



Photo Voltaic Questionnaire

GREENTECH® Denver

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All Fields must be filled in to allow the CED Greentech personnel to do a complete analysis of the project and be able to provide a complete quotation. Please enter DNK (Do Not Know) or NA (Not Applicable) for items not related to this specific installation. The quotation is only as accurate as the information provided. If drawings are available please provide them along with the filled out questionnaire.

Date Submitted: _____

CEDGT Job # _____ - _____ - _____

A. Project Information

Project Name _____

Project Bid Date _____

Special Requirements for Bid _____

Engineer Name and Address _____

B. Profit Center Information

Profit Center Location: _____ PC # _____

Profit Center Address: _____
City _____ State _____ Zip Code _____

Salesman Name _____ Phone Number _____ E-Mail _____

C. Customer Information

Customer Name _____

Customer Address _____

Customer City _____ State _____ Zip Code: _____

D. System Location Information

Project Owner Name: _____

Address 1: _____

Address 2: _____

City: _____ State: _____ Zip Code: _____

Latitude _____ Degrees _____ Minutes North

Longitude: _____ Degrees _____ Minutes West

Elevation: _____ Height of Building _____

Obstructions: _____

Roof Material: _____ Monolithic Membrane, Tar and Gravel, Shingle etc.

Age of Roof: _____ Give a rough estimate

Dimensions of Roof Surface _____ East to West _____ North To South

Structure of Roof: _____ Twin Tee Precast, Bar Joist with Metal Deck, etc.

Roof Pitch _____ True Orientation _____

or Dimensions of Ground Mount Area _____ East to West _____ North To South

Utility Company _____

Grid Voltage _____ Voltage _____ Phase

Existing panel or service rating _____ Amps

Location Type _____ Residential, Commercial, Govt, etc.

Other Pertenant Information _____

F. Facility Layout Sketch

Please include a Sketch of the roof / array layout and include the following:

1. Outside roof dimensions
2. Requested array layout and configuration
3. Location and size of existing obstructions on the roof
4. Expected mounting layout and other mounting requirements.
5. All potentially useful dimensions
6. Make sure to indicate North
7. Include any external obstructions such as trees and other buildings
8. Mark locations of the inverter, power panels, and utility meter.

The information supplied is for the use of CED Greentech Denver to develop a quotation for the materials necessary to build a photovoltaic system. The quotation is only as accurate as the information supplied and no assumptions will be made. If you have any questions regarding the completion of this form please contact a representative of CED Greentech Denver to assist in getting the correct information entered. The more complete the information supplied the more complete the quotation will be. Balance of System materials will only be included if requested, if not the local Profit Center will be responsible to price the materials necessary to make the system complete. The base materials will include modules, inverters, racking, combiner panels, ground lugs for modules, ground wire if dimensions are given, and DC string wiring if dimensions are given.

Instructions on completing Photovoltaic Questionnaire

1. Complete as many of the sections as you can, if the information is not available please put DNK if you do not know the information or NA if this does not apply to this system.
2. Regarding the exposure category please use the following codes:
 - Exposure B** is urban and suburban areas, wooded areas, or other terrain with numerous closely spaced obstructions having the size of a single family dwellings.
 - Exposure C** has open terrain with scattered obstructions having heights generally less than 30 feet. This category includes flat open country, grasslands, and all water surfaces in hurricane prone regions.
 - Exposure D** has flat, unobstructed areas and water surfaces outside hurricane prone regions. This category includes smooth mud flats, salt flats, and unbroken ice.
If uncertain please confirm your selection with the local building authority.
3. Regarding the maximum load at any one time, you will need to do an inventory of the electrical loads of the facility and determine all of the loads that may be on at any one time to determine maximum KW.
4. Regarding the average usage over a 24 hour period, you will need to either have historic data for an existing facility or take all of the loads from your inventory and estimate how long each item will run in a 24 hour day and total all of the KWH figures together to arrive at the KWH per day.
5. Regarding the days of reserve for the battery bank, this will be determined by how many days of power a customer would want the battery bank to have in reserve to supply power during an extended cloudy period when the sun would not support the loads and charge the batteries.
6. Wind load and snow load can be acquired from the local building department, if this is left blank we will assume that these figures are typical for the area and we will not guarantee the accuracy of the figures that we use and the rating of the racking may be questioned by the building department when a permit is applied for.
7. The question regarding WEEB clips if left empty or not allowed is checked we will include ground lugs for each module and rail, if WEEB clips are allowed we will include the appropriate clip for each module and ground lugs for each rail.

Notes on what we will include in our quote unless otherwise requested.

1. We will include a pair of PV wire terminations for each string of PV modules that the system will require, we will not include the crimping tool necessary to install the terminations. We will include Amphenol H4 connectors on Phono modules and others that require this type of termination and Tyco terminations on Schott modules and others that have this type of termination.
2. If the system has multiple strings of modules we will include fused combiner boxes if the inverter that is quoted does not have a fused combiner included. We will include a DC disconnect if the inverter that is quoted does not have a DC disconnect included.
3. If we are given accurate dimensioned drawings with the request we will include the USE-2 or PV wire that would be necessary to go from the PV modules to the inverters and the bare ground wire necessary to go from the modules to the inverter. If we are not given enough information we will exclude this wire from our quote and the local PC or customer will be responsible for this wire.
4. We normally will not include any AC wiring or components unless specifically called for on the Quote request.