

CERTIFICATE OF VERIFICATION

Note: This table completed by HERS Registry.

Project Name:	Enforcement Agency:		
Dwelling Address:	Permit Number:		
City and Zip Code:	Permit Application Date:		

A. Design HERS Verified Dwelling Unit Water Heating Systems Information (other than HPWH)

This table reports features of the water heating system(s) other than HPWH system specified on the registered LMCC compliance document for this project.

										-
02	03	04	05	06	07	08	09	10	11	12
Water			# of Like (or					Dwelling	11	2
Heating	Water		Identical)				Central	Unit DHW	10	Drain
System	Heating	Water	Water		Rated	Rated	DHW	System	No	Water
ID or	System	Heater	Heaters in	Fuel	Input	Input	System	Distribution	Compact	Heat
Name	Туре	Туре	System	Туре	Туре	Value	Distribution	Туре	Distrib.	Recovery
						2	0	36		
					1	10		10		
	Water Heating System ID or	Water Heating Water System Heating ID or System	Water Heating Water System Heating Water ID or System Heater	Water# of Like (orHeatingWaterIdentical)SystemHeatingWaterID orSystemHeaterHeaterHeaters in	Water# of Like (orHeatingWaterIdentical)SystemHeatingWaterID orSystemHeaterHeaterHeaters inFuel	Water# of Like (orHeatingWaterIdentical)SystemHeatingWaterWaterID orSystemHeaterHeaters in	Water Heating# of Like (or Identical)# attedSystemHeatingWaterWaterID orSystemHeaterHeaters in	Water Heating# of Like (or Identical)CentralSystemHeatingWaterRatedDHWID orSystemHeaterHeaters inFuelInputInput	Water Heating# of Like (or Identical)B of Like (or Identical)D of Like (or 	Water Heating# of Like (or Identical)# of Like (or Identical)DescriptionDescriptionDescriptionSystemHeatingWaterIdentical)RatedRatedDHWSystemID orSystemHeaterHeaters inFuelInputInputSystemDistribution

A2. Design HERS Verified Dwelling Unit HPWH System Information

This table reports the water heating system(s) that were specified on the registered LMCC compliance document for this project.

01	02	03	04	05	06	07	08	09
Dwelling	Water Heating System ID	Modeled Equipment Make and	# of Like (or Identical) Water Heaters in	une.	Exterior Tank Insulation	Dwelling Unit DHW System Distribution	Compact	Simulated Equipment Make and
Unit Name	or Name	Model	System	Tank Location	R-value	Туре	Distribution	Model

B. Installed HERS Verified Dwelling Unit Water Heating Systems Information

This table reports the water heating system features installed in this project.

01	01	02	03	04	05	06	07	08	09	10	11
	11			# of Like							
	Water			(or					Dwelling		
0	Heating	Water		Identical)					Unit DHW		Drain
Dwelling	System	Heating	Water	Water		Rated	Rated	Central DHW	System		Water
Unit	ID or	System	Heater	Heaters in	Fuel	Input	Input	System	Distribution	Compact	Heat
Name	Name	Туре	Туре	System	Туре	Туре	Value	Distribution	Туре	Distrib.	Recovery



B2. Installed HERS Verified Dwelling Unit HPWH System Information

This table reports the water heating system(s) installed in this project.

WaterModeled# of Like (or Identical)Exterior TankDwelling UnitDwellingEquipmentWaterExterior TankDwelling UnitDwellingSystem IDMake andHeaters in SystemInsulation R- ValueDHW SystemUnit NameModelSystemTank LocationvalueDistribution Type	01	02	03	04	05	06	07	08
	0	Heating System ID	Equipment Make and	Identical) Water Heaters in	Tank Location	Insulation R-	DHW System	Compact Distribution

C. Design HERS Verified Dwelling Unit Water Heating Efficiency Information

This table reports the water heater(s) efficiency features specified on the registered LMCC compliance document for this project. (Not needed for central systems)

01	02	03	04	05	06	07
Water Heating	Heating	Heating		Exterior	Water Heater	10
System ID or	Efficiency	Efficiency	Standby Loss	Insulation	Storage	21
Name	Туре	Value	(%)	R-Value	Volume (gal)	Tank location
				2	.50	
			1	5	61	

D. Installed HERS Verified Dwelling Unit Water Heating Efficiency Information

This table reports the water heater(s) efficiency features installed in this project. (Not needed for central systems)

01	02	03	04	05	06	07
Water Heating	Heating	Heating	Standby	Exterior	Water Heater	
System ID or	Efficiency	Efficiency	Loss	Insulation	Storage	
Name	Туре	Value	(%)	R-Value	Volume (gal)	Tank location
XU 10				C		
	1.	X	11			
08	Compliance Sta	itement	V.	(C)		

E. Installed Water Heater Manufacturer Information

01	02	03
Water Heating		
System ID or Name	Manufacturer	Model Number



HERS VERIFIED INDIVIDUAL DWELLING UNIT HOT WATER SYSTEM DISTRIBUTION CEC-LMCV-PLB-22-H

CALIFORNIA ENERGY COMMISSION

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F. Mandatory Measures for all Domestic Hot Water Distribution Systems

01	Equipment shall meet the app	licable requirements of the Appliance Efficiency Regulations (Section 110.3(b)1).						
02	Unfired Storage Tanks are ins	ulated with an external R-3.5 or combination of R-16 internal and external Insulation. (Section 110.3(c)4).						
03	to one of the exception Plumbing Code. Insulat Piping that penetrates i Piping that penetrates i made with the metal fr Piping installed in interi Piping installed in craw Piping installed in attics	insulated, to the thicknesses required by Table 120.3A, except for those sections of pipe that are subject s below: All domestic hot water piping shall be insulated as specified in Section 609.11 of the California on buried below grade must be installed in a water proof and non-crushable casing or sleeve. raming members shall not be required to have pipe insulation for the distance of the framing penetration. netal framing shall use grommets, plugs, wrapping or other insulating material to assure that no contact is aming. Insulation shall butt securely against all framing members. or or exterior walls that is surrounded on all sides by at least 1 inch (2.5 cm) of insulation. space with a minimum of 1 inches (2.5 cm) of crawlspace insulation above and below. with a minimum of 4 inches (10 cm) of attic insulation on top tightly and all elbows and tees shall be fully insulated.						
04	 Pipe insulation shall fit tightly and all elbows and tees shall be fully insulated. For Gas or Propane Water Heaters: Ensure either a or b are installed (Section 150.0(n)) A designated space at least 2.5 feet by 2.5 feet and 7 feet tall within 3 feet from the water heater A dedicated 125V, 20A electrical receptacle connected to the electric panel with a 120/240V 3 conductor, 10 AWG copper branch circuit, within 3 feet from the water heater and is accessible with no obstructions; The conductor shall be labeled with the word "Spare" on both ends; and A reserved single pole circuit breaker space next to the circuit breaker next to the branch circuit labeled "Future" 240V shall be provided. A condensate drain no more than 2 inches higher than the base on water heater for natural draining A designated space at least 2.5 feet by 2.5 feet and 7 feet tall more than 3 feet from the water heater A dedicated 240 volt branch circuit shall be installed within 3 feet from the designated space. The b branch circuit shall be rated at 30 amps minimum. The blank cover shall be identified as "240V ready"; and The main electrical service panel shall have a reserved space to allow for the installation of a double pole circuit breaker for a future HPWH installation. The reserved space shall be permanently marked as "For Future 240V use"; and Either a dedicated cold water supply, or the cold water supply shall pass through the designated HPWH location just before reaching the gas or propane water heater; and The hot water supply pipe coming out of the gas or propane water heater shall be routed first through the designated HPWH location before serving any fixtures; and The hot and cold water piping at the designated HPWH location shall be exposed and re							
2025	11.	ning without pump assistance.						
05	Verification Status:	 <u>Pass</u> - all applicable requirements are met; or <u>Fail</u> - one or more applicable requirements are not met. Enter reason for failure in corrections notes field below; or <u>All N/A</u> - This entire table is not applicable 						
06	Correction Notes:							

The responsible person's signature on this compliance document affirms that all applicable requirements in this table have been met unless otherwise noted in the Verification Status and the Correction Notes.



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G. HERS-Verified Compact Hot Water Distribution Expanded Credit (CHWDS-H-EX) (RA3.6.5)

For dwelling units with multiple systems, enter the master bath distance and kitchen distance to the closest water heater, and enter the average of the furthest fixture to each water heater.

C	01	02	03	04	05	06	07	08	09
	elling ame	Number of Stories	Master Bath distance of furthest fixture to Water Heater in feet	Kitchen distance from furthest fixture to Water Heater in feet	Furthest Third furthest fixture to Water Heater in feet (Avg for multiple water heaters)	Weighted Distance	Qualification Distance	Design Compactness Factor	Calculated Compactness Factor
10	No ho	t water piping >	1 inch diameter is	allowed.			-Hi		6.
11			eter piping is limit		ess.		0.	1 20	
12	Two a	nd three story b	uildings cannot h	ave hot water d	istribution piping	in the attic, un	less the water he	ater is also located i	n the attic.
13	Eligibl	e recirculating s	ystems must be H	ERS-Verified De	mand Recirculation	on: Manual Cor	ntrol conforming	to RA4.4.17.	
14	Verification Status: Pass - all applicable requirements are met; or Fail - one or more applicable requirements are not met. Enter reason for failure in corrections notes field below; or All N/A - This entire table is not applicable 							ions notes field	
15	Corre	ction Notes:	·		170	20	3		

The responsible person's signature on this compliance document affirms that all applicable requirements in this table have been met unless otherwise noted in the Verification Status and the Correction Notes.

H. Compact Hot Water Distribution (CHWDS) (RA4.4.6)

For dwelling units with multiple systems, enter the master bath distance and kitchen distance to the closest water heater, and enter the average of the furthest fixture to each water heater.

01	02	03	04	05	06	07	08	09
Dwelling Name	Number of Stories	Master Bath distance of furthest fixture to Water Heater in feet	Kitchen distance from furthest fixture to Water Heater in feet	Furthest Third furthest fixture to Water Heater in feet (Avg for multiple water heaters)	Weighted Distance	Qualification Distance	Design Compactness Factor	Calculated Compactness Factor
0	0							

The responsible person's signature on this compliance document affirms that all applicable requirements in this table have been met.



I. HERS-Verified Drain Water Heat Recovery System (DWHR-H)

DWHR devices shall comply with these requirements.

Design DWHR S	System Info	rmation							
01			02		03		04		
System ID/	'Name	Rate	d Effectiveness	Installatio	n Configuration	Percent of shower served by the DWHR device			
Installed DWH	R System Inf	ormation							
05		06	07	08	09	10	11		
System Name/ID			Model #	Rated effectiveness	Installation Configuration	Percent of shower served by the DWHR device	DWHR System Certified by CEC (Yes/No)		
12						It the minimum, recover Dective shower(s) or the v			
13		vers located				m shall, at the minimum either back to all the res	the second se		
14				•	he rated slope. Slop lus or minus 1 degree		nimum lengthwise slope		
15		ion Status:			 Pass - all applicable requirements are met; or Fail - one or more applicable requirements are not met. Enter reason for failure in corrections notes field below; or All N/A - This entire table is not applicable 				
16	Correctio	on Notes:		0	-	-			

The responsible person's signature on this compliance document affirms that all applicable requirements in this table have been met unless otherwise noted in the Verification Status and the Correction Notes.

J. HERS-Verified Pipe Insulation Credit Requirements (PIC-H) (RA3.6.3)

Systems that utilize this distribution type shall comply with these requirements.

01	HERS rater shall perform a visual inspection th	t all hot water piping comply with the insulation requirements in 150.0(J).
	(O) (A)	Pass - all applicable requirements are met; or
02	Verification Status:	<u>Fail</u> - one or more applicable requirements are not met. Enter reason for failure
02	vermeation status.	in corrections notes field below; or
	11. 104	All N/A - This entire table is not applicable
03	Correction Notes:	

The responsible person's signature on this compliance document affirms that all applicable requirements in this table have been met unless otherwise noted in the Verification Status and the Correction Notes.



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K. HERS-Verified Parallel Piping Requirements (PP-H) (RA3.6.4)

Systems that utilize this distribution type shall comply with these requirements.

01	Each central manifold has 5 feet or less of pipe between manifold and water heater.		
02	For manifolds that include valves, the manifold must be readily accessible in accordance with the plumbing code.		
03	Hot water distribution system piping from the manifold to the fixtures and appliances must take the most direct path. For example, piping from a second story manifold cannot supply the first floor.		
04	The hot water distribution piping must be separated by at least 2 inches from any other hot water supply piping, and at least 6 inches from any cold water supply piping. Alternatively, the hot water supply piping must be insulated to the thicknesses shown in TABLE 120.3-A.		
04	,,	natively, the hot water supply piping must be insulated to the thicknesses shown in TABLE	
04	,,	 natively, the hot water supply piping must be insulated to the thicknesses shown in TABLE Pass - all applicable requirements are met; or Fail - one or more applicable requirements are not met. Enter reason for failure in corrections notes field below; or All N/A - This entire table is not applicable 	

The responsible person's signature on this compliance document affirms that all applicable requirements in this table have been met unless otherwise noted in the Verification Status and the Correction Notes.

L. Parallel Piping Requirements (PP) (RA4.4.4)

Systems that utilize this distribution type shall comply with these requirements.

01	Each central manifold has 15 feet or less of pipe between manifold and water heater
02	For manifolds that include valves, the manifold must be readily accessible in accordance with the plumbing code.
03	Hot water distribution system piping from the manifold to the fixtures and appliances must take the most direct path. For instance, piping from a second story manifold cannot supply the first floor
04	The hot water distribution piping must be separated by at least 2 inches from any other hot water supply piping, and at least 6 inches from any cold water supply piping. Alternatively, the hot water supply piping must be insulated to the thicknesses shown in TABLE 120.3-A.

The responsible person's signature on this compliance document affirms that all applicable requirements in this table have been met.

M. Point of Use Requirements (POU) (RA4.4.5)

Systems that utilize this distribution type shall comply with these requirements.

0	All hot water supply pipe run lengths are equal to or less than the maximum values shown below, based on the pipe diameter. If a combination of piping is used in a single run, then one half the allowed length of each size is the maximum installed length. The maximum allowed length of piping for the longest run terminating in:
01	3/8 inch - For only one pipe size - max length allowed is 15 feet For combination pipe sizes the max allowed length of 3/8-inch piping is 7.5 feet, of ½ inch piping is 5 feet, and ¾ inch piping is 2.5 feet.
(½ inch - For only one pipe size – max length allowed is 10 feet For combination pipe sizes the allowed length of ½-inch piping is 5 feet, and ¾ inch piping is 2.5 feet.
	¾ inch - For only one pipe size = 5 feet

The responsible person's signature on this compliance document affirms that all applicable requirements in this table have been met.



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N. Mandatory Requirements for all Recirculation Systems (RA4.4.7)

Systems that utilize this distribution type shall comply with these requirements.

01	A check valve located between the recirculation pump and the water heater to prevent unintentional recirculation.
02	Piping must take most direct path between water heater and fixtures.
03	Insulation is not required on the cold water line when it is used as the return.
04	If more than one loop installed each loop shall have its own pump and controls.

The responsible person's signature on this compliance document affirms that all applicable requirements in this table have been met.

O. Recirculation Non-Demand Controls Requirements (R-ND) (RA4.4.8)

Systems that utilize this distribution type shall comply with these requirements.

01 The active control shall be either: timer, temperature, or time and temperature. Timers shall be set to less than 24 hours. The temperature sensor shall be connected to the piping and to the controls for the pump.

The responsible person's signature on this compliance document affirms that all applicable requirements in this table have been met.

P. Demand Recirculation Manual Control (R-DRmc) (RA4.4.9)/Sensor Control (RDRsc) (RA4.4.10) Requirements

Systems that utilize this distribution type shall comply with these requirements.

System	is that utilize this distribution type shall comply with these requirements.	
01	The system operates "on-demand", meaning that the pump begins to operate shortly before or immediately after hot water draw begins, and stops when the return water temperature reaches a certain threshold value. For Demand Recirculation Manual Control, the pump shall be turned on using a manual switch system. For Demand Recirculation Sensor Control, the pump shall be turned on using a sensor system.	
02	The controls shall be located in the kitchen, bathroom, and any hot water fixture location that is at least 20 feet from the water heater.	
03	Manual controls may be active by wired or wireless mechanisms.	
04	Sensor Controls may be activated by wired or wireless mechanisms, including buttons, motion sensors, door switches and flow switches. Each control shall have standby power of 1 Watt or less.	
05	 Pump and control placement shall meet one of the following criteria: When a dedicated return line has been installed the pump, controls and thermo-sensor are installed at the end of the supply portion of the recirculation loop; or The pump and controls are installed on the dedicated return line near the water heater and the thermo-sensor is installed in an accessible location as close to the end of the supply portion of the recirculation loop as possible; or When the cold water line is used as the return, the pump, demand controls and thermo-sensor shall be installed in an accessible location at the end of supply portion of the hot water distribution line (typically under a sink). 	
06	After the pump has been activated, the controls shall allow the pump to operate until the water temperature at the thermo-sensor rises to one of the following values: • Not more than 10°F (5.6°C) above the initial temperature of the water in the pipe • Not more than 102°F (38.9°C).	
07	Controls shall limit operation to no more than 5 minutes following activation.	

The responsible person's signature on this compliance document affirms that all applicable requirements in this table have been met.



Q. HERS-Verified Demand Recirculation Manual Control (RDRmc-H) (RA3.6.6)/Sensor Control (RDRsc-H) (RA3.6.7) Requirements

Systems that utilize this distribution type shall comply with these requirements.

0,000	y sterno trat danze and distribution type shar compty with these requirements.		
01	HERS rater shall perform a visual inspection to verify that the demand pump, manual/sensor controls and thermo-sensor are present and operating properly consistent with the applicable requirements of RA4.4.9 and RA4.4.10		
02	Verification Status:	 <u>Pass</u> - all applicable requirements are met; or <u>Fail</u> - one or more applicable requirements are not met. Enter reason for failure in corrections notes field below; or <u>All N/A</u> - This entire table is not applicable 	
03	Correction Notes:		

The responsible person's signature on this compliance document affirms that all applicable requirements in this table have been met unless otherwise noted in the Verification Status and the Correction Notes.

R. Determination of HERS Verification Compliance

All applicable sections of this document shall indicate compliance with the specified verification protocol requirements in order for this Certificate of Verification as a whole to be determined to be in compliance.

For Not Vallers provider



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DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

1. I certify that this Certificate of Verification documentation is accurate and complete.

1. I certify that this Certificate of Verification documentation is accurate and complete.		
Documentation Author Name:	Documentation Author Signature:	
Company:	Date Signed:	
Address:	CEA/HERS Certification Information (if applicable):	
City/State/Zip:	Phone:	

RESPONSIBLE PERSON'S DECLARATION STATEMENT

- 2. I certify the following under penalty of perjury, under the laws of the State of California:
 - 1. The information provided on this Certificate of Verification is true and correct.
 - 2. I am the certified HERS Rater who performed the verification identified and reported on this Certificate of Verification (responsible rater).
 - 3. The installed features, materials, components, manufactured devices, or system performance diagnostic results that require HERS verification identified on this Certificate of Verification comply with the applicable requirements in Reference Appendices RA2, RA3, and the requirements specified on the Certificate of Compliance for the building approved by the enforcement agency.
 - 4. The information reported on applicable sections of the Certificate(s) of Installation (LMCI) signed and submitted by the person(s) responsible for the construction or installation conforms to the requirements specified on the Certificate(s) of Compliance (LMCC) approved by the enforcement agency.
 - 5. I understand that a registered copy of this Certificate of Verification shall be posted, or made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections, and I will take the necessary steps to ensure this requirement is accomplished.
 - 6. I understand that a registered copy of this Certificate of Verification is required to be included with the documentation the builder provides to the building.

BUILDER OR INSTALLER INFORMATION AS SHOWN ON THE CERTIFICATE OF INSTALLATION

Company Name (Installing Subcontractor, General Contractor, or Builder/Owner):		
Responsible Builder or Installer Name:	CSLB License:	

HERS PROVIDER DATA REGISTRY INFORMATION

Sample Group Number (if applicable):	Dwelling Test Status in Sample Group (if applicable):

HERS RATER INFORMATION

HERS Rater Company Name:	
Responsible Rater Name:	Responsible Rater Signature:
Responsible Rater Certification Number w/ this HERS Provider:	Date Signed:

For assistance or questions regarding the Energy Standards, contact the Energy Hotline at: 1-800-772-3300

LMCV-PLB-22-H User Instructions

A. Design HERS Verified Central Water Heating Systems Information

This table reports the water heating system features that were specified on the registered LMCC compliance document for this project. For information only and requires no user input.

A1. Design HERS Verified Dwelling Unit HPWH System Information

This table reports the water heating system features that were specified on the registered LMCC compliance document for this project. This section is for information/verification purposes only and requires no user input.

B. Installed HERS Verified Dwelling Unit Water Heating Systems Information

This table reports the water heating system information that is being installed. Require one line for each system.

- 1. Dwelling Unit Name Reference information from LMCC.
- 2. Water Heating System ID or Name Reference information from LMCC.\\
- 3. Water Heating System Type Reference information from LMCC. The different kinds of water heating system type are DHW, or Combined Hydronic.
- Water Heater Type Information from LMCC. The different kinds of water heaters are Large/Commercial Storage, Small/Consumer Storage, Residential-Duty Commercial Storage, Heat Pump, Boiler, Large/Commercial Instantaneous, Small/Consumer Instantaneous, Residential-Duty Commercial Instantaneous or Indirect.
- 5. # of Like (or Identical) Water Heaters in system Reference information from LMCC.
- 6. Fuel Type Reference information from LMCC. The different kinds of fuel types are natural gas, propane, oil, or electricity.
- 7. Rated Input Type Reference information from LMCC. For natural gas, propane and oil fuel type the input type is Btu/hr. For electric the input type is kW.
- 8. Rated Input Value User input. Numerical value of the rated input. Must be equal to or less than value indicated on the LMCC.
- 9. Central DHW System Distribution Reference information from LMCC.
- 10. Dwelling Unit DHW System Distribution Type Reference information from LMCC.
- 11. Compact Distribution Reference information from LMCC.
- 12. Drain Water Heat Recovery Reference information from LMCC.

B2. Installed HERS Verified Dwelling Unit HPWH System Information

This table reports the water heating system information that is being installed. Require one line for each installed water heater. Not applicable for central systems.

- 1. Dwelling Unit Name Reference information from Table A2.
- 2. Water Heating System ID or Name Reference information from Table A2. AFUE, UEF and Thermal Efficiency.
- 3. Modeled Equipment Make and Model User input must be equal to the value indicated on Table C as default and allow user to override with an equivalent system based on the simulated equipment in Table A2.
- 4. # of Like (or Identical) Water Heaters in System Reference information from Table A2.

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- 5. Tank Location User input. Must be equal to value indicated in Table B2.
- 6. Exterior Tank Insulation R-value User input. Must be equal to or higher than value indicated in Table A2.
- 7. Dwelling Unit DHW System Distribution Type Reference information from Table A2.
- 8. Compact Distribution Reference information from Table A2.

C. Design HERS Verified Dwelling Unit Water Heating Efficiency Information

This table reports the water heating system features that were specified on the registered LMCC compliance document for this project. For information only and requires no user input.

D. Installed HERS Verified Dwelling Unit Water Heating Efficiency Information

This table reports the water heating system information that is being installed. Require one line for each central system.

- 1. Water Heating System ID or Name Reference information from LMCC
- 2. Heating Efficiency Type Reference information from LMCC. Different efficiency types are Energy Factor, AFUE, UEF and Thermal Efficiency.
- 3. Heating Efficiency Value User input. Numerical value of the Heating Efficiency. Must be equal to or higher efficiency than value indicated on the LMCC.
- 4. Standby Loss User input. Must be equal to or less than value indicated on the LMCC. Value may be N/A if LMCC value is N/A.
- 5. Exterior Insulation R-Value User input. Must be equal to or higher than value indicated on the LMCC. Value may be N/A if LMCC value is N/A.
- 6. Water Heater Storage Volume (gal) User input. Value may be N/A if water heater type is instantaneous with zero storage.
- 7. Tank location User input. Must be equal to system type indicated on the LMCC.

E. Installed Water Heater Manufacturer Information

This table reports the manufacturer information of the installed water heater(s). Require one line for each installed water heater

- 1. Water Heating System ID or Name Reference information from LMCC.
- 2. Manufacturer User input. Enter the name of the water heater manufacturer.
- 3. Model Number User input. Enter the model number of the water heater.

F. Mandatory Measures for all Domestic Hot Water Distribution Systems

This table lists the requirements for all DHW systems. HERS rater must ensure all the requirements in this table are met.

G. HERS-Verified Compact Hot Water Distribution Expanded Credit and

H. Compact Hot Water Distribution Basic

If performance compliance is used, this table lists the values used in the performance calculation and require no user input.

If prescriptive compliance is used, fill out this table

- 1. Reference information from LMCC
- 2. Enter the Master Bath distance of furthest fixture to Water Heater in feet. For multiple water heaters, enter the distance to the closest water heater.

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- 3. Enter the Kitchen distance from furthest fixture to Water Heater in feet. For multiple water heaters, enter the distance to the closest water heater.
- 4. Enter Furthest Third fixtures from fixture to Water Heater in feet. For multiple water heaters, enter the average of the furthest distance of each water heater.
- 5. Calculated value no user input required
- 6. Calculated value no user input required

I. HERS-Verified Drain Water Heat Recovery System

This table lists the requirements for all central recirculation systems. HERS rater must ensure all the llectruith 3 requirements in this table are met.

- 1. Reference information from LMCC.
- 2. Reference information from LMCC.
- 3. Reference information from LMCC.
- 4. Reference information from LMCC.
- 5. Reference information from LMCC.
- Drain Water Heat Recovery Manufacturer's name- Enter the name of the Manufacturer.
- 7. Drain Water Heat Recovery Manufacturer's model number Enter the Model number.
- 8. Rated Effectiveness' Enter the rated effectiveness of the DWHR device.
- 9. Installation Configuration Enter type of configuration. Available options are Equal flow, unequal to shower, and unequal to water heater
- 10. Percent of shower served by the DWHR device Enter the percent of showers served by this DWHR device.
- 11. DWHR System Certified by CEC Enter "Yes" if certified or else enter "No

J. HERS-Verified Pipe Insulation Credit Requirements

This table only applies to systems indicated as HERS-Verified Pipe Insulation Credit. In addition to the mandatory requirements in Table F, the HERS rater must ensure the requirements in this table are met.

K. HERS-Verified Parallel Piping Requirements

This table only applies to systems indicated as **HERS-Verified Parallel Piping.** In addition to the mandatory requirements in Table F, the HERS rater must ensure the requirements in this table are met.

L. Parallel Piping Requirements

This table only applies to systems indicated as **Parallel Piping.** In addition to the mandatory requirements in Table F, the installer must ensure the requirements in this table are met.

M. Point of Use Requirements

This table only applies to systems indicated as **Point of Use** In addition to the mandatory requirements in Table F, the installer must ensure the requirements in this table are met.

N. Mandatory Requirements for all Recirculation Systems

The requirements of this table apply to all recirculation systems listed below.

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HERS Verified Individual Dwelling Unit Hot Water System Distribution	(Page 4 of 4)

O. Recirculation Non-Demand Controls Requirements

This table only applies to systems indicated as **Recirculation Non-demand controls.** In addition to the mandatory requirements in Table F and N, the installer must ensure the requirements in this table are met.

P. Demand Recirculation Manual Control/Sensor Control Requirements

This table only applies to systems indicated as **Demand Recirculation Manual Control, Demand Recirculation Senor Control, HERS-Verified Demand Recirculation Manual Control** or **HERS-Verified Demand Recirculation Senor Control.** In addition to the mandatory requirements in Table F and N, the installer must ensure the requirements in this table are met.

Q. HERS-Verified Demand Recirculation Manual Control (RDRmc-H) (RA3.6.6)/Sensor Control (RDRsc-H) (RA3.6.7)

This table only applies to systems indicated as **HERS-Verified Demand Recirculation Manual Control** or **HERS-Verified Demand Recirculation Senor Control**. In addition to the mandatory requirements in Table F and N, the HERS rater must ensure the requirements in this table are met.

R. Determination of HERS Verification Compliance

1. This field is filled out automatically. Compliance requires that all individual criteria pass.

Documentation Declaration Statements

- 1. The person who prepared the LMCV will sign and complete the fields for their name, company (if applicable), address, phone number, certification information (if applicable), date and signature.
- 2. The person who is assuming responsibility for the project being built to comply with Title 24, Part 6, will complete the fields (if applicable) for their company, responsible builder or installer name, CSLB license number, sample group number, dwelling test status in sample group, HERS Rater company name, HERS Rater name, HERS Rater signature, HERS Rater certification number and date signed.