Sale and minister and a second

A breath of fresh air for solar **SolarWIN**

Solar

High-quality flat plate collector for installation on roof, integrated in roof or freestanding

1392 It Shine ato door

windhager

HOW DO YOU GET MORE HEAT OUT OF A FIRE? WITH A LITTLE FRESH AIR ...

A breath of fresh air is blowing in the heating world: One that will also pay off in the future

For more than 90 years, the name Windhager has been inseparably linked with high quality boiler technology "Made in Austria". This is thanks to our wealth of experience which allows us to develop heating solutions which go that crucial extra step further. In the future, one of the challenges will be to make optimum use of available resources. The lower our consumption of these resources, the lower the financial cost and impact on our environment will be.

Windhager is a visionary company that is steeped in tradition yet offers efficient and forward thinking solutions for all fuels and solar technology. So it's hardly surprising that Windhager are continuously looking out for a breath of fresh air for its wood pellet boilers. This explains why more than 40,000 Windhager customers throughout Europe benefit from the efficient and environmentally-friendly heat produced from pellets.



Energy free from the sun

We owe all life on Earth to the sun as an inexhaustible source of energy. It supplies us with an abundance of light and warmth everyday. Within just three hours the sun emits as much energy to the Earth as is consumed by the entire population of the planet in one year. Due to the latest technology we are in a position to harness some of this free energy and make use of it to lower our demands on other less sustainable fuel.

How to harness the power of the sun

New build or retro fitting of solar thermal systems is possible to almost every home. A suitably installed hot water cylinder and solar thermal system can be linked into your existing system. System controls are then updated to maximise the benefits of the available energy. If you consider this at planning stage and ensure your house is installed 'solar ready' then is it very easy to retrofit the collectors and the rest of the system at a subsequent date.

The alignment

The sun reaches its highest point in the south, so aligning the collectors to face south is optimal. In the case of roofs that are aligned east-west a split system can be installed on the east and west aspects to maximise system performance. Larger collector areas can be installed to compensate for partially shaded areas.

The angle of inclination

A roof pitch of between 25° to 60° is ideal. The collectors can be installed on the roof (roof mounted) or integrated into the roof covering (in roof). For flat roof installations the solar collectors are mounted on an 'A' frame to provide the optimum angle and orientation towards the sun.

Sizing of collectors

The collector area depends on many design criteria and it is also necessary to take into account the water consumption and number of occupants living in the property.

breating of the second second



Enough sun the whole year round

During the summer months the solar thermal system will reach its optimum performance, harnessing enough energy to achieve 100% of your energy requirements to provide hot water. On average per annum your solar thermal system will harness 70% of the energy required for your hot water demand. Any short fall will be automatically achieved by your backup heating source.



Energy free of charge

PARTICULARLY CLEAN AND EFFICIENT

- Cut the cost of heating hot water by up to 70% on average
- Cover up to 100% of your summer requirements free with your solar system
- An active way to reduce CO2 emissions
- Make use of various state and community grants

COMFORT LEVELS NEVER ACHIEVED BEFORE

- Tailored solar packages to boost your heating system and/or supply hot water for every need
- Greater independence from energy imports and prices or fuel shortages
- Can be easily combined with other heat generators
- Ideal for both new builds and modernisation projects
- Flexible options of in-roof, on-roof and horizontal collectors and also freestanding units

RELIABLE AND SAFE

- Separate solar controller monitors all relevant functions
- Windhager system technology with function guarantee
- Hardened, hail-proof solar glass
- Solar Keymark tested
- A ten-year warranty is provided on the construction material of the collector (not including the collector glass)
- Tested to the Austria Solar quality seal standard



Using the sun efficiently

Solar technology that you will enjoy for a long time

Windhager offer high quality, robust solar technology in the form of the SolarWIN solar collectors. The elegant flat plate collectors permit exceptionally good absorption of the available energy and also look good on any roof.



Installation within the roof



Installation on the roof



Solar flat plate collector with installation rack 25°

• **Maximum absorption of the energy** Through the black surface and copper collector with highly selective coating.

Long working life

Due to hardened, hail-proof, 4 mm thick solar glass with high radiation permeability.

• Flexible options for use The SolarWIN is available for installation

The SolarWIN is available for installation in roof, on roof or as an 'A' frame mounted unit.



Installation on the roof - horizontal

Match the solution t o the problem

Do you want to upgrade an existing system with solar technology? Or perhaps incorporate additional heat sources later on? No problem! Windhager offers you individual complete solutions to meet all needs through customised solar thermal packages. From a simple standard system up to complex heating combinations with various heat sources.



AquaWIN Solar Solar indirect coil heating tank



Solar-Flachkollektor

SolarWIN hot water package

Sit back and relax, and enjoy solar produced hot water. The SolarWIN hotwater package ensures a maximum degree of comfort for you.

	For persons	2–3	4-5	5-6
/!!\\	Collector area gross – m²	4,5	6,75	9,0



AccuWIN Solar Solar-Wärmespeicher mit Frischwassermodul



SolarWIN Solar-Flachkollektor

SolarWIN heating package

Space heating and solar hot water. Add the feel good factor of helping the environment and reducing your energy costs. With the SolarWIN heating package you can, in addition to your hot water, supplement your central heating system

 For persons	2–3	3-4	3–5	4-5	4-6
Collector area gross – m²	11,25	13,5	15,75	18,0	22,5



Specialist for system solutions

The key to using solar thermal systems efficiently is to combine all the components of the system effectively. Hot water storage cylinders, buffer tanks, boiler and controls all play an important role. Windhager can provide everything you need, for a one stop shop. This means that not only do you have to deal with just one company but also have the security of knowing that all the components have been designed to work together perfectly. With the potential to easily upgrade your heating system at a later date and future proofing your investment.



Warmth when you need it

Design

	SWA/SWH - on the roof	SWI – in the roof	
Cross-section			
Glass		n 4 mm solar glass with high radiation a low iron content	
Absorber	Copper full area absorber with highly selective coating: Absorption 95%; emission 4%		
Frame	Double-walled, powder-coated aluminium profile sec- tions with built-in glass holder, welded mitre joints.	Environmentally-friendly wooden frame.	
Rear wall	Seawater-resistant aluminium sheet, 1mm	Plywood panel with water-resistant glue	
Insulation	Rock wool that does not emit vapours Rear wall: 50 mm; side: 20 mm	Rock wool that does not emit vapours Rear wall: 50 mm	
Glass seal	3-lip EPDM rubber seal	4-lip EPDM rubber seal	
Covering system	_	Covering system with aluminium clip profile section without visible screws ensures complete sealing and a perfect appearance. Easy access if required.	

Technical data

SolarWIN flat collector		SWA 225	SWH 225	SWI 225
Installation type		On the roof	On the roof – horizontal	In the roof
Dimensions H x W x D	mm	2.100 x 1.070 x 105	1.070 x 2.100 x 105	2.100 x 1.050 x 122
Gross area	m ²	2,25	2,25	2,25
Light inlet area	m ²	2,02	2,02	2,02
Absorber area	m ²	2,01	2,01	2,01
Weight without heat medium	kg	48	48	49,5
Filling volume	l	1,95	1,95	1,8
max. operating pressure/test pressure	bar	10/15	10/15	10/15
Setup angle	0	15 bis 70	15 bis 70	23 bis 70

Austria

Windhager Zentralheizung GmbH Anton-Windhager-Straße 20 A-5201 Seekirchen bei Salzburg T. +43 (0) 62 12/23 41-0 F. +43 (0) 62 12/42 28 info@at.windhager.com

Windhager Zentralheizung GmbH Carlbergergasse 39 A-1230 Wien

Windhager Zentralheizung GmbH Tiroler Straße 25 A-6424 Silz

Germany Windhager Zentralheizung GmbH Deutzring 2 D-86405 Meitingen bei Augsburg T. +49 (0) 82 71/80 56-0 F. +49 (0) 82 71/80 56-30 info@de.windhager.com

Windhager Zentralheizung GmbH Heinrich-Rudolf-Hertz-Straße 2 D-04509 Delitzsch bei Leipzig

Windhager Zentralheizung GmbH Gewerbepark 18 D-49143 Bissendorf

Switzerland

Windhager Zentralheizung Schweiz AG Industriestrasse 13 CH-6203 Sempach-Station bei Luzern T. +41 (0) 41/469 469-0 F. +41 (0) 41/469 469-9 info@ch.windhager.com

Windhager Zentralheizung Schweiz AG Rue des Champs Lovats 23 CH-1400 Yverdon-les-Bains

Windhager Zentralheizung Schweiz AG Dorfplatz 2 CH-3114 Wichtrach

France

Windhager Chauffage Central France S.A.S. France S.A.S. 1, rue du Maire Georges Baruch Z.A.C. Nord du Rosenmeer F-67560 Rosheim T. +33 (0)388818217 F. +33 (0)3 88 95 81 85 info@fr.windhager.com

Italy

Windhager Italia S.R.L. Via Ungheresca sud I-31010 Mareno di Piave (TV) T. +39/04 38/49 91 43 F. +39/04 38/49 78 84 info@windhager.it

United Kingdom

Windhager UK Ltd Tormarton Road Marshfield South Gloucestershire, SN14 8SR T. +44/12 25/89 22 11 info@windhager.co.uk

Your expert PARTNER



Σαμαράς Ι.Ν.& Σία ΟΕ

32ο χλμ. Λεωφ. Λαυρίου - ΤΘ.20009 - 19003 Μαρκόπουλο Απικής τηλ: 22990 63480 φαξ: 22990 63481, info@nsamaras.gr www.nsamaras.gr

