

## A New Generation of Solar Thermal Technology

- Excellent Value and Performance
- Flexible Mounting Solutions for All Roof-Types
- 25 Years Solar Heating Experience from Buderus
- Fully Integrated Solar Solutions
- Optimum Energy Yields



**Comfortable. Efficient. Intelligent Heating.**

# Solar Technology

## Sunny Outlook with Intelligent Solar Technology

The life-giving sun provides us with the fuel of the future – solar energy. The sun beams down on us every day and gives us heat, light and energy. Energy, which you can now utilize easily and conveniently with a Buderus solar heating system, whether to enjoy a warm shower or to boost your central heating. Affording a benefit to you and the environment!

With solar energy, you not only preserve valuable fuel and save heating costs, you also protect the environment: A collector area of only 20 square feet prevents the release of approx. 70 lbs. CO<sub>2</sub> each year. By the way, Buderus solar technology offers any number of options for new houses or new heating systems, for domestic hot water heating or for central heating backup. Don't forget, we can provide not just solar collectors, but the entire solar heating system – with everything perfectly integrated.



## The Perfect Solution for Any Roof

No matter what you are planning – Buderus is sure to have a solution for you, which is even more individual, flexible and attractive than you would have thought possible. Solar heating systems from Buderus not only “shine” because of their optimum efficiency, but also because of their incredible versatility, not forgetting their easy and affordable installation.

Solar technology from Buderus is attractive. The integrated and unobtrusive roof mounting systems are architecturally stunning. You're living in a house with a flat roof? No problem. With the Buderus roof mounting system, any roof surface or angle is easy and simply looks great!

## Designed for Reliability

Solar collectors are exposed to the elements all the year round. To permanently safeguard their optimum performance requires a lot of experience, specialized designs and materials. One such example is the long-lasting and light weight fiberglass used for the frames of all Buderus solar collectors. Of equal importance is the special safety glass, required for stability and the selective coating for optimum energy yields. These high performance collectors are hermetically sealed, filled with an inert gas to reduce heat loss and use an innovative double meander tube design for greater heat transfer capacity.

“I feel comfortable knowing that all the components of my Buderus Solar Thermal System are designed to work efficiently together for an integrated solution. I am confident that I made an intelligent choice because of the quality, reputation and experience of Buderus.”



## Flat Roof Mounting System



The Flat Roof Mounting Systems is compatible with both SKN and SKS collectors. The inclination can be easily adjusted to optimize your solar gain. Properly installed, the mounting system can withstand hurricane force winds and up to 35 lbs/ft<sup>2</sup> snow loads.

1-800-283-3787

## First Choice for Installation Ease and Materials

Buderus has the solution not only outside your house, but also where installation costs are concerned. Simple plug-in connections and assembly promise an installation in record time. The installation can be completed with a single tool. Not only all plug-in connections, but also mounting rails, roof brackets and other installation components are made from long-lasting and robust materials. An optimum system requires that every component delivers top performance – just like Buderus.

## Solar Energy: Comfort by Design

You can rely on the solar collectors on your roof to harvest the solar energy. However, some other components are needed to complete your system so that you can “bathe in sunlight.” For example, the solar pump station circulates the solar fluid through the system. The solar controller ensures optimum utilization of the solar collector performance, and the tank stores the captured energy, until you are ready to enjoy it.

## One Stop Solar Shopping

We supply you with all of the parts you will need for your solar heating system. Every single component is something quite special in its own right because we have combined innovative technology with advanced materials to produce perfectly matching components down to the last detail. Our product range covers everything from boilers to solar collectors, from domestic hot water tanks to radiators, from control systems to accessories, every product is a perfect fit.



### Bathe Yourself in Solar Energy

Genuine hot water convenience for your home – with high-grade domestic hot water storage tanks from Buderus. Seamlessly integrated with our solar solutions, they store the yielded energy until you really need it. When you

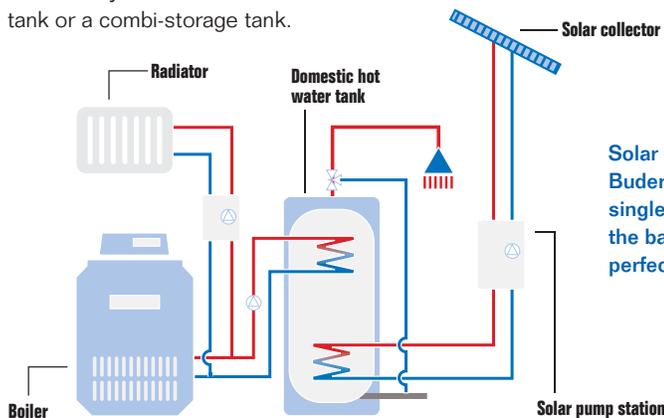
shower or take a bath you're not only saving cash, but you also do your part to help the environment. You will always find the right product, no matter what your demand – whether you need a domestic hot water tank or a combi-storage tank.



### Everything Under Control

Your pump station transfers the heat from your collectors to your storage tank, maintaining a constantly high

efficiency. The combination of a solar controller with a boiler control unit offers you even more possibilities. The automatic reduction of the reheat temperature. This can reduce burner starts by up to 24%, saving up to 10% fuel during domestic hot water heating.



Solar comfort by design. Buderus delivers it from a single source – from the roof to the basement. Everything is a perfect match.

## Benefits at a glance:



- Easy installation with roof brackets: Install the brackets, mount the mounting system, position and secure the solar collector – that's it!
- Optional roof integration: Collectors can be easily and harmoniously integrated into all types of roof surfaces and pitches.
- Quick and easy connection through stainless steel plug-in connectors or solar hoses with spring clips.

## Adjustable Roof Jack

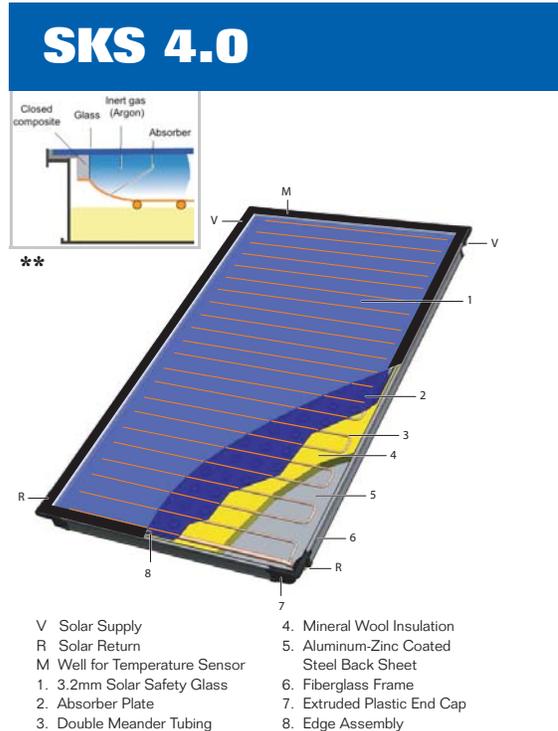
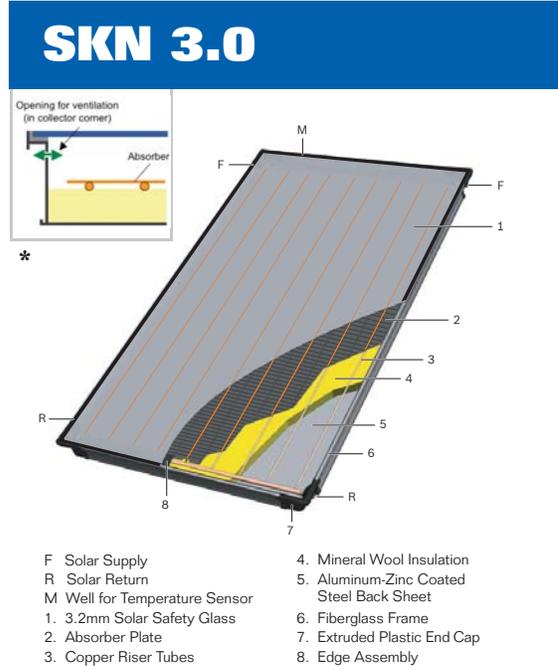


The flexible roof jack for vertical and horizontal type collectors is made of aluminum and is designed for fast and easy installation using a single tool.

# Intelligent Solar Heating Solutions



Model	SKN3.0v Vertical	SKN3.0h Horizontal	SKS4.0v Vertical	SKS4.0h Horizontal
Height (in)	81½	45½	81½	45½
Width (in)	45½	81½	45½	81½
Depth (in)	3½		3½	
Gross Collector Area (ft. <sup>2</sup> )	25.96		25.96	
Net Aperture Area (ft. <sup>2</sup> )	24.29		24.29	
Solar Glass Transmission	91.5% ± 0.5%		91.5% ± 0.5%	
Stagnation Temperature (°F)	370		400	
Fluid Content (gal.)	0.23	0.33	0.39	0.46
Dry Weight (lbs.)	90	93	101	104
Coating	Highly Selective Black Chrome		Highly Selective PVD Coating	
Absorptivity	95% ± 2%		95% ± 2%	
Emissivity	12% ± 2%		5% ± 2%	
Max. Operation Pressure (psi)	87		145	
Max Flow Rate (gpm)	1.07		1.07	
Absorber Material	Copper with Ultrasonic Welding		Copper with Ultrasonic Welding	
Absorber Type	Harp		Double Meander	
Collector Construction	Open Vented*		Hermetically Sealed Inert Gas**	



## 25 Years of Solar Excellence and Experience

Buderus dates back nearly 275 years, and is clearly a leader when it comes to manufacturing high quality heating solutions that are user friendly, energy efficient, and environmentally sound. Buderus has been supplying solar heating systems for over 25 years. With over 4 million square feet of solar collectors installed since 1995, thousands of Buderus customers are today enjoying clean solar heated water for domestic and space heating applications.



OG-100  
Certified Solar Collector

Proud sponsor of Darmstadt Technical University, the 2007 US Department of Energy Solar Decathlon's 1st place team.



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