### RESIDENTIAL PRODUCT GUIDE

A Brighter Way of Living





# ARCHITECTURAL GLAZING SYSTEMS

### **ABOUT US**



s an industry leader for more than 20 years, Solar Innovations<sup>®</sup> has a long history that is rooted in the heart of manufacturing with a deep passion for the American dream. As a single source provider of custom glass structures, skylights, windows, doors, and more, Solar Innovations<sup>®</sup> strives to endlessly innovate and design custom products throughout the world. With over 25,000 projects under our belt, we continue to develop and grow as a direct result of our dedication to the industry and the creativity of our team and customers.

By investing in our team and customers, we are proud to turn dreams into reality. All of our American-made products are designed and manufactured at our campus in Pine Grove, PA, allowing for more flexibility to provide superior products and services. In addition, most of our engineering, product testing, and product designing take place within our facility. By producing as many components as possible in-house, we have greater control over quality, lead times, and cost, which ultimately achieves better results for our customers.

Although Solar Innovations<sup>®</sup> comes from small and humble beginnings, we now reside in a 400,000-square-foot office and manufacturing space. With a three-building campus located on over 36 acres of land, our company continues to develop and grow by creating innovative designs and engineering new product lines. The Solar Innovations<sup>®</sup> team strives to forge its path into the future by promoting a strong spirit of unity, with the desire to be better today than yesterday.

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### Why Solar Innovations®?

#### INNOVATIVE

Solar Innovations<sup>®</sup> – it's in the name. By constantly introducing new ideas with creative ways of thinking, our decisions take standard products to the next level. No project is too big or too small for us to handle.

#### DURABLE

With two in-house test labs, the quality of our products is second to none and includes some of the highest ratings in class. Solar Innovations<sup>®</sup> offers a vast line of certified products, including NFRC, AAMA, Florida Impact, Miami Dade, and TDI. Our products can be specifically designed and engineered to your project location.

#### **HIGH-PERFORMING**

At Solar Innovations<sup>®</sup>, we are about superior results. Our company currently offers the largest, impact-rated folding glass walls on the market and constantly strives to create the highest quality product possible.

#### SINGLE SOURCE PROVIDER

We are a single source supplier of aluminum, wood, and vinyl-composite glazing systems, making your entire project cohesive. Solar Innovations<sup>®</sup> provides all fasteners, silicone, sill flashings, and project-specific shop drawings.

#### **ECO-FRIENDLY PRODUCTS**

We are proud that our materials are sourced from local suppliers; not only does this help boost our local economy, but also reduces transportation times and fuel emissions. Our high thermal-performance products are energy-efficient for homes and commercial spaces. Even more, our systems include recycled content and are LEED friendly. LEED credits are available in the following categories: Materials & Resources (recycled content), Indoor Environmental Quality (daylight), Energy & Atmosphere (performance), and Regional Priority (within 500 miles of our facility). Depending on the application, other credits may also apply. Solar Innovations® was designed to be a LEED Gold certified manufacturing facility.

#### EASY TO OPERATE

All of our systems are user-friendly and straightforward. No matter the shape, size, or type of project you may have, our products remain practical and manageable for the ultimate customer experience.

#### **COASTAL APPLICATIONS**

Our systems can be designed to meet coastal requirements, limiting visible wear and tear. We have advanced aluminum finishes and stainless steel components, reducing the corrosive effects of the elements in coastal regions.

#### INSTALLATION

Whether a product is purchased directly from our manufacturing facility or through our dealer network, Solar Innovations<sup>®</sup> can provide installation and service for all of our products within a six-hour radius of Pine Grove, PA. Our expertly-trained team is registered to complete installation and service work in an ever-increasing number of states (contact our sales department for a current listing).

#### **REPAIR & REPLACEMENT SERVICES**

Our team has the technical skill and experience to evaluate your situation and determine the most effective options for repair, service, or replacement of your door or window. All drawings and information are saved for each project, so a site visit will not always be required.



#### -Get in Touch

There are three convenient ways to work with Solar Innovations<sup>®</sup>. If you aren't quite sure please feel free to call us directly at 800 618 0669.

#### **1. SOLAR'S DEALER NETWORK**

Our extensive network of dealers throughout the United States have experience in the glazing industry and with our products. Dealers are frequently able to visit the job site and work one-on-one with the customer, aiding in design, local permits, and installation.

#### 2. ARCHITECTS, GLAZIERS OR CONTRACTORS

Your architect, glazier, or contractor can work with our inside sales designer to ensure you receive the best product information. Specifications, quotes, and drawings can be directed to you to review.

#### **3. INSIDE SALES DESIGNER**

Contact our inside sales designers directly to help plan and specify your project at 800 618 0669.

## Bifold doors

Sometimes called folding glass walls, bifold doors, are accordionstyle doors which fold toward either or both door jambs and stack in the open position. They can be designed to open in one direction or divided to open toward both door jambs. A swing door can also be incorporated into the design. They can cover a large opening and are some of the most popular doors in the industry.











### **OPERABLE WALLS & DOORS**

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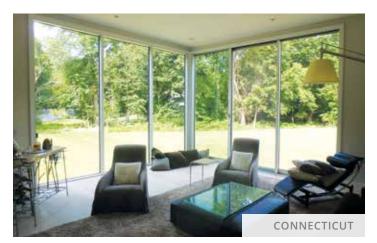


#### **OPERABLE WALLS & DOORS**











# Sliding Glass Doors

Multi-track sliding glass doors maximize views and are widely used all over the world. This system can be designed to stack to one or both sides and anywhere in between or can be completely invisible from view in the open position when a pocket is incorporated. These doors can also be configured in corners without a post creating unobstructed views.



## Lift-Slide Doors

Lift-slide doors are sliding glass panels that rise off their gaskets when in operation. These doors can be configured just like sliding glass doors and move with great ease and can typically be opened with one hand. This system is extremely durable and can be designed with high air and water performance.













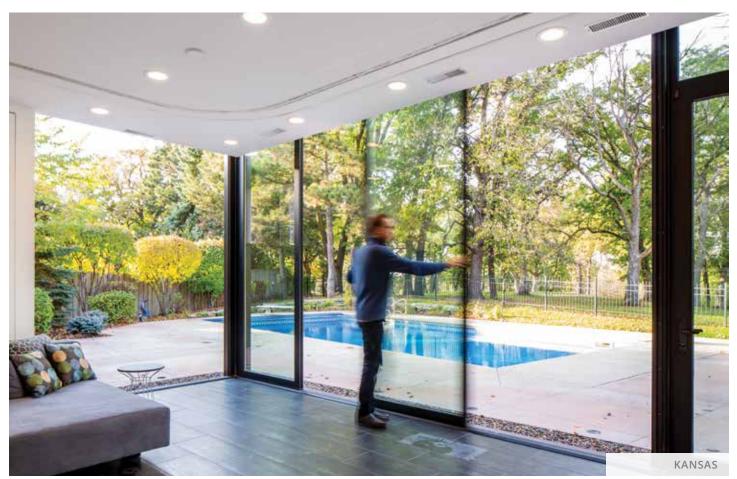
#### **OPERABLE WALLS & DOORS**

## Slide & Stack Doors



Also known as stacking glass walls, these units consist of individually operated panels which slide along a track and stack off to the side of the door opening. The panels can be arranged in a postless corner configuration or a segmented radius. A swing door can be incorporated into any design to create an entrance point. These panels can also be used to separate rooms within your home.







## Pivot Doors

Pivot doors are the perfect choice when a design statement is desired. The swing doors' pivot point can be located anywhere along the door opening. These modern doors can handle some of the largest glass sizes in the industry.









#### **OPERABLE WALLS & DOORS**





# Swing Doors

Swing doors are ideal for front doors, patio doors, entry doors, and interior doors, and can be retrofitted into existing structures. We offer terrace and French door configurations both in vinylcomposite and aluminum. Swing doors are the perfect option for areas with limited space.

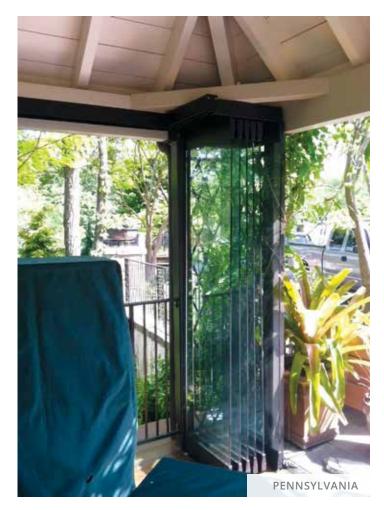








#### **OPERABLE WALLS & DOORS**



### Clear Glass Walls

Clear glass walls don't have vertical stiles, allowing for maximum transparency, natural daylighting, open views, and a sleek, modern appearance. The system's nonthermal design makes it a great choice for interior room dividers and exterior applications with overhead protection. Our clear glass wall systems can be configured to operate several ways: sliding; folding; and slide and stack, creating nearly an unlimited number of possibilites.



## Vinyl Doors

In addition to our durable aluminum, we also offer vinyl-composite products including folding glass walls, sliding glass doors, terrace doors, and French doors. Our vinyl-composite products will not rot, rust, warp, and prevent extreme temperatures from entering the home, making them an energy-efficient option.



## Folding, Sliding, Stacking, & Pivot Windows

Nearly identical to their door counterparts, our folding, sliding, stacking, and pivot windows are ideal for any home. We have no standard sizes and each window is custom built to ensure the perfect fit for every project.









PIVOT WINDOW | PENNSYLVANIA



SLIDE & STACK WINDOW | NEW JERSEY





CASEMENT WINDOW | PENNSYLVANIA

## Casement, Awning, & Hopper Windows

We offer a variety of operable windows to fulfill almost any design need. Casement windows are hinged on either side and are operated by a crank. Awning windows are hinged at the top while hopper windows operate in an opposite manner, hinged at the bottom. Our windows are available in a variety of colors or can be cladded with a wood veneer.







CASEMENT WINDOW | CONNECTICUT

## Tilt-Turn & Fixed Windows

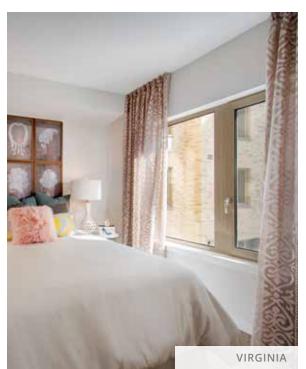
Rounding out our variety of aluminum window choices are our tilt-turn and fixed window options. The versaitle tilt-turn window can be operated like a casement or hopper window, offering a choice for ventilation and security. Fixed windows do not open and can be configured in a multitude of ways.



# Vinyl Windows

Vinyl-composite window systems are increasing in demand in homes for their high performance, low maintenance, and design flexibility. Our vinylcomposite window line allows for fixed, awning, inswing casement, hopper, and tilt-turn configurations. All of these styles have similar sightlines and finishes.







## Curtain Walls

A curtain wall is a glass wall with aluminum supports, often spanning multiple floors. Curtain walls are an excellent way to bring natural light into a room while being protected from the elements. It is also an ideal solution for interior use as a room divider. Wood can be incorporated into the interior of the design, combining the warmth and beauty of natural wood with the durability and longevity of aluminum, creating a high-performing, sustainable building system.















### Conservatories

Conservatories are the perfect multi-season addition to any home. Whether you desire classic English charm or a sleek, modern feel, our durable structures are built for the indoor-outdoor experience. Enhance your living space with a wood interior or incorporate any of our window or door products to make this structure truly your own.















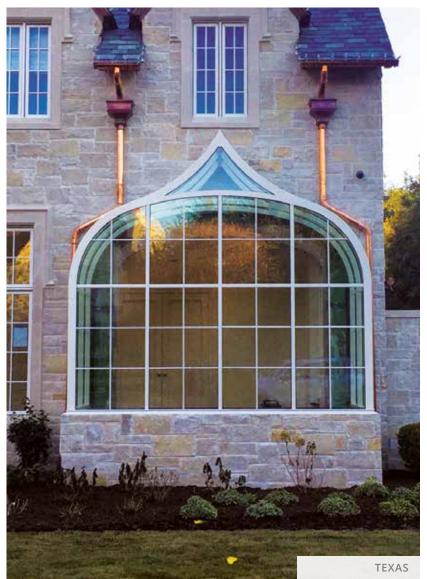
### Sunrooms

Sunrooms are an excellent way to bring the therapeutic benefits of sunlight into your home. They can be used to expand your year-round living space and are the perfect solution for getting a jump-start on the planting season for the novice gardener.











## Canopies

Canopies protect from the rain and snow and are available in a variety of designs. Outdoor kitchens, sheltered patios, and carports are all common applications for residential canopies and provide appeal and function to any space.











### Greenhouses

Our greenhouses are built to last a lifetime and are fully customizable. They can be setup as a simple lean-to for the casual gardener to elaborate, grand structures, complete with environmental control systems. A complete line of accessories is available, including benches, fans, humidifiers, heating and cooling units, and decorative elements.











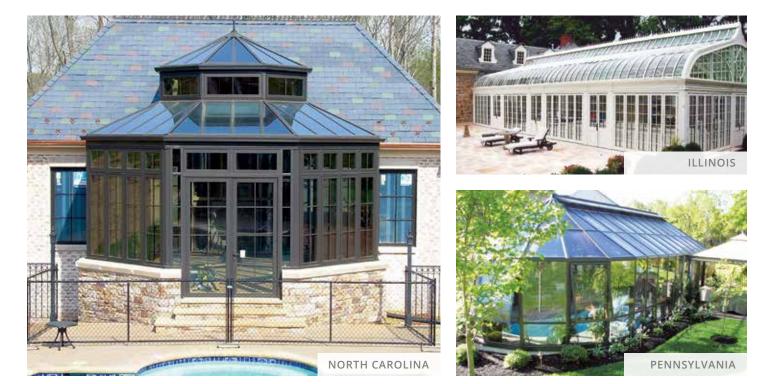






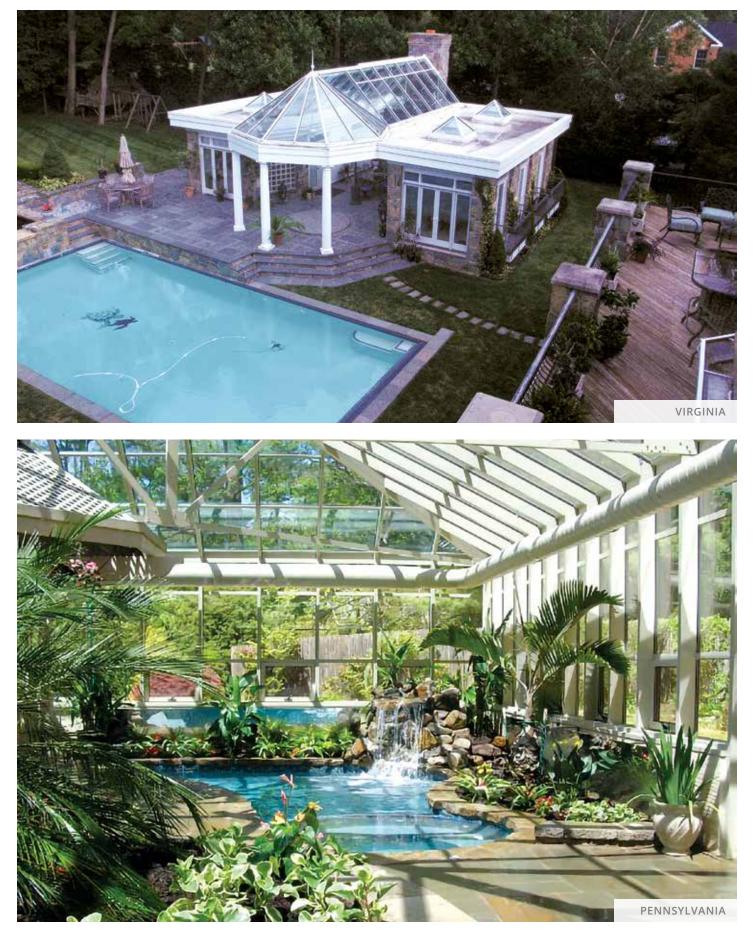
## Pool Houses & Enclosures

A pool house—also known as a pool cabana—is an alternative to a pool enclosure. Generally, it is a small structure that sits near the pool and can serve as a multi-purpose space for users. Almost any of our window or door products can be incorporated into a pool house. Our pool enclosures can withstand environments with high humidity and moisture levels. Enclosures allow you to enjoy your pool year-round while providing amazing views.









### SKYLIGHTS







# Fixed Skylights



Skylights enhance any space by bringing in natural light. They can be glazed with high-performance glass or polycarbonate, and can be incorporated into any pitch roof line. We offer single slope, pyramid, hip end, domed, and walkable options, and every skylight is completely custom made to the specifications of your project.

MARYLAND



### SKYLIGHTS

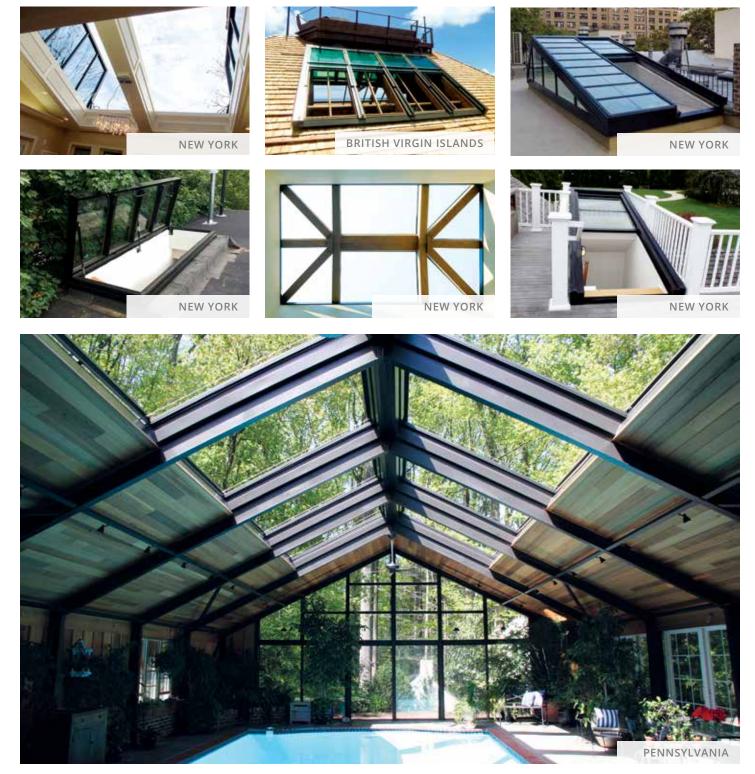




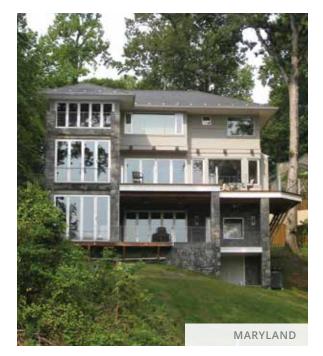


# Operable Skylights

Operable skylights open to allow for ventilation. They can be used in any structure, including greenhouses and conservatories, and operate either manually or through a motorized cable system. Our 90° operable skylights allow for the largest possible openings. Retractable skylights feature roof panels that can open to provide unobstructed views. Vents, screen systems, rain sensors and other automated control options are also available.



#### WHOLE-HOME SYSTEM







## Complete Glazing Solutions

Doors and windows purchased from different manufacturers make for an inconsistent overall look for your home. The result is often a disparity in sightlines, finishes, and materials that ruins the aesthetics of your home. We can provide a complete door, window, skylight and/or structure package that will ensure a consistent design and lifespan.





### **GLAZING OPTIONS**

# Glazing

All of our systems can be installed with a wide variety of glazing types. Each provides its own advantages. Low-E varieties reflect the sun's rays with minimal tinting of the glass. We offer dynamic glass that darkens either as sunlight intensifies or on demand through electrochromic glazing. If you desire diffused light, infilled glazing spreads the sunlight evenly, causing less glare and softer shadows. We also offer decorative options for aesthetic appeal or a bit of privacy while allowing maximum sunlight.

### Low-E Glass



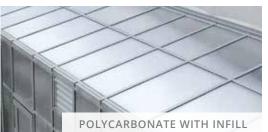
Low-E glass has a transparent thin coating applied to the encapsulated glass surfaces that reflect heat back to its source, keeping the sun's heat out in the summer, and the structure's warmth in during the winter. We offer several variations of tint intensity.

### Dynamic Glass

Dynamic glass automatically changes as the temperature varies, light changes, or on demand. This allows for heat, light, and glare control any time of day.

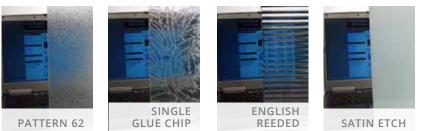


### Polycarbonate



Polycarbonate is a popular alternative to glass; it is lightweight, sustainable, incredibly strong, and easily transported. Heat and light diffusing materials can be infilled, if desired.

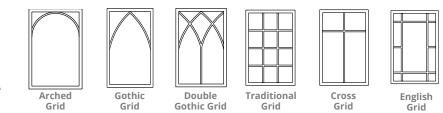
### **Decorative Glazing**



Decorative glazing is a broad category consisting of art glass and other unique glazing options, including etching. Additional custom decorative options are also available.

### Grid Options

Grids can enhance the appearance of any of our systems. They can be installed on the exterior and interior of the window. For insulated glass, simulated divided lites are recommended to give the appearance of traditional divided panes of glass.



## Timber Frame Construction

Combine the warmth and beauty of a natural wood interior with the durability and longevity of an aluminum exterior to create the perfect solution for those seeking a high-performing, sustainable building system. An exterior aluminum system creates a superior barrier from the elements, limiting the wood's exposure to any type of precipitation or wind, and dependably maintains a high level of performance.





WOOD FACADE SYSTEM (STANDARD OPTION) \* Available for interior walls/sheltered walls

WOOD FACADE WITH WOOD COVER CAP\*



2-SIDED STRUCTURALLY GLAZED WOOD FACADE



4-SIDED STRUCTURALLY GLAZED WOOD FACADE



WOOD AND ALUMINUM FACADE SYSTEM





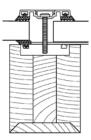
#### Solid sawn wood framing is highly desirable and stands alone as the choice for any high-end project. It should only be installed on the interior or covered areas, but can be incorporated with high-performance aluminum when any part of the system is exposed to the elements.

### **Glue Laminated Timber**

Glue laminated timber, or glulam, can be utilized as both a structural and aesthetic element for glass doors, windows, and curtain walls. Solar Innovations<sup>®</sup> patented glue laminated timber simulates the appearance of solid sawn wood.



TRADITIONAL GLUE LAMINATED TIMBER



SOLAR INNOVATIONS® PATENTED GLUE LAMINATED TIMBER

### Wood Veneer



The most popular product to replicate a real wood appearance is wood veneering. A thin layer of wood material is applied with an adhesive to the aluminum frame. This is an affordable option for those desiring a wood look. It also is easier to maintain as it less likely to chip like real wood.

### Decoral™

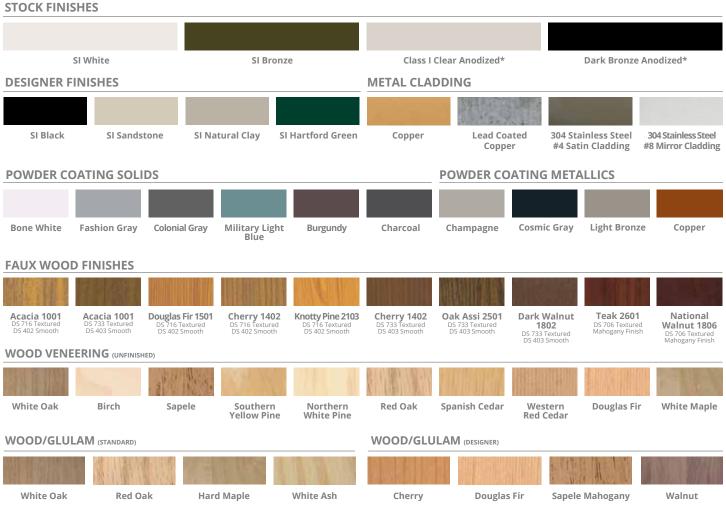
Decoral<sup>™</sup> is a powder coat finish that exhibits a wood appearance without the use of wood. The process involves applying a powder coat base, afterwhich a wood-grain laminate is overlaid. The feature that makes Decoral<sup>™</sup> stand out is that it can be applied to exterior surfaces.

### TimberOptic™

TimberOptic<sup>™</sup> by Solar Innovations<sup>®</sup> mimics the appearance of wood, but consist of materials such as aluminum and vinyl. This design feature is most notable at the product's joints. Not limited to faux-wood finishes, aluminum finishes are available as well, allowing for a wood look on one side and aluminum look on the other.



# Finishes



\*Stock anodized finishes are available at an additional cost.

Note: Depending upon color selection, additional charges and increased lead times may apply. Examples are shown as accurate as photography and printing processes allow. Final finish selection should be made from a physical sample; contact Solar Innovations® for samples. Product and finish options are subject to vendor availability. Solar Innovations® reserves the right to discontinue any option at any time without notice. Additional options, including custom color match, are available; contact Solar Innovations® for details.

### Hardware

Solar Innovations® provides superior quality in all our hardware. Utilizing stainless steel pins and extruded aluminum hinges ensures the serviceability and durability of our products. Heavy saltwater finishes are available for coastal applications. We also offer a patented adjustable door catch for folding glass wall applications.



#### Visit Us Online

Dig deeper into our full product line online. Browse through hundreds of projects until you find the style you're looking for. Get more information including technical specifications on all our products. We also offer commercial solutions for many of the products featured in this brochure.

solarinnovations.com

#### **ADDED COMFORT**

## Shades, Screens & Blinds

Whether it's protection from the sun or those pesky insects, Solar Innovations<sup>®</sup> has you covered. We offer a wide variety of shade, blind and screen solutions that can be applied to our doors and windows as well as our glass structures. Most of our shades are designed for high moisture areas and are water, bacteria, and fungi resistant. Our screens can be set up to operate like our doors and windows, depending on your configuration.























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