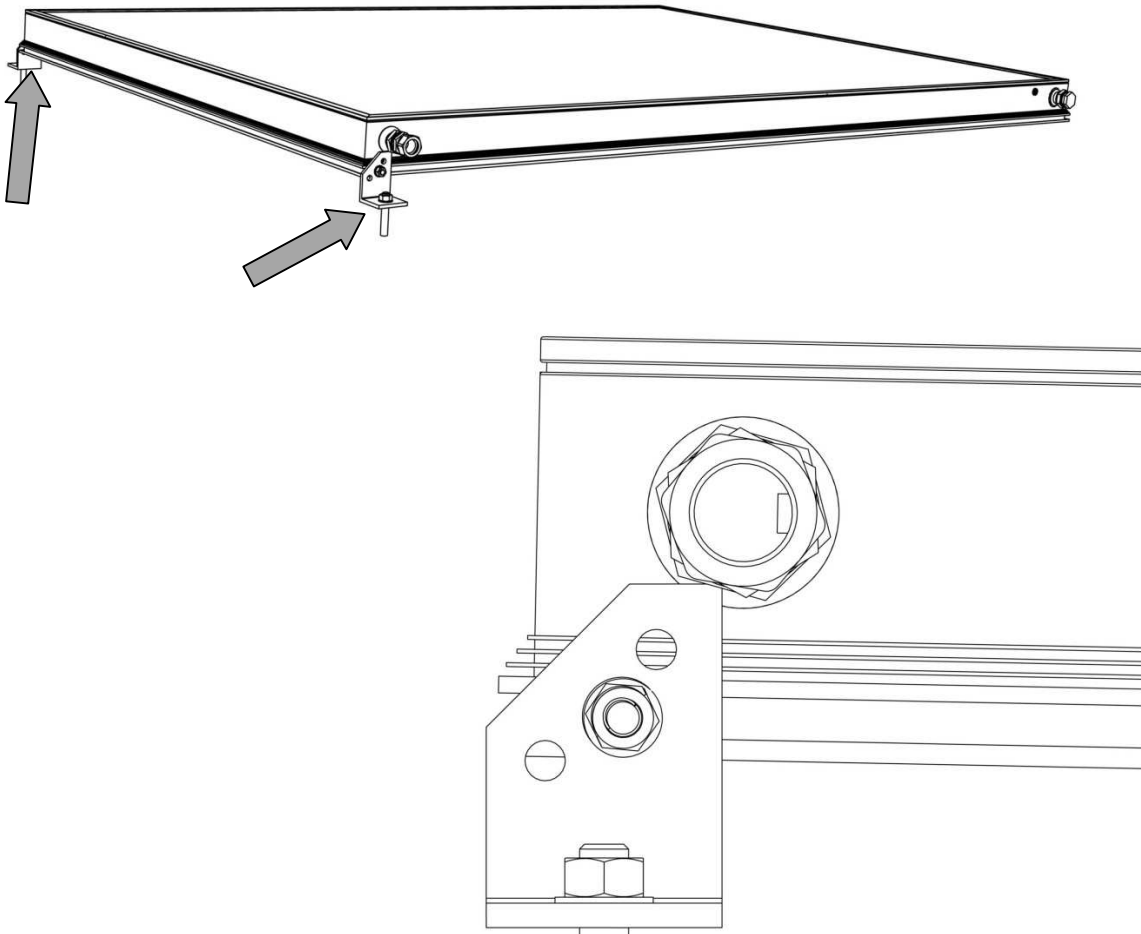


7.1. M4 Collector installation

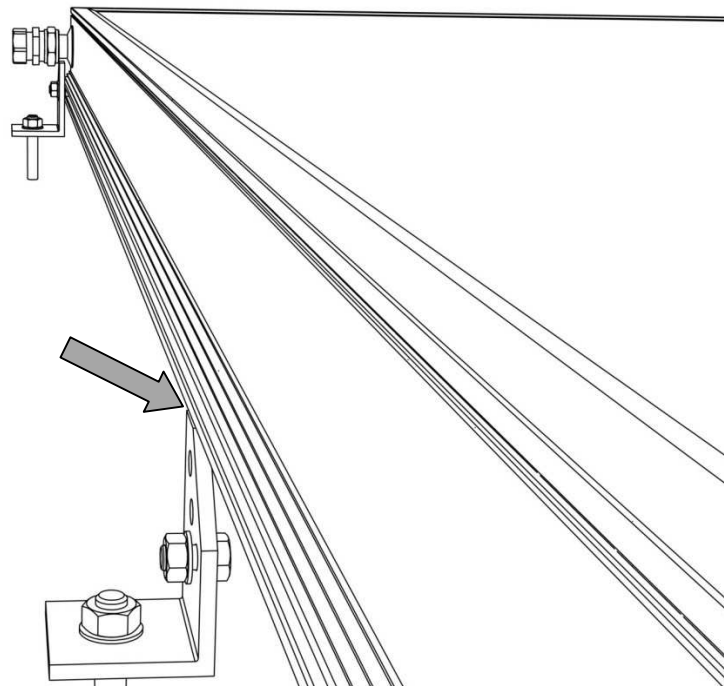
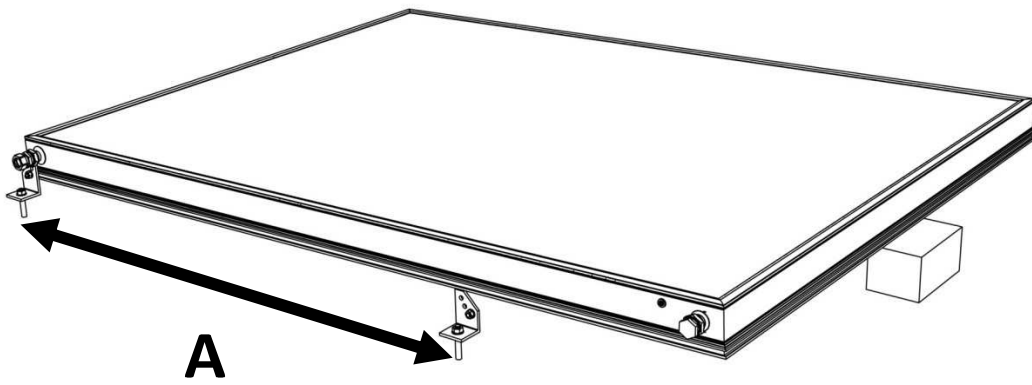
- M4 Collector installation on flat roof



STEP 1

Place the collector on the flat roof and connect the collector footings as shown in the following figure. Tighten screws as necessary without excessive play, just to allow collector rotation in relation to the footings. Mount footings on flat roof. Follow the recommendations listed in Chapter III regarding system orientation and position. Use adequately long screws to allow sufficient encasing of uprights in the concrete mass of the flat roof (not on the surface of insulation or on light concrete). Use suitable sealant to prevent the intrusion of moisture from the holes on the flat roof.

CAUTION: DO NOT REMOVE THE PROTECTIVE COVER FROM THE COLLECTOR GLASS!

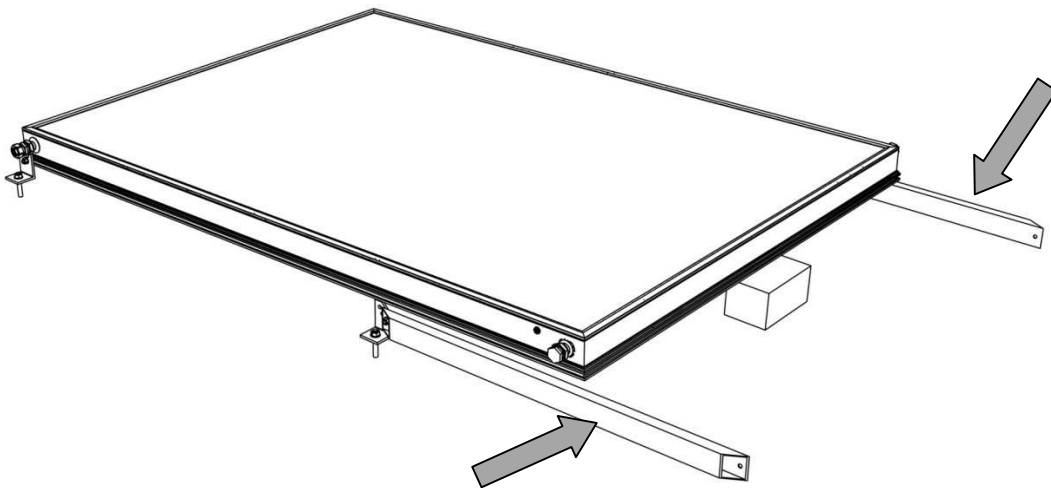


STEP 2

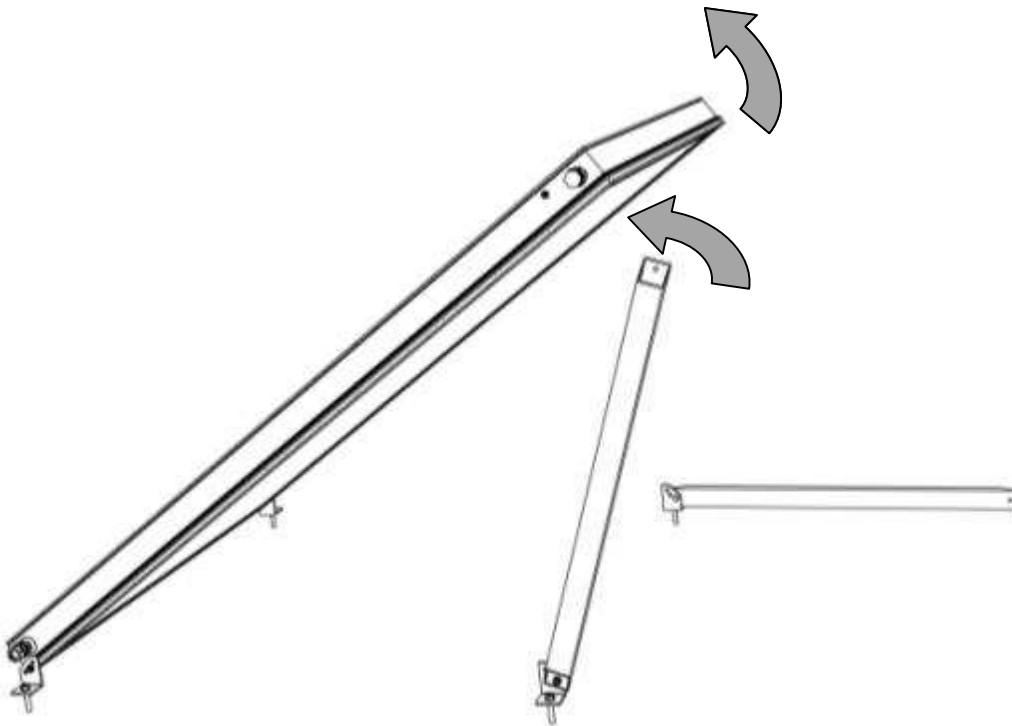
Use a small object on the top side of the collector to lift it just enough to place the footings of the braces, at a distance equal to A [between anchoring bolt holes] according to table 1. To ensure proper installation, the footing of the brace and the collector must be aligned, as shown in the following figure.

TABLE 1

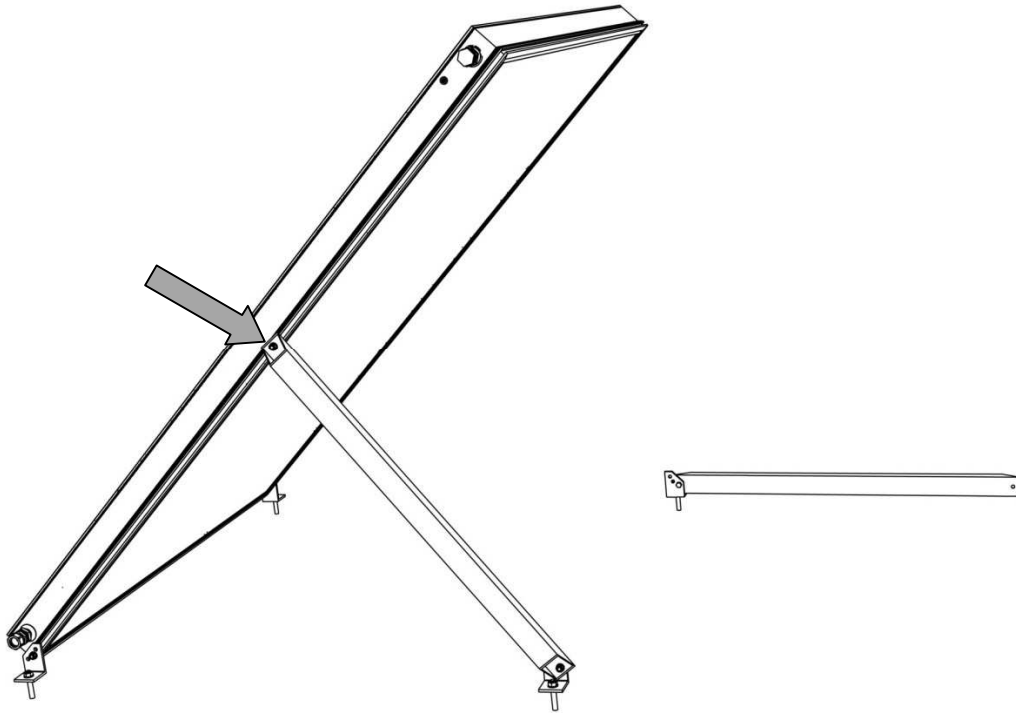
COLLECTOR	2	2.1	2.5	2.6	2.6H	3	3H
DISTANCE A [MM] 45 DEGREES	1240	972	1350	1240	697	1240	972
DISTANCE A [MM] 30 DEGREES	1765	1390	1965	1765	1007	1765	1390

**STEP 3**

Connect both braces on the footings. Tighten screws sufficiently without excessive play, just to allow brace rotation.

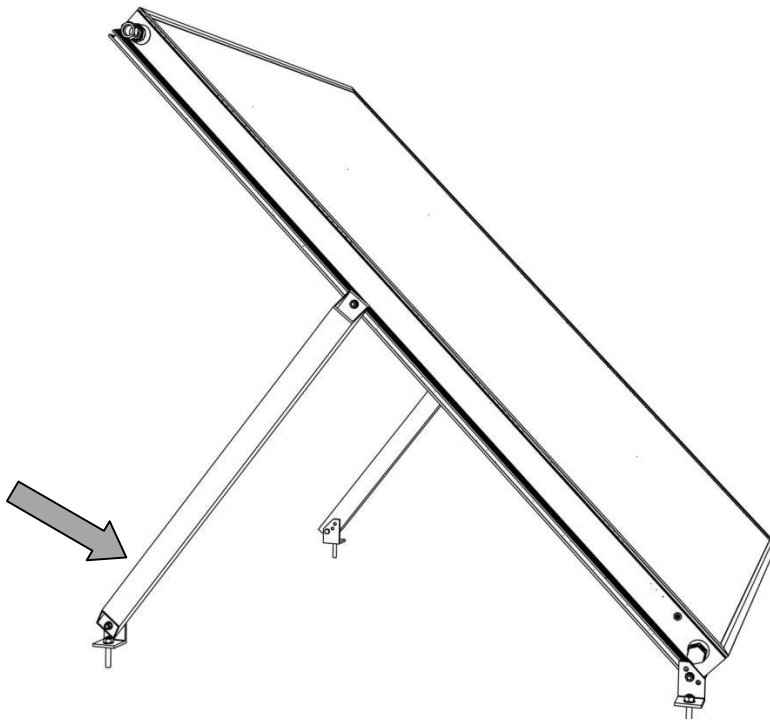
**STEP 4**

Lift the collector from the top, together with one brace.



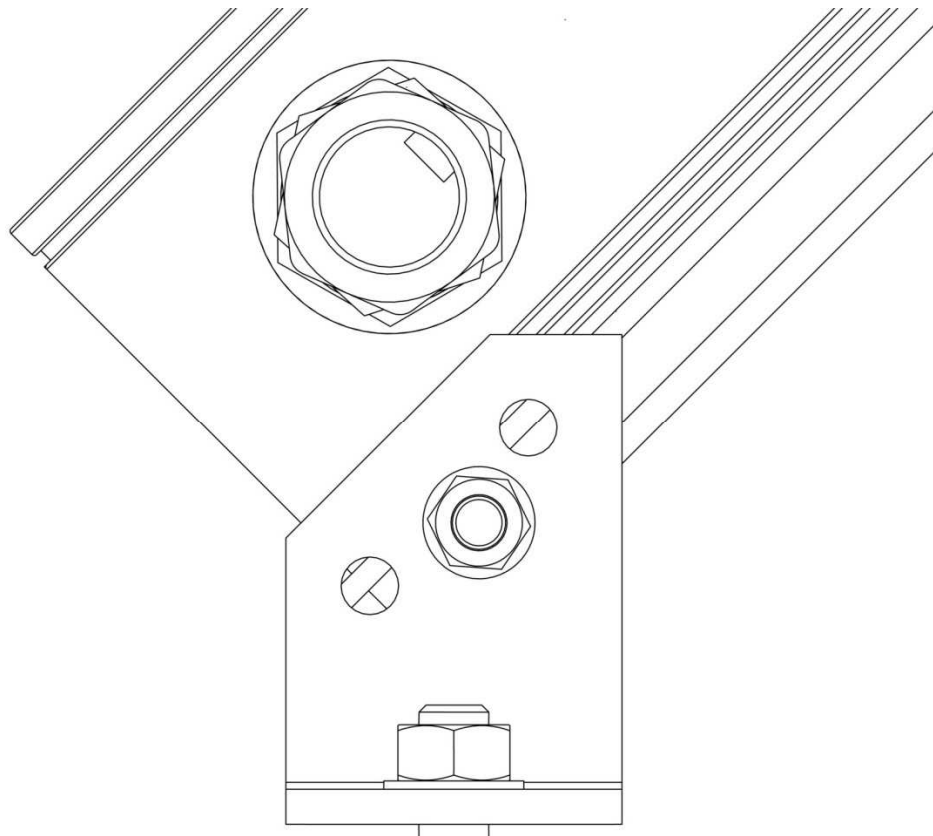
STEP 5

Connect the top of the brace with the collector's retaining screw. Do not fully tighten the screw.



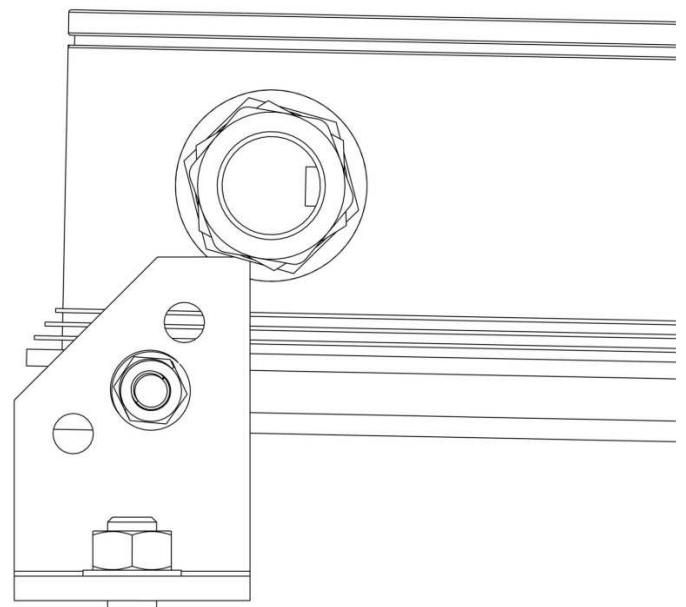
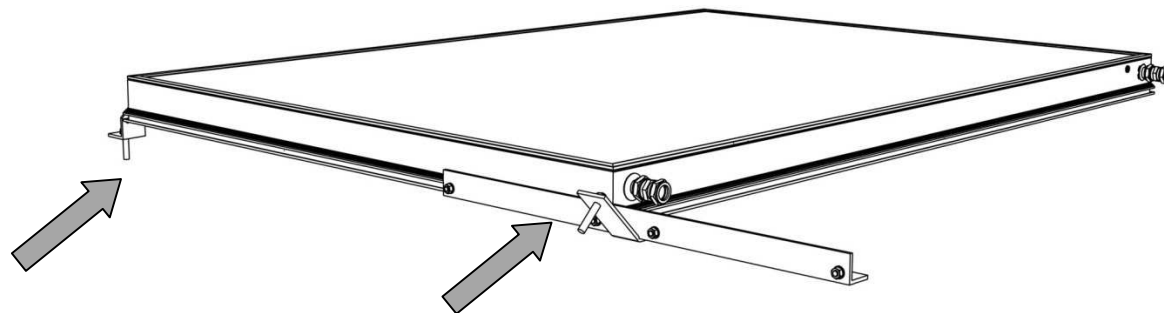
STEP 6

Connect the other brace. Do not fully tighten the screw holding the collector.

**STEP 7**

Make sure that the collector is installed at the preferred inclination. The collector support footings can be used as guides, as their cap is truncated at a 45 degree angle. Moreover, the angle between the retaining screw, the bottom hole and the horizontal plane is 30 degrees. Ensuring that the inclination of the collector is right, you may secure all 6 screws [4 screws retaining the collector and 2 screws at the bottom of braces].

- Installation of M4 collector array on flat roof

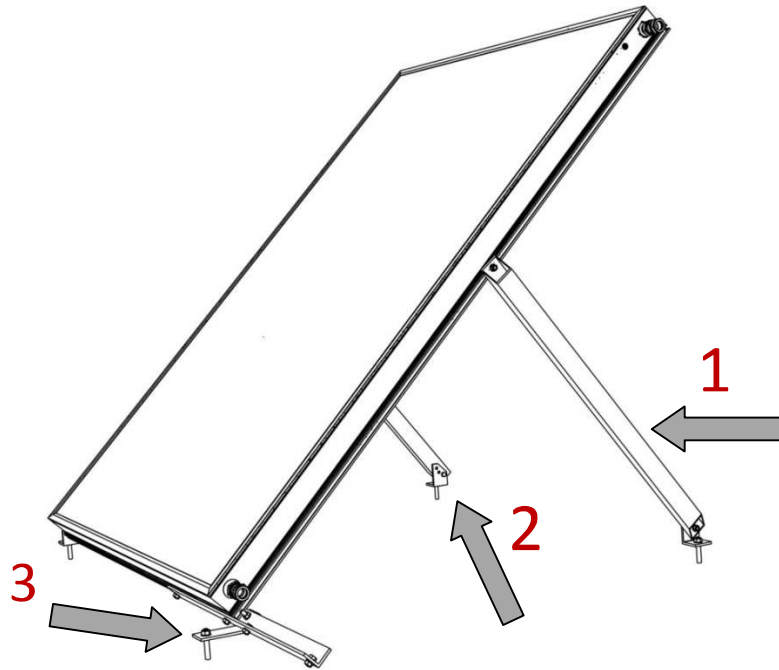


STEP 1

Install the first collector on the floor of the flat roof and connect the support footing to the side that corresponds to the end of the array, as shown in the above figure. Tighten the screw as necessary without excessive play, just to allow collector rotation in relation to the footing. Mount the footing on flat roof. Follow the recommendations listed in Chapter III regarding system orientation and position. Use adequately long screws to allow sufficient encasing of uprights in the concrete mass of the flat roof (not on the surface of insulation or on light concrete). Use suitable sealant to prevent the intrusion of moisture from the holes on the flat roof.

CAUTION: DO NOT REMOVE THE PROTECTIVE COVER FROM THE COLLECTOR GLASS!

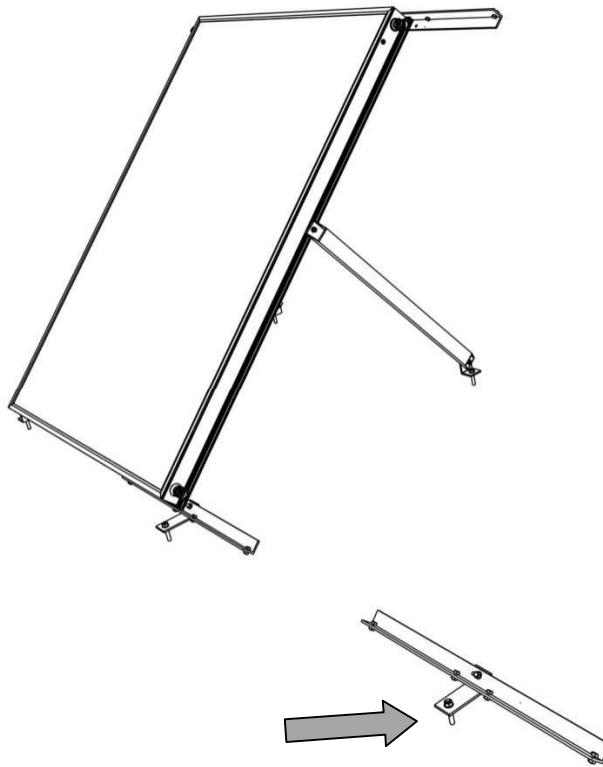
Connect a bottom joint at the side where the next collector will be installed. Tighten the collector's retaining screws but do not place it on the floor of the flat roof.

**STEP 2**

Follow Steps 2-7 of Chapter VII to mount the braces and to regulate collector inclination. Mount the bottom joint on the flat roof.

**STEP 3**

Connect a top joint at the top of the collector.

**STEP 4**

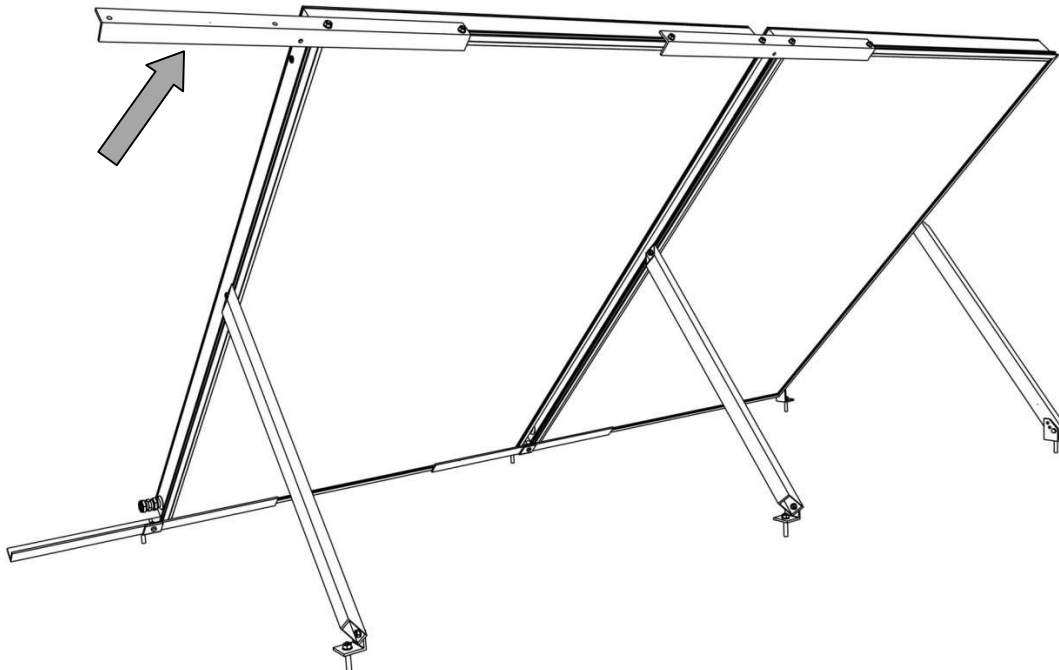
Install the next bottom joint at a distance equal to collector width. Make sure that both joints are aligned.

**STEP 5**

Place the next collector on the joints. Locate the screws and tighten them sufficiently so that the new collector can be dragged towards the one previously installed. Tighten the hydraulic fittings between absorbers and then tighten the collector retaining screws.

**STEP 6**

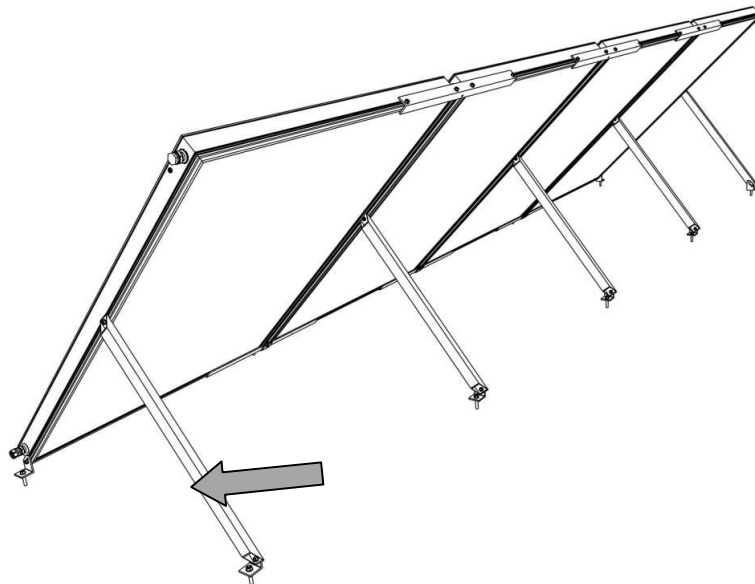
Install the brace. Before tightening the screws, make sure that the edge of the collector is at the correct inclination.

**STEP 7**

Install the bottom joint.

**STEP 8**

Continue with the installation of as many collectors as necessary, following steps 4-7. The last collector should have a mounting footing connected, before installation on joints. First tighten the collector retaining screws to the joints and then, install the footing on the flat roof floor.

**STEP 9**

Install the last brace.

