

# PremiumCAD Design Request Form

Project Name: .....

1Project Info→ 2Structural Info→ 3Electrical Info

## PROJECT INFORMATION

\*\*\* ASTERISK COLOR CODE KEY \*\*\*

\* = Required Field   \* = Account Preference

### HOMEOWNER INFORMATION

First Name:\*  
.....  
Last Name:\*  
.....  
Address:\*  
.....  
City, State, Zip:\*  
.....  
Project's Assessor's Parcel #:  
.....

### CONTRACTOR INFORMATION

Company Name:\*  
.....  
Phone:\*  
.....  
Address (Street, City, State, Zip):\*  
.....  
.....  
License Numbers:\*  
.....

### PROJECT MANAGER

First Name:\*  
.....  
Last Name:\*  
.....  
Phone:\*  
.....

#### Application Type:\*

Please select the appropriate racking application types.

☐ Tilt-Up   ☐ Flush-Mount   ☐ Integrated Racking

#### Engineering Stamps:

Structural Only Stamp

Electrical Only Stamp

Structural & Electrical Both

Wet Stamps / Hard Copy

No. Of Copies:

Delivery Address:

### AHJ INFORMATION

AHJ Name:\*  
.....  
Utility Name:\*  
.....

#### Special AHJ/Utility Requirements (If Known)

.....  
.....  
.....  
.....  
.....  
.....

#### Snow & Wind Loads (If Known)

Snow Load:  
.....  
Wind Load:  
.....

#### Project (Site) Photos Checklist:

Photos will be used to understand site conditions and project site and are **essential to generate an accurate permit package.**

- ☐ Utility Meter Location (Zoomed out View)\*
- ☐ Main Service Panel Location\*
- ☐ Close-up of Main Service Panel Label\*
- ☐ Close-up of Main Breaker
- ☐ Close-up of Main Breaker Label
- ☐ Sub-Panel Main Breaker (If used)
- ☐ Sub-Panel Location (If used)
- ☐ Subpanel Location (If used)
- ☐ Close-up of Sub-Panel Breaker Label
- ☐ Proposed Inverter Location (Zoomed out View)
- ☐ Array Location(s) (if possible)
- ☐ Entire Roof with Obstructions (If possible)
- ☐ Ground Mount Location (If applicable)
- ☐ Rafter/Truss Size and Spacing (Show tape measure in photo if possible)
- ☐ Attic Space - Show existing roof rafter/truss for each roof structure (Show tape measure if possible)\*

ARRAY 1 - PITCHED ROOF APPLICATIONS

PITCHED ROOF & STRUCTURAL INFO

Roof Material:\*

Please select the appropriate roof material from the options below.

☐

(Asphalt) shingles

☐

Corrugated Metal

☐

Flat Tile

☐

Wave Tile

☐

Wood Shake

☐

Standing Seam Metal

☐

Clay S-Tile

☐

Rubber Membrane

☐

Other:\_\_\_\_\_

Layers of Roof Material

☐ One


☐ Two

Structure Type:\*

Please select the appropriate Structure Type from the options below.

☐

Truss (Wood)




☐

Metal Beam Supported


☐

Interior bearing wall (Wood)




☐

Purlins




☐

Knee Wall




☐

Knee Wall + Collar Tie




☐

Collar Tie (Wood)



☐

Single Span Rafter (Wood)



☐

Wood Supported Strut

☐

Steel Frame

Rafter Size:\*

☐ 2x4

☐ 2x6

☐ 2x8

☐ 2x10

☐ Other:\_\_\_\_\_

Rafter Spacing:\*

Please select the typical distance between each rafter (in inches):

☐ 12"

☐ 14"

☐ 16"

☐ 24"

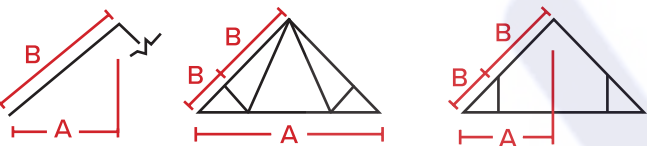
☐ 48"

☐ Other:\_\_\_\_\_

Roof Structure Measurements:\*

A: \_\_\_\_\_

B: \_\_\_\_\_



RACKING INFO

Attachment Type:\*

☐ Flashed L-Foot

☐ Tile Hook

☐ Standoff

☐ Integrated into Racking

☐ Standing Seam Clamp

☐ Corrubracket

☐ Other:\_\_\_\_\_

Racking Manufacturer:\*

Racking Model:\*

Attachment Manufacturer:\*

Attachment Model:\*

Maximum Rail Span:\*

Please select the default maximum distance between mounting points across the rail layout used for this project.

☐ 16"

☐ 24"

☐ 32"

☐ 48"

☐ 72"

☐ 96"

☐ Other:\_\_\_\_\_

Pitch (Degrees):\*

Azimuth(s):\*

ARRAY 2 - PITCHED ROOF APPLICATIONS (Only if roof structure is different)

PITCHED ROOF & STRUCTURAL INFO

Roof Material:\*

Please select the appropriate roof material from the options below.








<input type="checkbox"/>	(Asphalt) shingles	<input type="checkbox"/>	Standing Seam Metal
<input type="checkbox"/>	Corrugated Metal	<input type="checkbox"/>	Clay S-Tile
<input type="checkbox"/>	Flat Tile	<input type="checkbox"/>	Rubber Membrane
<input type="checkbox"/>	Wave Tile	<input type="checkbox"/>	Other:_____
<input type="checkbox"/>	Wood Shake		

Layers of Roof Material

☐ One    ☐ Two

Structure Type:\*

Please select the appropriate Structure Type from the options below.

<input type="checkbox"/>	Truss (Wood) 	<input type="checkbox"/>	Knee Wall + Collar Tie 
<input type="checkbox"/>	Metal Beam Supported	<input type="checkbox"/>	Collar Tie (Wood) 
<input type="checkbox"/>	Interior bearing wall (Wood) 	<input type="checkbox"/>	Single Span Rafter (Wood) 
<input type="checkbox"/>	Purlins 	<input type="checkbox"/>	Wood Supported Strut
<input type="checkbox"/>	Knee Wall 	<input type="checkbox"/>	Steel Frame

Rafter Size:\*

☐ 2x4    ☐ 2x6    ☐ 2x8    ☐ 2x10    ☐ Other:\_\_\_\_\_

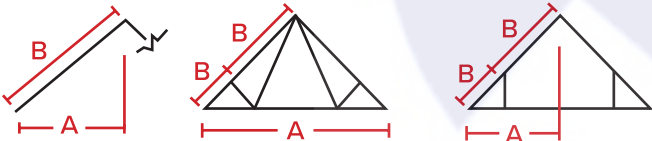
Rafter Spacing:\*

Please select the typical distance between each rafter (in inches):

☐ 12"    ☐ 14"    ☐ 16"    ☐ 24"    ☐ 48"    ☐ Other:\_\_\_\_\_

Roof Structure Measurements:\*

A: \_\_\_\_\_ B: \_\_\_\_\_



RACKING INFO

Attachment Type:\*

☐ Flashed L-Foot    ☐ Tile Hook    ☐ Standoff  
☐ Integrated into Racking    ☐ Standing Seam Clamp  
☐ Corru bracket    ☐ Other:\_\_\_\_\_

Racking Manufacturer:\*

Racking Model:

Attachment Manufacturer:\*

Attachment Model:\*

Maximum Rail Span:\*

Please select the default maximum distance between mounting points across the rail layout used for this project.

☐ 16"    ☐ 24"    ☐ 32"    ☐ 48"    ☐ 72"    ☐ 96"    ☐ Other:\_\_\_\_\_

Pitch (Degrees):\*

Azimuth(s):\*

ELECTRICAL INFORMATION

NEW EQUIPMENT INFORMATION

Module Manufacturer & Model Number:\*

Module Manufacturer:

Model Number:

Quantity:

String/Micro Manufacturer & Model Number:\*

Inverter Manufacturer:

Model Number:

Quantity:

Optimizer Manufacturer & Model Number  
(If Applicable):

Optimizer Manufacturer:

Model Number:

Quantity:

Inverter DC Disconnect Options (If Applicable):\*

☐ Utilize Integrated DC Disconnect

☐ Utilize Standalone DC Disconnect (Rooftop or Ground Array)

Standalone DC Disconnect Location (If Used):

1. ☐ Exterior ☐ Interior

2. ☐ House ☐ Garage ☐ Barn ☐ Pole Mounted  
☐ Rooftop ☐ At Ground Array  
☐ Other:\_\_\_\_\_

3. ☐ North ☐ South ☐ East ☐ West  
☐ NE ☐ NW ☐ SE ☐ SW

Inverter Location:\*

Please select intended location of inverter and electrical equipment.

1. ☐ Exterior ☐ Interior

2. ☐ House ☐ Garage ☐ Barn ☐ Pole Mounted  
☐ Other:\_\_\_\_\_

3. ☐ North ☐ South ☐ East ☐ West  
☐ NE ☐ NW ☐ SE ☐ SW

Wire Transition Enclosure:\*

Please select the appropriate wire transition enclosure between modules and inverter.

☐ Junction Box ☐ Soladeck ☐ Combiner Box ☐ None

Combining AC Circuits:\*

Select how to combine the inverter(s) AC outputs. Multiple inverters or micros only.

☐ Soladeck (Rooftop) ☐ (N) AC Panel Board

☐ Existing Subpanel

Service AC Disconnect:\*

Typically the utility requires a lockable utility disconnect for the AC output in case of an emergency or service.

☐ Yes ☐ No

Utility Disconnect Location:\*

Please describe the Utility Disconnect location.

1. ☐ Exterior ☐ Interior

2. ☐ House ☐ Garage ☐ Barn ☐ Pole Mounted  
☐ Next to Utility Meter ☐ Other:\_\_\_\_\_

3. ☐ North ☐ South ☐ East ☐ West  
☐ NE ☐ NW ☐ SE ☐ SW

PV Revenue Meter:\*

Is there a PV Revenue Meter? The Production meter measures and tracks the production for the solar array.

☐ Yes ☐ No (Net Meter)

ELECTRICAL INFORMATION (Continued)

Location of PV Meter:\*

Select the location of the PV meter in reference to the AC disconnect.

- ☐ Between inverter and disconnect
- ☐ Between disconnect and point of interconnection (MEP, Tap, Etc.)

EXISTING EQUIPMENT INFORMATION

Meter Main Combo?\*

- ☐ Yes
- ☐ No

Main Electrical Panel Rating:\*

Write the Bus and main circuit breaker rating.

Bus Rating (amps):  
.....

Main Breaker Rating (amps):  
.....

Are there spaces available in the panel?  
.....

Main Breaker Location:\*

- ☐ Top-fed
- ☐ Center-fed
- ☐ Bottom-fed

Main Electrical Panel Location:\*

Please select where the Main Electrical Panel is located.

1. 

☐ Exterior

☐ Interior
2. 

☐ House

☐ Garage

☐ Barn

☐ Pole Mounted

☐ Other:.....
3. 

☐ North

☐ South

☐ East

☐ West

☐ NE

☐ NW

☐ SE

☐ SW

(N)ew Main Breaker Derating or Panel Upgrade:

Write the new ratings that the main breaker will be derated to.

Bus Rating (amps):  
.....

Main Breaker Rating (amps):  
.....

Interconnection Strategy:\*

Please select the appropriate interconnection strategy from the choices below: Panel upgrades or choose "Backfeed Breaker".

- ☐ Backfeed Breaker
- ☐ Derate Main Breaker
- ☐ Line Side Tap
- ☐ Load Side Tap

Interconnection Location\*

Please select the electrical location the tap will occur.

☐

Existing Main Electrical Panel (MEP)

☐

Existing Meter

☐

New Sub-Panel

☐

Renewable Meter Adapter (RMA) at Meter

☐

New Tap Box

☐

Automatic Transfer Switch (ATS)

☐

Existing Sub-Panel

☐

New Main Electrical Panel Upgrade

(E)xisting Meter Location:\*

1. 

☐ Exterior

☐ Interior
2. 

☐ MEP Location

☐ Pole Mounted

☐ Other:.....
3. 

☐ North

☐ South

☐ East

☐ West

☐ NE

☐ NW

☐ SE

☐ SW

\*Location of the Pole in relation to the house:

\*For pole mounted utility meters and main electrical panels.

Cardinal Direction:  
.....

Distance:  
.....

Utility Entrance:\*

- ☐ Overhead
- ☐ Under Ground

Existing Electrical Grounding:\*

Current or Original Bond of existing electrical system?  
Please select from the options below.

- ☐ Ground Rod
- ☐ Ufer
- ☐ Cold Water Pipe

Project Notes & Special Requirements:

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

Sales Sketch:\*

A rough sketch or drawing of the solar panel layout on the project residence or site including roof measurements where possible and plan for equipment locations from the provided key. This sketch will be used to create the base site plan and array layout.

- ☐ I placed the modules on the roof sketch below
- ☐ I want the designer to place the modules
- ☐ The Sales Sketch is attached as a separate document

I

DC/AC INVERTER

PNL

AC PANELBOARD

S

AC DISCONNECT

DSW

DC DISCONNECT

UM

(E) UTILITY METER

V

PV REVENUE METER

MEP

MAIN ELECTRICAL PANEL

JB

JUNCTION BOX

M1

MODULE #

X

ROOF OBSTRUCTION

