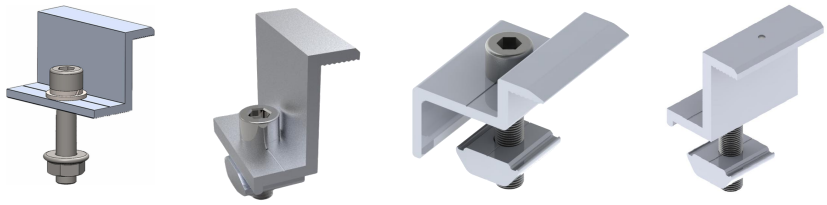
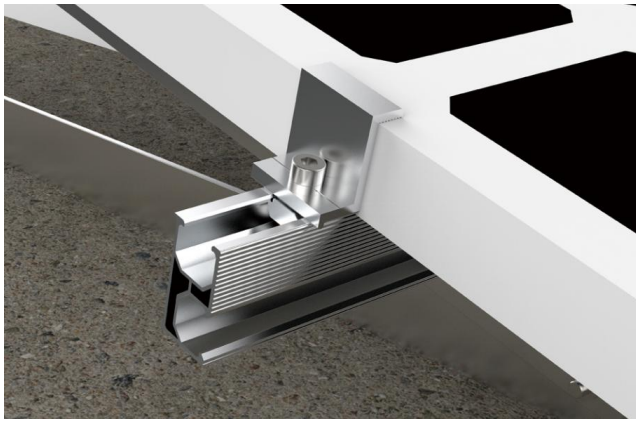
End Clamp Product Datasheet

TG-SBP-EC Series





Regular style

With spike version

Material: Main Material **AL 6063-T6**
Bolt **SUS316 stainless steel**

Test Standard

IEC 62321-1:2013
IEC 62321-3-1:2013
IEC 62321-4:2013+A1:2017
IEC 62321-7-2:2017
IEC 62321-5:2013
IEC 62321-6:2015
IEC 62321-7-1:2015
IEC 62321-8:2017

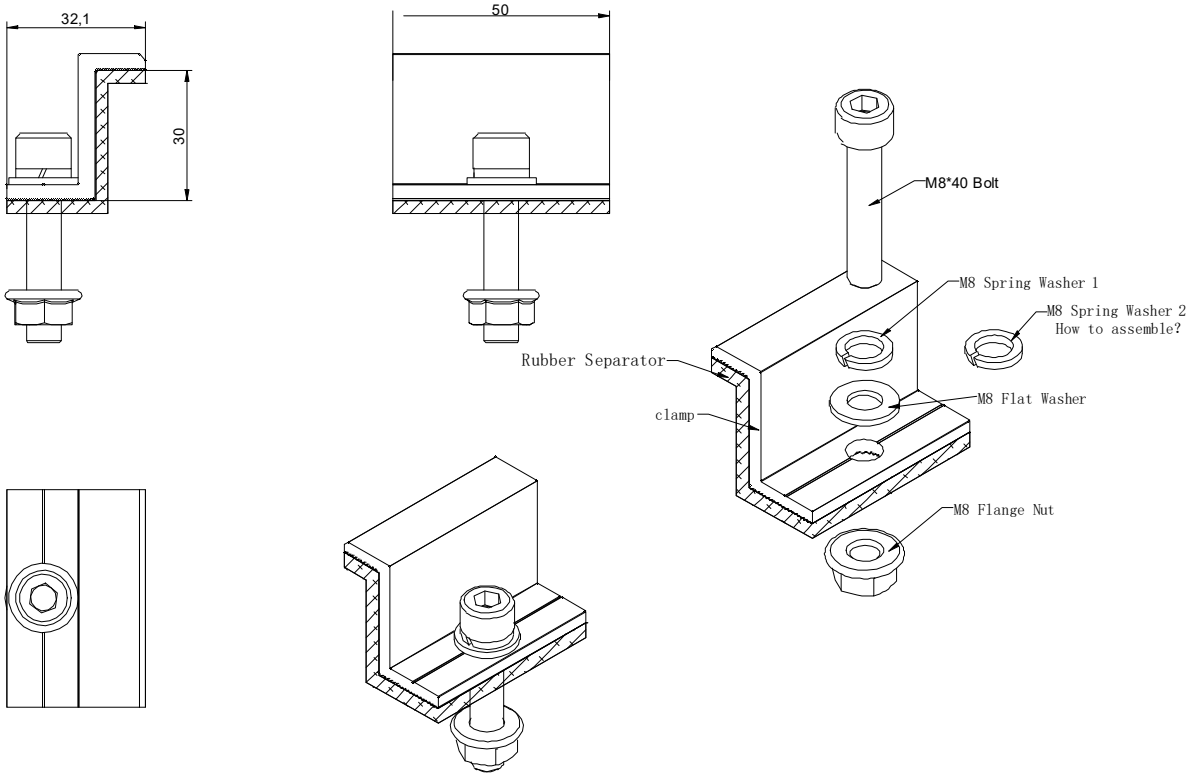
Specifications & Parameters

TG-SBP-EC(30-50)

Suitable for the fixing of solar panels, with thicknessesfrom 30mm to 50mm.

Model	Length dimension(mm)	Bolt specifications	End-Clamp Length（mm）
TG-SBP-EC30	30	M8*40mm	50
TG-SBP-EC35	35		
TG-SBP-EC40	40		
TG-SBP-EC45	45		
TG-SBP-EC50	50		

Assembly diagram



Instructions & Installation

1. No contact with glass or deformation: Clamps must not contact the module glass, and must not cause deformation or modification of the frame.

2. Avoid shadowing: Ensure clamps do not create any shadows on the modules during installation.

3.Minimum quantity requirement: A minimum of 4 clamps musbe used to secure each module.

4. Reinforcement for extreme environments: Additional clampsre required in high-wind, heavy-snow, or valley environments. Consult technicalsupport for specific solutions.

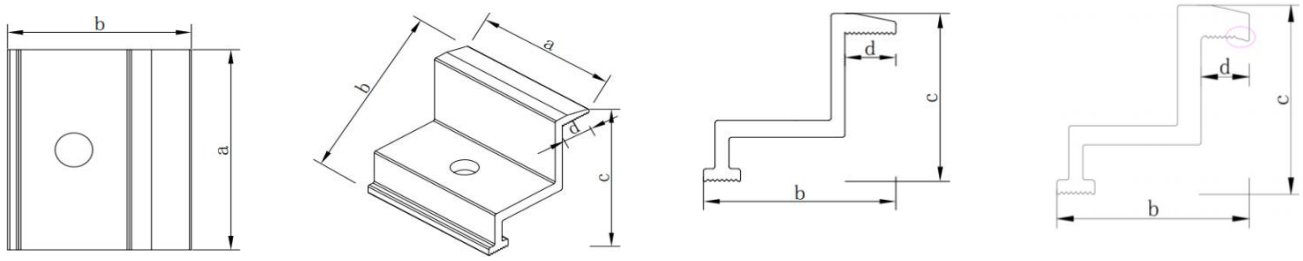
5.Key parameters:

- Minimum clamp length: 50mm(60mm arched clamps required for oversized modules >2.2m x1.3m)
- Contact width >10mm;
- Clamp wall thickness >3mm;
- Bolt torque must be strictly controlled within 16-20 N.m.

6. Torque tool requirement: A torque wrench must be used for tightening.

Note: All installations must comply with the above specifications.While mid clamps and end clamps may seem like small accessories, their role in maintaining the integrity, alignment, and safety of a solar system is massive. Selecting the right type based on module specs, compatibility and environmental conditions ensures smooth installation and long-term reliability.

At then at TG-EP Company, we offer a complete range of solar mid clamps and end clamps,including custom sizes and finishes to match your project needs. Whether you're installing a rooftop system or a utility-scale array, our clamps are engineered for precision, durability, and fast installation.



a) b) c) d)

Figure 1 Recommended Clamp Schematic Diagram

Parameter	Minimum Value / Requirement
Clamp Length (a)	⩾50 mm ⩾60 mm (for oversized modules exceeding 2.2m*1.3m)
Clamp Thickness	⩾3 mm
Clamp Coverage Length (d)	10-11 mm
Torque	16-20 Nm (M8)

Table 2 Minimum Values for Clamp Dimensions, Contact Area, and Torque

Technical Specifications for Rubber Separator

Rubber Tape with Single-Sided Adhesive

Product Description

This rubber material is made of dense EPDM,with one side coated with a high-viscosity acrylic adhesive.The standard color is black.

Features

- Multiple thickness options available
- Customizable width
- Can be directly applied to metal product surfaces

Typical Applications

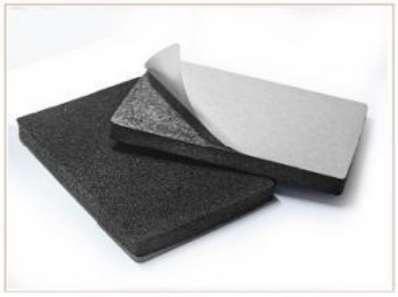
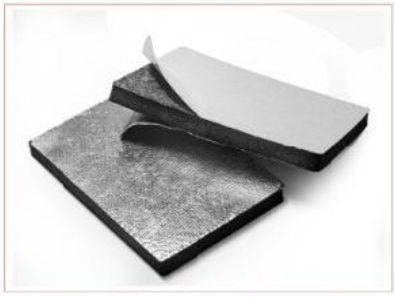
- Roof and waterproof sealing
- Suitable for outdoor weather-resistant materials

Parameter	Value	Unit
Specifications	69*59*T3.0mm	mm
Hardness, Shore A	62	-
Tensile Strength, min	7.1	MPa
Ultimate elongation, ASTM D412, min	600	%
Compression Set	19.3	%
Change in Hardness, max	±5	points
Change in Tensile Strength	-10.4	%
Ultimate elongation change, max	-18.7	%
Specific Gravity, ASTM D1817	1.24	g/cm3

Complies with standards

- **Testing complies with ISO and SGS standards.**

Technical Specifications for Rubber Separator

		
Self-Adhesive EPDM Granular Rubber Strip	Self-Adhesive EPDM Granular Rubber Strip	Self-Adhesive EPDM Granular Rubber Strip
		
Self-Adhesive Rubber Pad	Self-Adhesive Rubber Pad	Self-Adhesive Rubber Pad
		
Customized Rubber Pad	Customized Rubber Pad	EPDM Granular Rubber Pad

Key Performance Characteristics:

EPDM rubber Separators are renowned for their exceptional resistance to weathering, ozone, and steam. They also exhibit excellent compatibility with a wide range of polar solvents, chemicals, and fluids, including ketones, alcohols, and dilute acids and alkalis. However, it is important to note that EPDM has poor resistance to petroleum-based oils, greases, and fuels. For applications involving these media, alternative elastomers such as NBR (Nitrile Rubber) are recommended.