

VARIOTOP

the adjustable flat roof support with summer and winter setting

Advantages:

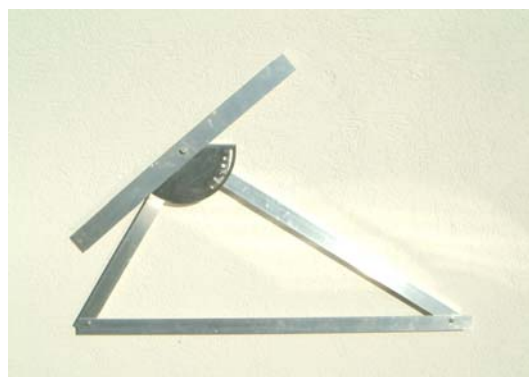
- **10% more yield in the annual average**
(in comparison to a plant with fixed supports)
- **Extremely convenient**
A complete row can be adjusted **by one person** within minutes.
- **No failure days in the winter**
The modules stay virtually snow-free in the winter.
- **Big adjustable range**
The adjustable range from 10 to 60 degrees allows the best setting for every month.

Brief description

The VarioTop support is made of aluminium L angles and an aluminium turn-tilt plate. The turning mechanics is welded free of play. So wind noises are prevented. Fixed settings in steps of 10 degrees are marked on the turn-tilt plate.

A module row is usually mounted on a line of supports on two cross beams. So it can be adjusted as a whole. A plant with 1kW for example can be adapted by one person in one to two minutes without problems.

The VarioTop supports can be combined with all kinds of fastening elements (gravel tubs, Kalzip clamps, plate fold clamp, roof hooks, etc) or also directly screwed to the sub-structure.



Application

The VarioTop support is especially suitable for flat roof plants in schools, community projects, etc. The economic efficiency calculation is significantly improved by the higher yield of 10%.

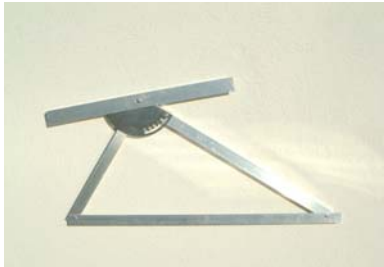
With our VarioTop system you can make your customers a considerably better offer than your competitors. Just offer VarioTop as an alternative to fixed flat roof systems.

If mounted on flat roofs in a multi-row arrangement with loaded supports we recommend a combination with the system **KompaktVario**.

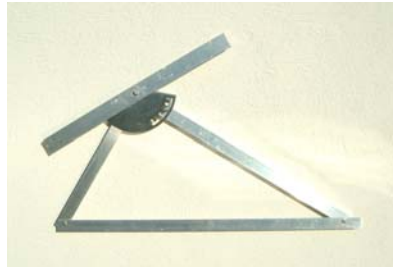


Technical specifications

Material	aluminium / high-grade steel
Base length	1545 mm
Adjustable range	10 to 60 degrees
Weight	7 kg
Settings	10 degree steps (labelled)
Statics	DIN 1055new and Eurocode 1
	Exact values on demand
Substructures	<ul style="list-style-type: none"> • concrete blocks • gravel (with optional gravel tub) • tin roofs (with plate fold clamps, Kalzip clamps...) • bitumen roof • pantiled roof • different foundations (for open area mounting) • etc



VarioTop – 10 degrees



VarioTop – 30 degrees



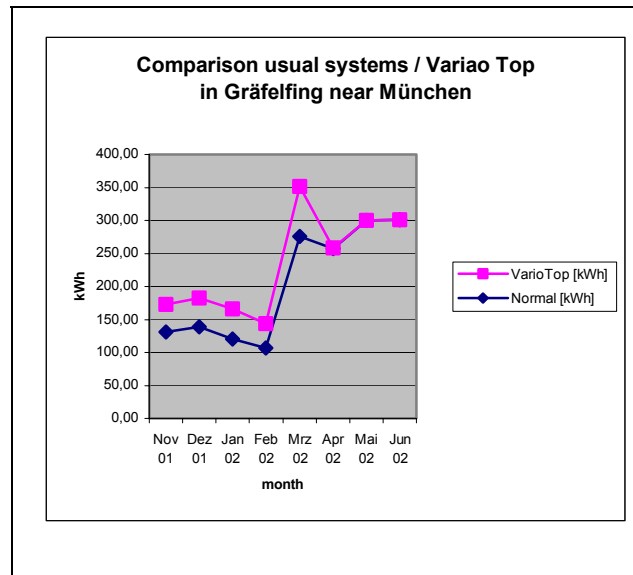
VarioTop – 60 degrees

Economic efficiency

Plants with VarioTop are very efficient in comparison to plants with fixed supports:

- The steeper setting in the winter leads to a better solar irradiation angle.
- At a setting of 60 degrees in the winter the modules stay virtually snow-free.
- The 10% higher yield (measured in Greater Munich) improves the economic efficiency of the plant by 10%, the additional expenses for VarioTop only effect the price of the mounting system and thus do not influence the total investment costs too much.
- The adjustment efforts are very small (app. one to two minutes two times a year for a plant with 1kW). Normally the adjustment can be combined with regular maintenance work.

The yields in the diagram on the right side where measured with a setting of 60 degrees in the winter and 30 degrees in the summer half year. More frequent adaptations in smaller steps are also possible. Information about the highest position of the sun can be found on the Internet (in German: www.stadtklima.de). Approximate values for Southern Germany:



Jan	Feb	Mar	Apr	Mai	Jun	Jul	Aug	Sep	Okt	Nov	Dez
19	27	39	50	61	66	63	55	44	31	22	18

Get all system prices fast and easily with our auto calculator!