Ultimate Double Hung Tilt Pacs

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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 balance system: 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

7/8"

7/8"
W/Spacer Bar

1 1/8"

1 1/8"
W/Spacer Bar
Divided Lite Options

Single Glaze

Single Glaze
W/ Energy Panel

5/8" SDL
7/8" SDL
1 1/8" SDL

5/8" Putty SDL
7/8" Putty SDL
1 1/8" Putty SDL
### Min and Max Glass Size

<table>
<thead>
<tr>
<th>Unit Type</th>
<th>Min Glass Size</th>
<th>Max Glass Size</th>
<th>Max Glass Size</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Width (in)</td>
<td>Height (mm)</td>
<td>Width (in)</td>
</tr>
<tr>
<td>UWDHTP</td>
<td>8</td>
<td>203</td>
<td>44</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>UWDHTP</td>
<td>8</td>
<td>203</td>
<td>44</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UWDHMTT</td>
<td>12</td>
<td>305</td>
<td>60</td>
</tr>
<tr>
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<td></td>
<td></td>
</tr>
<tr>
<td>UWDHMTT</td>
<td>12</td>
<td>305</td>
<td>60</td>
</tr>
</tbody>
</table>

**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 Pacs

#### Unit Measurements

<table>
<thead>
<tr>
<th>From</th>
<th>To</th>
<th>Width</th>
<th>Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glass Size:</td>
<td></td>
<td>in</td>
<td>mm</td>
</tr>
<tr>
<td>Glass size Daylite Opening</td>
<td></td>
<td>-1 1/16</td>
<td>27</td>
</tr>
<tr>
<td>Glass size Sash Opening</td>
<td></td>
<td>+ 4</td>
<td>102</td>
</tr>
<tr>
<td>Glass size Outside Measurement Bottom Sash</td>
<td></td>
<td>+ 2 1/2</td>
<td>64</td>
</tr>
<tr>
<td>Glass size Outside Measurement Top Sash</td>
<td></td>
<td>+ 2 1/2</td>
<td>64</td>
</tr>
<tr>
<td>Daylight Opening</td>
<td></td>
<td>in</td>
<td>mm</td>
</tr>
<tr>
<td>Daylight Opening Sash Opening</td>
<td></td>
<td>+ 5 1/16</td>
<td>129</td>
</tr>
<tr>
<td>Daylight Opening Outside Measurement Bottom Sash</td>
<td></td>
<td>+ 3 9/16</td>
<td>90</td>
</tr>
<tr>
<td>Daylight Opening Outside Measurement Top Sash</td>
<td></td>
<td>+ 3 9/16</td>
<td>91</td>
</tr>
<tr>
<td>Outside Measurement</td>
<td></td>
<td>in</td>
<td>mm</td>
</tr>
<tr>
<td>Outside Measurement Top Sash Sash Opening</td>
<td></td>
<td>+ 1 1/2</td>
<td>38</td>
</tr>
<tr>
<td>Outside Measurement Bottom Sash Sash Opening</td>
<td></td>
<td>+ 1 1/2</td>
<td>38</td>
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</tbody>
</table>

### Ultimate Wood Double Hung Magnum Tilt Pacs

#### Unit Measurements

<table>
<thead>
<tr>
<th>From</th>
<th>To</th>
<th>Width</th>
<th>Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glass Size:</td>
<td></td>
<td>in</td>
<td>mm</td>
</tr>
<tr>
<td>Glass size Daylite Opening</td>
<td></td>
<td>-1 1/16</td>
<td>27</td>
</tr>
<tr>
<td>Glass size Sash Opening</td>
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<td>+ 5 3/4</td>
<td>146</td>
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<tr>
<td>Glass size Outside Measurement Bottom Sash</td>
<td></td>
<td>+ 3 7/16</td>
<td>87</td>
</tr>
<tr>
<td>Glass size Outside Measurement Top Sash</td>
<td></td>
<td>+ 3 7/16</td>
<td>87</td>
</tr>
<tr>
<td>Daylight Opening</td>
<td></td>
<td>in</td>
<td>mm</td>
</tr>
<tr>
<td>Daylight Opening Sash Opening</td>
<td></td>
<td>+ 6 13/16</td>
<td>173</td>
</tr>
<tr>
<td>Daylight Opening Outside Measurement Bottom Sash</td>
<td></td>
<td>+ 4 1/2</td>
<td>114</td>
</tr>
<tr>
<td>Daylight Opening Outside Measurement Top Sash</td>
<td></td>
<td>+ 4 1/2</td>
<td>114</td>
</tr>
<tr>
<td>Outside Measurement</td>
<td></td>
<td>in</td>
<td>mm</td>
</tr>
<tr>
<td>Outside Measurement Top Sash Sash Opening</td>
<td></td>
<td>+ 2 5/16</td>
<td>59</td>
</tr>
<tr>
<td>Outside Measurement Bottom Sash Sash Opening</td>
<td></td>
<td>+ 2 5/16</td>
<td>59</td>
</tr>
</tbody>
</table>
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.
<table>
<thead>
<tr>
<th>CN</th>
<th>Sash Opening</th>
<th>Daylight Opening</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ft - in</td>
<td>mm</td>
</tr>
<tr>
<td></td>
<td>ft - in</td>
<td>mm</td>
</tr>
<tr>
<td></td>
<td>ft - in</td>
<td>mm</td>
</tr>
<tr>
<td>16</td>
<td>1-8</td>
<td>(508)</td>
</tr>
<tr>
<td>20</td>
<td>2-0</td>
<td>(610)</td>
</tr>
<tr>
<td>24</td>
<td>2-4</td>
<td>(711)</td>
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<td>26</td>
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<td>(762)</td>
</tr>
<tr>
<td>28</td>
<td>2-8</td>
<td>(813)</td>
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<tr>
<td>30</td>
<td>2-10</td>
<td>(864)</td>
</tr>
<tr>
<td>32</td>
<td>3-0</td>
<td>(914)</td>
</tr>
<tr>
<td>36</td>
<td>3-4</td>
<td>(1016)</td>
</tr>
</tbody>
</table>
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 1)
J. Sash Filler
K. Sash Opening Filler
Magnum Double Hung Tilt Pac Parts List

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)