A breath of fresh air

With a broad range in window operations — from fixed to tilt turn — Solar Innovations® Window Systems offer countless custom configurations to enhance any living space. The thermally broken aluminum profiles have exceptional thermal performance, creating a comfortable environment in all temperature extremes. In addition, aluminum windows will not rust, rot, warp, or need constant finish maintenance. These systems can be incorporated into almost any glass structures, houses, hotels, storefronts, and restaurants, just to name a few applications.

FEATURES

PANELS:
- Systems include fixed, casement, awning, tilt turn, tilt slide, hopper, and egress windows
- Mulled options available
- Consistent sightlines within systems
- LEED friendly system including recycled content
- Designed and manufactured in the U.S.A.

PERFORMANCE:
- Thermally enhanced aluminum profiles
- Test results may be available upon request

HARDWARE:
- Large variety of hardware options
- Heavy salt water resistant finishes available

OPTIONS

FINISHES:
- Standard finishes:
  - AAMA 2603: Bronze, White
  - AAMA 611 Class I Anodized: Clear, Dark Bronze
- Designer finishes:
  - AAMA 2603: Hartford Green, Black Natural Clay, Sandstone
- Custom finishes:
  - Powder coat finish: AAMA 2604 - 2605
  - Fluoropolymer (50% or 70%): AAMA 2604 - 2605
  - Wood veneer, metal cladding, and foiling options
  - Dual color or dual finish options

ACCESSORIES:
- Decorative interior & exterior grids
- Fixed mesh insect screens
- In-system frame flanges, snap-in nailing fins, or slide-on nailing flanges
HARDWARE

A: Handles

- Folded Handle
  For Awning and Hopper Windows

- Standard Pole Operator
  Cam Handle
  For Hopper Windows

- Prima Handle
  For Tilt Turn Windows

- Crank Dyad Operator
  For Casement Windows

- Split Arm Operator
  For Awning Windows

Additional handle styles and finishes available upon request. Non-standard handle options may increase lead times and/or cost.

B: Locks

- Standard Single & Multi Point
  Cam Locks
  Dependent on size of the window

- Surface Mount
  Cam Lock

Hinges

- Four Bar Hinge

- Four Bar Egress Hinge

Please Note: All hardware is subject to vendor availability. Custom finishes may be available upon request at additional lead time and/or cost. Solar Innovations® reserves the right to discontinue any hardware option at any time. Please be sure to visit our website for additional product information: www.solarinnovations.com
**CONFIGURATIONS**

- **CASEMENT**
  - All Window Systems
  - Outswing Casement Only in Projected System

- **AWNING**
  - All Window Systems

- **HOPPER**
  - All Window Systems except Projected

- **TILT TURN**
  - International Window Systems

- **FIXED**
  - All Window Systems

**FINISH OPTIONS**

**Stock Finishes**

- Si White
- Si Bronze
- Class I Clear Anodized*
- Dark Bronze Anodized*

**Designer Finishes**

- Si Black
- Si Sandstone
- Si Natural Clay
- Si Hartford Green

**Metal Cladding**

- Copper
- Lead Coated Copper
- 304 Stainless Steel #4 Satin Cladding
- 304 Stainless Steel #8 Mirror Cladding

**Powder Coating Solids**

- Bone White
- Fashion Gray
- Colonial Gray
- Military Light Blue
- Burgundy
- Charcoal
- Champagne
- Cosmic Gray
- Light Bronze
- Copper

**Powder Coating Metallics**

- Acacia 1001 DS 716 Textured DS 402 Smooth
- Acacia 1001 DS 733 Textured DS 403 Smooth
- Douglas Fir 1501 DS 716 Textured DS 402 Smooth
- Cherry 1402 DS 716 Textured DS 402 Smooth
- Knotty Pine 2103 DS 716 Textured DS 402 Smooth
- Cherry 1402 DS 733 Textured DS 402 Smooth
- Oak Ash 2501 DS 716 Textured DS 402 Smooth
- Dark Walnut 1802 DS 733 Textured DS 403 Smooth
- Teak 2601 DS 706 Textured Mahogany Finish
- National Walnut 1806 DS 706 Textured Mahogany Finish

**Wood Veneering** (Unfinished)

- White Oak
- Birch
- Sapele
- Southern Yellow Pine
- Northern White Pine
- Red Oak
- Spanish Cedar
- Western Red Cedar
- Douglas Fir
- White Maple

*Stock anodized finishes are available at an additional cost.

**GRID OPTIONS**

- Arched Grid
- Gothic Grid
- Double Gothic Grid
- Traditional Grid
- Cross Grid
- English Grid
- Low Profile Grid with SDL
- Interior Muntin Grid on Insulated Glass

Low profile grids can be used on all systems. Colonial, Ogee, and Traditional grids cannot be used on sliding glass doors, windows, or walls. Please visit solarinnovations.com for additional decorative options.
Operable window options include casement windows that are cranked open either left or right or awning windows that are hinged at the top and push outward to open. Projected windows allow for further customization and ventilation when incorporated as an in-system window in a Solar Innovations® custom glass structure. The projected window system is an ideal solution for both commercial and residential applications when mulling is not desired and is engineered specifically for out-swing applications.

Product Overview

Features

- Available in awning, casement, & fixed
- 2\(\frac{13}{16}\)" frame depth
- Thermally broken utilizing thermal fill & debridge
- In-system frame flange
- Minimum panel size: 2' x 2' operable, 1' x 1' fixed; smaller panels may be available upon engineering approval
- Maximum panel size up to 4' x 7' pending hardware limitations
The Mulled Window System can be a combination of fixed panels and operable windows in one unit. Solar Innovations® Mulled Window system can be composed of any number of fixed, awning, hopper, and casement windows. Unlike the systems of many other manufacturers, Solar’s window system can include both inswing and outswing windows in one structure, creating a truly unique and customizable system. The Mulled Window system is also NFRC certified.

### Features
- Awning, hopper, casement, & fixed windows
- 3 ¾” frame depth
- Thermally enhanced utilizing thermal strut

### Product Overview

- Designed to accommodate monolithic laminated, and insulated glazing infills of 3/16” to 1½”

### Panels
- Minimum panel size: 2’ x 2’ operable, 1’ x 1’ fixed; smaller panels may be available upon engineering approval
- Maximum Panel size up to 4’ x 7’ pending hardware limitations; larger panel options may be available depending on application

<table>
<thead>
<tr>
<th>Glazing</th>
<th>Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water performance up to 15psf (fixed), depending on configuration, and water column</td>
<td></td>
</tr>
<tr>
<td>Higher design pressure ratings available with engineering approval</td>
<td></td>
</tr>
<tr>
<td>Test results available upon request</td>
<td></td>
</tr>
</tbody>
</table>

### Glass Make-up

<table>
<thead>
<tr>
<th>WINDOW TYPE</th>
<th>GLASS MAKE-UP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed</td>
<td>LoE 272 / Clear</td>
</tr>
<tr>
<td>Casement</td>
<td>0.45</td>
</tr>
<tr>
<td>Fixed</td>
<td>0.38</td>
</tr>
<tr>
<td>Awning</td>
<td>0.46</td>
</tr>
</tbody>
</table>

[Table showing Mulled Air & Structure Impact Testing]

<table>
<thead>
<tr>
<th>OPERATION</th>
<th>PANEL SIZE</th>
<th>AIR INFILTRATION AT 1.57 PSF (55 MPH)</th>
<th>WATER PENETRATION</th>
<th>DESIGN PRESSURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed</td>
<td>60” H x 60” W</td>
<td>0.06 cfm/ft²</td>
<td>15 PSF</td>
<td>± 80 PSF</td>
</tr>
</tbody>
</table>

Please Note:
Testing and performance results may vary depending upon sill, size, and hardware selections. Please be sure to visit our website at www.solarinnovations.com or contact your Solar Innovations® representative for additional product information.
Head & Sill Details

Awning Window

Casement Window

Fixed Window

Hopper Window

Jamb Details

Awning Window

Casement Window

Fixed Window

Hopper Window

Learn More

To find out more about the features and options of our Window Systems, visit our website at solarinnovations.com/window-systems/
Product Overview

The G1 International Window System is a smaller version of Solar’s existing mullion window system. The G1 Window System utilizes thermal strut technology to maximize thermal performance. Beveled exterior edges provide a more traditional look compared to the G2 and G3 Window Systems and their modern sightlines. This system is the best for use with traditional grid systems and two-tone applications. Rounded glazing stop edges provide a more traditional look compared to the G2 and G3 window systems and their modern sightlines.

Head & Sill Details

Jamb Details

Casement

Fixed
G2 INTERNATIONAL WINDOW SYSTEMS

Product Overview

With the ability to mull different operable or fixed windows together, G2 International Window Systems can provide a solution to almost any type of configuration imaginable while providing superior thermal and structural performance. This system utilizes fill and debridge technology. Casements, awnings, fixed, and hopper windows are all able to be incorporated into the same unit without requiring additional framing in this system. The G2 HP system can be used for creating large high performance tilt turn windows.

Features

- Awning, out-swing casement, hopper, fixed, and tilt turn windows
- 2⅝" frame depth
- Slide-on nailing flange - 2" standard
- Impact option available
- Acoustical Testing
- NFRC Certified

Panels

- Minimum panel size: 2' x 2' operable, 1' x 1' fixed; smaller panels may be available upon engineering approval
- Maximum panel size up to 4' x 7' pending hardware limitations; larger panel options may be available depending on application

Glazing

- Designed to accommodate monolithic laminated, and insulated glazing infills of 1"

Performance

- Water performance up to 15psf (fixed), depending on configuration and water column
- Higher design pressure ratings available with engineering approval
- Test results available upon request

G2 Fixed Air and Structure Impact Testing

<table>
<thead>
<tr>
<th>PANEL SIZE</th>
<th>AIR AT 1.57 PSF</th>
<th>AIR AT 6.24 PSF</th>
<th>WATER Awning &amp; Casement</th>
<th>WATER Fixed</th>
<th>DESIGN PRESSURE</th>
<th>UNIFORM LOAD</th>
<th>OVERLOAD</th>
</tr>
</thead>
<tbody>
<tr>
<td>72” H x 36” W</td>
<td>0.1 L/s/m²</td>
<td>0.01 L/s/m²</td>
<td>12.0 PSF (water)</td>
<td>15.0 PSF (water)</td>
<td>± 65 PSF</td>
<td>± 65 PSF</td>
<td>± 97.5 PSF</td>
</tr>
</tbody>
</table>

Please Note:
Testing and performance results may vary depending upon sill, size, and hardware selections. Please be sure to visit our website at www.solarinnovations.com or contact your Solar Innovations® representative for additional product information.
Framing Member Options

- Inswing Sash
- Outswing Sash
- Fixed Frame
- Inswing Sill
- Head/Jamb
- Outswing Sill
- Glazing Flange
- Glazing Bead
- HP Tilt Turn Frame
- Tilt Turn Sash

Head & Sill Details

- Awning
- Casement
- Fixed
- Hopper
- HP Tilt Turn

Jamb Details

- Awning
- HP Tilt Turn
- Fixed
- Casement
- Hopper
G3 INTERNATIONAL WINDOW SYSTEMS

Product Overview

G3 International Window Systems provide superior thermal offerings and capabilities by utilizing thermal strut. This technology allows for a dual color unit by separating the profiles into two individual pieces. It also provides a wide range of glazing thicknesses to conform to any application. The system can be used in awning, hopper, casement, fixed, and tilt turn windows.

Head & Sill Details

Jamb Details

Casement

Awning