

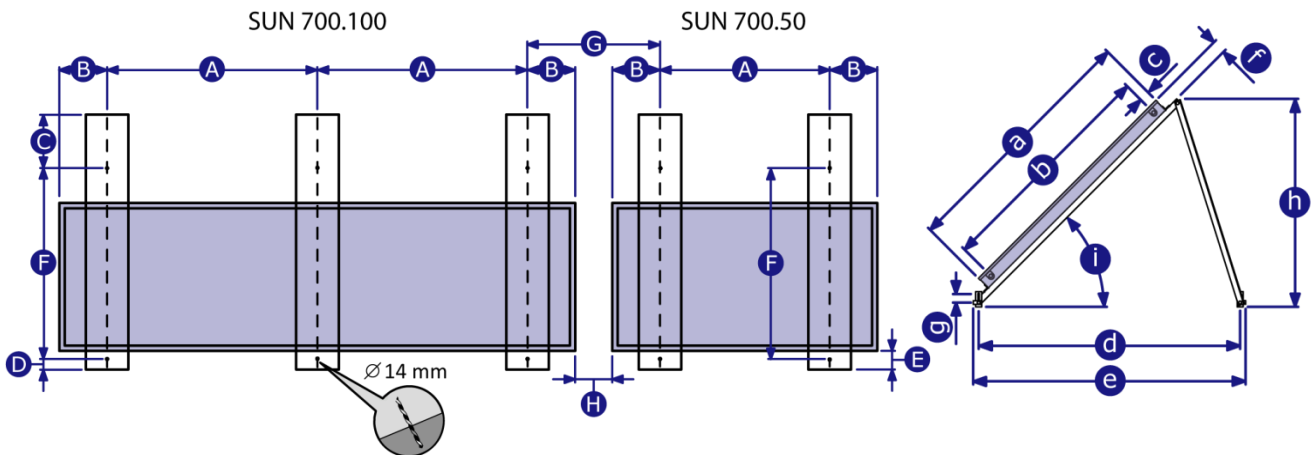
FLAT-ROOF MOUNTING SYSTEMS SUN 700

Technical datasheet Nr 94

These mounting systems are designed to install rows of 1 to 6 collectors SUN 700 on flat-roof with frames tilted at 30°, 45° and 60° depending on your needs.

• TECHNICAL SPECIFICATIONS:

	Dimensions (mm)								Length of a row of collectors (mm)					
	A	B	C	D	E	F	G	H	1	2	3	4	5	6
SUN 700.50 5 m ²	1 600 ±150	450 ±150	150	100	110	2 150	1 200	140	2 500	5140	7 780	10 420	13 060	15 700
SUN 700.100 10 m ²	1 900 ±100	530 ±150	150	100	110	2 150	1 200	140	4 860	9 860	14 860	19 860	24 860	29 860



Tilt angle i	Dimensions (mm)							
	a	b	c	d	e	f	g	h
30°							Adjustable height up to 70	1259 to 1329 (h+g)
45°	2064	1892	83	2150	2240	114		1705 to 1775 (h+g)
60°								2070 to 2140 (h+g)

		Tilt angle i		
		30°	45°	60°
SUN 700.50 5 m ²	Reference	50070201247	50070201248	50070201249
	Weight per frame (kg)	13.4	15.0	16.6
SUN 700.100 10 m ²	Reference	50070201250	50070201251	50070201252
	Weight per frame (kg)	20.0	22.1	24.5

Calculus of the distance between collector rows to avoid shadows:

- $\beta = 90^\circ - 23.5^\circ - L$
- $z = H_{ht} \times [\cos(\alpha) + \sin(\alpha) / \tan(\beta)]$
- $d = z - H_{ht} \times \cos(\alpha)$

Where:

- β = Angle of the position of the sun
- L = Latitude of the place considered
- z = Spacing between rows of collectors
- α = Tilt angle of the collectors
- H_{ht} = Overall height of the collector

Example:

Field of collectors SUN700.100 ($H_{ht} = 2064\text{mm}$) located at Strasbourg (Latitude = 48.55°) with an inclination of 45° :

- $\beta = 90^\circ - 23.5^\circ - 48.55^\circ = 17.95^\circ$
- $z = 2.064 \times [\cos(45) + \sin(45) / \tan(17.95)] = 5.96\text{m}$
- $d = 5.96 - 2.064 \times \cos(45) = 4.51\text{m}$

