

SOLAR NEWSLETTER TIMES

Quarter 4 2019
VOLUME 15, ISSUE 4
External Newsletter



\$5,000 Raised for
Local Culinary Students

Project to Watch

TimberOptic™
Technology



Content Guide

- 4 **Project to Watch**
Solar Innovations® for the Arts
- 6 **Recent Installations**
- 7 **Case Study**
Private Residence - Paeonian Springs, VA
- 8 **In the Know**
Greenhouses, Sunrooms, and Conservatories.
Oh my!
- 10 **What are Net Zero Homes?**
The Benefits to Building Green
- 11 **TimberOptic™ Technology**
Aluminum and Vinyl Adopt Classic Wood Design
- 12 **The REEL Deal**
IRTs in Action
- 13 **IRT® Updates**
Renewed Reels, IRT Goes Global
& New IRT Apparel
- 14 **Solar Word Search**
- 14 **Testing Updates**



ON THE COVER

Top: 14-04-220 Oddette Winery
Bottom: 15-07-461 Riverpoint Tower Chicago

NEWSLETTER COMMITTEE

Melissa Cramer
Ben Foreman
Greg Header
Abbie Kaiser
April Mitchell
Kevin Sninsky
Joshua Troxell



SOLAR CARES

Our Solar Family helping one Cause at a time

UPDATES PROVIDED BY APRIL MITCHELL

For Q3, the Solar Innovations® family set out to assist the Schuylkill Technology Center's culinary students in raising money for their very own food truck.

DONATION GOAL ACHIEVED!

·\$5,000 donated to STC with 81% company-wide participation



Featured Jobs



ALVERNIA PRESS BOX

16-09-029

A press box now equipped with 29 folding glass windows allows Alvernia University announcers and spectators to watch the game with a view like no other. Filled with insulated LoE 272 tempered glass these windows are equipped to handle the elements all year long. The windows are also accented with Solar Innovations® standard clear anodized frame and a two-point locks, readying this press box for many more plays for years to come. The folding glass windows complement the school colors and show their football spirit that can be seen by the whole stadium. On a crisp fall day, the windows can easily be closed but will not obstruct any views. While on a warm early season game, the windows can be wide open to allow the breeze to flow in and out while the game is played.

PENNSYLVANIA RESIDENCE

15-10-319

Expanding over 31 feet from the home, this glass pyramid and double pitch canopy now provides owners an exceptional amount of outdoor living space. The clients can use this on a sunny day to escape to the shade, make lunch in between laps in the pool or host parties under this canopy. The space the canopy provides can be used for much of the year, not only the summer. Warm spring days and mild autumn nights could easily be spent here enjoying dinner or reading the newspaper. This canopy is also accented with Solar Innovations® standard black finish and is filled with clear annealed laminated monolithic glass that covers the whole canopy.





Project to Watch

SOLAR INNOVATIONS® FOR THE ARTS

BY KEVIN SNINSKY

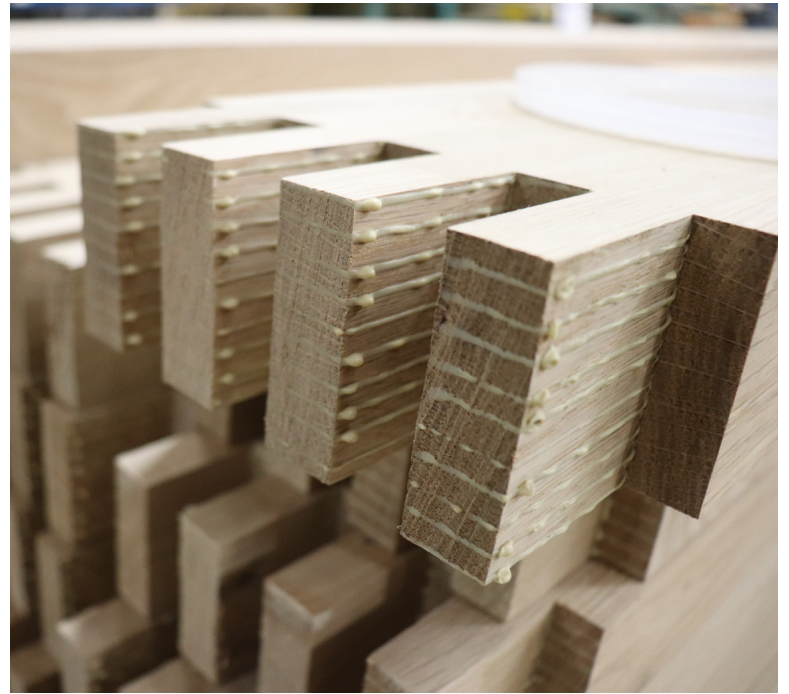
Big things are happening inside and out of the Solar Innovations® home base. The architectural glazing system manufacturer is deep into production and installation of several large-scale projects. As with all endeavors, each presents their respective set of unique challenges and opportunities for innovation.

One notable project has the Solar team lending their talents to the pursuit of art and culture. Located in Groton, MA, the Music Center at Indian Hill is an ambitious project which will make use of several SI products, including various pieces from both the aluminum and wood-based Solar Innovations® product lines.

Shop members are working hard to ensure each product is crafted up to Solar Innovations® standards. On any given day, those out on the shop floor could catch a glimpse of custom eyebrow windows and custom, unitized wood curtain wall assemblies being prepped for shipment. Aside from the assembly of these requested pieces, a litany of ongoing tests are being conducted to ensure ultimate strength and integrity of these products is present from top to bottom.

Those interested in the progression of the efforts at the Indian Hill Music Center should keep a close eye on the Solar Innovations® Facebook and Instagram pages in the coming weeks. Regular updates regarding this project, as well as others, will be posted throughout the course of the manufacturing process.





RIDDLE ME THIS

There are 5 houses: a blue house, a pink house, a yellow house, a red house, and a green house. The blue is made out of blue bricks. The pink is made out of pink bricks. The yellow is made out of yellow bricks. The red is made out of red bricks. What is the green made out of?

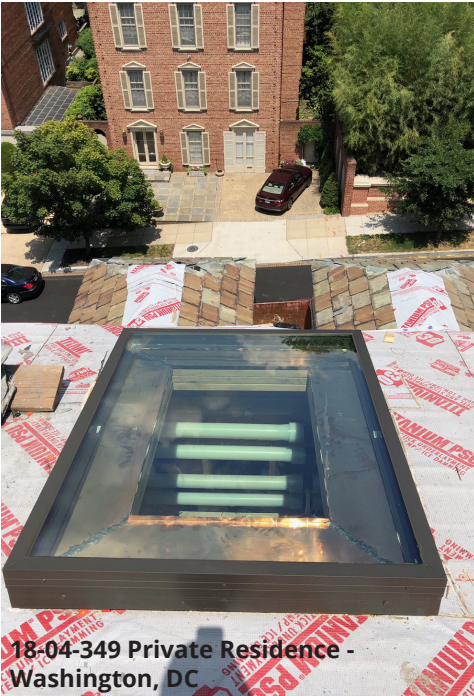
Answer: Glass. It is a green house.



Recent Installations



17-12-041 Private Residence - New Canaan, CT



18-04-349 Private Residence - Washington, DC



18-08-009 Private Residence - Long Eddy, NY



19-02-341 Private Residence - Wescosville, PA



18-07-124 Private Residence - Montclair, NJ

Case Study: Private Residence - Paeonian Springs, VA

THE BENEFITS TO BUILDING GREEN

BY ABBIE KAISER

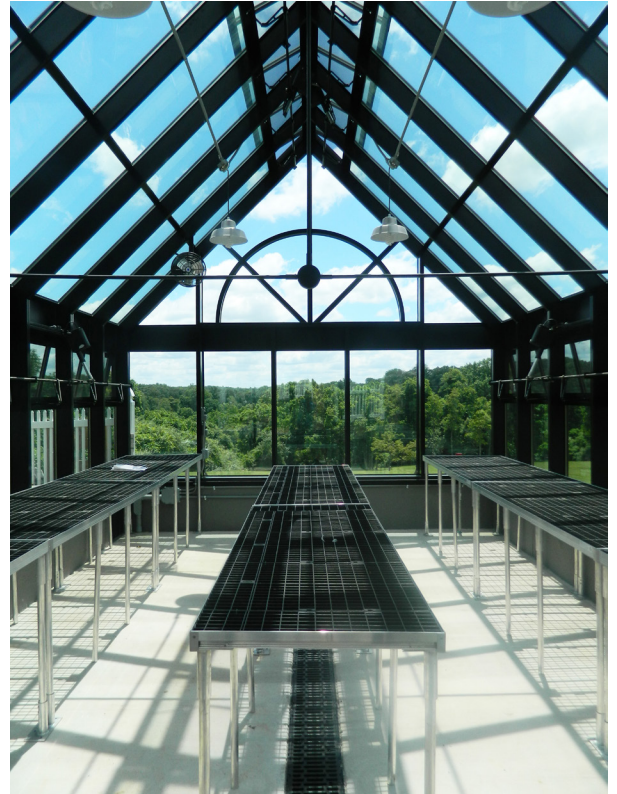
THE CHALLENGE

Homeowners came to Solar Innovations® with a mission, to be able to grow their own produce all year round. Luckily, they had the land to expand. Now, all they needed was a greenhouse. Knowing Solar's industry reputation, their journey started here and, eventually, lead to their planting and growing dreams coming to life.

THE SOLUTION

Knowing their wants and needs, the customer's decided a larger-scale greenhouse was the way to go. Picking colors and other design specific requirements was a breeze, especially when the owners wish list was completely exceeded by our team. The owners picked Solar Innovations® standard black frame finish, added operable ridge and eave vents and large greenhouse benches to make this greenhouse fully functional. This straight eave double pitch greenhouse is made from aluminum, glazed with LoE 272 tempered glass, and accented with a stone wall around the exterior boarder to compliment the client's choice of décor that was already present in their side garden. This greenhouse serves its purpose on a residential plot conveniently located a few steps from home.

After the large straight eave double pitch greenhouse was constructed, it left the owners awe-struck and excited to be able to grow their fruits and vegetables. Additional accessories selected during the design process allowed the homeowners to stay at ease with the eco-friendly and technologically advanced extras. Thanks to the advanced thermostat that controls the ridge and eave vents, the greenhouse can be cooled down or heated up with ease to allow for year round operation.



Light Reading



In the Know GREENHOUSES, SUNROOMS, AND CONSERVATORIES. OH MY!

BY KEVIN SNINSKY

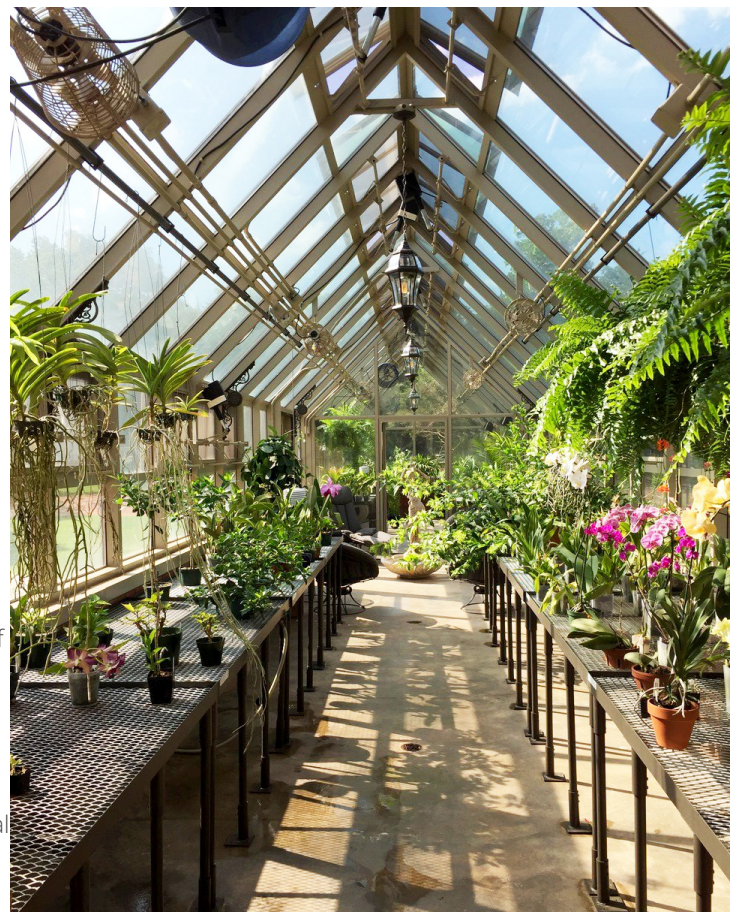
GREENHOUSES

A greenhouse's most distinctive feature is found in its application. This is a structure specifically designed to grow plants in – plain and simple.

During the 13th century, greenhouses – called botanical gardens – were built in Italy out of necessity. Explorers returning from the tropics would use these structures to house the different plants they had collected during their expeditions. It wasn't until the 1800s that the first “modern” greenhouse would be constructed by Charles Lucien Bonaparte, a French botanist and nephew of Napoleon Bonaparte, to grow medicinal tropical plants.

Greenhouses can vary greatly in size, ranging anywhere from a small backyard structure perfect for recreational use to much larger ones tailored for commercial growth. Greenhouses are constructed out of various materials including glass, plastic, and aluminum.

Unlike with other gardening methods, plants grown in a greenhouse have the added benefit of protection from pests and the elements. Additionally, greenhouses can be equipped with a range of additional features to assist growers, such as benches, heaters, irrigation systems, and more.



SUNROOMS

A sunroom – also known as a Florida Room or Solarium – is any glass-roofed structure that has been added on to a building or attached to a pre-existing room that can be modified into one by replacing the roof with glass.

Although typically less ornate than the other structures discussed here, sunrooms can still be outfitted with several decorative features. Designers can integrate doors and windows into the room's frame, giving occupants the option of added ventilation and accessibility. Grids can be integrated into windows, while roofline's can be adorned with ridge cresting for some added flare.

Sunrooms serve as an extension of your home or business and can be thought of more as an additional room rather than an entirely new structure. Because of this, owners will need to decide whether they want them to blend seamlessly into the rest of their home or create a unique focal point. Sunrooms give occupants an opportunity to bask in the sunlight regardless of the season.



CONSERVATORIES

Out of all the structures featured here, conservatories are the most versatile of the group. Conservatories are glazed structures comprised of glass roofing and/or walls. These units can be both freestanding or added on to existing buildings. Conservatories are a happy medium between greenhouses and sunrooms.

The conservatory originated in the 16th century and, similar to greenhouses, was used to preserve citrus plants brought home by explorers returning to Europe. These structures were helpful in protecting the new plants from strong breezes and cold temperatures.

While conservatories can certainly be used to cultivate plant life, their primary use is to create additional living space. With their addition, owners are welcomed to a world of possibilities. Some possible uses include living rooms, pool houses, kitchen extensions, tea houses – the possibilities are endless.





What Are Net Zero Homes?

THE BENEFITS TO BUILDING GREEN

BY BENJAMIN FOREMAN

INCORPORATING PASSIVE SOLAR TO ACHIEVE A ZERO WASTE OR NET ZERO HOME

As environmental concerns continue to grow, home owners are on the lookout for new ways to go green whenever possible. Recycling, electric vehicles, and solar panels are all excellent, eco-friendly solutions that allow us to incorporate more sustainable features into our daily lives. However, some home owners are taking matters one step further in pursuit of a life that is free of wasted energy. Energy generators outside the home and interior optimization of space and exposure can make a waste-free life possible. Though these homes may “net zero” energy, they certainly net green results.



WHAT ARE NET ZERO HOMES?

While net zero houses appear just like any other home, their function is much different. By incorporating solar panels, wind mills, or other energy generators on the premises, these “zero energy houses” create as much or more energy than the inhabitants use in a given day.

However, it is not just the energy generators that make this style of living effective. The house itself must be designed to effectively conserve and utilize what energy is available. This could be achieved through an efficient layout where airflow is optimized for all seasons and keeps the internal climate regulated without the use of significant amounts of energy.

Many net zero buildings are so well-insulated that very little interior air can escape at all. In addition, net zero homes can use a feature known as “passive solar” to optimize their exposed rooms for energy retention

WHAT IS PASSIVE SOLAR?

Passive solar describes a space that uses its windows, floors, and walls to collect and redistribute heat energy in the room. This energy is most commonly used to retain heat in the winter and deflect heat in the summer. This technology keeps certain rooms in the house from needing to be heated at all and does so without compromising comfort.

Incorporating passive solar design into your home has never been easier or more affordable. Photovoltaic panels can be incorporated into most elements of the room and are quite discrete in their appearance. However, not all passive solar solutions involve the use of solar panels. Something as simple

as incorporating stone tile into the room can help trap and slowly release heat when planned correctly. The same can be said about the addition of a Trombe wall, which uses layers of glass and stone to store and radiate heat.



The Latest & Greatest:

TIMBEROPTIC™

BY SOLARINNOVATIONS®

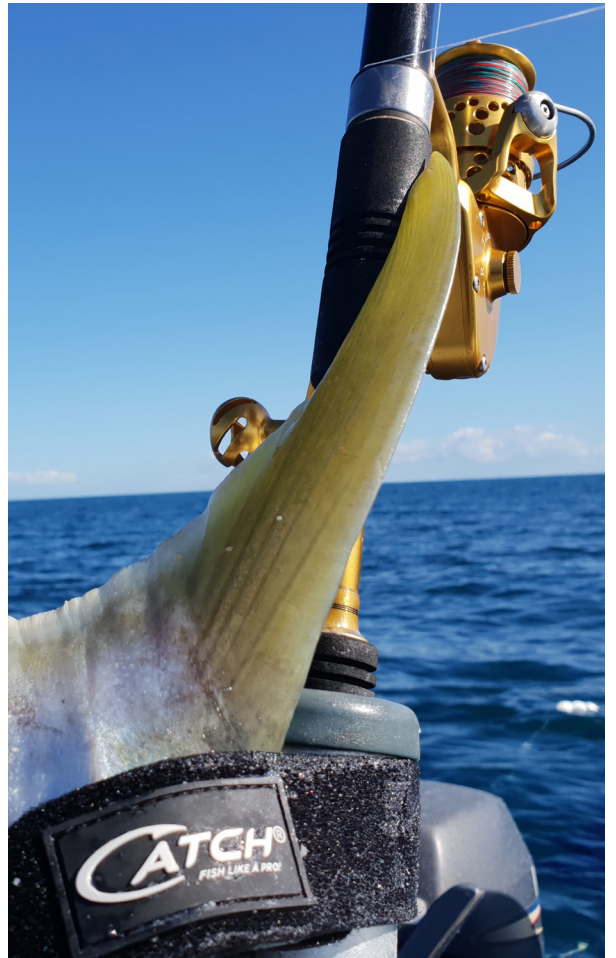
ALUMINUM AND VINYL ADOPT CLASSIC WOOD DESIGNS

Solar Innovations® Architectural Glazing Systems has begun utilizing TimberOptic™ technology in the production of various product lines. Products available for purchase in this style include doors, windows, and more. Though produced from the same raw materials as other aluminum and vinyl products, it is the unique design and assembly methods used in the creation of TimberOptic™ units that distinguishes them from the rest of the Solar Innovations product family.

TimberOptic™ units are crafted in such a way so that their appearance successfully mimics that of true, wood-crafted products. While many faux wood products can appear fake in certain key areas, our in-house assembly process ensures that TimberOptic™ products have an exceptionally real-wood look regardless of their base material. You can learn more about TimberOptic™ products and all this excitingly modern line has to offer at the Solar Innovations® website.



THE REEL DEAL: IRT In ACTION



IRT® Update



IRT Renewed Reels

In August of 2019, IRT Reels launched efforts to bring new life to its supply of preexisting reels. Anglers world wide are now able to find renewed IRT reels on our open eBay shop. Various series of IRT reels can be purchased through the site at discounted prices, but with the same standard for quality IRT has come to be known for.

IRT Goes Global

IRT paired up with Catch Fishing Tackle in New Zealand to create these beautiful co-branded reels. They will be a perfect match for the drag-screaming species New Zealand has to offer.



Ready for Action – New IRT Apparel

You've got the reel. Now, dress the part! IRT is proud to announce new additions to our line of IRT brand apparel. These latest options include our short-sleeve "Dorado del Mar" Mahi tee shirt, as well as a line of all-new IRT bucket hats, perfect for providing some added shade when spending long days on the water.

IRT Secures New Patent – Handle Drag System

IRT Reels is proud to announce the issuing of Canadian Patent no. 2,910,528. Though the possibilities for this patent are endless, IRT® will be using this invention immediately to add a more practical drag system into an industry-changing line of fly reels.



IRT200 – Coming Soon

IRT Reels unveiled their newest series of spinning reels, the IRT200. This compact, yet powerful reel is the perfect size for inshore saltwater and various freshwater applications. The IRT200 will be IRT's smallest model to date, but will maintain the same strength and durability of all larger reel series. Testing on these reels is set to begin this October.

SOLAR WORD SEARCH

C C I S W V G M U A Z V O G A
 X O N U O E O N O D E H R V B
 Y B N D W L Z C I N A E K U J
 E D O S G F A E T K E O Y P M
 W O V E E M P R E N C X W F O
 L C A R O R S N H I O A R C O
 S O T I O Y V O T S N A T W R
 S L I D E R U A P H J W P S N
 M R O G W S H V T U F F D T U
 A B N E E B U P S O L U D G S
 X R S Z M Z I S I T R L J Q T
 B T H G I L Y K S B O Y E Q Z
 O B X T S G Q W U F D W C X U
 F F G U D R B Z I G S G Q R M
 Z W F P T G C B A K T O V W V

BIFOLD
 CONSERVATORY
 GREENHOUSE
 INNOVATIONS
 RIDGE
 SKYLIGHT
 SLIDER
 SOLAR
 STACKING
 SUNROOM
 VENT

Testing Update

PREPARED BY JOSH TROXELL

CURRENTLY BEING TESTED

- Indian Hill Mock Up**
Air, Water, and Structural Testing
- Vinyl Medium Slider**
Air, Water, and Structural Testing
- G3 Modular Terrace Door**
Air, Water, and Structural Testing
- G3 Modular Terrace Door with Sidelite**
Air, Water, and Structural Testing
- G3 Pivot Door**
Air, Water, Structural, Impact, and Cycling Testing
- G3 LT FGW**
Thermal Testing

CURRENTLY BEING TESTED

- HVHZ G3 Sliding Door**
Air, Water, Structural, Impact, and Cycling Testing
- G3 Lt Narrow FGW**
Air, Water, Structural, Impact and Cycling Testing
- G2 Ridge Vent (Window Master)**
Impact and Cycling Testing
- HVHZ G3 Regular FGW (High Pressure)**
Air, Water, Structural, Impact, and Cycling Testing
- HVHZ 2x4 Curtain Wall**
Air, Water, Structural, Impact, and Cycling Testing
- HVHZ Wood Curtain Wall**
Air, Water, Structural, Impact, and Cycling Testing

