Roseville Electric's Residential New Construction Program

BEST Homes Solar Installer Verification

TO BE COMPLETED BY THE SOLAR PV INSTALLER

ADDITIONAL REQUIRED DOCUMENTATION THAT MUST BE INCLUDED, please attach and check the list below before submitting
□ Final CSI EPBB Calculation for installed system
□ Final City of Roseville building permit inspection
□ Title 24 HERS Rater Certification Form completed and signed by rater

SITE INFORMATION		
Site Address		
Builder	Village Name	Lot #
PV Installation Company	PV Installation Technician Name	Builder Project Manager Name
Builder Project Manager Phone	Builder Project Phone Number	Builder Project Manager Email

SYSTEM INFORMATION								
Equipment Type		**CEC Certified Manufacturer Name and Model Number**						
Inverter Mfr.	**Qty. Inverters**	**Model #**		**Serial#**		**Inverter Efficiency**	RE Use: Information verified	Inverter Eff. %
Modules Mfr.		**Module Model #**						Module PTC (W)
Modules Mounting ____ Rack Mount _____ BIPV		# of series modules in each string	_____	# of strings in parallel	_____	Total # of modules	_____	No. of modules Total Watts

Installation Specifications		Method Used to Determine Value		Value Measured	
		Installing Contractor	RE Use	Installing Contractor	RE Use
1	**The azimuth of the system (Orientation)** (degrees from North)				
2	**The roof pitch/tilt of the system** (Rise : Run / degrees from horizon)				
3	**The standoff height of system** (if BIPV, enter "0")				
4	**PV Kw rating (CEC A/C)**		**PTC Rating**		

Performance Specifications		Method Used to Determine Value		Value Measured	
		Installing Contractor	RE Use	Installing Contractor	RE Use
5	**Measurement of Solar Irradiance** (W/m squared)				
6	**Measurement of Ambient Temperature** (F degrees)				
7	**Expected Output from Field Verification Table (FVT)** (W)	**FVT**			
8	**Inverter or other performance display reading** (W)				

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9	**The electric production (W) as shown on the inverter or other performance display is equal to or higher than the value on the FVT for the system based on the incident radiation and ambient temperature measured.** (Pass if line 8 > line 7)	Pass Fail	Pass Fail

Field Verification Certification Form

Primary Method (Single or Multiple String Arrays)

Irradiance _____ (W/m^2)
Temp _____ (F)
Inv Output _____ (W)

_____ CEC-AC Output (W) X _____ FVT (%) =
Estimated System Output (W)

RE USE

Irradiance _____ (W/m^2)
Temp _____ (F)
Inv Output _____ (W)

_____ CEC-AC Output (W) X _____ FVT (%) =
Estimated System Output (W)

Field Verification Output Table (FVO)

(W/m²)	T=15	T=25	T=35	T=45	T=55	T=65	T=75	T=85	T=95	T=105	T=115
300	26%	26%	25%	24%	24%	23%	22%	22%	21%	20%	20%
325	28%	28%	27%	26%	26%	25%	24%	24%	23%	22%	22%
350	31%	30%	29%	28%	28%	27%	26%	25%	25%	24%	23%
375	33%	32%	31%	31%	30%	29%	28%	27%	27%	26%	25%
400	35%	34%	33%	33%	32%	31%	30%	29%	28%	27%	27%
425	37%	36%	36%	35%	34%	33%	32%	31%	30%	29%	28%
450	40%	39%	38%	37%	36%	35%	34%	33%	32%	31%	30%
475	42%	41%	40%	39%	38%	37%	36%	35%	34%	33%	32%
500	44%	43%	42%	41%	40%	39%	38%	37%	36%	34%	33%
525	46%	45%	44%	43%	42%	41%	40%	38%	37%	36%	35%
550	48%	47%	46%	45%	44%	43%	41%	40%	39%	38%	37%
575	51%	49%	48%	47%	46%	45%	43%	42%	41%	40%	38%
600	53%	51%	50%	49%	48%	46%	45%	44%	43%	41%	40%
625	55%	54%	52%	51%	50%	48%	47%	46%	44%	43%	42%
650	57%	56%	54%	53%	52%	50%	49%	47%	46%	45%	43%
675	59%	58%	56%	55%	54%	52%	51%	49%	48%	46%	45%
700	61%	60%	58%	57%	55%	54%	52%	51%	49%	48%	46%
725	63%	62%	60%	59%	57%	56%	54%	53%	51%	50%	48%
750	65%	64%	62%	61%	59%	58%	56%	54%	53%	51%	49%
775	68%	66%	64%	63%	61%	59%	58%	56%	54%	53%	51%
800	70%	68%	66%	65%	63%	61%	59%	58%	56%	54%	53%
825	72%	70%	68%	66%	65%	63%	61%	59%	58%	56%	54%
850	74%	72%	70%	68%	66%	65%	63%	61%	59%	57%	55%
875	76%	74%	72%	70%	68%	66%	65%	63%	61%	59%	57%
900	78%	76%	74%	72%	70%	68%	66%	64%	62%	60%	58%
925	79%	78%	76%	74%	72%	70%	68%	66%	64%	62%	60%
950	81%	79%	77%	75%	73%	71%	69%	67%	65%	63%	61%
975	83%	81%	79%	77%	75%	73%	71%	69%	67%	65%	63%
1000	85%	83%	81%	79%	77%	75%	73%	70%	68%	66%	64%
1025	90%	85%	83%	81%	78%	76%	74%	72%	70%	67%	65%
1050	90%	90%	84%	82%	80%	78%	76%	73%	71%	69%	66%
1075	90%	90%	86%	84%	82%	79%	77%	75%	72%	70%	68%
1100	90%	90%	90%	86%	83%	81%	79%	76%	74%	71%	69%
1125	90%	90%	90%	90%	85%	82%	80%	78%	75%	73%	70%
1150	90%	90%	90%	90%	86%	84%	81%	79%	76%	74%	71%
1175	90%	90%	90%	90%	90%	85%	83%	80%	78%	75%	73%
1200	90%	90%	90%	90%	90%	90%	84%	82%	79%	77%	74%

For systems that have only one string connected to a single inverter or for systems using micro-inverters, the following applies:

1. Record Temperature and Irradiance
2. Examine Field Verification Output (FVO) table for the percentage shown given the measured temperature and irradiance.
   Always round temperature up to the next block. So, 47 degrees rounds up to 55 degrees on the chart.
3. Multiply the CEC-AC (from EPBB printout) times the FVO percentage to get estimated system output.
4. Compare estimated system output with actual output. If actual system output is higher, system is operating within expectations.
   If estimated output is higher, perform additional diagnostics and correct any issues as the system may not be performing properly.

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SHADING ANALYSIS

A Shading Analysis is required for all solar projects. Please complete the table below with the values from the shading analysis.

Monthly Shading	Shading Derate Factors (%)
Jan	
Feb	
Mar	
Apr	
May	
Jun	

Monthly Shading	Shading Derate Factors (%)
July	
Aug	
Sep	
Oct	
Nov	
Dec	

PV REBATE INFORMATION

Applicable Rebate Program	Rebate per A/C watt	CSI-Rating	Total Rebate
□ BEST Homes Program Participating Community	$.48		

BUILDER/INSTALLER SIGNATURE

☐ I, the undersigned, verify that equipment listed on this form is the actual equipment installed and the shading criteria are as specified. (check the box box)

Signature:	Date:
Print Name:	

Roseville Electric use only

Third-party Field Inspector

Signature:	Date:
Company Name:	Phone:
Findings:	

RE Retail Services

Incentive Approved Y/N:	BEST Homes Incentive per A/C Watt:	CSI Rating:	Total Incentive:
Notes:			

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