

# Ultimate Wood Double Hung Tilt Pac

Unit Features .....	1
Divided Lite Options .....	2
Min and Max Glass Size .....	4
Measurement Conversions .....	5
Tilt Pac Measurements .....	6
Tilt Pac Full Screen Measurements .....	7
Standard Unit Measurements .....	8
Double Hung Tilt Pac Parts List .....	9
Magnum Double Hung Tilt Pac Parts List .....	10



**Unit Features**

Wood Ultimate Double Hung Tilt Pac: UWDHTP

Wood Ultimate Double Hung Magnum Tilt Pac: UWDHMTP

*NOTE: CE mark not available on Ultimate Wood Double Hung Tilt Pac or Ultimate Wood Double Hung Magnum Tilt Pac.*

**Sash:**

- Ultimate Wood Double Hung Tilt Pac
  - Sash thickness: 1 5/16" (33)
  - Top rail width: 2 15/32" (63)
  - Bottom rail width: 3 3/4" (95)
  - Stile width: 1 25/32" (45)
- Ultimate Wood Double Hung Magnum Tilt Pac
  - Sash thickness: 1 3/4" (44)
  - Top rail width: 2 1/4" (57)
  - Bottom rail width: 3 1/2" (89)
  - Stile width: 2 1/4" (57)
  - Bottom rail bevel 14 degrees
- Removable exterior glazing stops

**Hardware:**

- Lock: high pressure zinc die-cast cam lock and keeper
  - Optional keyed lock
  - Two locks on glass sizes of 36" (914) and wider
  - Color: Satin Taupe
    - Optional: Bronze, White, Plated Brass, Antique Brass, Satin Chrome, Oil Rubbed Bronze, Satin Nickel, Polished Chrome
- Ultimate Wood Double Hung Tilt Pac balance system: coil spring block and tackle with nylon cord and fiber filled nylon clutch
- Ultimate Wood Double Hung Magnum Tilt Pac: double coil spring block and tackle with nylon cord and fiber filled nylon clutch
- Jamb track: vinyl extrusion, foam backing
  - Color: Beige or White
- Sash retainer plate: standard for magnum units, optional for double hung - polycarbonate theroplastic
  - Color: Bronze or White
- Optional sash lifts: high pressure zinc die-cast
  - Color: Satin Taupe
    - Optional: Bronze, White or Brass

**Weather Strip:**

- Double Hung weather strip: dual durometer double leaf at check rail; bulb type dual durometer weather strip at bottom rail
- Double Hung Magnum weather strip: 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

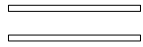
**Insect Screens:**

- Full sized wood screen is standard
  - Optional wood half screen, or aluminum full or half screen
  - All screens are shipped loose
  - Aluminum screen colors: Pebble Gray, Bahama Brown, Evergreen, Bronze, Stone White, Ebony, Wineberry, Coconut Cream, Hampton Sage, Cashmere, Sierra White, Cadet Gray, or Cascade Blue Screen Mesh: Charcoal fiberglass
  - Optional Screen Mesh: Charcoal Aluminum Wire, Black Aluminum Wire, Bright Aluminum Wire, Bright Bronze Wire or Charcoal High Transparency (CH Hi-Tran) fiberglass

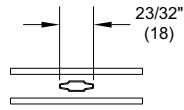
**Glass and Glazing:**

- Glazing method: single glaze, single glazed with energy panel or hermetically sealed insulated glass
- Glazing seal: silicone glazed
- Standard glass is insulating Low E2 Argon or Air
- Optional glazing available: Low E1 Argon or without Argon, Low E3 Argon or without Argon, clear, tints, tempered, obscure, decorative glass options
- Insulated glass will be altitude adjusted for higher elevations, Argon gas not included
- ADL glazing options not available with Argon.

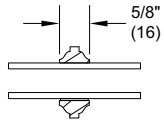
**Divided Lite Options**



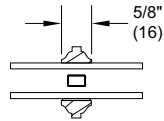
Insulating Glass



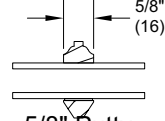
Aluminum 23/32"  
Contour GBG



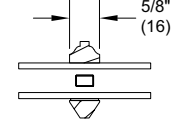
5/8" SDL



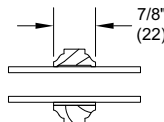
5/8" SDL  
W/Spacer



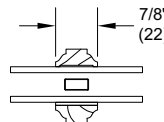
5/8" Putty  
SDL



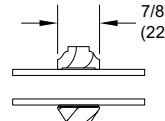
5/8" Putty SDL  
W/Spacer



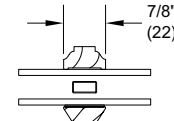
7/8" SDL



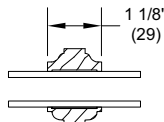
7/8" SDL  
W/Spacer Bar



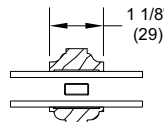
7/8" Putty SDL



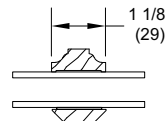
7/8" Putty SDL  
W/Spacer Bar



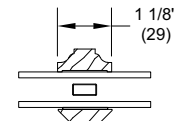
1 1/8" SDL



1 1/8" SDL  
W/Spacer Bar

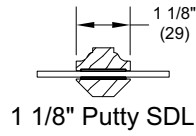
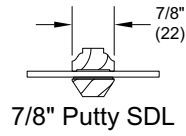
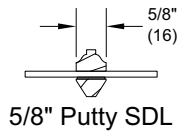
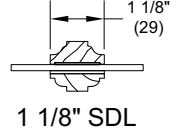
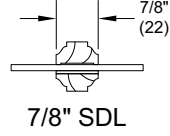
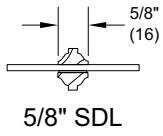
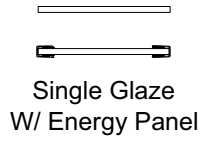


1 1/8" Putty SDL



1 1/8" Putty SDL  
W/Spacer Bar

**Divided Lite Options**



**Min and Max Glass Size**

Unit Type		Min Glass Size				Max Glass Size				Max Glass Size	
		Width		Height		Widht		Height			
		in	mm	in	mm	in	mm	in	mm	Sq. Feet	Sq. Meters
UWDHTP	Insulating Glass	8	(203)	8	(203)	44	(1118)	48	(1219)	10	0.929
UWDHTP	Single Glaze	8	(203)	8	(203)	44	(1118)	48	(1219)	12	1.115
UWDHMTP	Insulating Glass	12	(305)	12	(305)	60	(1524)	60	(1524)	18.5	1.719
UWDHMTP	Single Glaze	12	(305)	12	(305)	60	(1524)	64	(1626)	18.5	1.719

*NOTE: When glass height exceeds 48" (1219), top sash will be stationary and bottom sash will have limited travel. Maximum sash weight is 70 lbs per sash.*

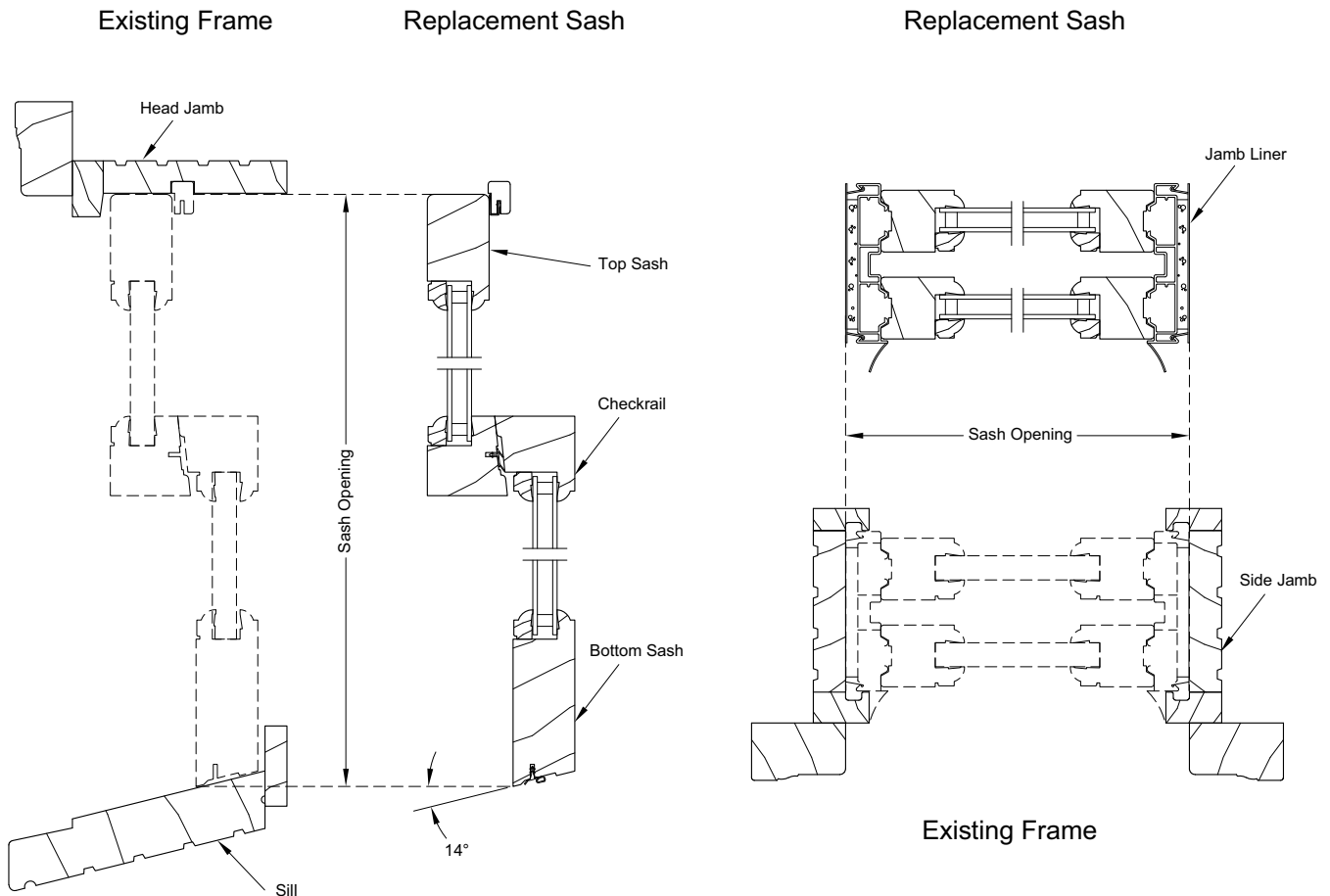
Measurement Conversions

Ultimate Wood Double Hung Tilt Pac						
Unit Measurements		Width		Height		
From	To					
Glass Size:		in	mm		in	mm
Glass size	Daylite Opening	-1 1/16	(27)		-1 1/16	(27)
Glass size	Sash Opening	+ 4	(102)	× 2	+ 6	(152)
Glass size	Outside Measurement Bottom Sash	+ 2 1/2	(64)		+ 4 1/2	(114)
Glass size	Outside Measurement Top Sash	+ 2 1/2	(64)		+ 3 3/32	(79)
Daylight Opening		in	mm		in	mm
Daylight Opening	Sash Opening	+ 5 1/16	(129)	× 2	+ 8 1/8	(206)
Daylight Opening	Outside Measurement Bottom Sash	+ 3 9/16	(90)		+ 5 9/16	(141)
Daylight Opening	Outside Measurement Top Sash	+ 3 9/16	(91)		+ 4 5/32	(106)
Outside Measurement		in	mm		in	mm
Outside Measurement Top Sash	Sash Opening	+ 1 1/2	(38)	× 2	-3/16	(05)
Outside Measurement Bottom Sash	Sash Opening	+ 1 1/2	(38)	× 2	-3	(76)

Ultimate Wood Double Hung Magnum Tilt Pac						
Unit Measurements		Width		Height		
From	To					
Glass Size:		in	mm		in	mm
Glass size	Daylite Opening	-1 1/16	(27)		-1 1/16	(27)
Glass size	Sash Opening	+ 5 3/4	(146)	× 2	+ 5 7/8	(149)
Glass size	Outside Measurement Bottom Sash	+ 3 7/16	(87)		+ 4 17/32	(115)
Glass size	Outside Measurement Top Sash	+ 3 7/16	(87)		+ 2 29/32	(74)
Daylight Opening		in	mm		in	mm
Daylight Opening	Sash Opening	+ 6 13/16	(173)	× 2	+ 8	(203)
Daylight Opening	Outside Measurement Bottom Sash	+ 4 1/2	(114)		+ 5 19/32	(142)
Daylight Opening	Outside Measurement Top Sash	+ 4 1/2	(114)		+ 3 31/32	(101)
Outside Measurement		in	mm		in	mm
Outside Measurement Top Sash	Sash Opening	+ 2 5/16	(59)	× 2	-1/16	(02)
Outside Measurement Bottom Sash	Sash Opening	+ 2 5/16	(59)	× 2	-3 3/16	(81)

**Tilt Pac Measurements**

Scale: 3" = 1'0"



**Instructions:**

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

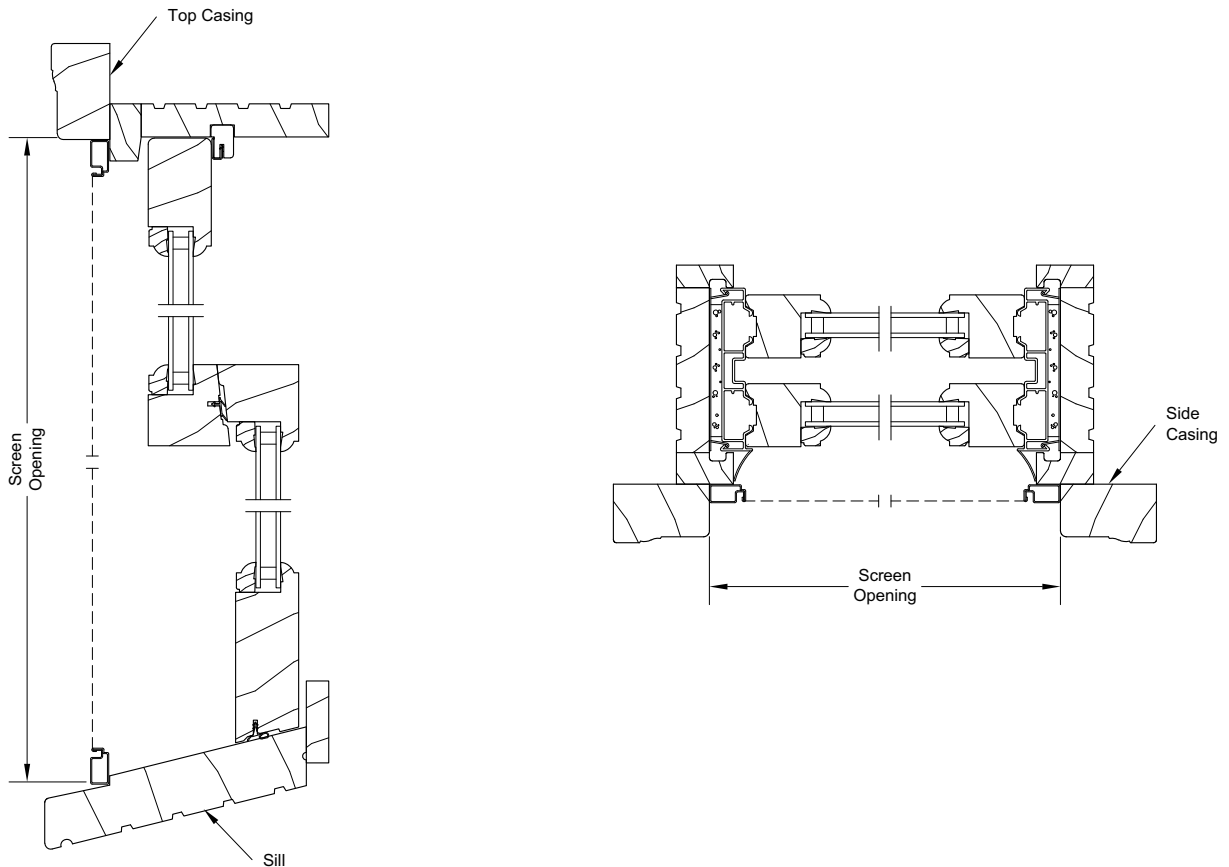
1. To find the sash opening height:  
If the old window has Wood blocks holding the top sash in place, remove them. Lower the top sash for measuring clearance, then measure the height of the window from where the top sash meets the head jamb to where the bottom sash meets the sill when the bottom sash 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 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.*



**Tilt Pac Full Screen Measurements**

Scale: 3" = 1'0"



**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. Instruction and measuring locations apply to Single Hung, Magnum Double Hung/Single Hung Sash. Screen measuring instructions also apply to Combination Storm/Screen measurement. Standard angle on combination bottom rails is 14 degrees, other angles must be specified.*

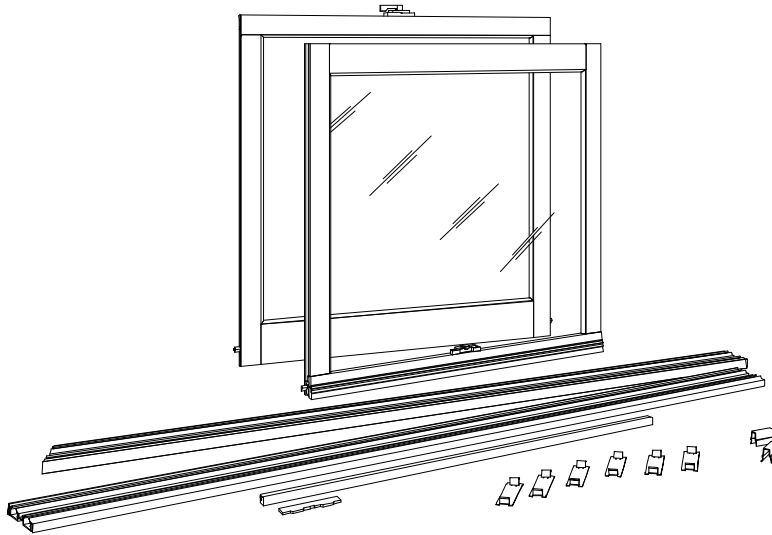
**Standard Unit Measurements**

Tilt Pac Unit Measurements				
Width				
CN	Sash Opening		Daylight Opening Double Hung Tilt Pac	
	ft - in	mm	ft - in	mm
16	1-8	(508)	1-2 15/16	(379)
20	2-0	(610)	1-6 15/16	(481)
24	2-4	(711)	1-10 15/16	(583)
26	2-6	(762)	2-0 15/16	(633)
28	2-8	(813)	2-2 15/16	(684)
30	2-10	(864)	2-4 15/16	(735)
32	3-0	(914)	2-6 15/16	(786)
36	3-4	(1016)	2-10 15/16	(887)

Tilt Pac Unit Measurements				
Height				
CN	Sash Opening		Daylight Opening Double Hung Tilt Pac	
	ft - in	mm	ft - in	mm
12	2-6	(762)	0-10 15/16	(278)
14	2-10	(864)	1-0 15/16	(329)
16	3-2	(965)	1-2 15/16	(379)
18	3-6	(1067)	1-4 15/16	(430)
20	3-10	(1168)	1-6 15/16	(481)
22	4-2	(1270)	1-8 15/16	(532)
24	4-6	(1372)	1-10 15/16	(583)
26	4-10	(1473)	2-0 15/16	(633)
28	5-2	(1575)	2-2 15/16	(684)
30	5-6	(1676)	2-4 15/16	(735)
32	5-10	(1778)	2-6 15/16	(786)
34	6-2	(1880)	2-8 15/16	(837)
36	6-6	(1981)	2-10 15/16	(887)

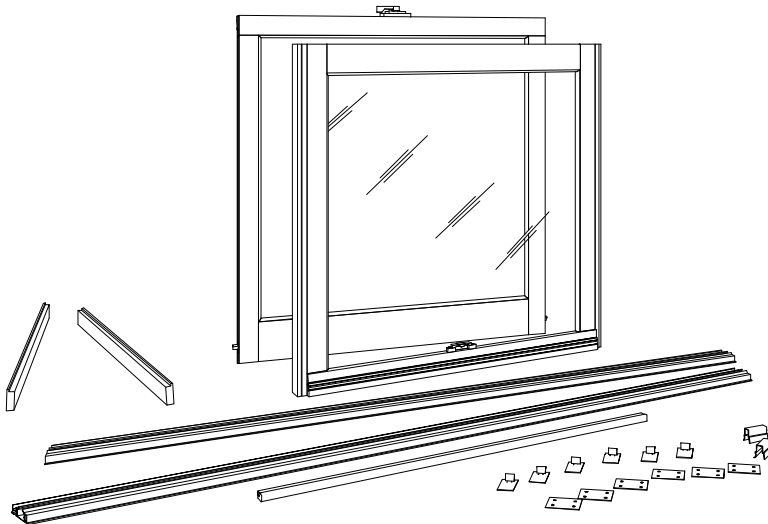
**Double Hung Tilt Pac Parts List**

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

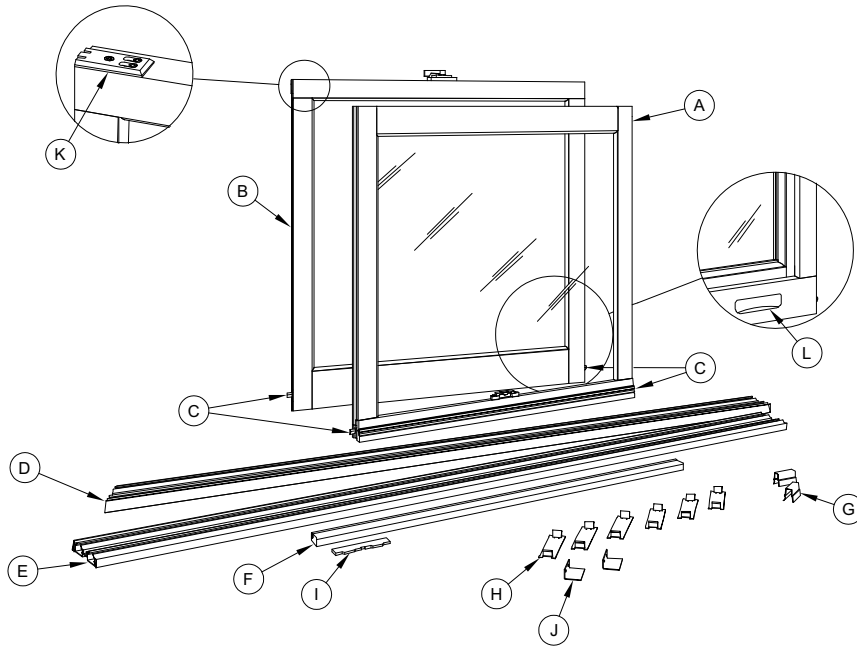


- A. Top Sash
- B. Bottom Sash
- C. Cam Pivots
- D. Left Vinyl Jamb Liner
- E. Right Vinyl Jamb Liner
- F. Head Jamb Part Stop
- G. Two Plastic Sash Stops
- H. Metal Brackets (quantity varies)
- I. Stationary Sash Bracket (quantity r
- J. Sash Filler
- K. Sash Opening Filler

**Magnum Double Hung Tilt Pac Parts List**

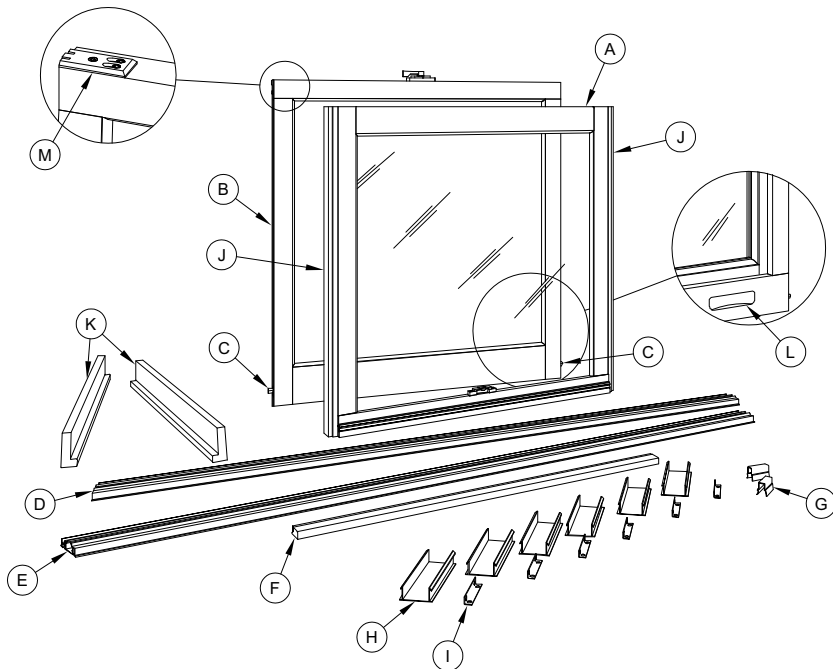
Magnum Double Hung Tilt Pac

ILLUSTRATIVE PURPOSE



- 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)