

COMMERCIAL SOLAR FLAT PLATE COLLECTORS



Commercial Solar Thermal Systems



- 65 – 130 SQUARE FOOT COMMERCIAL COLLECTORS FOR REDUCED INSTALLATION COSTS
- HIGH EFFICIENCY SOLAR THERMAL PANEL WITH PVD COATING, LASER WELDED ABSORBER AND SERPENTINE HEAT TRANSFER SYSTEM
- LOW HEAT LOSS, HIGH INSULATION VALUES
- VERSATILE ON-ROOF OR FREE STANDING INSTALLATION
- WEATHER-RESISTANT ANTHRACITE POWDER COATED ALUMINUM FRAME FOR A LONG SERVICE LIFE
- 10-YEAR LIMITED WARRANTY
- SRCC-OG100 CERTIFIED



Commercial Solar Thermal Systems

Lochinvar Corporation, with its world headquarters based in Lebanon, Tennessee and TiSUN headquartered in a region of the eastern Alps in Austria, develops, produces and distributes high-efficiency solar collectors, solar storage tanks, pump stations, controls, stratified tanks and solar accessories to withstand extreme climatic conditions, for the U.S. market. Innovative cutting edge technology, superior quality and an outstanding distribution and service network have brought this remarkable partnership together with promises of huge growth in the commercial solar market.

Lochinvar/TiSUN aim to make the heat supply and backup heating independent from fixed energy resources. This commitment provides customers a great advantage for cost savings while utilizing this technology for the benefit of the planet.

Commercial Solar Flat Plate Collectors

The Commercial Solar Flat Plate Collector is suitable for on-roof and freestanding installations on pitched or flat roofs as well as on the ground. It is available as a single-piece large collector in sizes ranging from 65 to 130 square foot which offers considerable installation savings in commercial applications where multiple 30 -square foot panels would traditionally be used.

The SCH panels are SRCC OG-100 certified and ready to be incorporated into your next energy saving project.



Solar Thermal Package

Lochinvar / TiSUN also offers a wide variety of light-duty commercial solar thermal collectors, storage tanks, controls and accessories that enable you to take advantage of a single source solar package.

Even better is our custom packaging capabilities which offers limitless options for systems to be skid mounted, piped, wired , factory packaged* and tested at our facility and delivered to yours ready to be set in place as a single unit. We take the guesses out of designing solar and provide you with piece of mind knowing that it was engineered and manufactured to your specification.

* System packaging excludes solar panels and substructures which are shipped loosed and field installed at the jobsite

Substructure and roof mounts are available for SCH collectors which offer flexibility and ease of installation to your solar thermal heating system. Inclination of 0°, 20°, 40° and 60° are standard, however each kit is field adjustable to match the exact pitch desired for your specific installation.





Outstanding Features

Design - On-roof flat panel collector for crane installation

Housing - Anthracite powder-coated aluminium frame structure with aluminium sandwich rear panel

Cover - Prismatic solar safety glass, .16" thick, with maximum light transmission

Insulation - .80" heat-resistant special PU hard foam and 1.57" mineral wool insulating board, nominal bulk density 50 kg/m³, emission-free, non-flammable – A1 DIN 4102 Part 1, SPF (solar technology testing and research institute) approved

Absorber - Full-area absorber, laser-welded with high-selectivity PVD coating (PVD = Physical Vapor Deposition), serpentine flow

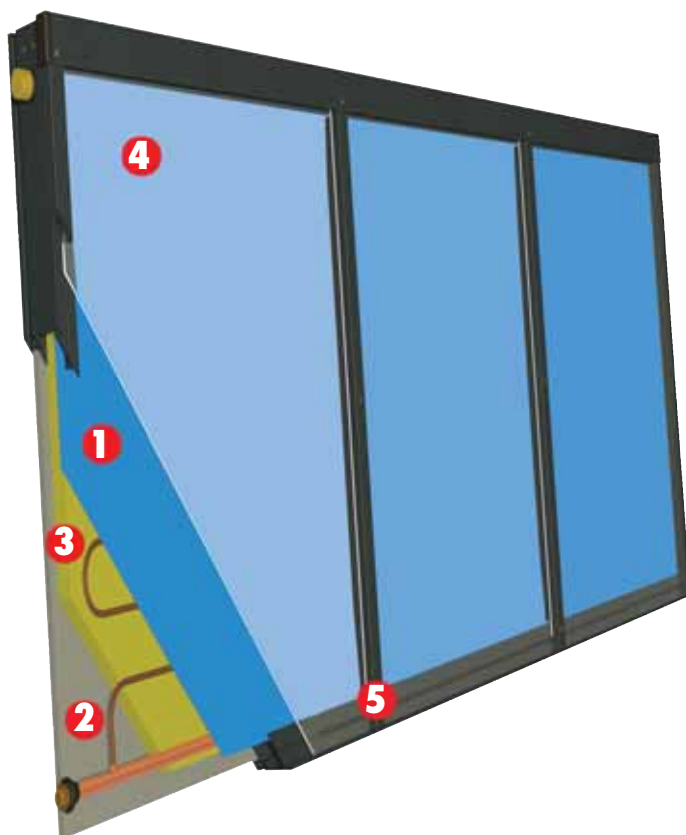
Collector Sealing - Aluminium section system with double temperature- and UV-resistant silicone seals, emission-free

Connections - 4 x .87" copper pipes, including cutting rings, support sleeve and union nut.

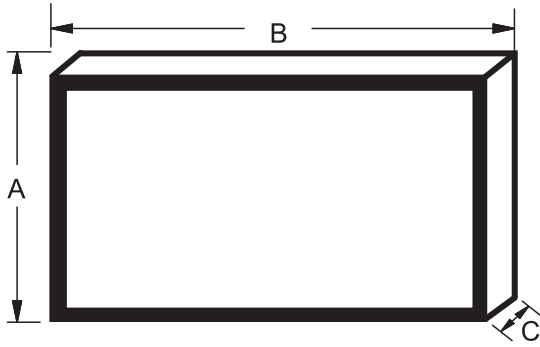
Collector Angle - 15°–70°

Under the Glass

- 1 **Absorber:** Laser-welded full area absorber with high selectivity PVD coating and serpentine flow.
- 2 **Rear panel:** Aluminium sandwich rear panel.
- 3 **Insulation:** 1.57" mineral wool, emission-free, non-flammable insulation.
- 4 **Glass cover:** Prismatic solar safety glass, .16" thick with light transmission.
- 5 **Housing:** Anthracite powder-coated aluminium frame structure with structured aluminium rear panel.

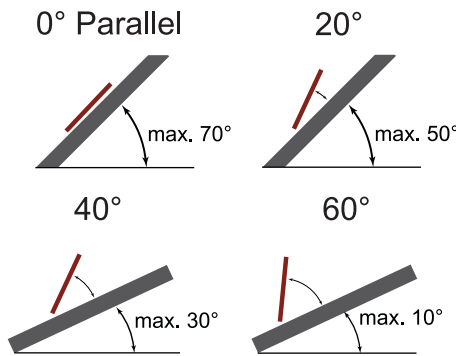


Commercial Solar Flat Plate Collectors Dimensions and Specifications



	SCH065	SCH090	SCH110	SCH130
Number of Glass Panels	3	4	5	6
Gross Surface Area (sq. ft)	65.66	87.19	108.72	130.2
"A" Dimension	6' 7"	6' 7"	6' 7"	6' 7"
"B" Dimension	9' 10"	13' 2"	16' 4"	19' 7"
"C" Dimension	5.25"	5.25"	5.25"	5.25"
Weight	309 lbs	411 lbs	513 lbs	614 lbs
Solar Transfer Volume	1.43 gallons	1.9 gallons	2.38 gallons	2.86 gallons
Max Operating Temperature	248°F	248°F	248°F	248°F
Max Operating Pressure	145 psi	145 psi	145 psi	145 psi
Max Snow Load	61.4 lb/ft ²	61.4 lb/ft ²	61.4 lb/ft ²	61.4 lb/ft ²
Wind Load Certification	74.14 psf	74.14 psf	74.14 psf	74.14 psf
Warranty	10 yr. limited	10 yr. limited	10 yr. limited	10 yr. limited

SCH Collector Substructure Kits



	SCH065	SCH090	SCH110	SCH130
Angle Brackets				
Parallel/0°				
Bottom Hooks	(2) SSK20005	(3) SSK20005	(3) SSK20005	(3) SSK20005
Side Brace	(2) SSK20004	(2) SSK20004	(2) SSK20004	(2) SSK20004
20°	(2) SSK20001	(3) SSK20001	(3) SSK20001	(4) SSK20005
40°	(2) SSK20002	(3) SSK20002	(3) SSK20002	(4) SSK20002
60°	(2) SSK20003	(3) SSK20003	(3) SSK20003	(4) SSK20003
Horizontal Bars				
(for 0°, 20°, 40°, 60°)	(2) SCA20001	(2) SCA20002	(2) SCA20003	(2) SCA20004
U Channel Supports				
(for 0°, 20°, 40°, 60°)	(3) SCA20005	(3) SCA20006	(3) SCA20007	(3) SCA20008

Hydronic Connection Kits

For the connection and expansion compensation of large collectors with corrugated stainless steel pipe and cutting ring threaded connection including insulation, immersion tube and dummy plug.

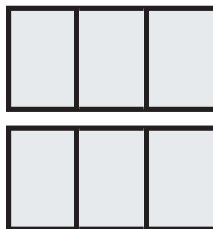


HYK20001
(2) 6'-6" Connections



HYK20002
(1) 6'-6" Connections & (1) 13' Connection

Expansion Connection Sets



HYK20003
Connection for panels piped one over the other in series

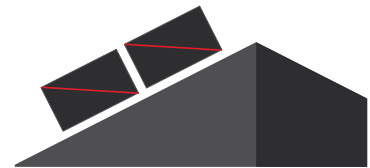


HYK20004
Connection for adjacent panels piped in parallel



HYK20005
Connection for adjacent panels piped in series

Miscellaneous Options



GBK20003 - Gable Bracing Kit

Additional bracing for collectors when installing at right angles to gable roofs. One bracing kit required per collector



Mechanical Connections
MCK20001 - Side by side
MCK20002 - Stacked

Piping Cover

MCK20003 - Side of collector



Lochinvar
High Efficiency Water Heaters, Boilers and Pool Heaters

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