

# User Questionnaire

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Updated September 2010

Attn: \_\_\_\_\_



For information on all available frame and fastening systems, please see our latest planning and implementation brochures at [www.solarworld.de](http://www.solarworld.de).

Testing at SolarWorld AG does not include a study of shade conditions. We cannot offer a refund in case of decreased output caused by shade.

The frame layout by SolarWorld AG can only consider a possible need for increased fastening points due to wind suction peaks in the roof edge areas if the distances to the roof edges are indicated in the sketch.

1. **Installer** \_\_\_\_\_ **Project:** \_\_\_\_\_

## 2. Desired generator power

Module/Laminate type \_\_\_\_\_

Number of modules/laminates \_\_\_\_\_

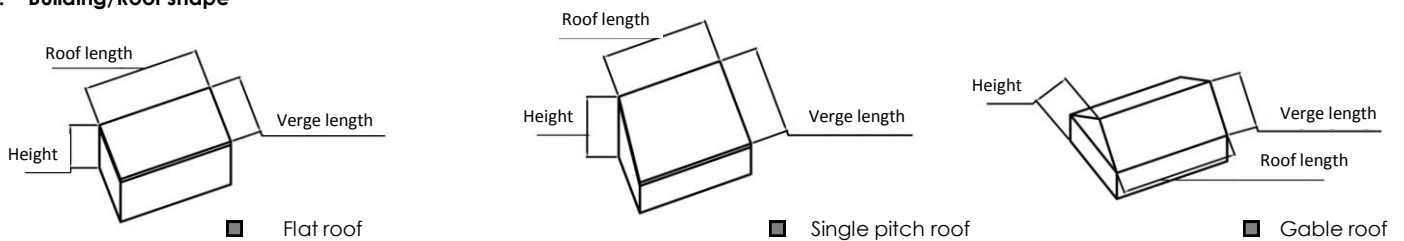
If not filled in, the maximum module array according to roof dimensions will be calculated

## 3. System location

Postal code \_\_\_\_\_ City: \_\_\_\_\_

Ground level above sea level \_\_\_\_\_ m Exposed location:  Yes  No

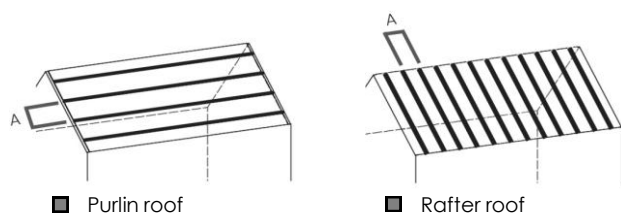
## 4. Building/Roof shape



Height (ridge) \_\_\_\_\_ m Roof length \_\_\_\_\_ m Orientation: \_\_\_\_\_ deg.

Roof pitch \_\_\_\_\_ deg. Verge length \_\_\_\_\_ m (South = 0°; West = 90°; East = -90°)

## 5. Substructure



Purlin/Rafter spacing \_\_\_\_\_ cm (center-center)

Material  Wood  Steel  Concrete

Beam width \_\_\_\_\_ cm

Beam height \_\_\_\_\_ cm

## 6. Desired mounting system

Suntub \*2 \*3

Building fascia \_\_\_\_\_ m

Terrain category (TC)

TC1

(Smooth, flat land with no obstructions)

TC2

(Land with hedges, scattered farms, houses or trees, such as a rural area)

TC3

(Suburbs, industrial or commercial areas, woods)

TC4

(Urban areas; 15% of the land contains buildings with an average height over 15 m)

Pitched roof mounting \*7

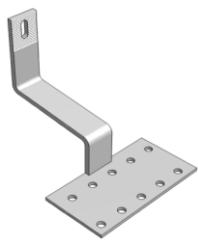
Two-layer

One-layer \*4

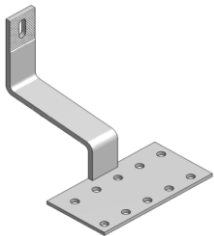
Roof covering

Roof tiles

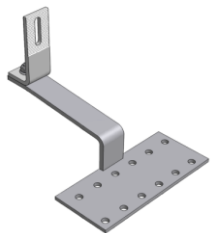
Tile type



Roof hook Medium 0-30



Roof hook Medium 0-24



Roof hook UNI 30



Roof hook Biber 0



Roof hook Schiefer 0

Roof hook fastener set

\_\_\_\_\_

Fastener type

Battens  24 x 48  30 x 50

\_\_\_\_\_ X \_\_\_\_\_

Height adjustable \*1

<input checked="" type="checkbox"/> Slate/bitumen shingles	Slate/shingle roof hooks	
<input type="checkbox"/> Plain tile	Plain tile roof hooks	
<input checked="" type="checkbox"/> Fiber cement corrugated panel	<input type="checkbox"/> Hanger bolt fastener set (Standard: M10 x 190 mm)	
<input checked="" type="checkbox"/> Trapezoidal profile	<input checked="" type="checkbox"/> Al sheet <input checked="" type="checkbox"/> Steel sheet Distance peak-to-peak _____ mm (center-center) Sheet thickness: _____ mm (one-layer systems only, no sandwich elements)	<input checked="" type="checkbox"/> Hanger bolt fastener set <input checked="" type="checkbox"/> Fix Trapezoid fastener set (rivets) *5 Raised bead height _____ mm

**7. DC lines, inverters and communication**

Longest cable run between generator array and inverters: \_\_\_\_\_ m (up to max. 40 m)  
 (indicate inverter location on detailed sketch)  4 mm<sup>2</sup> solar cable  
 6 mm<sup>2</sup> solar cable \*1 \_\_\_\_\_ m (up to max. 70 m)

Kits will be planned with SMA inverters according to SolarWorld standard configuration.

**8. Roof insulation**

Thickness of insulation (if present) \_\_\_\_\_ cm

**9. Module arrangement**

Please indicate the module arrangement (e.g., 3 rows of 10 modules each) and provide a sketch. \_\_\_\_\_

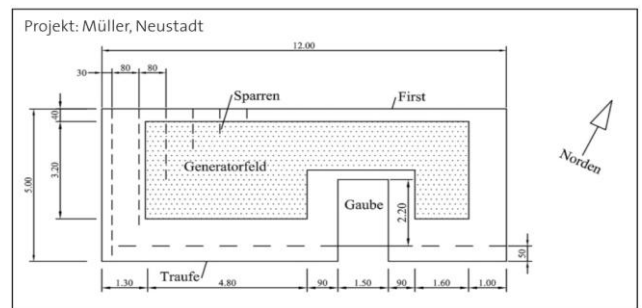
Module mounting  On edge  Transverse

**Detailed roof sketch required with module arrangement drawn in (please note minimum edge distances on-roof 20 cm around (recommended)/flat roof (elevation) 1.2 m ridge/eaves or 1.5 m verge).**

The sketch should contain the following information:

- Outside dimensions of the roof surface
- Desired location of the generator array, distance from roof edge, eaves, ridge
- Any disruptive objects, with dimensions, such as position and height of dormers and chimneys, location of skylights, roof overhangs
- Position of rafters or purlins to which the system is to be fastened
- North arrow and degrees (south = 0°; west = 90°; east = -90°)

Beispielskizze



**10. Delivery address**

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Phone number for notification \_\_\_\_\_

Liftgate required:

Yes  No

- \* 1 Additional charge
- \* 2 Up to 6° roof pitch only (ballast provided by customer)
- \* 3 Suntub only with transverse module position and tile angle of 28° possible/minimum edge distances; 0.2 x building height
- \* 4 Two-layer is standard; technical advice required for one-layer
- \* 5 For steel trapezoidal sheet  $\geq 0.63$  mm only
- \* 6 In case of roof insulation, indicate thickness
- \* 7 Prerequisite in case of roof insulation for mounting with roof hooks: the existing counter battens above the roof insulation must be able to bear all forces occurring parallel to the roof surface (shearing forces from the dead weight of the PV system, the roof system, and from snow loads) securely in the substructure.

Notes

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Date and signature:

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[www.solarworld.de](http://www.solarworld.de)

