

CALIFORNIA ENERGY COMMISSION

1516 NINTH STREET
SACRAMENTO, CA 95814-5512
www.energy.ca.gov

**Registered Compliance Documentation**

As required by the 2008 Building Energy Efficiency Standards, all compliance documentation for low-rise residential buildings requiring HERS field verification shall be registered starting October 1, 2010. To ensure compliance with this regulation, please follow these guidelines:

- Look for and review an electronically signed and registered Certificate(s) of Compliance (CF-1R) submitted with the building plans (for newly constructed buildings and additions) or with the building permit application (for alterations). A registered CF-1R will have a HERS Provider's watermark and a unique 12-digit registration number followed by 13 zeros located at the bottom of each page (see registration number guide and example registered CF-6R on the following pages). This number is assigned electronically to compliance documents by a HERS Provider. You may verify that any registered compliance document is valid by searching for the electronic version of the document on the appropriate HERS Provider's website using the document's registration number. If the submitted CF-1R does not exactly match the version posted on the Provider's website, or if there is no electronic version available, then its validity should be questioned.
- Look for and review an electronically signed and registered Installation Certificate(s) (CF-6R) posted by the installing contractor at the building site. A registered CF-6R will have a unique 21-digit registration number followed by four zeros located at the bottom of each page. The first 12 digits of the number will match the registration number of the associated CF-1R. If the CF-6R posted at the building site does not exactly match the version posted on the appropriate Provider's website, or if there is no electronic version available, then its validity should be questioned.
- At final inspection, look for and review an electronically signed and registered Certificate(s) of Field Verification and Diagnostic Testing (CF-4R) posted at the building site by a certified HERS rater. A registered CF-4R will have a unique 25-digit registration number located at the bottom of each page. The first 20 digits of the number will match the registration number of the associated CF-6R. If the CF-4R posted at the building site does not exactly match the version posted on the appropriate Provider's website, or if there is no electronic version available, then its validity should be questioned.
- At final inspection, verify that the work listed on the CF-1R has actually been completed and that the installed equipment matches what is listed on the CF-6R posted at the building site.

To combat fraud, the California Energy Commission recommends that building department personnel use the HERS Providers' websites to perform random verification checks of registered compliance documents. (See HERS Providers' website information on back.)

Registration Number Guide

1	provider (1=CalCERTS; 2=CalCERTS; 3=CBPCA)
1	year (eg 3rd digit of year 2010)
0	year (eg 4th digit of year 2010)

2	CF-1R Type (N=new residential, A=alteration residential, D=addition residential)
0	numeric (sequential 0 through 9)
0	numeric (sequential 0 through 9)
0	numeric (sequential 0 through 9)
7	numeric (sequential 0 through 9)
3	numeric (sequential 0 through 9)
2	numeric (sequential 0 through 9)
1	numeric (sequential 0 through 9)
0	Revision Level (alpha only: A=first issuance; then sequential B through Z)

9,999,999 numbers + 0

CF-1R

M	CF-6R Type (E=envelope, L=lighting, M=mechanical)
2	CF-6R Type (first numeric digit eg "2" from the mech-21)
1	CF-6R Type (second numeric digit eg "1" from the mech-21)
0	numeric (sequential 0 through 9)
0	numeric (sequential 0 through 9)
0	numeric (sequential 0 through 9)
5	numeric (sequential 0 through 9)
2	numeric (sequential 0 through 9)
A	Revision Level (alpha only: A=first issuance; then sequential B through Z)

99,999 numbers

CF-6R

use 000000000 for

CF-1R

documents

M	CF-4R Type (L=lighting, M=mechanical)
2	CF-4R Type (first numeric digit eg "2" from the mech-21)
1	CF-4R Type (second numeric digit eg "1" from the mech-21)
C	Revision Level (alpha only: A=first issuance; then sequential B through Z)

CF-4R

use 0000 for

CF-1R and CF-6R

documents

Note: Only capitalized alpha digits are used, to avoid confusion with the number Zero "0", the letter "O" is not used, and to avoid confusion with the number One "1", the letter "I" is not used.

HERS Providers

Approved for Newly Constructed Buildings, Alterations, and New Solar Homes Partnership Programs

CalCERTS – www.calcerts.com

CHEERS – www.cheers.org

Approved for Alterations Only

CBPCA – www.cbPCA.com

Example Registered CF-6R from CalCERTS

INSTALLATION CERTIFICATE CF-6R-MECH-20-HERS Duct Leakage Test - Completely New or Replacement Duct System (Page 1 of 2)

Site Address: 20400 Via Sansovino, Northridge CA 91324 (System 1)	Enforcement Agency: County of Los Angeles	Permit Number: 09010-20000-01587
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Enter the Duct System Name or Identification/Tag: **System 1**

Enter the Duct System Location or Area Served: **LIVING**

Note: Submit one Installation Certificate for each duct system that must demonstrate compliance in the dwelling.

This certificate is required for compliance for completely new duct systems installed in new dwelling construction, and also for completely new or replacement duct systems in existing dwellings. For existing dwellings, a completely new or replacement duct system can also include existing parts of the original duct system (e.g., register boots, air handler, coil, plenums, etc.) if those parts are accessible and they can be sealed.

Duct Leakage Diagnostic Test - completely new or replacement duct system

Enter a value for the Allowed Leakage (CFM) for the duct system leakage verification. The value entered must be the VLLDCS criteria or one of the three calculated leakage rates described below.

Verified Low Leakage Ducts in Conditioned Space (VLLDCS) Compliance Credit. If compliance credit for verified low leakage ducts in conditioned space is shown in the special features section of the CF-1R, the leakage to outside test method must be used to verify duct leakage (refer to RAJ.1.4.3.4), and 25 CFM must be entered for Allowed Leakage. Allowed leakage calculation - (select one calculation method from this section). Use 6% (leakage factor = 0.06) for calculations if tested at 'Final' or 4% (leakage factor = 0.04) if tested at 'rough.' When utilizing Low Leakage Air Handler (LLAH) credit, the allowed duct leakage may be specified by the CF-1R to be less than 6%, in which case the user-specified leakage rate must be used in the calculations below. For example, if the user-specified leakage (specified as a percentage of fan airflow) is reported on the CF-1R as 3%, then use leakage factor of 0.03 in the calculations below. ☒ Cooling system method: Nominal Capacity of condenser in Tons <u>4</u> x 400 x leakage factor = <u>9.6</u> CFM ☐ Heating system method: 21.7 x <u> </u> Output Capacity in Thousands of Btu/hr x leakage factor = <u> </u> CFM ☐ Measured airflow method (RAJ.1): Enter measured fan flow in CFM here <u> </u> x leakage factor = <u> </u> CFM	Allowed Leakage (CFM)
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Enter value for Actual leakage (CFM) in the right column, from measurement using applicable duct leakage pressurization test procedure from Reference Residential Appendix RAJ.1 (CFM @ 25 Pa). List Actual Leakage from duct leakage test (CFM) Pass if Actual Leakage is equal to or less than Allowed Leakage ☒ Pass ☐ Fail	Actual Leakage (CFM) 85
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For complete replacement of duct systems only, if the 6 percent leakage rate criteria cannot be met, a smoke test should be performed to verify that the excess leakage is coming only from a pre-existing furnace cabinet (air handler cabinet), and not from other accessible portions of the duct system. A HERS rater must verify the installation (No sampling allowed). List Actual Leakage from smoke test (CFM) Pass if all accessible leaks (except for existing air handler) are sealed using smoke ☐ Pass ☐ Fail	
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HERS
Provider
watermark

210-N0001972A-M2000005B-0000

Registration Number

Reg. 210-N0001972A-M2000005B-0000 Registration Date/Time: 2010/07/22 13:23:37 HERS Provider: CalCERTS, Inc.
2008 Residential Compliance Forms August 2009

For more information, visit www.energy.ca.gov/title24 and www.energyvideos.com or call the
Energy Standards Hotline at 1-800-772-3300

September 29, 2010