Product Selection Guide

Size and Performance Data ................................................................................................................TT-2
Features and Options ..........................................................................................................................TT-3

Grilles

Grille Types ........................................................................................................................................TT-4
Grille Patterns ...................................................................................................................................TT-5

Size Tables ..........................................................................................................................................TT-6
Design Data–Vent and Fixed .................................................................................................................TT-7

Detailed Product Descriptions

Clad .....................................................................................................................................................TT-8
Wood ..................................................................................................................................................TT-9

Unit Sections

Clad .....................................................................................................................................................TT-10
Wood ...................................................................................................................................................TT-11

The information published in this document is believed to be accurate at the time of publication. However, because we are constantly working to improve our products, specifications are subject to change without notice. Consult your local Pella representative for up-to-date product information.
# Pella® Reserve™ Tilt-Turn Window

## Size and Performance Data

<table>
<thead>
<tr>
<th>Sizes</th>
<th>Clad</th>
<th>Wood</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Vent Sizes</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Special Sizes Available</td>
<td>●</td>
<td>●</td>
</tr>
</tbody>
</table>

## Performance:

<table>
<thead>
<tr>
<th>Meets or Exceeds AAMA/WDMA Ratings</th>
<th>C-R40 Hallmark Certified</th>
<th>C-R30 Hallmark Certified</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Infiltration</td>
<td>0.05</td>
<td>0.05</td>
</tr>
<tr>
<td>(cfm/ft² of frame @ 1.57 psf wind pressure)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water Resistance</td>
<td>6.24 psf</td>
<td>4.5 psf</td>
</tr>
<tr>
<td>Design Pressure</td>
<td>40 psf</td>
<td>30 psf</td>
</tr>
</tbody>
</table>

## Other Performance Criteria

<table>
<thead>
<tr>
<th>Forced Entry Resistance Level</th>
<th>10</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Minimum Security Grade)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maximum Operating Force (lb)</td>
<td>15/6</td>
<td>15/6</td>
</tr>
<tr>
<td>Initiate Motion / Maintain Motion</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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(1) Maximum performance for single unit when glazed with the appropriate glass thickness. See Design Data pages in this section for specific product performance class and grade values. Values shown are for standard and special sizes; Custom sizes may not have the same values. Contact your local sales representative for complete information.

(2) The higher the level, the greater the product’s ability to resist forced entry.
## Standard Tilt-Turn Window

### Glazing Options

<table>
<thead>
<tr>
<th>Glazing Type</th>
<th>Options / Upgrades</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dual-Pane Insulating Glass</td>
<td>Triple-Pane Insulating Glass</td>
</tr>
</tbody>
</table>

### Insulated Glass Options/Low-E Types

- **Advanced Low-E**
  - SunDefense™ Low-E
  - AdvancedComfort Low-E
  - NaturalSun Low-E
  - Clear (no Low-E coating)

### Additional Glass Options

- **Annealed Glass**
  - Tempered Glass
  - Obscure Glass
  - Tinted Glass (Bronze, Gray and Green)
  - Custom

### Gas Fill/High Altitude

- **Argon**
- **High altitude**

### Wood Types

- **Exterior**
  - Pine
  - Mahogany, Douglas Fir
- **Interior**
  - Unfinished wood
  - Factory primed
  - Factory prefinished paint
  - Factory prefinished stain

### Exterior Sash Profile

- **Ogee - clad, Putty - wood**
- **Putty - clad**

### Exterior Finish

- EnduraClad® protective finish
- EnduraClad Plus protective finish, Factory Primed Pine wood exterior, Unfinished Mahogany wood exterior

### Cladding Colors

- 27 Standard colors
- Custom Colors

### Interior Sash Profile

- **Ogee**
- **Traditional**
- **Prairie**
- **Top Row**
- **Cross**
- **New England**
- **Victorian**
- **Simulated French**
- **Custom**

### Exterior Sash Profile

- **Ogee**
- **Traditional**
- **Prairie**
- **Top Row**
- **Cross**
- **New England**
- **Victorian**
- **Simulated French**
- **Custom**

### Hardware

- **Champagne, White or Brown**
- **Bright Brass, Satin Nickel or Oil-Rubbed Bronze**

### Sash Locks

- Multi-point® System
- Traditional, Prairie, Top Row, Cross, New England, Victorian, Simulated French, Custom

### Grilles

- **Integral Light Technology® Grilles**
- **Traditional**, **Prairie**, **Top Row**, **Cross**, **New England**, **Victorian**, **Simulated French**, **Custom**
- **Roomside Removable Grilles**
- **Traditional**, **Prairie**, **Top Row**, **Cross**, **New England**, **Victorian**, **Custom**
- **Grilles-Between-the-Glass**
- **Traditional**, **Prairie**, **Cross**, **Top Row**.
- **Custom-Equally Divided**
- **Screens**
- InView™ or Vivid View® screens

---

(1) Contact your local Pella sales representative for current designs and color options.

(2) Not available on Mahogany and Douglas Fir interiors.
Integral Light Technology®

Putty and Ogee Glaze Grilles
Clad Exterior - Wood Interior

Putty and Ogee Glaze Grilles
Wood Exterior - Wood Interior

Ogee Glaze Grilles
Clad Exterior - Wood Interior

Contoured Aluminum - Grilles-Between-the-Glass

Removable Interior Pine Grilles

Interior ILT grilles available in Pine, Mahogany or Douglas Fir to match complete unit.

Wood exterior ILT grilles available in Pine or Mahogany to match complete unit.
Typical ILT and Removable Grille Patterns

Prairie Lite Patterns

Size range availability is for 3/4", 7/8" and 1-1/4" grille width. Standard corner lite dimension for Prairie patterns = 2-1/2" VG.

- **9-Lite**
  - Available in all standard and special sizes.

- **12-Lite**
  - Available in units ≥ 1'9" and ≤ 2'11" in width, and ≥ 1'9" in height.

- **14-Lite**
  - Available in units ≥ 1'9" in width and ≥ 2'11" in height.

Other Patterns

Grilles-Between-the-Glass Patterns

Prairie Lite Patterns

Cross - Standard visible glass to separator bar = one-quarter of total visible glass height.

New England - Standard visible glass to separator bar = half of total visible glass height.

Top Row - Standard visible glass to separator bar = 14" or half of total visible glass height, whichever is smaller.

Cross - Available for units with frame heights ≥35". Standard visible glass to separator bar = 1/4 of total visible glass height.

Top Row - Standard visible glass to separator bar = 14" for frame heights ≥35". Standard visible glass to separator bar = 21" for ≥35" frame heights and optional for 41" frame height. Separator bar at 12" or 16" optional for frame heights ≥41".

For traditional patterns, see size tables.

VG = Visible Glass

Lite dimensions noted can vary.

Custom configurations are also available, for details contact your local Pella sales representative.
Pella® Reserve™ Tilt-Turn Window

Size Tables

Vent Units

<table>
<thead>
<tr>
<th>Opening</th>
<th>1' 5 1/4&quot;</th>
<th>1' 9 1/4&quot;</th>
<th>1' 11 3/4&quot;</th>
<th>2' 1 1/4&quot;</th>
<th>2' 5 1/4&quot;</th>
<th>2' 11 1/4&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frame</td>
<td>1' 5&quot;</td>
<td>1' 9&quot;</td>
<td>1' 11&quot;</td>
<td>2' 1&quot;</td>
<td>2' 5&quot;</td>
<td>2' 11&quot;</td>
</tr>
</tbody>
</table>

Not to scale.

Traditional grille patterns shown. Refer to grille Section for additional patterns and profiles.

Opening dimensions shown are for clad units only.
### Vent and Fixed - Wood and Aluminum-Clad Exteriors

<table>
<thead>
<tr>
<th>Clear Opening</th>
<th>Clad</th>
<th>Wood</th>
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</thead>
<tbody>
<tr>
<td><strong>Width</strong> (Inches)</td>
<td><strong>Height</strong> (Inches)</td>
<td><strong>Vt Area Ft²</strong></td>
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<tr>
<td>1735</td>
<td>10</td>
<td>29</td>
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<td>1741</td>
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<td>3571</td>
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<td>65</td>
</tr>
<tr>
<td>3573</td>
<td>28</td>
<td>67</td>
</tr>
</tbody>
</table>

(1) Maximum performance when glazed with the appropriate glass thickness. To convert area to square meters (m²), multiply square feet by 0.0929.
Frame

- Select woods, immersion treated with Pella’s EnduraGuard® wood protection formula in accordance with WDMA I.S.-4. The EnduraGuard formula includes three active ingredients for protection against the effects of moisture, decay, stains from mold and mildew. Plus, an additional ingredient adds protection against termite damage.
- Interior exposed surfaces are [pine] [mahogany] [Douglas fir] [standard rectangular units only]. Any curved member may have visible finger-jointed surfaces.
- Exterior surfaces are clad with aluminum.
- Overall frame depth is 5” (127 mm) for a wall depth of 3-11/16” (94 mm).
- Optional factory-applied jamb extensions available between 4-9/16” (116 mm) and 7-3/16” (183 mm) wall depths.

Sash

- Select woods, immersion treated with Pella’s EnduraGuard® wood protection formula in accordance with WDMA I.S.-4. The EnduraGuard formula includes three active ingredients for protection against the effects of moisture, decay, stains from mold and mildew. Plus, an additional ingredient adds protection against termite damage.
- Interior exposed surfaces are clear [pine] [mahogany] [Douglas fir].
- Exterior surfaces are clad with aluminum and sealed.
- Corners mortised and tenoned, glued and secured with metal fasteners.
- Sash thickness is 2-3/4” (70 mm) for [11/16”] or [1”] glazing.
- Exterior sash profile is [ogee] [putty glaze], interior sash profile is ogee.

Weatherstripping

- Dual Weatherstripping
  - A foam filled close cell sheeted weatherstrip on the full frame perimeter is compressed between frame and sash for positive seal on all four sides.
  - Secondary leaf-type weatherstrip between edge of sash and frame.

Glazing System

- Quality float glass complying with ASTM C 1036.
- Silicone-glazed 11-1/16” dual-seal insulating glass [annealed] [tempered] [clear] [Advanced Low-E coated with argon] [AdvancedComfort Low-E] [SunDefense™ Low-E with Argon] [NaturalSun Low-E] [bronze] [gray] [green] air-filled Advanced Low-E coated.
- Custom and high altitude glazing available for 11-1/16” glazing only.
- Silicone-glazed triple-pane 1-1/16” dual-seal insulating glass [annealed] [tempered] [Advanced Low-E with argon] [AdvancedLow-E with krypton] [SunDefense™ Low-E with argon] [SunDefense™ Low-E with krypton] [NaturalSun Low-E with krypton] [Obscure] [standard] [frosted].

Exterior

- Exterior aluminum surfaces are finished with EnduraClad® multi-stage finish system.
  - Color is [Standard] [custom].
- Exterior aluminum surfaces are finished with EnduraClad Plus 70% fluoropolymer-based multi-stage finish system.
  - Color is [Standard] [custom].

Interior

- [Unfinished, ready for site finishing] [Factory-primed with one coat acrylic latex] [Pine: Factory-primed [paint] [stain]].

Hardware

- Multi-point lock system—A single handle locking system engages multiple locking points around the sash.
  - Turn operation requires a 90 degree turn of the handle from locked position.
  - Tilting the sash inwards requires a 180 degree turn from locked position. Sash is limited by stay at top of window during tilt operation.
  - Finish of handle is [baked enamel] [Champagne] [White] [Brown] [Bright Brass] [Satin Nickel] [Oil-Rubbed Bronze]. All vent units are available with left or right-hand hinging.

Optional Products

Grilles

- Interior grilles are [5/8”] [7/8”] [1-1/4”] [2”] ogee profile that are solid [Pine] [Mahogany] [Douglas Fir]. Interior surfaces are [unfinished, ready for site finishing] [factory primed] [pine: factory primed [paint] [stain]].
- Exterior grilles are [5/8” putty profile] [7/8” [putty] [ogee profile] [1-1/4” [putty] [ogee] profile] [2” ogee profile] that are extruded aluminum.
- Patterns are [Traditional] [Prairie] [Top Row] [Cross] [New England] [Prairie] [Top Row] [Cross] [Prairie] patterns that are removable solid pine wood bars fitted to sash with steel clips and tacks.
- Interior [unfinished, ready for site finishing] [factory-primed] [Pine: Factory-primed] [factory-primed [paint] [stain]].
- Exterior [unfinished, ready for site finishing] [factory-primed] [factory-primed] [finish color matched to exterior cladding].

Screens

- InView™ Screens
  - [Full-Size] black vinyl-coated 18/18 mesh fiberglass screen cloth complying with SMA 1201, set in aluminum frame fitted to outside of window, supplied complete with all necessary hardware.
  - Screen frame finish is [baked enamel] [anodized], color to match window cladding.
- Vivid View® Screen
  - [Full-Size] PVDF 21 / 17 mesh, minimum 78 percent light transmissivity screen, set in aluminum frame fitted to outside of window, supplied complete with all necessary hardware.
  - Screen frame finish is [baked enamel] [anodized], color to match window cladding.

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(1) Insulating glass with argon is Low-E coated. All other insulating glass is air-filled.
(2) Available in clear, Low-E and obscure insulating glass.
(3) Contact your local Pella sales representative for current color options.
(4) Tan, Brown and Putty Interior GBG colors are available in single-tone (Brown/Brown, Tan/Tan or Putty/Putty). Other interior colors are also available with Tan or Brown exterior.
(5) Appearance of exterior grille color will vary depending on Low-E coating on glass.
Pella Reserve™ Tilt-Turn Window

Detailed Product Description - Wood Exterior

Frame

- Select woods, immersion treated with Pella's EnduraGuard wood protection formula in accordance with WDMA I.S.-4. The EnduraGuard formula includes three active ingredients for protection against the effects of moisture, decay, stains from mold and mildew. Plus, an additional ingredient adds protection against termite damage.
- Interior exposed surfaces are [Pine] [Mahogany] (standard rectangular windows only). Any curved member may have visible finger-jointed surfaces.
- Exterior surfaces are [Pine: primed] [Mahogany: [primed] [ready-to-stain]].
- Overall frame depth is 4-3/8” (111 mm) for a wall depth of 4-3/16” (106 mm).
- Optional factory-applied jamb extensions available between 4-9/16” (116mm) and 7-3/16” (183mm) wall depths, with Pella’s standard wood exterior trim.

Sash

- Select woods, immersion treated with Pella's EnduraGuard wood protection formula in accordance with WDMA I.S.-4. The EnduraGuard formula includes three active ingredients for protection against the effects of moisture, decay, stains from mold and mildew. Plus, an additional ingredient adds protection against termite damage.
- Interior exposed surfaces are [Pine] [Mahogany].
- Exterior surfaces are [Pine: primed] [Mahogany: [primed] [ready-to-stain]].
- Corners mortised and tenoned, glued and secured with metal fasteners.
- Sash thickness is 2 3/4” (70mm) for [11/16”] or [1”] glazing.
- Exterior sash profile is putty glaze, interior sash profile is ogee.

Weatherstripping

- Dual Weatherstripping
  - A foam filled close cell sheathed weather-strip on the full frame perimeter is compressed between frame and sash for positive seal on all four sides.
  - Secondary leaf-type weather strip between edge of sash and frame.

Glazing System

- Quality float glass complying with ASTM C 1036.
- Silicone-glazed 11/16” dual-seal insulating glass [[annealed] [tempered]] [clear] [Advanced Low-E coated with argon] [SunDefense™ Low-E with Argon] [AdvancedComfort Low-E with Argon] [NaturalSun Low-E coated with argon] [bronze] [gray] [green] air-filled Advanced Low-E coated.
- Custom and high altitude with argon glazing available.

Optional Products

Grilles

- Integral Light Technology’ grilles
  - Interior grilles are [5/8”] [7/8”] [1-1/4”] [2”] ogee profile that are solid [pine] [mahogany]. Interior surfaces are [unfinished, ready for site finishing] [factory primed] [pine: factory finished [paint] [stain]].
  - Exterior grilles are solid [5/8” putty profile] [7/8” putty] [ogee profile] [1-1/4” putty] [ogee profile] [2” ogee profile] that are [pine] [mahogany].
  - Exterior surfaces are water repellent, preservative-treated in accordance with WDMA I.S.-4, and are [unfinished, ready for site finishing] [factory primed].
- Patterns are [Traditional] [Prairie] [Top Row] [Cross] [New England] [Victorian] [Simulated French].
- Insulating glass contains non-glare spacer between the panes of glass.
- Grilles are adhered to both sides of the insulating glass with VHB acrylic adhesive tape and aligned with the non-glare spacer.

- Grilles-Between-the-Glass
  - Insulating glass contains 3/4” contoured aluminum grilles permanently installed between two panes of glass.
  - Patterns are [Traditional] [Prairie] [Cross] [Top Row] [Custom – Equally Divided].
  - Interior color is [White] [Tan] [Brown] [Putty] [Black] [Morning Sky Gray] [Ivory] [Sand Dune] [Harvest] [Cordovan] [Brickstone].
  - Exterior color is [standard].

- Roomside Removable grilles
  - [[3/4”] [1-1/4”] [2”] Regular] [1-1/4”] [2”] profile, with [Traditional] [Prairie] patterns that are removable solid pine wood bars steel-pinmed at joints and fitted to sash with steel clips and tacks.
  - Interior [unfinished, ready for site finishing] [factory-primed] [factory prefinished] [White] [Bright White] [Linien White] [stain].
  - Exterior [unfinished, ready for site finishing] [factory-primed] [finish color matched to exterior cladding].
  - When the exterior is pine and the interior finish is unfinished then the interior removable grille is unfinished or prefinished white. If the interior finished is stained then removable grille stained to match.
  - When the exterior is Mahogany then removable is not an option.

Screen

- InView™ Screens
  - [Full-Size] black vinyl-coated 18/18 mesh fiberglass screen cloth complying with SMA 1201, set in aluminum frame fitted to outside of window, supplied complete with all necessary hardware.
  - Screen frame finish is [baked enamel, white] [feature].

- Vivid View™ Screens
  - [Full-Size] PVDF 21/17 mesh, minimum 78 percent light transmissivity screen, set in aluminum frame fitted to outside of window, supplied complete with all necessary hardware.
  - Screen frame finish is [baked enamel, white] [feature].

Hardware

- Multi-point lock system–A single handle locking system engages multiple locking points around the sash.
- Turn operation requires a 90 degree turn of the handle from locked position. Tilting the sash inwards requires a 180 degree turn from locked position. Sash is limited by stay at top of window during tilt operation.
- Finish of handle is [baked enamel] [Champagne] [White] [Brown] [Bright Brass] [Satin Nickel] [Oil-Rubbed Bronze]. All vent units are available with left- or right-hand hinging.

(1) Insulating glass with argon is Low-E coated. All other insulating glass is air-filled.
(2) Available in clear, Low-E and obscure insulating glass.
(3) Contact your local Pella sales representative for current color options.
(4) Tan, Brown and Putty Interior GBG colors are available in single-tone (Brown/Brown, Tan/Tan or Putty/Putty). Other interior colors are also available with Tan or Brown exterior.
(5) Appearance of exterior grille color will vary depending on Low-E coating on glass.
Scale 3" = 1' 0"
All dimensions are approximate.
Pella® Reserve™ Tilt-Turn Window

Unit Sections - Wood Exterior

Scale 3" = 1' 0"

All dimensions are approximate.