

novotegra Mounting solutions Tile roof





### Mounting solution for tile roofs



- Self-engineered mounting system, established on the market since 2006
- Easy and completely free of charge planning via online tool Solar-Planit
- Solutions for almost all roof tile types
- Free first-time installation support

- Quick mounting thanks to pre-assembled parts
- Approvals by building authorities, TÜV and DEKRA certified quality, CE marking
- Static calculation according to Eurocode and SIA norms
- 12 year product warranty















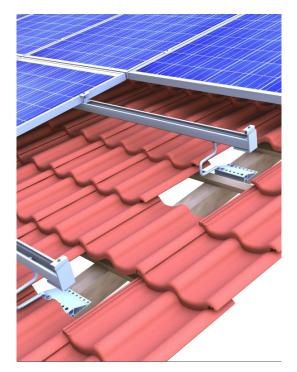
### Variations mounting solutions tile roof

#### top-fix clamping system

#### top-fix insertion system

### side-fix clamping system

#### side-fix insertion system



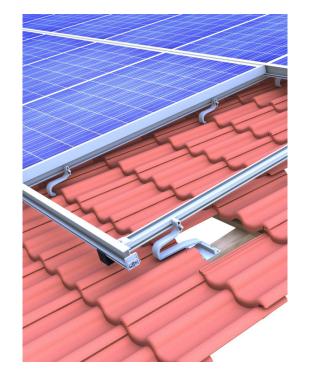
ZD 30 with C-rail 47



ZD 30 with C-rail 47 as vertical rail and insertion rail



ZD 30 N35 horizontal with C-N-rail 37



ZD 30 N35 vertical with C-N-rail 37 as vertical rail and insertion rail



### novotegra top-fix roof hook

#### Your benefits:

- Three-way adjustable roof hook
  - → Screw connection at the rail bottom allows precise adjustment of the lower rail layer
- Centric load distribution thanks to innovative geometry
- Narrow and elegant tile gap, only minimal tile manipulation necessary
- Roof hook does not touch the tile, no danger of tile damage
- Various roof hooks for low and high load situations light roof hooks for narrow rafters, double roof hooks for high snow loads
- Big cantilever of the bottom plate on the rafter possible without additional reinforcement
- Quick mounting from above with easily graspable components





Insertion system



Clamping system



### Unique component: novotegra top-fix roof hook with round steel

	ZD	ZD double	flex	flex double	BS	BS double
Clay tile	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		
Concrete tile	<ul> <li></li> </ul>	$\checkmark$	<ul> <li></li> </ul>	$\checkmark$		
Beavertail tile			<ul> <li></li> </ul>		<b>~</b>	
Horizontal rail	<ul> <li>✓</li> </ul>	~	~		<ul> <li>✓</li> </ul>	~
Vertical rail						
Load capacity	22	222	2	22	22	222
Adjustability	3-way	3-way		3-way		
Cost	€€	€€€	€	€€	€€	€€€



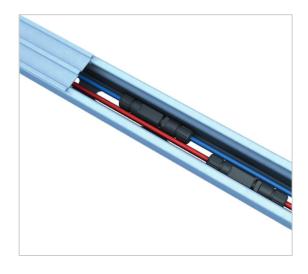
## The C-rail – more than just a module support rail

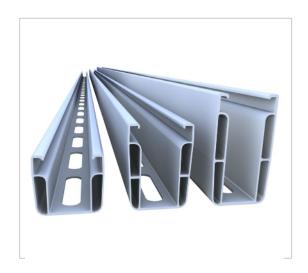
Our C-rail is unique: for each and every application it is available in the right strength and length.

Therefore it is usable across all novotegra pitched roof systems.

#### Your benefits at a glance:

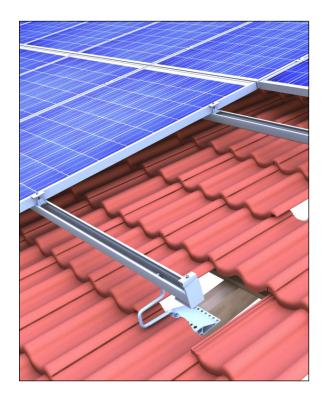
- C-rail also acts as a cable channel tidy without loose cables, enough space for plugs
- The optional cover protects the cables against damage from UV radiation, animals and humidity
- Quick mounting from above with long holes for optimum alignment flexibility
- Big cantilever possible
- Can be stepped on throughout installation (from C47 upwards)
- Rails in in blank aluminium or black anodized
- Unique components, usable across systems
- Installation-friendly clamps with a click-in mechanism for all frame heights in blank aluminium or black anodized
- Insertion rails in the most popular frame heights in blank aluminium or black anodized can be connected







### top-fix clamping system with C-rail 47 | Details





- Three-way adjustable roof hook
- Centric load distribution thanks to innovative geometry
- Narrow and elegant tile gap, only minimal tile manipulation necessary
- Roof hook does not touch the tile, no danger of tile damage



- C-rail usable across systems available in blank aluminium or black anodized
- Can be stepped on throughout installation (from C47 upwards)
  - C-rail also acts as a cable channel



- Middle and end clamps in blank and black anodized
- Installation-friendly thanks to click-in mechanism
- No falling out or slipping thanks to PE pad underneath the rail nut



## top-fix insertion system with C-rail 47 | Details





- Three-way adjustable roof hook
- Centric load distribution thanks to innovative geometry
- Narrow and elegant tile gap, only minimal tile manipulation necessary
- Roof hook does not touch the tile, no danger of tile damage



- C-rail usable across systems available in blank aluminium or black anodized
- Can be stepped on throughout installation (from C47 upwards)
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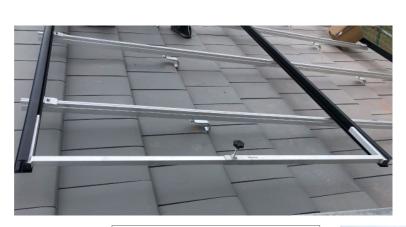


- Insertion rails in blank and black anodized for frame heights 30-50 mm
- Tension-free mounting as well as attractive and unmistakable appearance for module portrait and landscape installation
- Quick mounting, module- and maintenance-friendly



#### Your benefits:

- Quick roof hook installation through click technology (ZD 30 N35)
- Die-cast aluminium roof hooks without welding seam (ZD 533 / ZD 544)
- Easy to assemble connection from the side
- Installation-friendly clamps with a click-in mechanism
- Only two clamps for all frame heights
- Height-adjustable rail connection
- Low substructure clearance to the roof coverage
- Module installation floating and tension-free (Insertion system)
- Insertion rails in blank aluminium or black anodized











## novotegra side-fix roof hooks - overview

	ZD 30 N35	544	533	633
Clay tile	$\checkmark$	<ul> <li></li> </ul>	$\checkmark$	$\checkmark$
Concrete tile	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Beavertail tile				
Horizontal rail	$\checkmark$	$\checkmark$		
Vertical rail			<u> </u>	
Load capacity	22	2	2	2
Adjustability	2-way			3-way
Cost	€	€€	€€	€€€



### side-fix clamping system with C-N-rail | Details





- Quick roof hook installation through click technology
- For large tile overlap up to approx. 11 cm
- Same roof hook for vertical as well as horizontal connection of the C-N-rail or N-rail
- Easy to assemble connection from the side

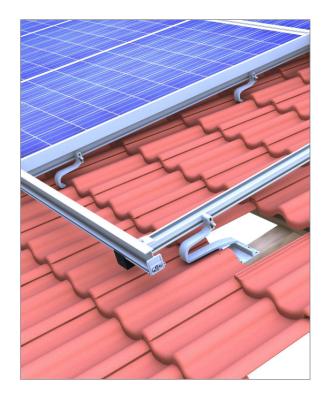
- Rail in blank and black anodized
- Can be used as a module support rail or as a cross rail
- With cable channel and groove



- Middle and end clamps in blank and black anodized
- Installation-friendly thanks to click-in mechanism
- No falling out or slipping thanks to PE pad underneath the rail nut



## side-fix insertion system with C-N-rail or N-rail | Details





- Quick roof hook installation through click technology
- For large tile overlap up to approx. 11 cm
- Same roof hook for vertical as well as horizontal connection of the C-N-rail or N-rail
- Easy to assemble connection from the side

- Rail in blank and black anodized
- Can be used as a module support rail or as a cross rail
- With cable channel and groove

- 25
- Insertion rails in blank and black anodized for frame heights 30-50 mm
- Tension-free mounting as well as attractive and unmistakable appearance for module portrait and landscape installation
- Quick mounting, module- and maintenance-friendly





**Roof hook mounting screws** Available in diameter 6mm and 8mm in different lengths. Can be used for various roof hooks.



**Rail connector set IR** Connector insertion rail for framed modules, available in blank or black anodized variations.



**Rail connector set C47** Rail connector set to extend C-rails, also available as expansion joint construction with four round-head screws.



**Cross rail connector set N IR M8** Connector for fixing insertion rails on Nrails, completely pre-assembled.



**Rail connector set C47 S** Rail connector set to extend the C-rail 47 internally over the profile chambers.



**Rail connector set C-N 37 S** Internal connector for maximum assembly freedom.





**End caps C-rail black** End caps in black for optically tidy rail ends. UV and weather resistant.



**Edge stop set IR** Edge stop for insertion rails, available in blank or black anodized.



Slip guard/ End cap set C-rail Slip guard for fixing modules mounted in landscape or as an end cap for the C-rail, available in blank or black anodized.



**EPDM-T protection IR** EPDM T protection for fixing modules in insertion rails with minimal module slope < 10°.



**End cap C-N 37 black** End cap in black for optically tidy rail ends. UV and weather resistant.



**Grounding connector set AF 18** Grounding connector set sufficient for clamping cables of 6-16 mm<sup>2</sup> or wire with diameter 6-10mm.



optional



#### Mounting Set C-Rail M8 Connector set for fixing parts as optimizers to the Crail.

optional

#### Cont Conta curre

Contact latch module clamp

Contact latch for equipotential bonding / lightning current carrying capacity between module frame and mounting system. Suitable for all middle clamps C-rail.

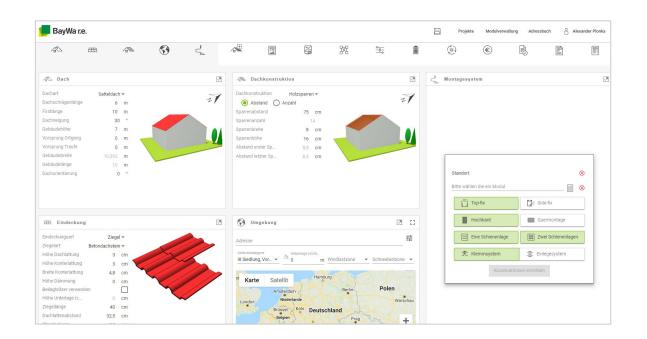
optional

#### Top cover C-rail

Cover to clip on to the C-rail if using as cable channel. Protects the cables against damage from UV radiation, animals and humidity.



### **Our free planning tool Solar-Planit**



#### **Our Solar-Planit**

- Complete system planning
  - Mounting system design & static calculation
  - Module configuration
  - Inverter design & suitable storage
  - Yield & profitability
  - System documentation
- System planning in a few minutes thanks to intuitive operation
- Free and webbased incl. free webinars
- Transmission to our webshop
- Availability can already be taken into account during planning

Use our <u>Solar-Planit!</u>



### **Our free first-time installation support**

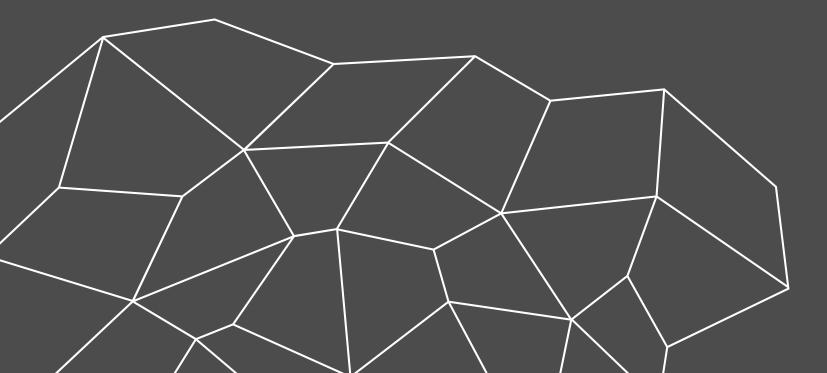


#### **Our first-time installation support**

- Support and instruction by a technical consultant during installation
- Instruction and support around the mounting system
- Discussion of the results of the static calculation
- Tips & tricks around novotegra
- For free!

For more information, please visit our <u>Website</u> or contact your personal representative!





# Thank you!

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