

MAXIMUM RATED TOTAL COOLING CAPACITY

CEC-CF-4R-MECH-27 (Revised 08/09)

CALIFORNIA ENERGY COMMISSION



CERTIFICATE OF FIELD VERIFICATION AND DIAGNOSTIC TESTING		CF-4R-MECH-27
Maximum Rated Total Cooling Capacity		(Page 1 of 4)
Site Address:	Enforcement Agency:	Permit Number:

Maximum Rated Total Cooling Capacity (MRTCC) Compliance Credit

Procedures for calculating the Maximum Rated Total Cooling Capacity (MRTCC) compliance credit and Electrical Input exception are given in Reference Residential Appendix RA1. The value is calculated by the compliance software and given on the Certificate of Compliance (CF-1R). Compliance with this credit requires that the installed space conditioning system must have a cooling capacity rating at ARI conditions that is equal or less than the MRTCC compliance credit value. The system must also meet the HERS verification requirements for duct leakage, and prescriptive cooling coil airflow compliance credits, and if the Electrical Input Exception is utilized, the EER must be verified. As many as 4 systems in the dwelling can be documented for compliance using this form. Attach an additional form(s) for any additional systems in the dwelling as applicable.

1	System Name or Identification/Tag			
2	System Location or Area Served			
3a	ARI Rated Total Cooling Capacity of the installed system (Btu/hr)			
3b	Sum of the ARI Rated Total Cooling Capacities of multiple systems installed in the dwelling (Btu/hr), if applicable.			
Note: MRTCC credit may be calculated for the whole dwelling, or for individual cooling systems in the dwelling. If the MRTCC target value from the CF-1R is for the entire dwelling, and there are multiple cooling systems installed in the dwelling, then the sum of ARI Rated Cooling Capacities of the installed cooling systems must be calculated and entered in row 3b.				
4a	MRTCC target value from the CF-1R (Btu/hr) – if for individual systems			
4b	MRTCC target value from the CF-1R (Btu/hr) – if total for entire dwelling			
5	If the applicable row 3 value is less than or equal to the applicable row 4 value, the unit complies. If the unit complies enter Pass			

Electrical Input Exception for MRTCC compliance credit

Electrical Input Exception for MRTCC compliance credit allows the installed rated total cooling capacity to exceed the MRTCC target value for compliance credit if the electrical input of the oversized cooling system is less than or equal to the electrical input of a standard cooling system. For buildings with more than one cooling system, the proposed electrical input is the sum of the values for each system.

1	System Name or Identification/Tag			
2	System Location or Area Served			
6	ARI Rated EER of the installed unit (Btu/Watt-hr)			
7a	Calculate Proposed Electrical Input ⁷			
7b	Sum of the Proposed Electrical Input values for entire multiple systems installed in the dwelling (Watt), if applicable.			
8a	Calculate Standard Total Electric Input ⁸ (Watt) – if for individual systems			
8b	Calculate Standard Total Electric Input ⁸ (Watt) – if total for entire dwelling			

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9	If the applicable row 7 value is less than or equal to the applicable row 8 value, the unit complies. If the unit complies enter Pass				
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SAMPLE FORM
 FOR INFORMATION ONLY
 NOT FOR SUBMITTAL

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Notes:

7) Proposed Electrical Input (Watt) = ARI Rated Total Cooling Capacity (Btu/hr) / ARI Rated EER (Btu/Watt-hr) if the proposed Air Conditioner is listed in the ARI database with a specified furnace or air handler and that furnace or air handler is to be installed.

Otherwise, if the proposed Air Conditioner is listed in the ARI database without a furnace or air handler, the proposed electrical input is either:

Proposed Electrical Input (Watt) = ARI Rated Total Cooling Capacity (Btu/hr) / ARI Rated EER (Btu/Watt-hr) + ARI Rated Total Cooling Capacity (Btu/hr) x .0048 (Watt-hr/Btu);

or

Proposed Electrical Input (Watt) = ARI Rated Total Cooling Capacity (Btu/hr) / ARI Rated EER (Btu/Watt-hr) - ARI Rated Total Cooling Capacity (Btu/hr) x .0122 (Watt-hr/Btu) + The measured fan power (Watt); where the measured fan power is determined at an airflow equal to or greater than 350 CFM per ton using the procedure described in RA3.3 of the Residential Appendices

8) Standard Total Electric Input (Watt) = MRTCC target from the CF-1R (Btu/hr) / 10 (Btu/Watt-hr)

- Systems must meet the Cooling Coil Airflow HERS verification requirement in order to receive credit for MRTCC.
- Systems must meet the Duct Sealing HERS verification requirements in order to receive credit for MRTCC.
- Systems must meet the HERS verification requirement for EER if the Electrical Input Exception is utilized to comply with the MTRCC compliance credit

DECLARATION STATEMENT

- I certify under penalty of perjury, under the laws of the State of California, the information provided on this form is true and correct.
- I am the certified HERS rater who performed the verification services identified and reported on this certificate (responsible rater).
- The installed feature, material, component, or manufactured device requiring HERS verification that is identified on this certificate (the installation) complies with the applicable requirements in Reference Residential Appendices RA2 and RA3 and the requirements specified on the Certificate(s) of Compliance (CF-1R) approved by the local enforcement agency.
- The information reported on applicable sections of the Installation Certificate(s) (CF-6R), signed and submitted by the person(s) responsible for the installation conforms to the requirements specified on the Certificate(s) of Compliance (CF-1R) approved by the enforcement agency.

Builder or Installer information as shown on the Installation Certificate (CF-6R)		
Company Name: (Installing Subcontractor or General Contractor or Builder/Owner)		
Responsible Person's Name:	CSLB License:	
HERS Provider Data Registry Information		
Sample Group # (if applicable):	<input type="checkbox"/> tested/verified dwelling	<input type="checkbox"/> not-tested/verified dwelling in a HERS sample group
HERS Rater Information		
HERS Rater Company Name:		
Responsible Rater's Name	Responsible Rater's Signature	

Registration Number: _____ Registration Date/Time: _____ HERS Provider: _____
 2008 Residential Compliance Forms August 2009

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Site Address:	Enforcement Agency:	Permit Number:
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Responsible Rater's Certification Number w/ this HERS Provider:	Date Signed:
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