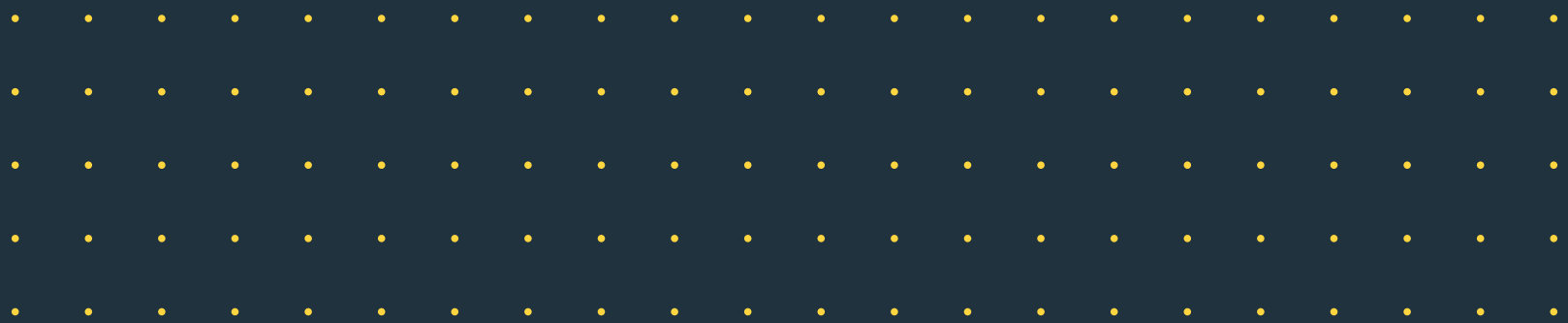


Building Sustainability with Solar by Schüco

Integrated Photovoltaic and Thermal Systems



SCHÜCO



Solar Sustainability by Schüco

Schüco is one of the world's leading suppliers of solar energy systems for residential and commercial buildings. We offer complete solutions for solar electric (photovoltaic/PV), domestic hot water, and space heating applications. One brand, one quality.

Our photovoltaic systems – both standard retrofit as well as building-integrated – offer hassle-free installation and long-term reliability.

Our integrated thermal systems lead the market in performance, design, and ease of installation.

Our engineered SolarEZ mounting system for pitched and flat roof installations saves time on the roof, while meeting the strictest code requirements and standing up to the toughest weather.

Our technologies help thousands of contractors around the world work faster and more effectively. As a technology partner and engineering powerhouse, we enable you, the solar integrator and installer, focus on what you do best: selling and installing cutting-edge solar energy systems. Together, we can build sustainability by taking solar mainstream.



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Sustainability through Energy²



Schüco designs facade, windows, and solar energy systems. Our products lead the world in energy efficiency, quality, convenience, and aesthetics.

Energy sustainability is the central challenge of our time. Fossil fuels are dwindling and CO² emissions are threatening to change our climate and way of life. Meanwhile, buildings consume at least 30% of the energy used in developed countries. We're helping reduce this with our Energy² concept – saving and generating energy.

Energy² is a model for the whole building envelope, saving and generating energy through insulation and solar photovoltaic and thermal systems. It incorporates:

- Energy through Automation using all forms of window opening, to optimize shading, ventilation, lighting, and climate control
- Energy and Security to protect life and property from extreme weather, crime, fire, and other dangers
- Energy and Design for durability, beauty, and ease of use

Tested Excellence

The quality and performance of our solar products are second to none. We make sure of it at our Technology Center, one of the best-equipped facilities in the world and Europe's largest privately-owned building materials test center. We test our systems under simulations of vicious hail, torrential rain, high winds, and anything else the weather can dish out. When you install one of our systems, you can stand behind it.

“Together with our partners, the Schüco Network is making a sustained contribution toward reduction of CO² emissions.

With Energy² – saving energy and generating energy in the building. That's how we're helping to preserve our blue planet. Be a part of it.”

Dirk U. Hindrichs, President and CEO
of Schüco International KG



Schüco Technology Center is one of the world's best-equipped test facilities for building exterior elements.

Ground-Breaking Technology

Since the early '90s, we have been one of the innovators instrumental in making solar a mainstream technology. We're one of the few solar companies with expertise in photovoltaic, solar thermal, building-integrated solar products, solar cooling, and other innovative solar technologies. Hundreds of megawatts of Schüco systems generate clean, reliable energy around the world, in residential, commercial, and industrial applications.

Schüco Photovoltaic

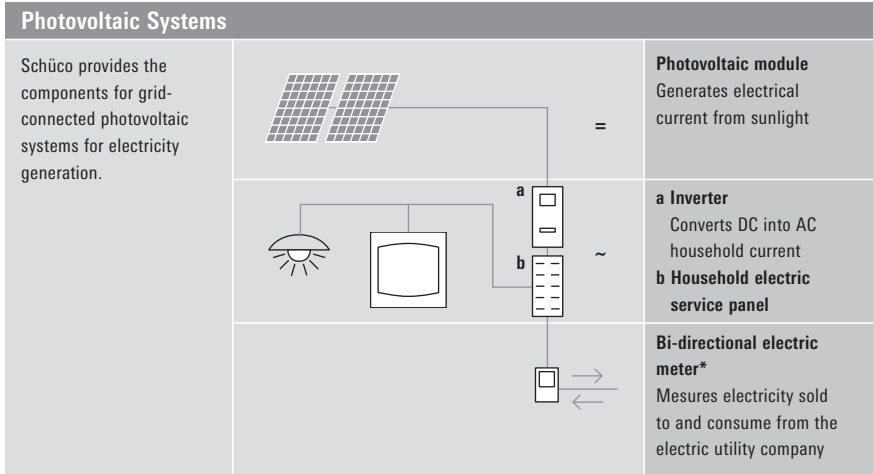
Our PV modules have outstanding sustained performance and durability. Schüco modules are known for high quality. Our minimum-tolerance output rating makes string sizing quick and easy. We offer integrated systems with pre-tested modules matched to highly efficient inverters, for maximum overall output. And since you get it all from one source, you don't have to waste time trying to match various manufacturers' products and dealing with multiple vendors.

Schüco Thermal

We're setting the standard in solar thermal. Thanks to our innovative third-generation technology, domestic hot water solar energy systems are back in the mainstream. Our fully integrated residential DHW packages cut installation times to less than a day. The modern look and feel, together with superior efficiency and the ability to read out kilowatt hours produced, make our systems an easy sell.

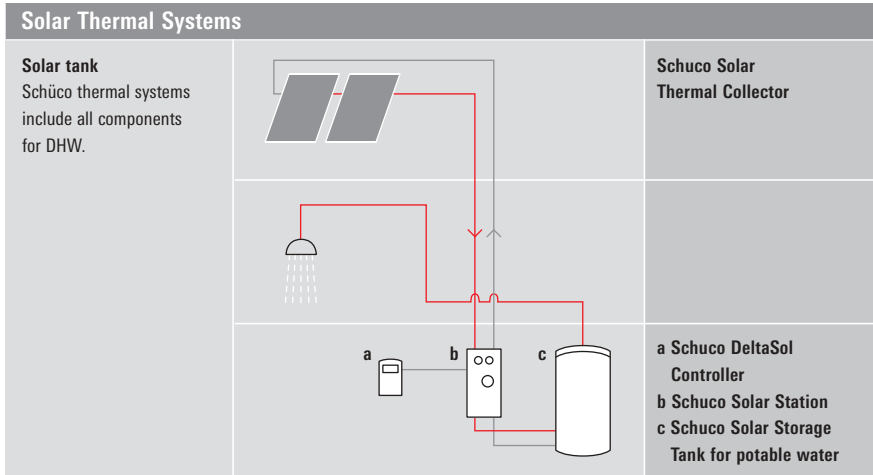
Schüco Mounting

The SolarEZ system makes rooftop mounting faster and easier than ever before, and stronger, too. By engineering "form lock" into elements, we add an extra margin of safety, which means peace of mind for you and your customers – even after decades of operation. A host of design details make short work of installations on metal, pitched, or shingle roofs.



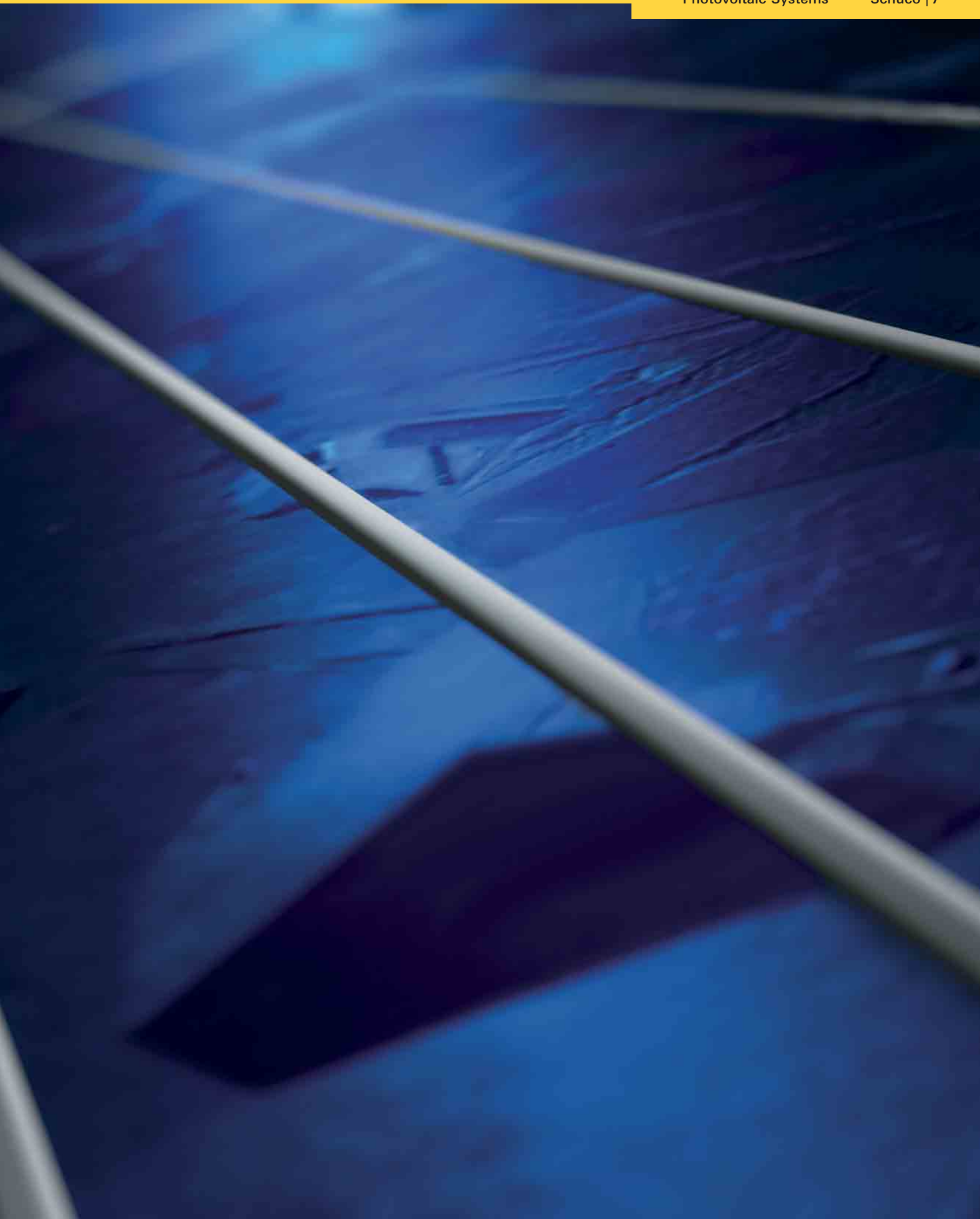
Schüco photovoltaic system configuration.

* other configuration possible



Schüco thermal system configuration.





Integrated Photovoltaic Performance



Schüco PV systems are on houses from coast to coast.

Schüco photovoltaic systems are the right choice for long-term performance and dependability. This begins with module design and goes on through system integration, single-source convenience, easy installation and guaranteed performance. We back it up with marketing and engineering support for an overall package that helps you work profitably, keep customers happy, and generate referral business.

By sourcing a Schüco PV system, you get everything from a single partner. This reduces your administrative overhead and lets you do what you do best – selling and installing. Equally importantly, it gives you a balanced system optimized for maximum performance. We test each module for its actual output, and combine modules of like output. This avoids series losses and assures that you, and your customer, are getting the performance you expect.

Our modules are lead-free and feature tempered glass for long life. The SolarEZ mounting system assures uniquely fast, easy installation on virtually any roof, and lets you get on to the next job quickly.

With extensive experience in residential and commercial PV, including building-integrated systems, we give installers the resources to handle projects large and small.



Bauerfeind Tower, Zeulenroda, Germany



Yale University, Fisher Hall, USA

The Right Choice

Schüco PV systems give you a unique combination of benefits:

Sustainability through Engineering

Our systems are engineered for sustainability, long life and reliability. Like all our products, we subject them to grueling tests at our Technology Center. This facility gives us capabilities few other companies have, so where others make assumptions, we actually know exactly how our systems will hold up under any given conditions. This means that when your customers ask tough questions about quality and longevity, you can give them good answers.

Performance Guarantee

To eliminate guesswork, each of our modules is flash-tested and the actual test data is marked on the packaging. We stand behind them with a 25-year performance guarantee.*

Integrated systems

We provide single components as well as all-in systems with modules, inverter, and mounting system. All components are carefully coordinated for maximum overall system performance.

Easy installation

Our SolarEZ mounting system makes it easier and faster than ever before to install panels on almost any roof. Since our systems include everything in one integrated package, connection and setup are faster too.

Engineering Support

You can rely on our engineering expertise to help on custom installations and other challenges.

Marketing Support

Our professional advertising and marketing will help build your business, by making it easier to get new customers and communicate the benefits of solar energy to them. We help you with professional brochures, mass-mailing flyers, trade show support, lead generation and much more.

Technology Partnership

When you partner with Schüco, your company will always be at the cutting edge of solar technology. While others have to spend time and resources to stay abreast on new technologies, we take care of this for you. We're not "just another module supplier" but a solar technology partner heavily invested in market and product R&D, giving you access to the latest trends in solar solutions.

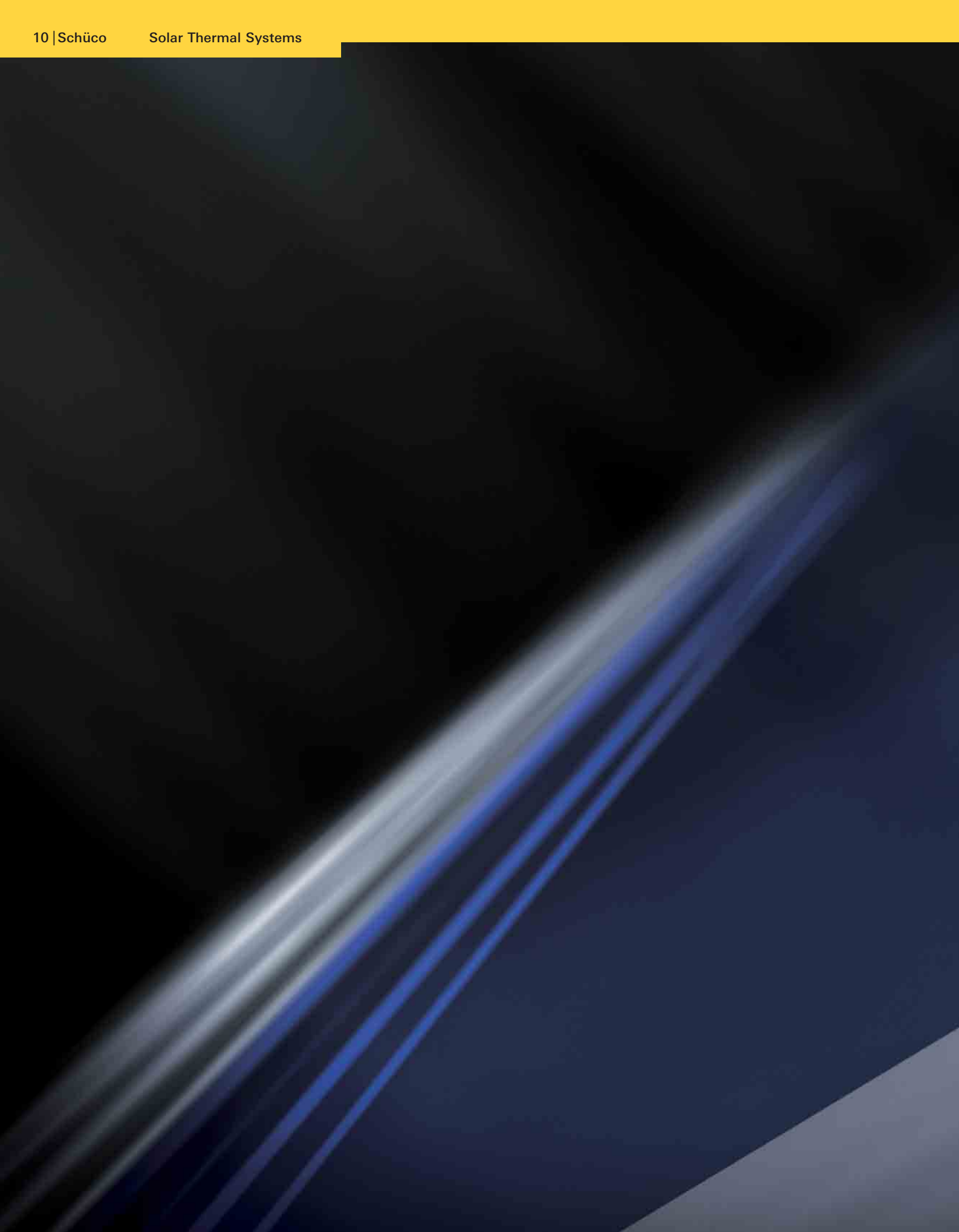
*see Schuco USA Solar Warranty for details

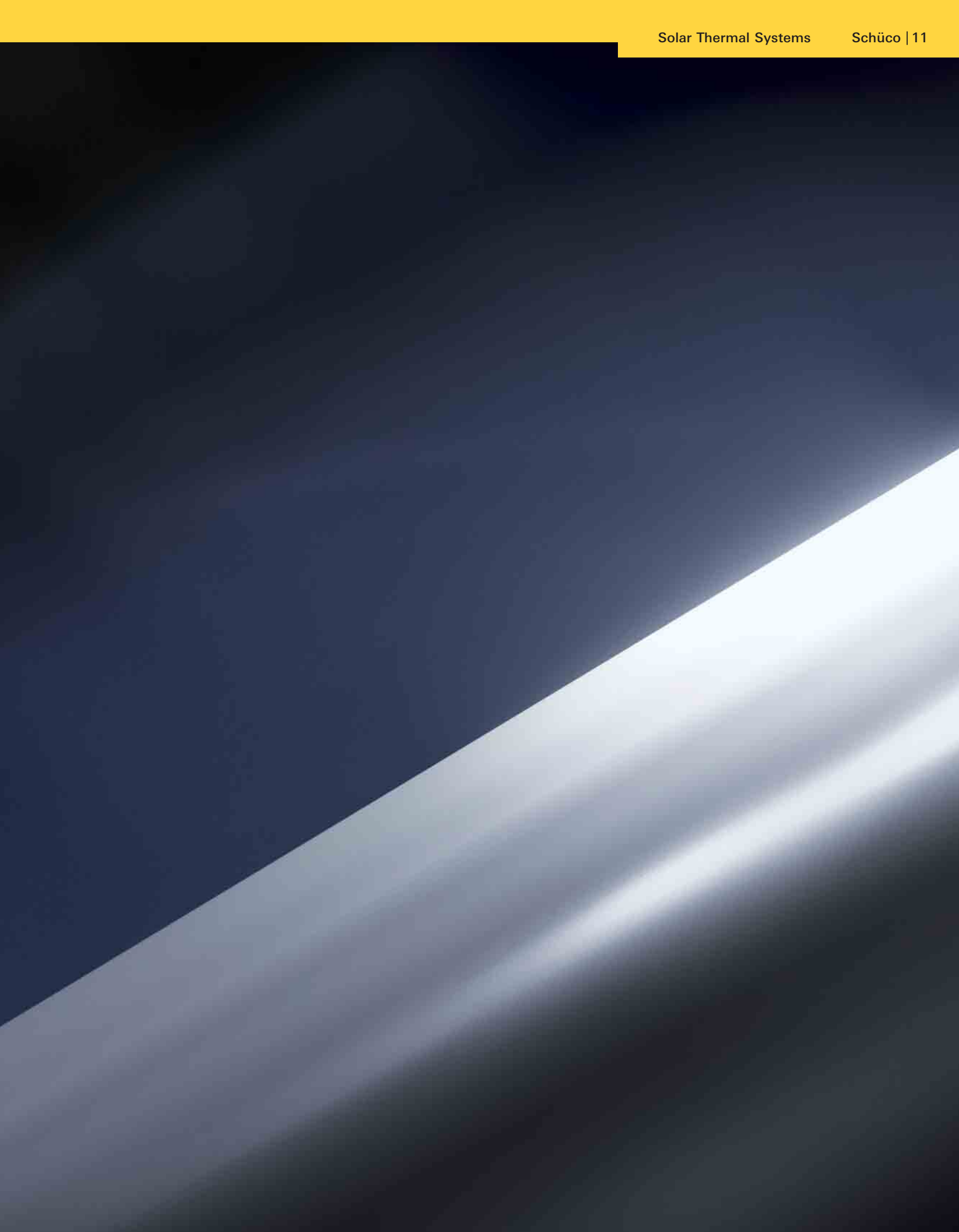


Our panels are built for long life, with guaranteed performance.



Our systems come with everything, including monitoring hardware.





Solar Thermal at the Leading Edge



Schüco thermal systems are a perfect match with our PV systems.

The Collectors

Schüco collectors come in two types, Premium and Slim Line. Both feature our high performance absorber coating, single absorber plate design, and low-iron glazing for very efficient heat collection. They're insulated for minimal energy loss. Tempered safety glass, a tough aluminum frame, and corrosion-resistant materials ensure long service life.

Schüco Premium collectors are architectural-grade collectors with clear glass, rounded edges and the

industry's most finished design. They can be integrated into the building envelope or mounted on the roof using the SolarEZ mounting system. The premium line is the perfect answer for your customer that just wants the best.

Slim collectors are somewhat smaller yet with the same high performance per square foot. Their sleek design resembles skylights or roof windows, as they are mounted flush to the roof. They come with bronze collector frames.

Schüco is at the leading edge of solar thermal technology. Our systems give you a combination of advantages you can get nowhere else:

Sustainability through engineering with high-performance collectors and unique technology that helps system components last longer.

Performance guarantee for long-term customer satisfaction.

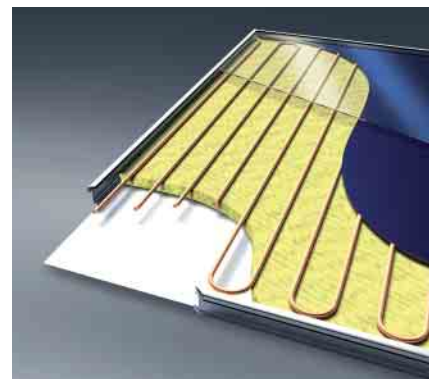
Integrated systems with everything included, coordinated for optimum performance.

Easy installation so you finish faster and stay on schedule. Our unique SolarEZ system simplifies roof mounting, and installs are plug and play – no soldering necessary at the customer site.

Better appearance with panels that look great on any home.

Engineering support to assist with custom projects and other challenges.

Marketing support to help you grow your business with professional advertising materials



Our collectors are carefully insulated for maximum heating efficiency.

The Next Generation

Our pressurized, closed-loop

propylene glycol technology brings solar thermal into the 21st century, with superior efficiency, ease of use, and service life. Our systems are made to last, giving reduced service calls and longer replacement intervals.

Steady, Low-Resistance Flow

Constant pressure and the closed loop reduces pump loading. This extends pump life and reduces power consumption, for higher overall system efficiency. It also makes the system very quiet.

Sealed System

Air and corrosive tap water stay out, and it is never necessary to draw off water or bleed off air. With no air in the system, pipes last longer, and there is no need for roof air venting.

Freeze-Proof, Lubricating, Nontoxic Fluid

Propylene glycol protects pipes, collectors, valves, and pump, for extended system life. It is non-toxic and freeze-proof down to -40°F.

Overheating Protection

Water molecules in the Schüco fluid vaporize and push the glycol out of the collectors before it can overheat. This extends fluid life to up to 12 years.

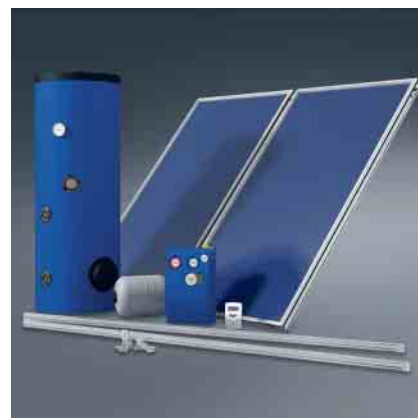
Ongoing Innovation

As a major innovator in solar thermal technology, we're developing heat pump and air conditioning systems that will enable solutions – hot water, heating, and cooling.

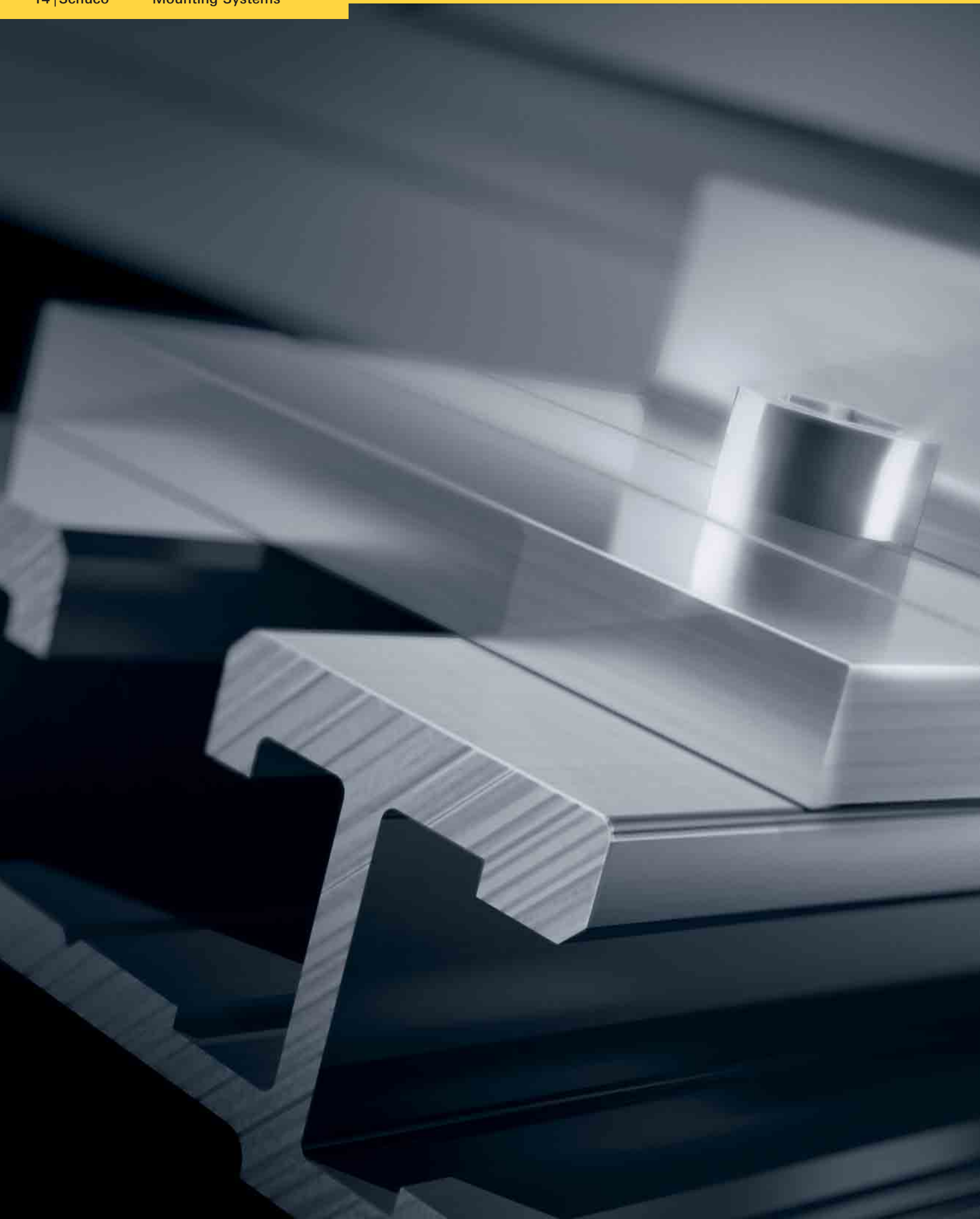
With our serpentine piping we control avoid solder joints inside the collector, manage to bleed air bubbles out of the system with roof vents, and fully address traditional overheating and stagnation issues.



The solar station is a fully factory integrated units housing all major hydraulic components for a fast and reliable installation.



We supply complete DHW packages optimized for household sizes of 2 to 6 people.





Roof Mounting Made Easy



SolarEZ is a complete mounting system with all the components you need.



Full Range

Schüco ezRails come in three cross-sections for different climate zones.



Every installer knows the challenges of roof mounting. You need something that will stand up to any weather challenge, simplify connections, and look good on your customer's roof. You also want to get installs done quickly, and you don't want to stock a lot of different hardware.

Schüco SolarEZ gives you all of this. It configures for any roof situation. It minimizes roof penetrations. It's quick to install, and incredibly sturdy. There are other mounting systems out there, but none of them can match the speed and ease of installation, durability, and long life of SolarEZ.

SolarEZ works on shingle, S-tile, mission tile roofs. Modular design means fewer parts, and helps installs go quickly and easily. It looks good when it goes up and stays looking good, with corrosion-proof aluminum and stainless steel components.

SolarEZ Solves Virtually Any Mounting Challenge

Easy Strength

Other companies' mounting systems rely on simple screw tension to stay together. But threaded fasteners on exteriors can work loose. We've solved the problem with "form lock" – the shape of our rails and elements makes them inherently tend to stay locked together, tightly and securely.

Easy Bolting

Other mounting rails make you slide bolts in from the ends. We've solved the problem, with a special T-bolt you can insert at any point along the rail. Simply twist to secure – form lock keeps it in place.

Easy Levelling

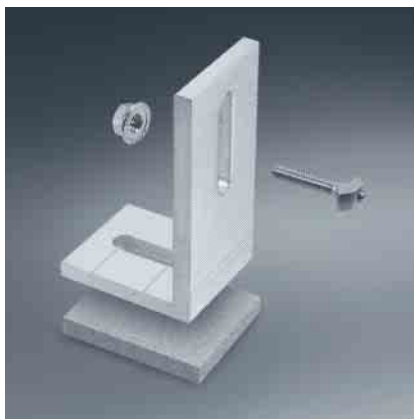
Other systems have a hard time coping with uneven roofs, and leave you to insert spacers as best you can. We've solved the problem. Our ezL Stand-Offs are slotted to let you compensate for uneven roof surfaces. A form lock surface ensures a non-slip hold to the rail at any height.

Easy Tightening

Other systems expect you to tighten bolts while holding a heavy panel in position on a sloping roof. We've solved the problem, with ezClips that snap into our ezRails and hold the panel in place while you tighten everything.

Easy Line Running

Other systems expect you to secure cables with cable ties or other unsightly workarounds. We've solved the problem, with cable and pipe clips that attach to the channels of our ezRails, quickly and cleanly.



ezL Stand-Off with T-bolt makes levelling easy.



ezClamp available for all major PV modules.



ezClip holds panel in place during tightening.



ezCableclip holds lines securely.

Let's Build Sustainability Together

We're building sustainability by bringing solar energy mainstream, and we're looking for installers like you to join us. As a Schüco partner, you'll enjoy numerous benefits:

Superior technology. Schüco solar products offer performance benefits and proven durability. The SolarEZ mounting system makes installs faster and easier than ever before.

Easier workflow. With our all-in, integrated PV and thermal systems you avoid the aggravations of assembling systems from different suppliers.

Certification. Schüco certification will help you gain the trust of customers and prospects.

Engineering support. You can access our engineering resources to help on custom installations and other challenges.

Marketing support. We'll help you build your business, with professional advertising and marketing. Customers will know they want Schüco, and know they can get it from you.

Training support. We offer training to help our partners expand their capabilities.

Consulting support. Schüco partners can draw on our expertise to help with quoting and installing large-scale projects.

Supply security. As a Schüco partner, you can rely on fast deliveries from warehouse stock. No more fielding customer calls while waiting for a part to come in.

We're building sustainability, and we'd like you to join us. Contact us at 877.472.4826 or info@schuco-usa.com



Your Partner for Windows and Solar Products

As a leading innovator in system-based construction, Schüco supplies components for the entire building envelope, including software solutions for planning, design, calculation, and fabrication.

- **Aluminum systems.** A comprehensive range of elements for façades, curtain walls, skylights, windows, doors, solar shading, balconies, balustrades, and security.
- **Vinyl windows.** Top-quality energy-efficient vinyl windows in a wide range of styles, including hurricane-resistant windows.
- **Solar energy systems.** Complete integrated photovoltaic and thermal energy systems for residential and commercial use.



Building Sustainability with Solar Energy

Schüco is a global leader in facade technology, one of the world's leading solar energy innovators, and a major supplier of energy-saving windows.

Our products save energy, create clean power, and make buildings better. Our solar energy systems are helping to bring renewable energy into the mainstream.

We're building sustainability. Be a part of it – get in touch with us.

Schüco USA L.P.
www.schuco-usa.com

