

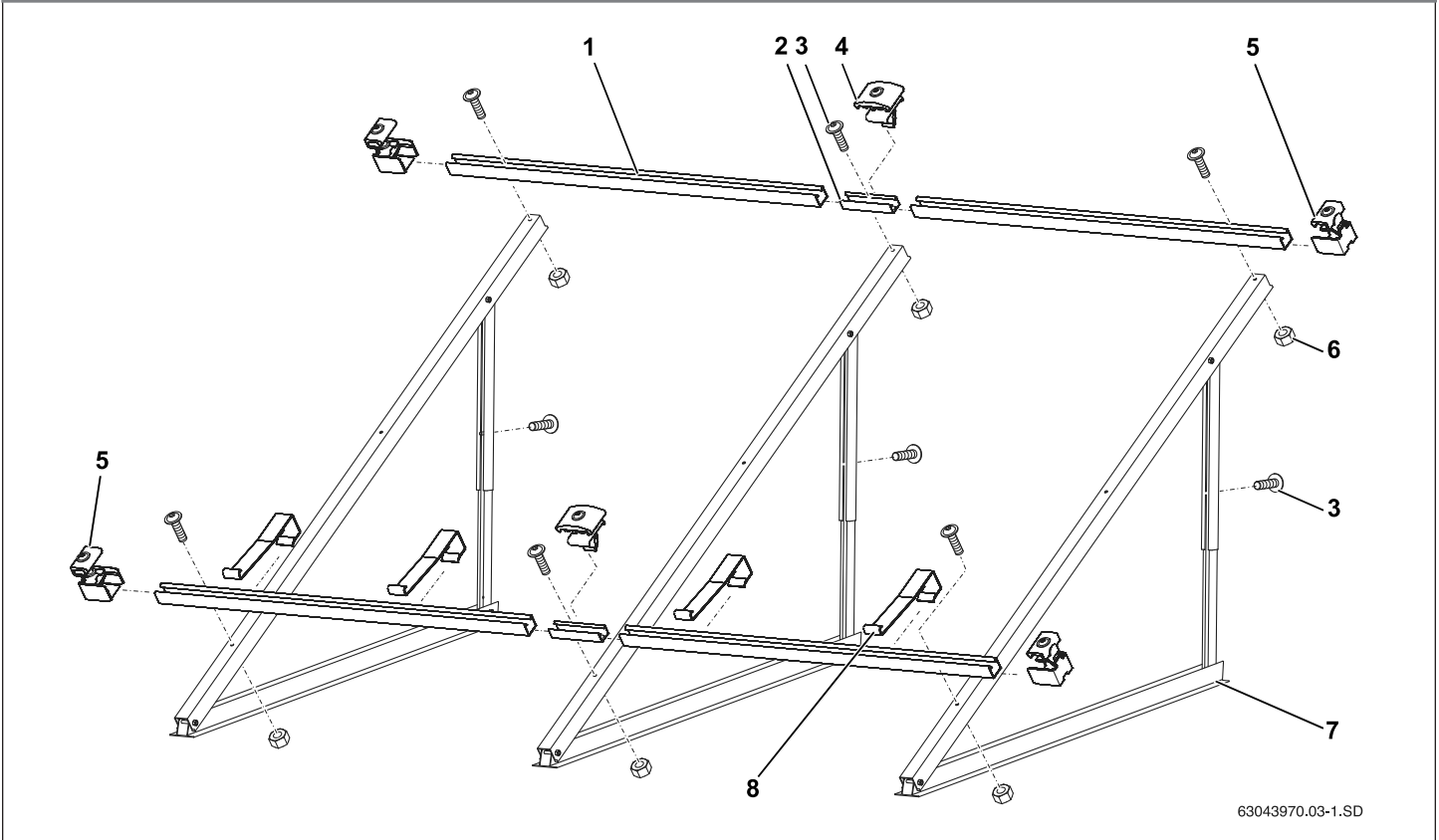
# Flat Roof Mounting Sets for Flat Plate Collectors

Engineering  
Submittal  
Sheet



# BOSCH

## Installation Sets for Collectors



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Fig. 1 Installation set for 2 collectors – 1 basic installation set, 1 extended installation set

### Basic installation set for each collector array and for the first collector (part #7739300454 portrait; 7739300456 landscape)

<b>Item 1:</b>	Profile rail	2×
<b>Item 3:</b>	M8x20 bolt	6×
<b>Item 5:</b>	One-sided collector clamp	4×
<b>Item 6:</b>	M8 nut	4×
<b>Item 7:</b>	Collector brace	2×
<b>Item 8:</b>	Anti-slip protection	2×

### Extended installation set for each additional collector (part #7739300455 portrait; 7739300457 landscape)

<b>Item 1:</b>	Profile rail	2×
<b>Item 2:</b>	Plug connector with threaded studs	2×
<b>Item 3:</b>	M8x20 bolt	3×
<b>Item 4:</b>	Double-sided collector clamp	2×
<b>Item 6:</b>	M8 nut	2×
<b>Item 7:</b>	Collector brace	1×
<b>Item 8:</b>	Anti-slip protection	2×

# Flat Roof Mounting Sets for Flat Plate Collectors



## Engineering Specifications

The following shall be the specifications for the flat roof and wall mounting system. The system for flat roof and wall mounting shall be constructed of extruded aluminum profiles with adjustable inclination of the collectors from 25-60° in 5° intervals.

Flat roof mounting shall be possible with portrait and landscape Buderus SKS4.0 and SKN3.0 collectors, and wall mounting with Landscape Buderus SKS4.0 and SKN3.0 collectors.

The collectors shall be attached to horizontal rails that span from one end of the racking system to the other. Collectors on either end of a rack shall be held in place by single sided clamps, and adjacent collectors by double sided clamps.

The flat roof racks shall permit attaching to the building sub structure, or four ballast trays per collector shall allow loading up with weight.

The flat roof mounting system shall be suitable for a max. standard snow load of 42 lbs/sqft, a maximum wind speed of 81 mph, and an installation height of max. 66 ft. Using a high load accessory rail, the system shall be rated for a max. standard snow load of 79 lbs/sqft, a maximum wind speed of 94 mph, and a max. installation height of 328 ft.

## Stabilizing a Collector

Height of Building	Wind Velocity	Base Anchor Number and Type of Screws <sup>2</sup>	Weighting Weight (e.g. Concrete Slabs) <sup>3</sup>	Ropes	
				Securing Against Tipping Weight (e.g. Concrete Slabs) <sup>3</sup>	Securing Against Slippage Maximum Rope Tension
0-26 ft. (0 m to 8 m)	64 mph (102 km/h)	2 x M8/8.8	595 lbs. (270 kg)	397 lbs. (180 kg)	360 lbs.-ft. (1.6 kN)
Above >26-66 ft. (8 m up to 20 m)	81 mph (129 km/h)	2 x M8/8.8	992 lbs. (450 kg)	705 lbs. (320 kg)	562 lbs.-ft. (2.5 kN)
Above >66-328 ft. (20 m up to 100 m <sup>1</sup> )	94 mph (151 km/h)	3 x M8/8.8	–	992 lbs. (450 kg)	742 lbs.-ft. (3.3 kN)

Values to stabilize one collector

<sup>1</sup> With additional profile rail only

<sup>2</sup> Per collector brace

<sup>3</sup> Using gravel in the ballast trays, a maximum load of 705 lbs. (320 kg) is possible per collector

## Ballast Tray Set Dimensions



Ballast tray set, 1 collector – 4 trays per set

Reference Letter	Dimension (mm)
A	37 ½" (953)
B	13 ¼" (337)
C	2" (51)