Collectors
SOLAR THERMAL COLLECTORS & DRAINBACK SYSTEM

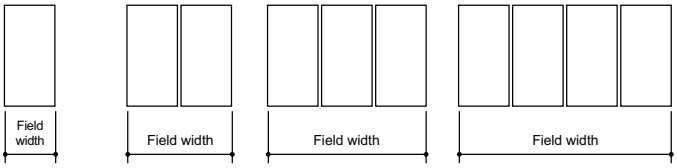
Range of solar thermal collectors available with or without drainback system.

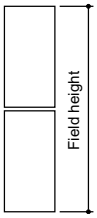
- Approved by EN12975-2-2006 and Solar Keymark certified
- Temperature resistant up to 200°C
- Installation options: roof unit (SPBO), built into the roof (SPBI), flat-roof mounting console (SPFR), wall-mounted console (SPWL)
- Simple installation system even with multiple collectors
- The system is supplied with all parts needed for complete installation. The entire package is available as a single order number
- Patented drainback system to prevent stagnation temperature is available as an accessory
- Sets are available in two versions: with copper absorber and meander, or with copper absorber and aluminum meander
- Frame construction collectors can be delivered with or without concrete blocks
- All sets can be delivered in horzontal or vertical aligned collectors
- Can be set up with up to 15 collectors in one row, multiple rows for large collector fields or for adjustment to available roof space

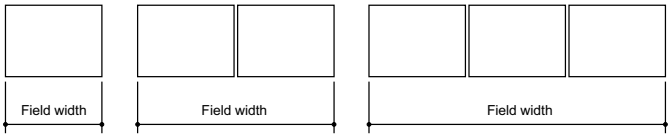
SAMPLE SPECIFICATION

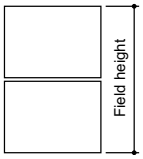
Solar collectors will have a fully copper collector absorber plate and copper meandering tubes, welded with ultra sound welding process, encased in aluminum weather resistant profile. Rear side will be stucco sheet to prevent corrosion. Insulation will be minimum 60 mm rockwool. The copper solar absorption plate will have a vacuum applied sputtered absorption layer on the absorber for maximum efficiency. Working pressure of the collector wil be 6 bar, tested at 10 bar. Collector will be suitable for high temperature glycol solar fluid. Collectors will be equipped with a drain back tank to prevent over heating of solar fluid. Collectors will be complying with EN12975-1:2011-01 and EN12975-2:2006-6 and current CEN-Keymark. Solar glass will be SPF certified.

TECHNICAL DETAILS
COLLECTORS









FIELD WIDTH						
	Number of collectors					Every extra collector
Vertical collector	1	2	3	4	5	
In cm	116.7	238.7	306.7	482.7	604.7	+122

FIELD WIDTH					
	Number of collectors				Every extra collector
Horizontal collector	1	2	3	4	
In cm	206.7	418.7	630.7	842.7	+212

FIELD WIDTH		
	Number of collectors	
Vertical collector	1	2
In cm	206.7	418.7

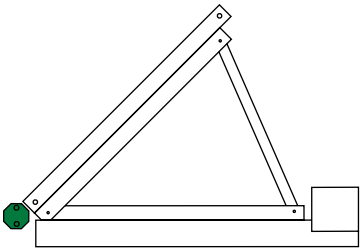
FIELD WIDTH		
	Number of collectors	
Horizontal collector	1	2
In cm	116.7	238.7

INSTALLATION
COLLECTORS

Frame with drainback

SPFR

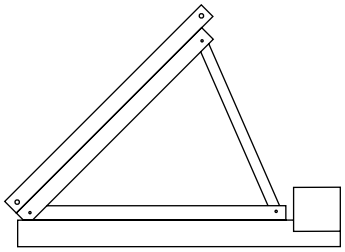
SPFR
Built on ***frame***



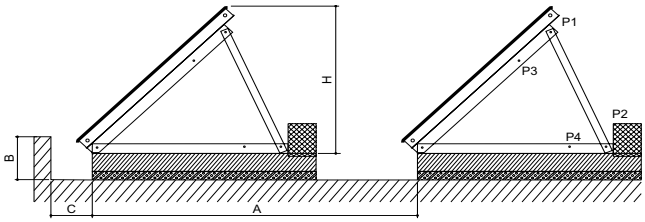
Frame

SPFR

SPFR
Built on ***frame***



TECHNICAL SPECIFICATIONS		
Net collector surface	m2	2.20
Total collector surface	m2	2.52
Length collector surface	mm	2100
Width collector surface	mm	1200
Height collector surface	mm	110
Frame material		Aluminium
Glass		ESG Sun Glass
Insulation		60mm Rockwool
Heat absorber		Copper
Maximum working pressure	kPa	600
Capacity unit of solar fluid	l	2.2
Flow of solar fluid	l/m2	15-40
Maximum admissible temperature	°C	208
Collector aperture area	m2	2.24
Zero loss efficiency	%	0.78
First order coefficient	W/(m2K)	3.59
Second order coefficient	W/(m2K2)	0.01
Indicident angle modifier		0.93
Length collector	mm	1167
Width collector	mm	2067
Thinkness collector	mm	110
Weight	kg	44



DISTANCE BETWEEN COLLECTORS				
Collector type	Distance A			
	20°	30°	45°	60°
Horizontal	270	310	320	330
Vertical	440	515	600	650

HEIGHT ASSEMBLED COLLECTORS				
Collector type	Height H			
	20°	30°	45°	60°
Horizontal	53	71	93	110
Vertical	71	104	147	180

DISTANCE TO FRAME	
Height balustrade	Distance C
30	20
40	40
50	70
60	100
70	125
80	150
90	180
100	205
110	20

POSITION STAND	
Angle	Position
SHORT TRAVERSE	
20°	40
30°	70
LONG TRAVERSE	
45°	125
60°	150

Data subject to change
ME/Collectors/01