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| **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: |  |
| 06 | Collector Brand: |  |
| 07 | Collector Model Number: |  |
| 08 | Certification Number: |  |
| 09 | Collector Type: |  |
| 10 | Collector Area (ft2): |  |
| 11 | Collector Rated Efficiency Curve Slope: |  |
| 12 | Collector Rated Efficiency Curve Intercept: |  |
| 13 | Number of Collectors: |  |
| 14 | Collector Fluid: |  |
| 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: |  |

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

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| **Documentation Author's Declaration Statement** | |
| 1. I certify that this Certificate of Compliance documentation is accurate and complete. | |
| Documentation Author Name: | Documentation Author Signature: |
| Company: | Signature Date: |
| Address: | CEA/ HERS Certification Identification (if applicable): |
| City/State/Zip: | Phone: |
| **Responsible Person's Declaration statement** | |
| I certify the following under penalty of perjury, under the laws of the State of California:   1. The information provided on this Certificate of Compliance is true and correct. 2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer). 3. That the energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations. 4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application. 5. I will ensure that a registered copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a registered copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy. | |
| Responsible Designer Name: | Responsible Designer Signature: |
| Company: | Date Signed: |
| Address: | License: |
| City/State/Zip: | Phone: |

**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

**Solar Fractions Water Heating Calculation for Built up Equipment**

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| **A. General System Information** | | |
| 01 | Water Heating System ID or Name: | <<reference data from CF1R>> |
| 02 | Climate Zone: | <<reference data from CF1R>> |
| 03 | Name of Program Used to Generate Solar Savings Fraction: | <<text (user input)>> |
| 04 | Version of Software Used to Generate Solar Savings Fraction: | <<text (user input)>> |
| 05 | Collector Manufacturer : | <<text (user input)>> |
| 06 | Collector Brand: | <<text (user input)>> |
| 07 | Collector Model Number: | <<text (user input)>> |
| 08 | SRCC Certification Number: | <<text (user input)>> |
| 09 | Collector Type: | <<text (user input)>> |
| 10 | Collector Area (square feet): | <<numeric xxx (user input)>> |
| 11 | Collector Rated Efficiency Curve Slope: | <<User input: Decimal3Places>> |
| 12 | Collector Rated Efficiency Curve Intercept: | << User input: Decimal3Places >> |
| 13 | Number of Collectors: | <<numeric xx (user input)>> |
| 14 | Collector Fluid: | <<text (user input)>> |
| 15 | Water Heater Storage Volume in Gallons: | <<numeric xx,xxx (user input)>> |
| 16 | Secondary Storage Tank Volume in Gallons (if used): | <<numeric xx,xxx (user input)>> |
| 17 | Collector Angle from True North in Degrees: | <<numeric allowed range -180 to 180 (user input)>> |
| 18 | Collector Slope form Horizontal in Degrees: | <<numeric allowed range 0 to 90 (user input)>> |
| 19 | Total Conditioned Floor Area (square feet): | <<reference value from CF1R)>> |
| 20 | Number of Identical Dwelling Units: | <<numeric xxx (user input)>> |
| 21 | Calculated Solar Savings Fraction: | <<numeric x.xx (user input)>> |

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