DOCKETED			
Docket Number:	18-BSTD-02		
Project Title:	2019 ENERGY CODE COMPLIANCE MANUALS		
TN #:	232774-13		
Document Title:	2019-CF1R-STH-01-E-OG100 Solar Water Heating Systems Worksheetpdf		
Description:	N/A		
Filer:	Corrine Fishman		
Organization:	California Energy Commission		
Submitter Role:	Public Agency		
Submission Date:	4/17/2020 12:03:41 PM		
Docketed Date:	4/17/2020		

OG 100 SOLAR WATER HEATING WORKSHEET CEC-CF1R-STH-01-E (Revised 01/19)

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EC-CF1R-STH-01-E (Revised 01/19)	CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE	CF1R-STH-01-E
OG 100 Solar Water Heating Worksheet	(Page 1 of 2)
Project Name	Date Prenared

A. G	A. General System Information				
01	Water Heating System ID or Name:				
02	Climate Zone:				
03	Name of Program Used to Generate Solar Savings Fraction:				
04	Version of Software Used to Generate Solar Savings Fraction:	>			
05	Collector Manufacturer:	.,0,			
06	Collector Brand:	Cr. N.o.			
07	Collector Model Number:	110 1151			
08	Certification Number:	CO. 7 M.			
09	Collector Type:	3 .00			
10	Collector Area (ft²):	·el			
11	Collector Rated Efficiency Curve Slope:	150			
12	Collector Rated Efficiency Curve Intercept:	8			
13	Number of Collectors:	18,			
14	Collector Fluid:	110			
15	Water Heater Storage Volume in Gallons:				
16	Secondary Storage Tank Volume in Gallons (if used):				
17	Collector Angle from True North in Degrees:				
18	Collector Slope form Horizontal in Degrees:				
19	Total Conditioned Floor Area of Building (ft²):				
20	Number of Identical Dwelling Units:				
21	Calculated Solar Savings Fraction:				

B. Solar Savings Fraction Calculator Printout		
01	The result from the approved solar savings fraction calculator must be attached to this form	

Registration Number: Registration Date/Time: **HERS Provider:** STATE OF CALIFORNIA

OG 100 SOLAR WATER HEATING WORKSHEET



CEC-CF1R-STH-01-E (Revised 01/19)

CALIFORNIA ENERGY COMMISSION

OG 100 Solar Water Heating Worksheet			(Page 2
Project Name:			Date Prepared:
			-
DOCUMENTATION AUTHOR'S DECLARATION STA	ATEMENT		
 I certify that this Certificate of Compliance d 	ocumentation is accurat	te and complete.	
Documentation Author Name:		Documentation Author Signa	ature:
Company:		Signature Date:	
Address:		CEA/ HERS Certification Iden	ntification (if applicable):
City/State/Zip:		Phone:	-10
RESPONSIBLE PERSON'S DECLARATION STATEM	ENT		0,
I certify the following under penalty of perjury, u	nder the laws of the Sta	ate of California:	3
1. The information provided on this Certificate			ac w
2. I am eligible under Division 3 of the Busines	s and Professions Code t	to accept responsibility	for the building design or system design
identified on this Certificate of Compliance			112 110.
3. That the energy features and performance s	specifications, materials,	, components, and mar	nufactured devices for the building design or
system design identified on this Certificate	of Compliance conform t	to the requirements of	Title 24, Part 1 and Part 6 of the California
Code of Regulations.		~~	
			npliance are consistent with the information
provided on other applicable compliance do	ocuments, worksheets, c	calculations, plans and	specifications submitted to the enforcement
agency for approval with this building perm	it application.	A.O	0.
5. I will ensure that a registered copy of this Co	ertificate of Compliance	shall be made available	e with the building permit(s) issued for the
building, and made available to the enforce	ment agency for all appl	licable inspections. I un	nderstand that a registered copy of this
Certificate of Compliance is required to be i	ncluded with the docum	nentation the builder pi	rovides to the building owner at occupancy.
Responsible Designer Name:	01,	Responsible Designer Signat	ture:
	- 0	100	
Company:	1:	Date Signed:	6.
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CERTIFICATE OF COMPLIANCE – USER INSTRUCTIONS	CF1R-STH-01-E
OG 100 Solar Water Heating Worksheet	(Page 1
of 1)	

CF1R-STH-02-E User Instructions

This worksheet is used to report the calculated solar savings fractions for OG-100 systems. Enter the input and output fields used in the approved Solar Savings Fraction Calculator located at:

https://www.energy.ca.gov/title24/2019standards/worksheets/2019_Title-24_Solar_Water_Heating_Calc.zip

A. General System Information

- 01 Water Heating System ID or Name: From CF1R, name of the water heating system.
- 02 California Climate Zone: From CF1R, climate zone the project was performed for.
- 03 Name of Program Used to Generate Solar Savings Fraction: Enter the name of the program used.
- 04 Version of Software Used to Generate Solar Savings Fraction: Enter the version of the program used.
- 05 Collector Manufacturer: Enter the name of the collector manufacturer.
- 06 Collector Brand: Enter the Brand name of the collector if different than the manufacturer.
- 07 Collector Model Number: Enter the collector model number as listed in the SRCC directory.
- 08 Certification Number: Enter the SRCC Certification Number from the SRCC directory.
- 09 Collector Type: Enter the collector type listed in the SRCC directory.
- 10 Collector Area (sq ft): Enter the listed square footage of the collector as listed in the SRCC directory.
- 11 Collector Rated Efficiency Curve Slope: Enter the slope of the collector listed in the SRCC directory.
- 12 Collector Rated Efficiency Curve Intercept: Enter the intercept of the collector listed in the SRCC directory.
- 13 Number of Collectors: Enter the number of collectors included in the simulation run.
- 14 Collector Fluid: Enter the type of fluid used in the collector (i.e. water, glycol, air).
- 15 Water Heater Storage Volume: Enter the number of gallons of fluid in the primary water heater storage tank.
- 16 Secondary Storage Tank Volume: If applicable, enter the volume of the secondary tank used for solar storage; this may include more than one tank.
- 17 Collector Angle from True North in Degrees: Enter the angle of the collectors from true north used in simulation. Note in calculating the angle be sure to include the regions magnetic declination.
- 18 Collector Slope form Horizontal in Degrees: Enter the slope of the collectors from horizontal as used in the simulation.
- 19 Total Conditioned Floor Area: Data from CF1R.
- 20 Number of Identical Dwelling Units: Enter the number of identical units entered in the calculation.
- 21 Calculated Solar Savings Fraction: Enter the Calculated Solar Fraction using the approved Solar Fraction Calculator.

B. Solar Savings Fraction Calculator Printout

A copy of the solar savings fraction calculator must be attached to this form with submitting for a building permit