



What to Check on a CF1R-PRF-01 for Building Departments

Title of table shown as is on the CF1R

X	General Info	Notes
	Confirm watermark, registration date & registration number from CalCERTS or CHEERS match on all pages. Date stamps at bottom indicate when the model was run, when the project was registered in a HERS Registry, and when the report was generated	
	Confirm the following from the General Info table:	
	Box 08 Climate Zone- check against plan set & correct climate zone for the project address.	
	Box 12 Project Scope- check against permit scope	
	Box 18 Conditioned Floor Area- must be close to plans. Margin of error is up to Building Department to determine but Energy Modeling is supposed to use CFA to the exterior of wall, often creating a discrepancy between the architectural FA.	
	Boxes 11 (dwelling units) and 13 (bedrooms) dictate ventilation requirements and are important- check against plan set	
	Box 15 Number of Stories- check against plan set	
	Box 22 Is Natural Gas available- the definition of gas availability for the project, is if a gas service line can be connected to the site without a gas main extension - If Natural Gas is not available is selected, confirm since this changes the project baseline.	

X	Energy Design Rating	Notes
	Confirm the project complies	
	Minimum PV and kW DC size- check that the roof and/or electrical plan shows a system designed to meet said minimum kWdc.	
	Battery size (if applicable)- check with plan set	

X	HERS Feature Summary and Required Special Features (many HERS features are not relevant at the plan check stage)	Notes
	HERS distribution for all pipes insulated or compact plumbing- R7.7 pipe insulation needs to be on the plans. If not installed, the T24 calculations will need to be modified.	

X	Opaque Surfaces	Notes
	Column 01 Wall Name- ignore, wall name is manually entered	
	Column 03 Assembly Construction Name- ignore	
	Column 04 Azimuth- Must match plans. Use best sampling practices to compare with site plans	

X	Attic/Cathedral Ceiling	Notes
	Column 03 Attic Type- ventilated attic is default. If unventilated attic, insulation must be shown on underside or on top of roof deck to bring attic into thermal envelope. Confirm with plan set.	
	Column 04 Roof Slope- if a high sloped roof ($\geq 2:12$) is selected, confirm on plan set	
	Columns 05 and 06 Reflectance and Emittance- 0.1 reflectance and 0.85 emittance are default. If any other value, confirm CRRC specifications for cool roof	
	Column 07 Radiant Barrier- check with plan set if claiming	
	Column 08 Cool Roof- if yes, confirm with Cool Roof Rating Council material specifications	

X	Fenestration/Glazing	Notes
	If wall azimuth from opaque surfaces was confirmed correct, then Columns 03-05 will be correct;	
	Columns 10 and 12 U-Factor and SHGC- SHGC > 0.5 and/or U-Factor < 0.2, is uncommon, confirm with window specifications a. U Factor should be less than or equal to what is reported. SHGC should be as close to listed value as possible. b. Inspectors - NFRC U-Factor needs to be \leq the CF1R values. SHGC needs to be as close to CF1R value as possible	
	Column 09 – Area should match plans	

X	Opaque Doors	Notes
	Column 04 U-Factor- If ≤ 0.2 U-Factor, confirm with design specifications as insulated doors give credit	

X	Slab Floors	Notes
	Column 04 Perimeter- if abnormally small or 0 linear feet, confirm because this might be claiming a credit that isn't real. Rejection will require model to be rerun.	
	Column 08 Heated- if yes, verify hydronic system on plan set	
	Columns 05 & 06 Edge Insul. R-value and Depth – If the slab floor is heated, verify that slab insulation meets mandatory requirements	

X	Opaque Surfaces Construction	Notes
	<p>Columns 04-06 Framing, Total Cavity R Value, and Interior/Exterior Continuous R Value- confirm with plan set</p>	
	<p>If time available:</p> <ul style="list-style-type: none"> a. Column 03 - Confirm wood or metal building b. Column 02 - Confirm roof insulation locations, attics will have two entries for ceiling and below roof decking, check against plan set 	

X	Opaque Surfaces HERS Verification Table	Notes
	<p>This is a HERS “cheat sheet”. Required/not required are only options. If required, the correct HERS forms needs to be collected by inspector.</p>	
	<p>Inspectors – If QII is required, ensure inspection occurs before drywall installation</p>	
	<p>Inspectors – HERS Testing verification can also be helped by the PSR document</p>	

X	Water Heating	Notes
	<p>Water Heating Systems- verify system on plan set</p> <ul style="list-style-type: none"> a. Column 03 Distribution System- if there is a recirculation system, confirm it’s control type on the plan set matches the selected on the CF1R. 	
	<p>Water Heater Specifications</p> <ul style="list-style-type: none"> a. Column 02 Heat Element Type- confirm on plan set. If heat pump, confirm location- a unit located indoors but drawing air from the outdoors is NOT located in conditioned space. Credit is given for locating the unit indoors. b. Column 03 Tank Type – Confirm unit specification matches selected type. c. Column 06 Energy Factor or Efficiency. Inspectors - installed efficiency must be \geq efficiency listed or model must be rerun. Ideally this is confirmed at design. 	
	<p>HERS Verification- If compact distribution, confirm on plan set, as this is very difficult to achieve in single family residences.</p>	

X	Space Conditioning Systems	Notes
	<p>HVAC Specifications- all values need to be confirmed per plan set as soon as possible. Minimum values must be met and the HERS verification will confirm in-field changes/accuracy.</p>	

X	HVAC Distribution Systems	Notes
	Column 02 Type, 06 Duct Supply Location, and 07 Duct Return Location must be confirmed with plan set. Double check- ducts in attic does not usually mean they are in conditioned space	
	Column 03 Duct Design Verified- If yes, confirm the duct design in the plan set matches the T24 input design, as there is a credit available but difficult to achieve	
	HERS Verification not relevant at plan check stage	

X	HVAC Fan Systems	Notes
	Column 03 HERS Rater must verify watt/cfm rating	

X	IAQ Fans	Notes
	Column 02 IAQ CFM- Confirm that of the system design ventilation meets or exceeds the CFM Minimum shown here	
	Column 04 IAQ Fan Type- confirm if the proposed system is balanced or default (continuous exhaust). If balanced, confirm system with plan set	
	Column 05 IAQ Recovery Effectiveness- confirm with spec sheet. Anything above high 80s value should be double checked, as these systems are expensive and rarely used	