Maximum flexibility – The new AeroFix G3 for flat roofs.

Johannes Cayé, Product Manager Mounting Structures at IBC SOLAR
Dieter Miener, Teammanager Technical Application Engineer at IBC SOLAR
Agenda

pv magazine Spotlight

➢ Wind tunnel test
➢ Systems
➢ General requirements
➢ Components
➢ Module support
➢ Cable laying

www.ibc-solar.com/AeroFixG3
Wind tunnel test
Perfect aerodynamics.
Systems
6 setup variants.
AeroFix G3 systems

➢ Inclination angle of the module in 15 °, 10 ° (landscape) and 8 ° (portrait)
➢ Each system in south and east-west orientation → 6 systems

AeroFix G3 15-S

AeroFix G3 10-S

AeroFix G3 8-S

AeroFix G3 15-EW

AeroFix G3 10-EW

AeroFix G3 8-EW
General requirements
That’s how it works.
General requirements

➢ Roof pitch 0°-10°
  ➢ From 5% or 2,8° secure the system against thermal hiking
➢ Roof covering foil, bitumen, gravel, green roof
➢ Building height max. 35 m
  ➢ Higher buildings only with IBC SOLAR approval
➢ Minimum field size 2x3 or 3x2 modules
➢ Maximum field size 20x20 m
➢ Module size
  ➢ Length: 1500 – 2100 mm  width: 980 – 1150 mm
➢ Only one tool plug nut SW10
  ➢ Clamp for potential equalization TX40
  ➢ G3 Module clamp TX40
Components

Less is more.
Base rail

Wide base rail
184 mm wide base rail with building protection mat / ak

The base rail is curved in order to distribute the pressure load over the entire surface.

Narrow base rail
100 mm narrow base rail with building protection mat / ak
Base rail connector

- Position on the side of the base rail
- Fastened with a 6.3x16 drilling screw
- Narrow and wide rails can be combined
Supports

➢ All supports have a tilt joint
  - Full contact surface of the module frame
Module support
From small to large.
Landscape

- TF27-T short in the upper and lower support
- In each support where two modules are placed
- At the edge TF27-T 2250 mm (blue)
  - Only one-sided load on the edge support
  - Profile is placed also on next row support and cannot tilt away

- 3rd base rail with TF27-T short
Landscape

- TF27-T long rails placed in each support
- Extension via rail connector
- 3rd base rail with TF27-T long rails
Landscape

- 3rd base rail with support Alu-L-Profile
- Alu-L-Profile is placed in the base supports
Portrait

- Base support positioned approx. in the middle on the same base rail
- Top support G3 10° base with Alu-L-Profile
Cable laying
Practically integrated.
AeroFix G3 Base rail

Up to 14 x 6 mm² cables on one side
Cable clips can be attached to the supports.
Free choice to attach other things at the flap.
Thanks a lot and stay flexible.

JOHANNES CAYÉ
Product Manager Mounting Structures
Tel: +49 9573 9224 - 884
Email: johannes.caye@ibc-solar.de
@IBC-SOLAR-AG
@IBCSOLAR
@IBCSOLAR.DE

DIETER MIENER
Technical Application Engineer
Tel: +49 9573 9224 - 422
Email: dieter.miener@ibc-solar.de
@IBC-SOLAR-International
@IBCSOLAR_Int