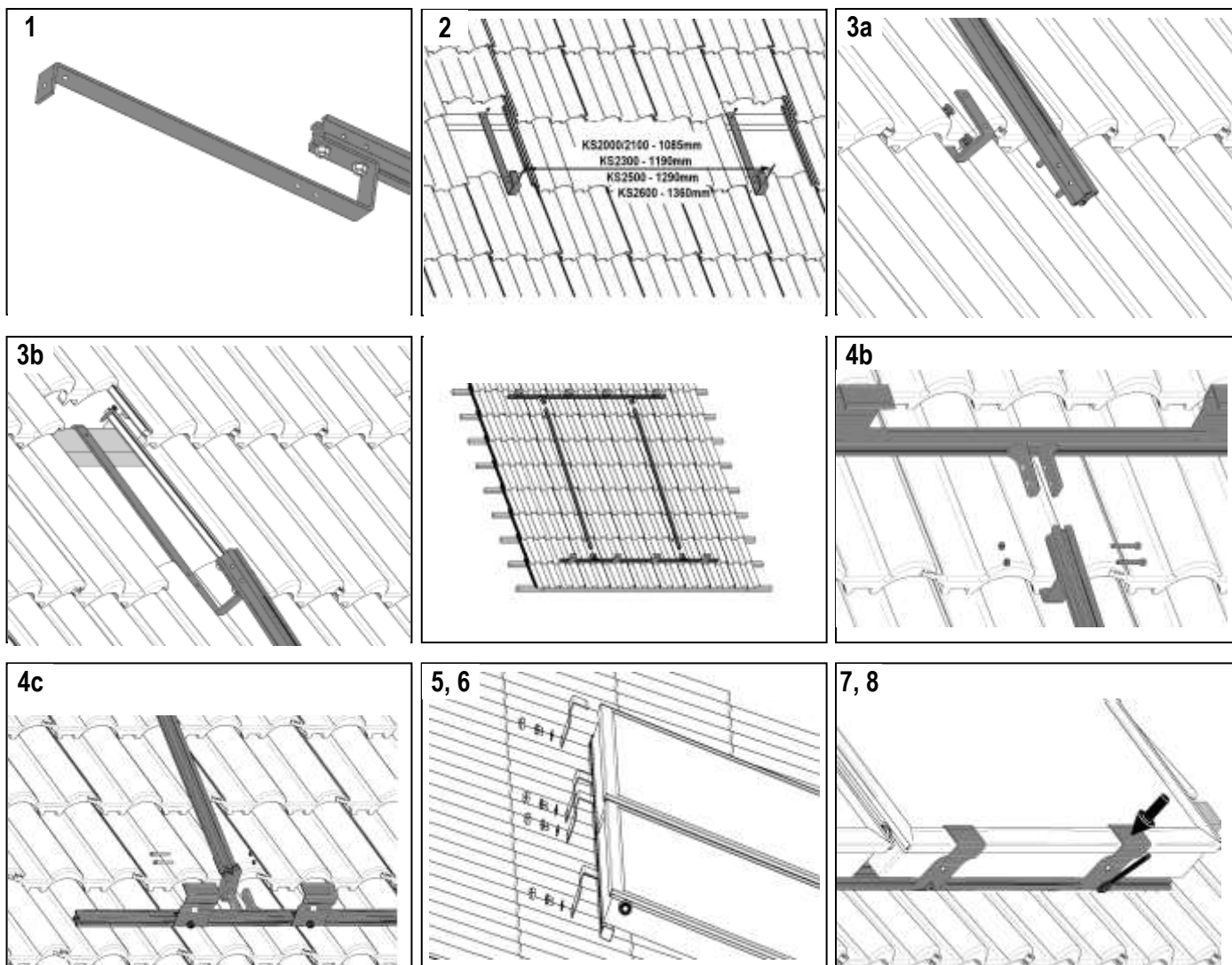


MANUAL OF INSTALLING KSAL-2 (KSOL-2) UNIVERSAL HANDLE FOR 2 KS2000/2100/2300/2500/2600 COLLECTORS



No	Name	Mount
1	Vertical profile (1930mm)	2
2	Upper horizontal profile: KS2000/2100 (1085mm) KS2300 (1190mm) KS2500 (1295mm) KS2600 (1362mm)	2
3	Lower horizontal profile: KS2000/2100 (1085mm) KS2300 (1190mm) KS2500 (1295mm) KS2600 (1361mm)	2
4	Collector grasper	8
5	Hook	4
6	Connector Al	4
7	Insert	4
8	Screw M6x40	8
9	Nut M6	8
10	Screw M8x20	8
11	Washer Ø8	28
12	Nut M8	8
13	Nut cap	8
14	End cap	4
15	Straight connector	2
16	Screw M2×25	4
17	Screw M8x14	8
18	Square nut	12
19	Screw M8x16	8





The KSAL-2 (KSOL-2) universal handle is used to mount a set of two KS2000-KS2600 collectors.

Steps of the assembly:

1. Screw tightly upper hooks (5) putting their edges equally with the profile's edge.
2. After removing the tiles mount lower hooks (5) with screw to roof battens in distance of about 1085mm - KS2000/2100, 1190mm - KS2300, 1290mm - KS2500, 1360mm - KS2600.
3. Mount vertical profiles (1) placing the upper hooks so that they fit well with previously mounted lower hooks. Mount the upper hooks to roof batten using screws. Screw tightly nuts which mount bottom hooks.
4. Connect upper horizontal profiles using straight connectors and lower horizontal profiles, as shown in the drawing, using screws (16). Attach the connectors (6) and connect upper horizontal profile (2), and lower horizontal profile (3) to vertical profiles (1). Put the end caps (14) on the endings of horizontal profiles. First connect horizontal profiles using straight connectors.
5. During the assembly, veer the upper collector graspers (4). Put the caps (14) on the endings of horizontal profiles. Place solar collectors on the rack with distance between them 85mm.
6. Put on and tight up the top graspers of the collector (4).
7. Using M8x16 screws (19) fasten the collector to the bottom graspers (using rivet nuts mounted in the collector).
8. Using M8x16 screws (19) fasten the collector to the upper graspers (using rivet nuts mounted in the collector).
9. Slide the collector to strictly adhere to the lower horizontal profile (3), screw tight the bottom graspers of the collector (4) and put caps on the nuts (13).
10. Push in and screw tight the upper graspers of the collector (4) and put caps on the nuts (13).

Additional information:

If the roof is covered with metal roofing tiles or bituminous material, the hook holders (5) should be modified by cutting off the hooks.

