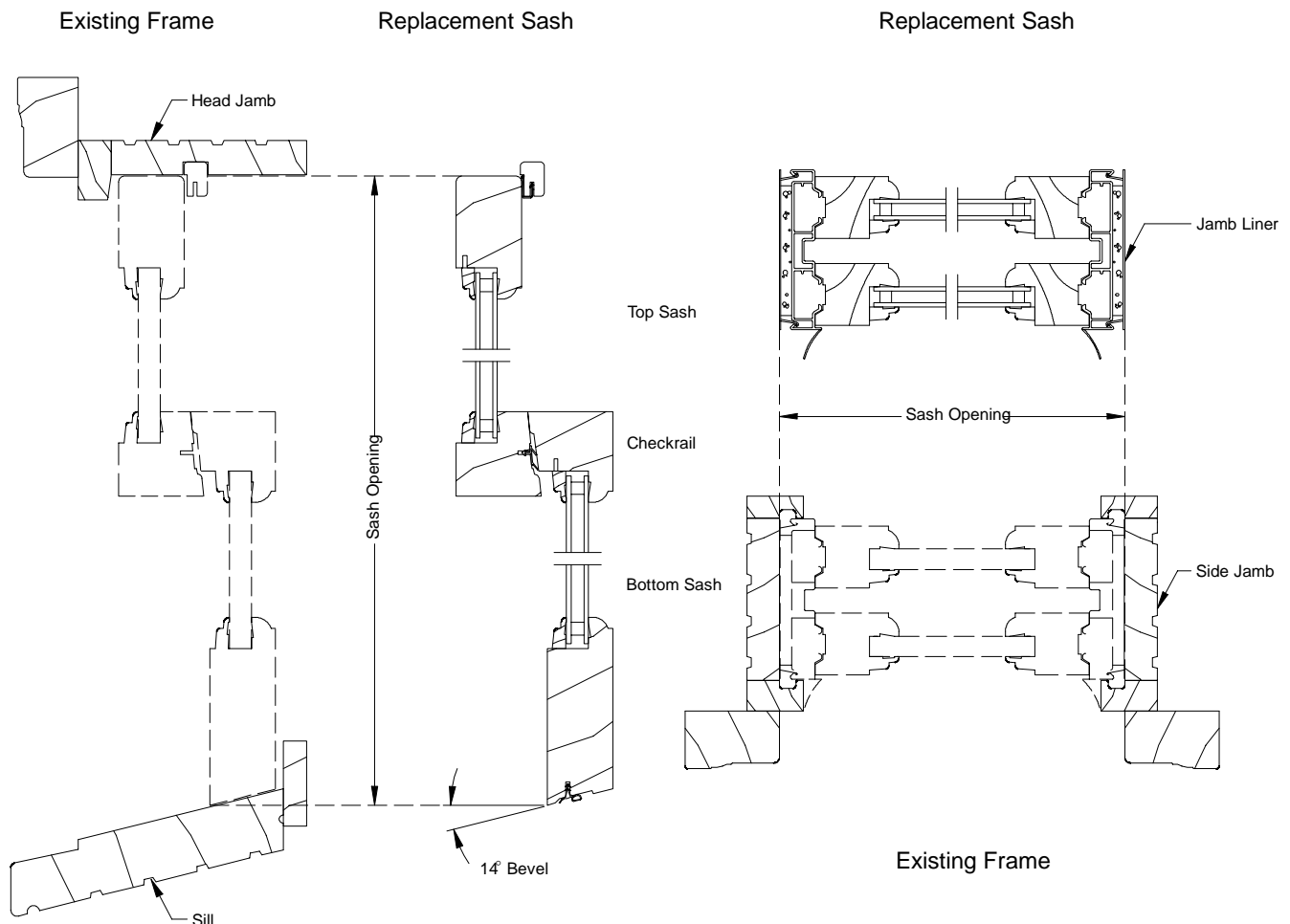
Measurement Conversions - Magnum Historic Tilt Pac											
Size Referenced	Daylight Opening (DLO)		Glass Size (GS)		Outside Measurement Top Sash		Outside Measurement Bottom Sash		Sash Opening (SO)		
Daylight Opening each sash (DLO)	Dimension Needed										
			Width	+ 3/8" (10)	Width	+ 4 1/16" (103)	Width	+ 4 1/16" (103)	Width	+ 6 3/8" (162)	
		Height		+ 3/8" (10)	Height	+ 3 3/4" (95)	Height	+ 4 7/8" (124)	Height	DLO X 2 + 7 5/8" (194)	
Glass Size (GS)	Width	- 3/8" (10)			Width	+ 3 11/16" (94)	Width	+ 3 11/16" (94)	Width	+ 6" (152)	
	Height	- 3/8" (10)			Height	+ 3 3/8" (86)	Height	+ 4 1/2" (114)	Height	GS X 2 + 6 7/8" (175)	
Outside Measurement Top Sash	Dimension Given										
											Width
		Height	- 3 3/4" (95)	Height	- 3 3/8" (86)			Height	+ 1 1/8" (29)	Height	SO X 2 - 1/8" (3)
Outside Measurement Bottom Sash	Dimension Given										
											Width
		Height	- 4 7/8" (124)	Height	- 4 1/2" (114)	Height	- 1 1/8" (29)			Height	SO X 2 - 2 1/8" (54)
Sash Opening (SO)	Dimension Given										
											Width
		Height	SO / 2 - 3 13/16" (97)	Height	SO / 2 - 3 7/16" (87)	Height	SO / 2 + 1/16" (52)	Height	SO / 2 + 1 1/16" (27)		

NOTE:
Conversions represent units without dividers. Contact Marvin's for additional conversions.

WOOD TILT PACS

TILT PAC MEASUREMENTS

SCALE: 3" = 1' 0"



Instructions:

Follow these steps to measure an opening for Tilt Pac Replacement Sash

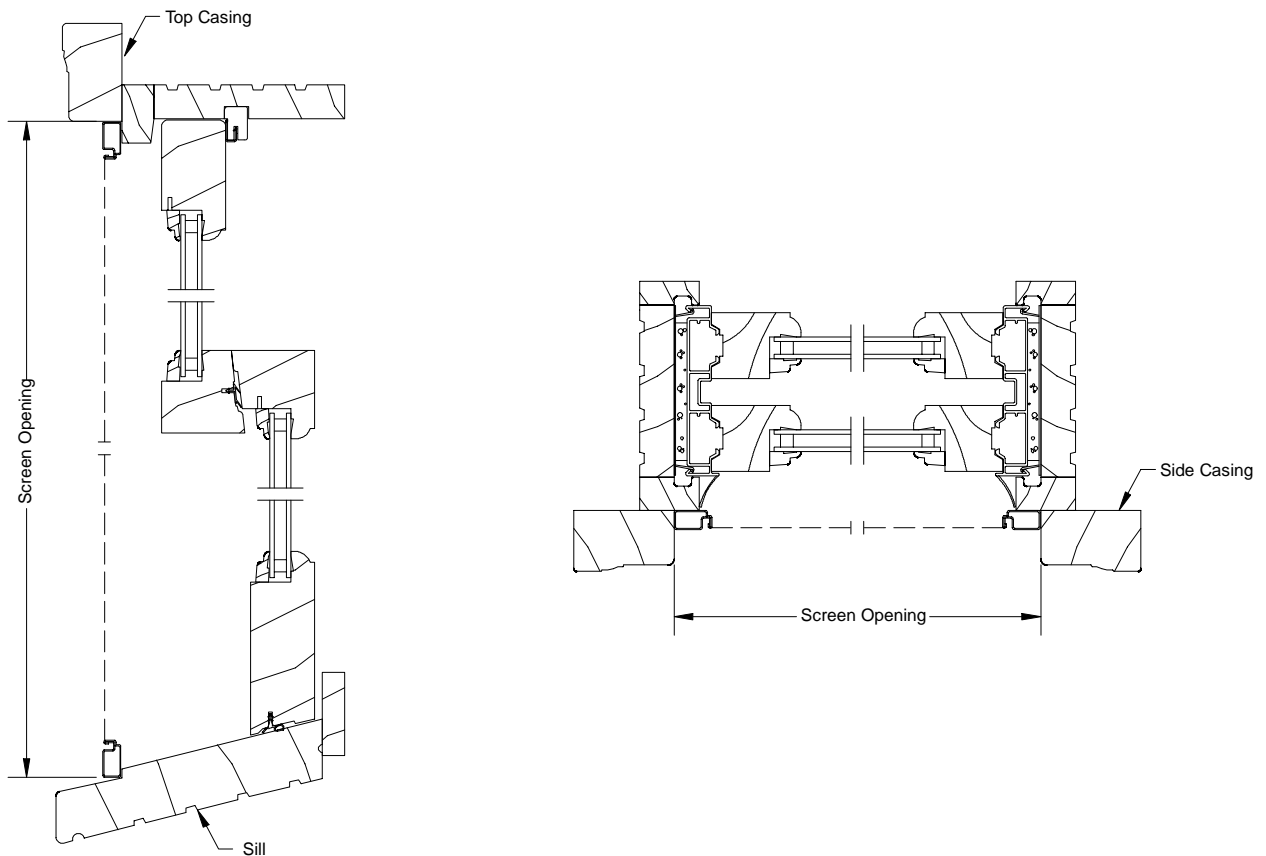
1. To find the sash opening height:
If the old window has wood blocks holding the top sash in place, remove them. Lower the top sash for measuring clearance, then measure the height of the window from where the top sash meets the head jamb to where the bottom sash meets the sill when the bottom sash is fully closed.
2. To find the sash opening width:
Take an inside measurement of the frame from jamb to jamb.
3. To find the sill angle:
Raise the bottom sash and place a carpenter's protractor on the sill, the angle will register. Marvin's standard bottom rail angle is 14 degrees, other angles must be specified.

NOTE:

Double Hung sash shown above. Instructions and measuring locations apply to Single Hung, Magnum Double / Single Hung sash, and Magnum Historical sash.

WOOD TILT PACS – ALL

TILT PAC FULL SCREEN MEASUREMENTS



Instructions:

To insure a proper screen fit, it is recommended to order a screen after the Tilt Pac installation.

1. To find the screen opening height:
Measure from the top casing to the edge of where the screen will rest at the sill, minus 3/32" (2) for the outside measurement (OSM) of the screen height.
2. To find the screen opening width:
Measure from the inside edge of the side casing to the inside edge of the opposite side casing, minus 1/8" (3) for the outside measurement (OSM) of the screen width.

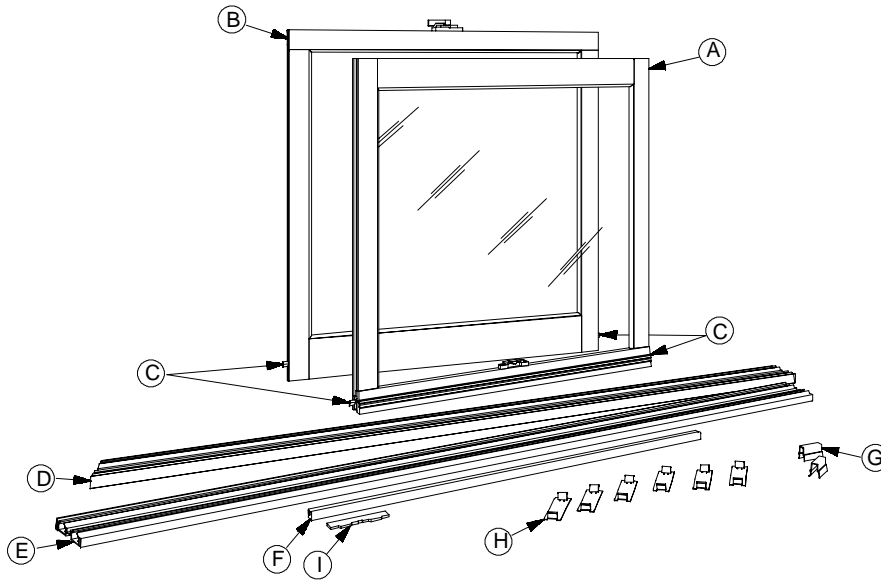
NOTE:

Double Hung sash and screen are shown above. Instructions and measuring locations apply to Single Hung, Magnum Double / Single Hung sash, and Magnum Historical sash. Screen measuring instructions also apply to Combination Storm / Screen measurements. Standard angle on combination bottom rails is 14 degrees, other angles must be specified.

WOOD DOUBLE HUNG TILT PACS

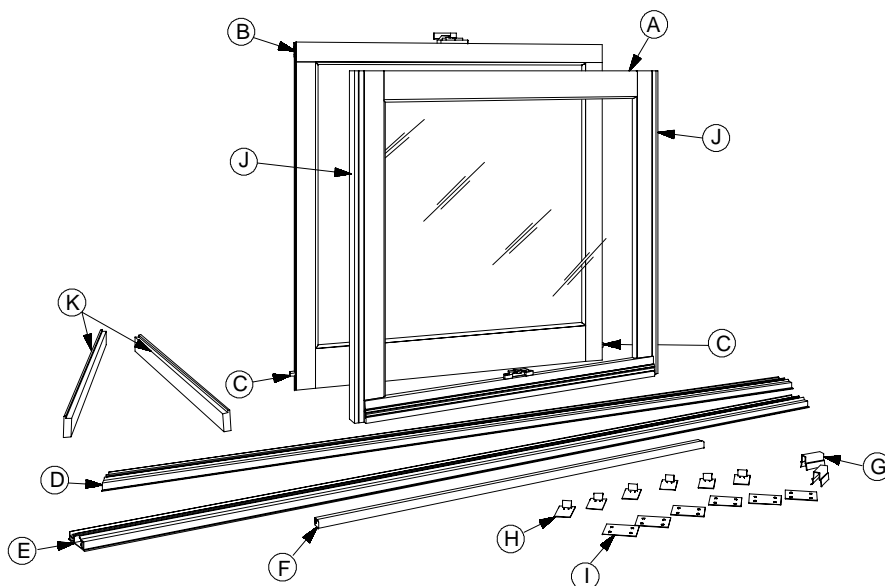
PARTS LIST

Double Hung Tilt Pac



- A. Top Sash
- B. Bottom Sash
- C. Cam Pivots
- D. Left Vinyl Jamb Liner
- E. Right Vinyl Jamb Liner
- F. Head Jamb Part Stop
- G. Two Plastic Sash Stops
- H. Metal Brackets (quantity varies)
- I. Two foam gaskets

Single Hung Tilt Pac

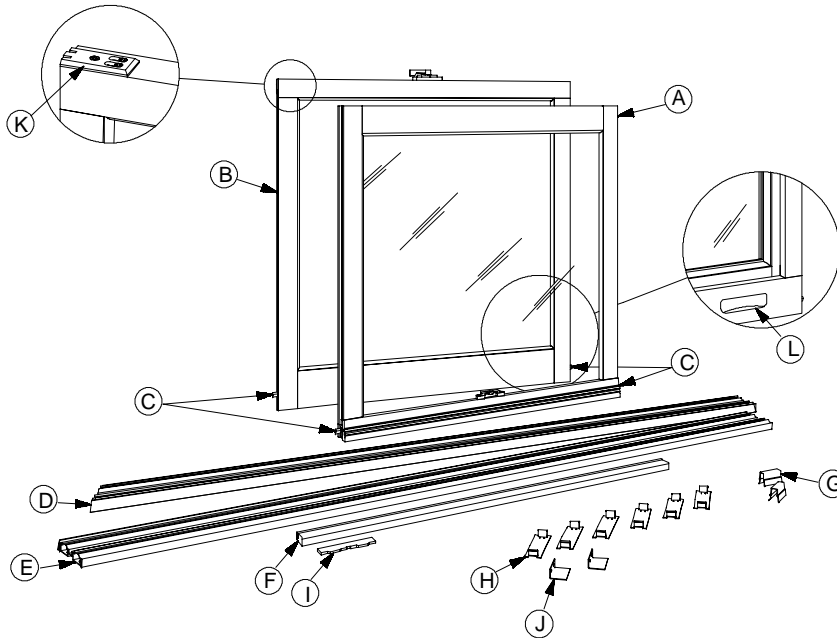


- A. Top Sash
- B. Bottom Sash
- C. Cam Pivots
- D. Left Vinyl Jamb Liner
- E. Right Vinyl Jamb Liner
- F. Head Jamb Part Stop
- G. Two Plastic Sash Stops
- H. Metal Brackets (quantity varies)
- I. Stationary Sash Bracket (quantity may vary)
- J. Sash Filler
- K. Sash Opening Filler

WOOD DOUBLE HUNG TILT PACS

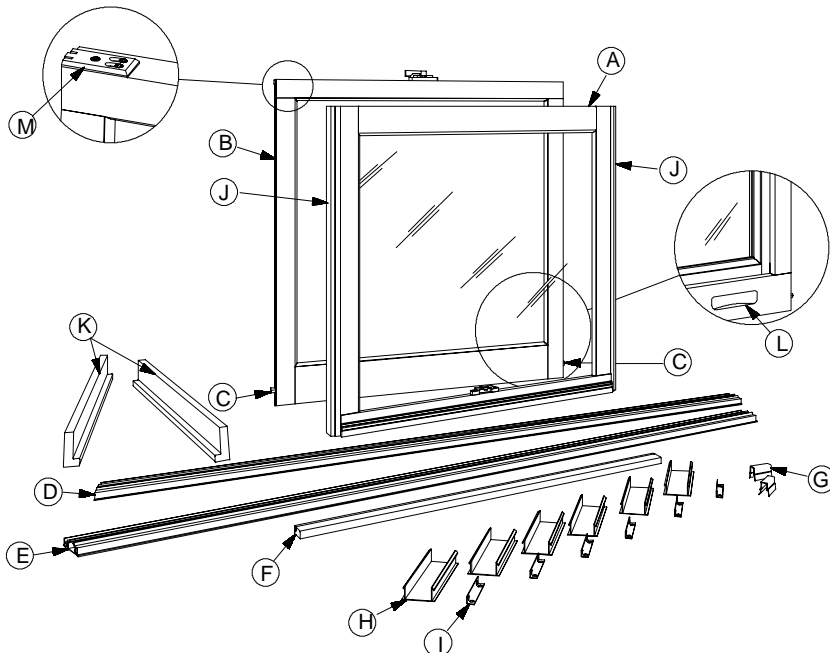
PARTS LIST

Magnum Double Hung Tilt Pac



- A. Top Sash
- B. Bottom Sash
- C. Cam Pivots
- D. Left Vinyl Jamb Liner
- E. Right Vinyl Jamb Liner
- F. Head Jamb Part Stop
- G. Two Plastic Sash Stops
- H. Metal Brackets (quantity varies)
- I. Two foam gaskets
- J. Two Top Sash Stays
- K. Two Sash Retainer Plates
(NOTE: Only on Magnum Tilt Pacs)
- L. Finger Pulls
(NOTE: Only on Magnum Historical Tilt Pacs)

Magnum Single Hung Tilt Pac



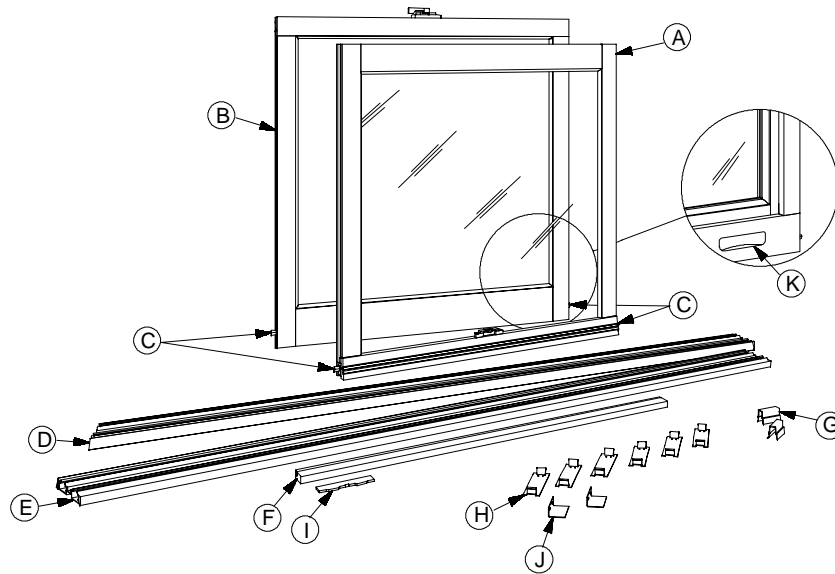
- A. Top Sash
- B. Bottom Sash
- C. Cam Pivots
- D. Left Vinyl Jamb Liner
- E. Right Vinyl Jamb Liner
- F. Head Jamb Part Stop
- G. Two Plastic Sash Stops
- H. Vinyl Hardware Clips
(Amount varies with unit size)
- I. Stationary Sash Brackets
(Amount varies with unit size)
- J. Stationary Sash Filler
- K. Sash Opening Filler
- L. Finger Pulls
(NOTE: Only on Magnum Historical Tilt Pacs)
- M. Two Sash Retainer Plates
(NOTE: Only on Magnum Tilt Pacs)

WOOD DOUBLE HUNG TILT PACS

PARTS LIST / SECTION DETAILS: DIVIDED LITE OPTIONS

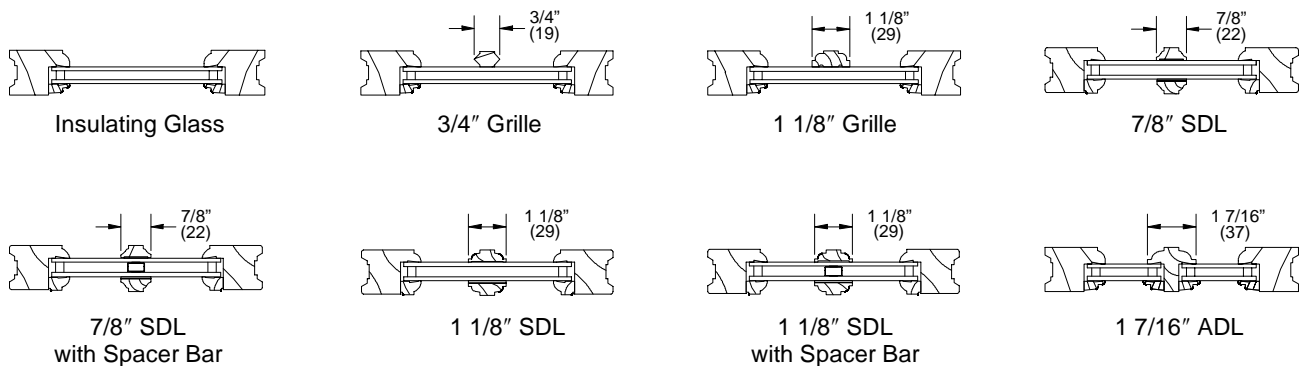
NOT TO SCALE

Magnum Historical Double Hung Tilt Pac

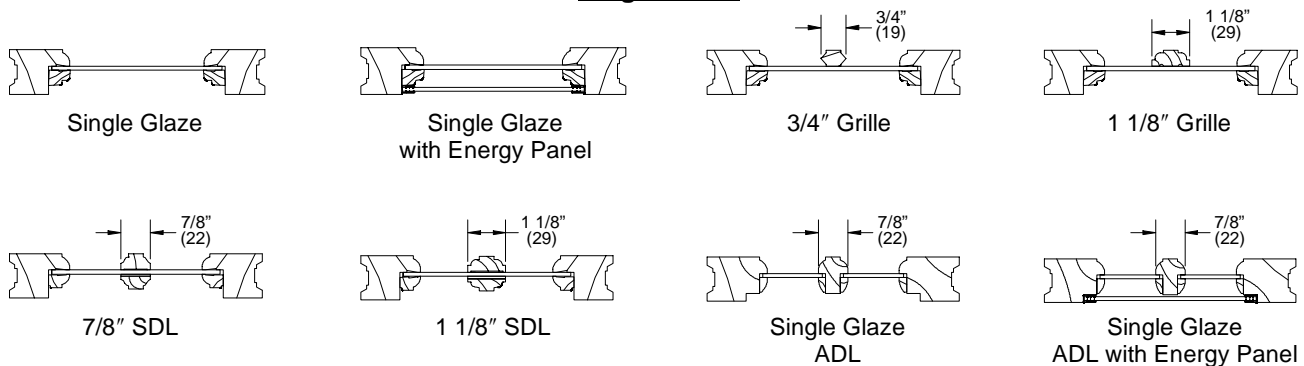


- A. Top Sash
- B. Bottom Sash
- C. Cam Pivots
- D. Left Vinyl Jamb Liner
- E. Right Vinyl Jamb Liner
- F. Head Jamb Part Stop
- G. Two Plastic Sash Stops
- H. Metal Brackets (quantity varies)
- I. Two foam gaskets
- J. Two Top Sash Stays
- K. Finger Pulls

Double Hung Insulating Glass



Double Hung Single Glaze



NOTE:

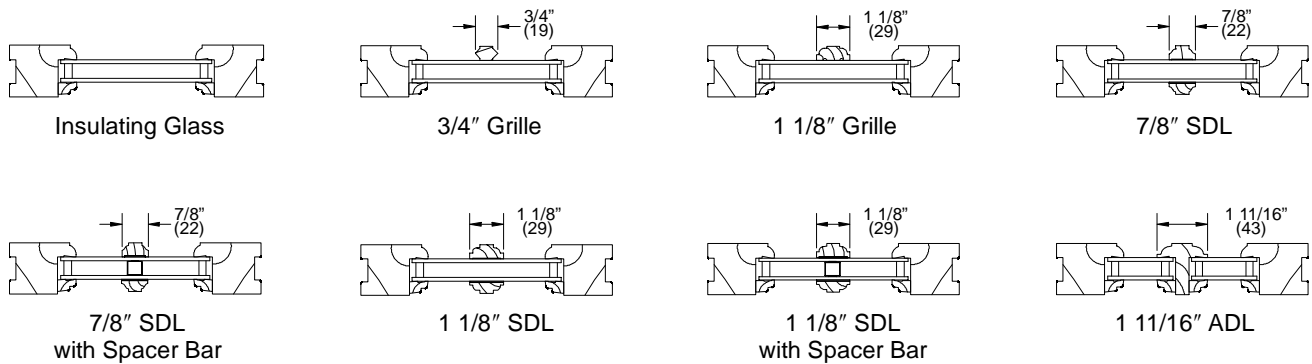
Grille = Removable interior divider
 SDL = Simulated divided lite
 ADL = Authentic divided lite

WOOD MAGNUM DOUBLE HUNG TILT PACS

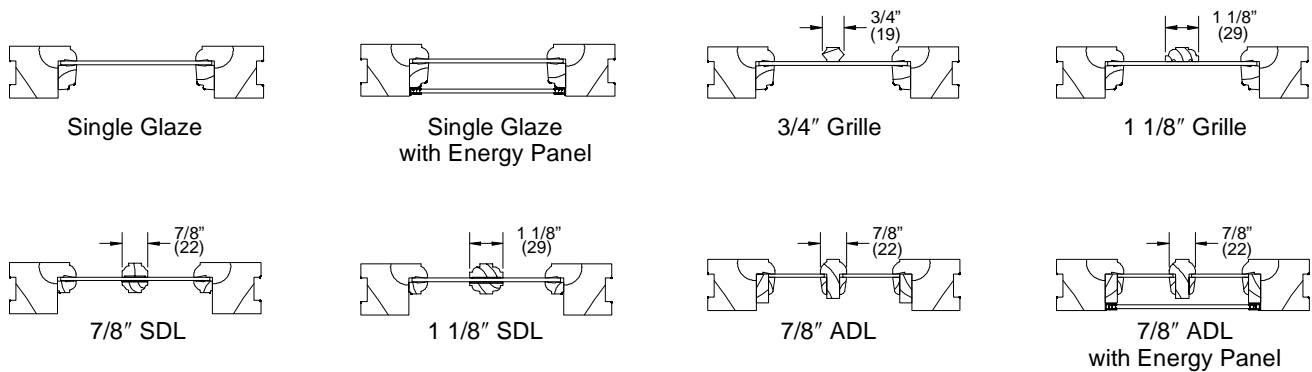
SECTION DETAILS: DIVIDED LITE OPTIONS

NOT TO SCALE

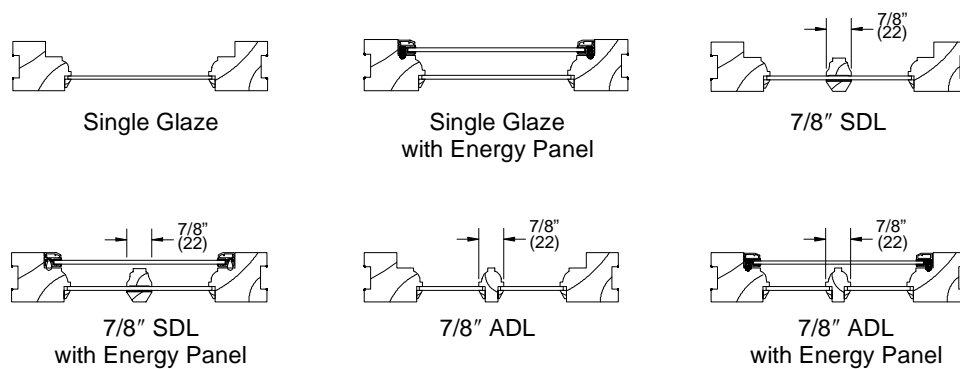
Magnum Double Hung Insulating Glass



Magnum Double Hung Single Glaze



Magnum Historic Double Hung



NOTE:

Grille = Removable interior divider
 SDL = Simulated divided lite
 ADL = Authentic divided lite

WOOD DOUBLE HUNG TILT PACS

STANDARD SIZES

Standard Sizes and Lite Patterns											
Call #. (Glass size)	Sash Opening	3/4" Grille 7/8" SDL 7/8" ADL	1 1/8 Grille 1 1/8 SDL 1 7/16 ADL	Call # (Glass size)	Sash Opening	3/4" Grille 7/8" SDL 7/8" ADL	1 1/8 Grille 1 1/8 SDL (IG Only) 1 7/16 ADL	Call # (Glass size)	Sash Opening	3/4" Grille 7/8" SDL 7/8" ADL	1 1/8 Grille 1 1/8 SDL 1 7/16 ADL
WDHTP1612	1-8 X 2-6	2W2H	2W1H	WDHTP2812	2-8 X 2-6	3W2H	3W1H	WDHTP4012	3-8 X 2-6	4W2H	4W1H
WDHTP1614	1-8 X 2-10	2W2H	2W1H	WDHTP2814	2-8 X 2-10	3W2H	3W1H	WDHTP4014	3-8 X 2-10	4W2H	4W1H
WDHTP1616	1-8 X 3-2	2W2H	2W1H	WDHTP2816	2-8 X 3-2	3W2H	3W1H	WDHTP4016	3-8 X 3-2	4W2H	4W1H
WDHTP1618	1-8 X 3-6	2W2H	2W2H	WDHTP2818	2-8 X 3-6	3W2H	3W2H	WDHTP4018	3-8 X 3-6	4W2H	4W2H
WDHTP1620	1-8 X 3-10	2W2H	2W2H	WDHTP2820	2-8 X 3-10	3W2H	3W2H	WDHTP4020	3-8 X 3-10	4W2H	4W2H
WDHTP1622	1-8 X 4-2	2W2H	2W2H	WDHTP2822	2-8 X 4-2	3W2H	3W2H	WDHTP4022	3-8 X 4-2	4W2H	4W2H
WDHTP1624	1-8 X 4-6	2W2H	2W2H	WDHTP2824	2-8 X 4-6	3W2H	3W2H	WDHTP4024	3-8 X 4-6	4W2H	4W2H
WDHTP1626	1-8 X 4-10	2W2H	2W2H	WDHTP2826	2-8 X 4-10	3W2H	3W2H	WDHTP4026	3-8 X 4-10	4W2H	4W2H
WDHTP1628	1-8 X 5-2	2W2H	2W2H	WDHTP2828	2-8 X 5-2	3W2H	3W2H	WDHTP4028	3-8 X 5-2	4W2H	4W2H
WDHTP1630	1-8 X 5-6	2W2H	2W2H	WDHTP2830	2-8 X 5-6	3W2H	3W2H	WDHTP4030	3-8 X 5-6	4W2H	4W2H
WDHTP1632	1-8 X 5-10	2W3H	2W3H	WDHTP2832	2-8 X 5-10	3W3H	3W3H	WDHTP4032	3-8 X 5-10	4W3H	4W3H
WDHTP1634	1-8 X 6-2	2W3H	2W3H	WDHTP2834	2-8 X 6-2	3W3H	3W3H	WDHTP4034	3-8 X 6-2	4W3H	4W3H
WDHTP1636	1-8 X 6-6	2W3H	2W3H	WDHTP2836	2-8 X 6-6	3W3H	3W3H	WDHTP4036	3-8 X 6-6	4W3H	4W3H
WDHTP2012	2-0 X 2-6	3W2H	2W1H	WDHTP3012	2-10 X 2-6	3W2H	3W1H				
WDHTP2014	2-0 X 2-10	3W2H	2W1H	WDHTP3014	2-10 X 2-10	3W2H	3W1H				
WDHTP2016	2-0 X 3-2	3W2H	2W1H	WDHTP3016	2-10 X 3-2	3W2H	3W1H				
WDHTP2018	2-0 X 3-6	3W2H	2W2H	WDHTP3018	2-10 X 3-6	3W2H	3W2H				
WDHTP2020	2-0 X 3-10	3W2H	2W2H	WDHTP3020	2-10 X 3-10	3W2H	3W2H				
WDHTP2022	2-0 X 4-2	3W2H	2W2H	WDHTP3022	2-10 X 4-2	3W2H	3W2H				
WDHTP2024	2-0 X 4-6	3W2H	2W2H	WDHTP3024	2-10 X 4-6	3W2H	3W2H				
WDHTP2026	2-0 X 4-10	3W2H	2W2H	WDHTP3026	2-10 X 4-10	3W2H	3W2H				
WDHTP2028	2-0 X 5-2	3W2H	2W2H	WDHTP3028	2-10 X 5-2	3W2H	3W2H				
WDHTP2030	2-0 X 5-6	3W2H	2W2H	WDHTP3030	2-10 X 5-6	3W2H	3W2H				
WDHTP2032	2-0 X 5-10	3W3H	2W3H	WDHTP3032	2-10 X 5-10	3W3H	3W3H				
WDHTP2034	2-0 X 6-2	3W3H	2W3H	WDHTP3034	2-10 X 6-2	3W3H	3W3H				
WDHTP2036	2-0 X 6-6	3W3H	2W3H	WDHTP3036	2-10 X 6-6	3W3H	3W3H				
WDHTP2412	2-4 X 2-6	3W2H	3W1H	WDHTP3212	3-0 X 2-6	4W2H	3W1H				
WDHTP2414	2-4 X 2-10	3W2H	3W1H	WDHTP3214	3-0 X 2-10	4W2H	3W1H				
WDHTP2416	2-4 X 3-2	3W2H	3W1H	WDHTP3216	3-0 X 3-2	4W2H	3W1H				
WDHTP2418	2-4 X 3-6	3W2H	3W2H	WDHTP3218	3-0 X 3-6	4W2H	3W2H				
WDHTP2420	2-4 X 3-10	3W2H	3W2H	WDHTP3220	3-0 X 3-10	4W2H	3W2H				
WDHTP2422	2-4 X 4-2	3W2H	3W2H	WDHTP3222	3-0 X 4-2	4W2H	3W2H				
WDHTP2424	2-4 X 4-6	3W2H	3W2H	WDHTP3224	3-0 X 4-6	4W2H	3W2H				
WDHTP2426	2-4 X 4-10	3W2H	3W2H	WDHTP3226	3-0 X 4-10	4W2H	3W2H				
WDHTP2428	2-4 X 5-2	3W2H	3W2H	WDHTP3228	3-0 X 5-2	4W2H	3W2H				
WDHTP2430	2-4 X 5-6	3W2H	3W2H	WDHTP3230	3-0 X 5-6	4W2H	3W2H				
WDHTP2432	2-4 X 5-10	3W3H	3W3H	WDHTP3232	3-0 X 5-10	4W3H	3W3H				
WDHTP2434	2-4 X 6-2	3W3H	3W3H	WDHTP3234	3-0 X 6-2	4W3H	3W3H				
WDHTP2436	2-4 X 6-6	3W3H	3W3H	WDHTP3236	3-0 X 6-6	4W3H	3W3H				
WDHTP2612	2-6 X 2-6	3W2H	3W1H	WDHTP3612	3-4 X 2-6	4W2H	3W1H				
WDHTP2614	2-6 X 2-10	3W2H	3W1H	WDHTP3614	3-4 X 2-10	4W2H	3W1H				
WDHTP2616	2-6 X 3-2	3W2H	3W1H	WDHTP3616	3-4 X 3-2	4W2H	3W1H				
WDHTP2618	2-6 X 3-6	3W2H	3W2H	WDHTP3618	3-4 X 3-6	4W2H	3W2H				
WDHTP2620	2-6 X 3-10	3W2H	3W2H	WDHTP3620	3-4 X 3-10	4W2H	3W2H				
WDHTP2622	2-6 X 4-2	3W2H	3W2H	WDHTP3622	3-4 X 4-2	4W2H	3W2H				
WDHTP2624	2-6 X 4-6	3W2H	3W2H	WDHTP3624	3-4 X 4-6	4W2H	3W2H				
WDHTP2626	2-6 X 4-10	3W2H	3W2H	WDHTP3626	3-4 X 4-10	4W2H	3W2H				
WDHTP2628	2-6 X 5-2	3W2H	3W2H	WDHTP3628	3-4 X 5-2	4W2H	3W2H				
WDHTP2630	2-6 X 5-6	3W2H	3W2H	WDHTP3630	3-4 X 5-6	4W2H	3W2H				
WDHTP2632	2-6 X 5-10	3W3H	3W3H	WDHTP3632	3-4 X 5-10	4W3H	3W3H				
WDHTP2634	2-6 X 6-2	3W3H	3W3H	WDHTP3634	3-4 X 6-2	4W3H	3W3H				
WDHTP2636	2-6 X 6-6	3W3H	3W3H	WDHTP3636	3-4 X 6-6	4W3H	3W3H				