

CITY OF SACRAMENTO

Permit No: 0610389

New City Hall, 915 I St., 3rd Floor, Sacramento, CA 95814

Insp Area: 3  
Thos Bros: 298E7

Site Address: 8439 MEDITERRANEAN WY SAC  
Parcel No: 079-0053-004

Sub-Type: ASFR  
Housing (Y/N): N

**CONTRACTOR**  
HERMAN V MILLER INC  
4608 AUBURN BLVD #11  
SACRAMENTO, CA 95841

PAID  
CITY OF SACRAMENTO  
APR 21 2006  
NEIGHBORHOODS PLANNING  
AND DEVELOPMENT SERVICES

**ARCHITECT**

Nature of Work: ADDITION OF 696 SQ FT 2ND STORY OVER EXISTING GARAGE & HOUSE

**CONSTRUCTION LENDING AGENCY:** I hereby affirm under penalty of perjury that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civ. C).

Lender's Name \_\_\_\_\_ Lender's Address \_\_\_\_\_

**LICENSED CONTRACTORS DECLARATION:** I hereby affirm under penalty of perjury that I am licensed under provisions of Chapter 9 (commencing with section 7000) of Division 3 of the Business and Professions Code and my license is in full force and effect.

License Class B License Number 844708 Date 9-21-06 Contractor Signature [Signature]

**OWNER-BUILDER DECLARATION:** I hereby affirm under penalty of perjury that I am exempt from the contractors License Law for the following reason (Sec. 7031.5, Business and Professions Code; any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he or she is licensed pursuant to the provisions of the Contractors License Law (Chapter 9 (commencing with Section 7000) of Division 8 of the Business and Professions Code) or that he or she is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars (\$500.00);

I, as a owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professional Code: The Contractors License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or herself or through his/her own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he/she did not build or improve for the purpose of sale.)

I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractors License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractors License Law).

I am exempt under Sec. \_\_\_\_\_ B & PC for this reason: \_\_\_\_\_

Date \_\_\_\_\_ Owner Signature \_\_\_\_\_

**IN ISSUING THIS BUILDING PERMIT,** the applicant represents, and the city relies on the representation of the applicant, that the applicant verified all measurements and locations shown on the application or accompanying drawings and that the improvement to be constructed does not violate any law or private agreement relating to permissible or prohibited locations for such improvements. This building permit does not authorize any illegal location of any improvement or the violation of any private agreement relating to location of improvements.

I certify that I have read this application and state that all information is correct. I agree to comply with all city and county ordinances and state laws relating to building construction and hereby authorize representative(s) of this city to enter upon the abovementioned property for inspection purposes.

Date 9-21-06 Applicant/Agent Signature [Signature]

**WORKER'S COMPENSATION DECLARATION:** I hereby affirm under penalty of perjury one of the following declarations:

I have and will maintain a certificate of consent to self-insure for workers' compensation as provided for by Section 3700 of the Labor Code, for the performance of work for which the permit is issued.

I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My workers' compensation insurance carrier and policy number are:

Carrier STATE COMP FUND Policy Number 713-2015654 Exp Date 3/1/07

(This section need not be completed if the permit is for \$100 or less) I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the workers' compensation laws of California and agree that if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

Date 9-21-06 Applicant Signature [Signature]

**WARNING:** FAILURE TO SECURE WORKER'S COMPENSATION COVERAGE IS UNLAWFUL AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS (\$100,000) IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST AND ATTORNEY'S FEE.

**THIS PERMIT SHALL EXPIRE BY LIMITATION IF WORK IS NOT COMMENCED WITHIN 180 DAYS.**

**INSTALLATION CERTIFICATE** (Page 2 of 12) CF-6R

Site Address <b>8436 Mediterranean</b>	Permit Number <b>0610389</b>
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An installation certificate is required to be posted at the building site or made available for all appropriate inspections. (The information provided on this form is required) After completion of final inspection, a copy must be provided to the building department (upon request) and the building owner at occupancy, per Section 10-103(a).


**FENESTRATION/GLAZING:**

Item	Manufacturer/Brand Name (GROUP LIKE PRODUCTS)	Product U-factor <sup>1</sup> (≤ CF-1R value) <sup>2</sup>	Product SHGC <sup>1</sup> (≤ CF-1R value) <sup>2</sup>	# of Panes	Total Quantity of Like Product (Optional)	Area Square Feet	Exterior Shading Device or Overhang	Comments/Location/Special Features
1.	Valsing	0.33	0.29	2	2	20	None	None
2.								
3.								
4.								
5.								
6.								
7.								
8.								
9.								
10.								
11.								
12.								
13.								
14.								
15.								

<sup>1</sup> Use values from a fenestration product's NFRC label. For fenestration products without an NFRC label, use the default values from Section 116 of the Energy Efficiency Standards.

<sup>2</sup> Installed U-factor must be less than or equal to values from CF-1R. Installed SHGC must be less than or equal to values from CF-1R, or a shading device (exterior or overhang) is installed as specified on the CF-1R. Alternatively, installed weighted average U-factors for the total fenestration area are less than or equal to values from CF-1R. If using default table SHGC values from §116 identify whether tinted or not.

I, the undersigned, verify that the fenestration/glazing listed above my signature: 1) is the actual fenestration product installed; 2) is equivalent to or has a lower U-factor and lower SHGC than that specified in the certificate of compliance (Form CF-1R) submitted for compliance with the Energy Efficiency Standards for residential buildings; and 3) the product meets or exceeds the appropriate requirements for manufactured devices (from Part 6), where applicable.

Item #s (if applicable)	Signature 	Date 08-01-07	Installing Subcontractor (Co. Name) OR General Contractor (Co. Name) OR Owner OR Window Distributor Hill, S, Corp, Inc.
Item #s (if applicable)	Signature	Date	Installing Subcontractor (Co. Name) OR General Contractor (Co. Name) OR Owner OR Window Distributor
Item #s (if applicable)	Signature	Date	Installing Subcontractor (Co. Name) OR General Contractor (Co. Name) OR Owner OR Window Distributor

Copies to: Building Department , HERS Rater (if applicable) Building Owner at Occupancy

Site Address

8439 MEDITERRANEAN WAY

Permit Number

0610389

**Insulation Installation Quality Certificate**

✓  Description of Insulation, (CF-6R, formerly IC-1) signed by the installer stating: insulation manufacturer's name, material identification, installed R-values, and for loose-fill insulation: minimum weight per square foot and minimum inches

✓  Installation meets all applicable requirements as specified in the High Quality Insulation Installation Procedures (ACM, Appendix RH)

<input checked="" type="checkbox"/> FLOOR			
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	All floor joist cavity insulation installed to uniformly fit the cavity side-to-side and end-to-end
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	Insulation in contact with the subfloor or rim joists insulated
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	Insulation properly supported to avoid gaps, voids, and compression
<input checked="" type="checkbox"/> WALLS			
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	Wall stud cavities caulked or foamed to provide an air tight envelope
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	Wall stud cavity insulation uniformly fills the cavity side-to-side, top-to-bottom, and end-to-back
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	No gaps
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	No voids over 3/4" deep or more than 10% of the batt surface area.
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	Hard to access wall stud cavities such as; corner channels, wall intersections, and behind tub/shower enclosures insulated to proper R-Value
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	Small spaces filled
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	Rim-joists insulated
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> NA	Loose fill wall insulation meets or exceeds manufacturer's minimum weight-per-square-foot requirement
<input checked="" type="checkbox"/> ROOF/CEILING PREPARATION			
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	All draft stops in place to form a continuous ceiling and wall air barrier
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	All drops covered with hard covers
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	All draft stops and hard covers caulked or foamed to provide an air tight envelope
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> NA	All recessed light fixtures IC and air tight (AT) rated and sealed with a gasket or caulk between the housing and the ceiling
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	Floor cavities on multiple-story buildings have air tight draft stops to all adjoining attics
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> NA	Eave vents prepared for blown insulation - maintain net free-ventilation area
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> NA	Knee walls insulated or prepared for blown insulation
<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> NA	Area under equipment platforms and cat-walks insulated or accessible for blown insulation
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> NA	Attic rulers installed

**INSTALLATION CERTIFICATE**

(Page 11 of 12) CF-6R

Site Address 8439 Medford Lane way	Permit Number 0600389
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✓ **ROOF/CEILING BATTS**

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No gaps
Yes	No	NA	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No voids over ¼ in. deep or more than 10% of the batt surface area.
Yes	No	NA	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Insulation in contact with the air-barrier
Yes	No	NA	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Recessed light fixtures covered
Yes	No	NA	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Net free-ventilation area maintained at eave vents
Yes	No	NA	

✓ **ROOF/CEILING LOOSE-FILL**

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Insulation uniformly covers the entire ceiling (or roof) area from the outside of all exterior walls.
Yes	No	NA	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Baffles installed at eaves vents or soffit vents - maintain net free-ventilation area of eave vent
Yes	No	NA	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Attic access insulated
Yes	No	NA	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Recessed light fixtures covered
Yes	No	NA	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Insulation at proper depth – insulation rulers visible and indicating proper depth and R-value
Yes	No	NA	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Loose-fill insulation meets or exceeds manufacturer's minimum weight and thickness requirements for the target R-value. Target R-value _____, Manufacturer's minimum required weight for the target R-value _____ (pounds-per-square-foot). Manufacturer's minimum required settled thickness _____, Note: To receive compliance credit the HERS rater shall verify that the manufacturer's minimum weight and thickness has been achieved for the target R-value. (CF-6R only)
Yes	No	NA	

**DECLARATION**

✓  I hereby certify that the installation meets all applicable requirements as specified in the Insulation Installation Procedures.

Installing Subcontractor (Co. Name) OR General Contractor (Co. Name) OR Owner	
Signature: <i>[Signature]</i>	Date: 08-07-07

Copies to: BUILDING DEPARTMENT, HERS RATER (IF APPLICABLE), BUILDING OWNER AT OCCUPANCY

**INSTALLATION CERTIFICATE**

(Page 12 of 12) CF-6R

Site Address <u>8439 Mediterranean way</u>	Permit Number <u>0610384</u>
County Subdivision	Lot Number

**Description of Insulation (Formerly IC-1 Form)**

- 1. RAISED FLOOR**  
 Material n/a Brand Name \_\_\_\_\_  
 Thickness (inches) \_\_\_\_\_ Thermal Resistance (R-Value) \_\_\_\_\_
- 2. SLAB FLOOR/PERIMETER**  
 Material n/a Brand Name \_\_\_\_\_  
 Thickness (inches) \_\_\_\_\_ Thermal Resistance (R-Value) \_\_\_\_\_  
 Perimeter Insulation Depth (inches) \_\_\_\_\_
- 3. EXTERIOR WALL**  
 Frame Type 2"x4" 16" @  
 A. Cavity Insulation  
 Material FIBER GLASS Brand Name OWENS CORNING  
 Thickness (inches) 3 1/2 Thermal Resistance (R-Value) 13  
 B. Exterior Foam Sheathing  
 Material n/a Brand Name \_\_\_\_\_  
 Thickness (inches) \_\_\_\_\_ Thermal Resistance (R-Value) \_\_\_\_\_
- 4. FOUNDATION WALL**  
 Material n/a Brand Name \_\_\_\_\_  
 Thickness (inches) \_\_\_\_\_ Thermal Resistance (R-Value) \_\_\_\_\_
- 5. CEILING**  
 Batt or Blanket Type FIBER GLASS Brand Name OWENS CORNING  
 Thickness (inches) 12 Thermal Resistance (R-Value) 38  
 Loose Fill Type n/a Brand \_\_\_\_\_  
 Contractor's min installed weight/ft<sup>2</sup> \_\_\_\_\_ lb Minimum thickness \_\_\_\_\_ inches  
 Manufacturer's installed weight per square foot to achieve Thermal Resistance (R-Value) \_\_\_\_\_
- 6. ROOF**  
 Material \_\_\_\_\_ Brand Name \_\_\_\_\_  
 Thickness (inches) \_\_\_\_\_ Thermal Resistance (R-Value) \_\_\_\_\_

**Declaration**

I hereby certify that the above insulation was installed in the building at the above location in conformance with the current *Energy Efficiency Standards for residential buildings* (Title 24, Part 6, California Code of Regulations) as indicated on the Certificate of Compliance, where applicable.

Item #s (if applicable)	Signature <u>[Signature]</u>	Date <u>05-21-07</u>	Installing Subcontractor (Co. Name) OR General Contractor (Co. Name) OR Owner OR Window Distributor <u>H.N.C. CORP. INC.</u>
Item #s (if applicable)	Signature	Date	Installing Subcontractor (Co. Name) OR General Contractor (Co. Name) OR Owner OR Window Distributor
Item #s (if applicable)	Signature	Date	Installing Subcontractor (Co. Name) OR General Contractor (Co. Name) OR Owner OR Window Distributor

CERTIFICATE OF FIELD VERIFICATION & DIAGNOSTIC TESTING (Page 1 of 8) CF-4R	
Project Address 8439 Mediterranean	Builder or Installer Name
Builder or Installer Contact Bryant Home & Air	Telephone 916 224-1253
HERS Rater Donald M Bryant	Telephone 916-728-6101
Compliance Method (Prescriptive)	Climate Zone 12
Compliance Method (Performance)	Sample House Number
Street Address 3949 Garfield Ave	HERS Provider Chefs
City/State/Zip Carlsbad CA 92008	

Copies to: BUILDER, HERS PROVIDER AND BUILDING DEPARTMENT

**HERS RATER COMPLIANCE STATEMENT**

The house was:  Tested  Approved as part of sample testing, but was not tested  
 As the HERS rater providing diagnostic testing and field verification, I certify that the home identified on this form complies with the diagnostic tested compliance requirements as checked on this form. The HERS rater must check and verify that the new distribution system is fully ducted and correct type is used before a CF-4R may be released on every tested building. The HERS rater must not release the CF-4R until a properly completed and signed CF-4R has been received for the sample and tested buildings.

- The installer has provided a copy of CF-4R (Installation Certificate).
- New ducts are fully ducted (i.e., does not use building cavities as plenums or platform returns in lieu of ducts).
- New ducts with cloth backed, rubber adhesive duct tape is installed, mastic and draw bands are used in combination with cloth backed, rubber adhesive duct tape to seal leaks at duct connections.

**MINIMUM REQUIREMENTS FOR DUCT LEAKAGE REDUCTION COMPLIANCE CREDIT**

Procedures for field verification and diagnostic testing of air distribution systems are available in RACM, Appendix RC4.3

**Duct Diagnostic Leakage Testing Results**

NEW CONSTRUCTION:		Measured Values	
	Duct Pressurization Test Results (CFM @ 25 Pa)		
1	Enter Tested Leakage Flow in CFM		
2	Fan Flow: Calculated (Blowout <input checked="" type="checkbox"/> Cooling <input checked="" type="checkbox"/> Heating <input type="checkbox"/> or <input type="checkbox"/> Measured Enter Total Fan Flow in CFM		✓ ✓
3	Pass if Leakage Percentage < 6% [100 x (Line # 1) / (Line # 2)]		<input type="checkbox"/> Pass <input type="checkbox"/> Fail
<b>ALTERATIONS: Duct System and/or HVAC Equipment Change-Out</b>			
4	Enter Tested Leakage Flow in CFM from CF-4R: Pre-Test of Existing Duct System Prior to Duct System Alteration and/or Equipment Change-Out		
5	Enter Tested Leakage Flow in CFM: Final Test of New Duct System or Altered Duct System for Duct System Alteration and/or Equipment Change-Out		
6	Enter Reduction in Leakage for Altered Duct System [(Line # 4) Minus (Line # 5)] (Only if Applicable)		
7	Enter Tested Leakage Flow in CFM to Outside (Only if Applicable)		✓ ✓
8	Entire New Duct System - Pass if Leakage Percentage < 6% [100 x (Line # 5) / (Line # 7)]		<input type="checkbox"/> Pass <input type="checkbox"/> Fail
<b>TEST OR VERIFICATION STANDARDS: For Altered Duct System and/or HVAC Equipment Change-Out</b>			
Use one of the following Test or Verification Standards for compliance:			
9	Pass if Leakage Percentage < 15% [100 x (Line # 5) / (Line # 2)]		<input type="checkbox"/> Pass <input type="checkbox"/> Fail
10	Pass if Leakage to Outside Percentage < 10% [100 x (Line # 7) / (Line # 2)]		<input type="checkbox"/> Pass <input type="checkbox"/> Fail
11	Pass if Leakage Reduction Percentage > 60% [100 x (Line # 6) / (Line # 4)] and Verification by Smoke Test and Visual Inspection		<input type="checkbox"/> Pass <input type="checkbox"/> Fail
	Pass if Sealing of all Accessible Leaks and Verification by Smoke Test and Visual Inspection		<input type="checkbox"/> Pass <input type="checkbox"/> Fail
	Pass if One of Lines #9 through #12 pass		<input type="checkbox"/> Pass <input type="checkbox"/> Fail

Permit 0610389

Certificate of Compliance Prescriptive Method - HVAC-only Alteration CF-1R-ALT

Project Title: HVAC	Date: 3-30-07	© CalCERTS 2005
Project Address: 8437 Mediterranean Way	Climate Zone: 12	Enforcement Agency Use Only
Documentation Author: John Bryant	Telephone: (916) 224-9253	Building Permit #
Company Name: Bryant Heating & Air Conditioning		Plan Check Date
IMPORTANT: This CF-1R-ALT form is only for use when an HVAC-only alteration is made to an existing home. Use one form for each system being altered. This is system # of systems altered in this house.		Field Check Date
<b>Check all lines that apply. Check only lines that apply.</b>		
<b>Scope of Alteration:</b>		
1 <input type="checkbox"/> An Air Handler is to be installed or replaced. Duct sealing to be determined. Continue to next line.		
2 <input type="checkbox"/> A Furnace Heat exchanger is to be installed or replaced. Duct sealing to be determined. Continue to next line.		
3 <input type="checkbox"/> An outdoor condensing unit is to be installed or replaced. Duct Sealing and/or TXV(RCA) to be determined. Continue to next line.		
4 <input type="checkbox"/> A ceiling or flexible duct is to be installed or replaced. Duct Sealing and/or TXV(RCA) to be determined. Continue to next line.		
5 <input checked="" type="checkbox"/> More than 40 feet of new or replacement duct are to be installed in unconditioned space. Duct sealing to be determined. <input checked="" type="checkbox"/> Check here if the existing duct system is also to be new or replaced. Continue to next line.		
6 <input type="checkbox"/> If none of lines 1-5 are checked, neither Duct Sealing nor TXV(RCA) are required. Go to Section 5.		
<b>Section 1 - Duct Sealing (Only if any of Lines 1, 2, 3, 4 or 5 are checked. Skip if Line 6 is checked.)</b>		
7 <input type="checkbox"/> This system is in Climate Zone 1, 3, 4, 5, 6, 7, or 8. No duct sealing is required. Go to Section 2.		
8 <input type="checkbox"/> This system has less than 40 feet of ducts in unconditioned space. No duct sealing is required. Go to Section 2.		
9 <input type="checkbox"/> This system was previously sealed and tested, and was certified by a HERS rater. No duct sealing is required. Attach previous CF-4R form. Go to Section 2.		
10 <input type="checkbox"/> This duct system is sealed or insulated with urethane. No duct sealing is required. Go to Section 2.		
Note: If the existing duct system is to be new or replaced, Lines 11-14 do not apply.		
11 <input type="checkbox"/> In Climate Zones 2, 12 and 16: An 8.2 AFUE furnace will be installed in lieu of duct sealing (and TXV, if applicable).		
12 <input type="checkbox"/> In Climate Zones 9, 13 and 15: An SEER 14 AND EER 12 condenser will be installed with TXV(RCA) AND added duct insulation (R-4 wrap on existing ducts, R-8 new ducts) in lieu of duct sealing. Go to Section 2.		
13 <input type="checkbox"/> In Climate Zones 8, 10, 11, 13, 14, or 16: An SEER 14 AND EER 12 condenser will be installed with TXV(RCA) AND a 8.2 AFUE furnace will be installed in lieu of duct sealing. Go to Section 2.		
14 <input type="checkbox"/> In Climate Zones 2, 9, 11, 12, 14 or 16: An SEER 14 AND EER 12 condenser will be installed with TXV(RCA) AND an 8.2 AFUE furnace will be installed with increased duct insulation in lieu of duct sealing. Go to Section 2.		
15 <input checked="" type="checkbox"/> None of lines 7-14 above are checked. Duct Sealing is Required. Continue.		
<b>Section 2 - TXV(RCA) (Only if Lines 3 or 4 are checked, otherwise got to Section 3)</b>		
16 <input checked="" type="checkbox"/> The system being altered is a package unit. No TXV(RCA) is required. Go to Section 3.		
17 <input type="checkbox"/> This system is in Climate Zone 8 and a 14 SEER air conditioner or 8.2 AFUE furnace is being installed. No TXV(RCA) is required. Go to Section 3.		
18 <input type="checkbox"/> This system is in Climate Zone 1, 3, 4, 5, 6, or 7. No TXV(RCA) is required. Go to Section 3.		
19 <input type="checkbox"/> This system is in Climate Zone 9 and line 14 is not checked. No TXV(RCA) is required. Go to Section 3.		
20 <input type="checkbox"/> This system is in Climate Zone 10 and line 14 is checked and not line 16. TXV(RCA) is required. Go to Section 3.		
21 <input type="checkbox"/> This system is in Climate Zone 2 or 8-15 and line 11, 13 or 17 is not checked. TXV(RCA) is required. Go to Section 3.		
<b>Section 3 - HERS Rater verification</b>		
22 <input checked="" type="checkbox"/> If line 15 is checked, HERS verification is required for Duct Sealing.		
23 <input type="checkbox"/> If line 12, 13, 14, 20 or 21 are checked and not line 16 or 17, HERS verification is required for TXV(RCA).		
24 <input type="checkbox"/> If line 12, 13 or 14 are checked, HERS verification is required for 12 EER.		
<b>Section 4 - Equipment Efficiencies</b>		
25 <input type="checkbox"/> If lines 11, 12, 13, 14 or 17 are checked, upgraded equipment efficiencies are required. List in Section 6.		
<b>Section 5- Duct R-Values</b>		
26 <input type="checkbox"/> If more than 40 feet of duct is being installed or replaced, duct R-value must meet or exceed Package D requirements.		
27 <input type="checkbox"/> If less than 40 feet of duct is being installed or replaced, duct R-value must meet or exceed R-4.2		
Section 6 - see next page		

Version 03-10-06

This form can only be used on projects being verified by CalCERTS certified raters.

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www.calcerts.com

Permit 0610389

Certificate of Compliance Prescriptive Method - HVAC-only Alteration CF-1R-ALT

Project Title: <b>HVAC</b>		Date: <b>3-30-07</b>	© CalCERTS 2005
<p><b>IMPORTANT:</b> This CF-1R-ALT form is only for use when an HVAC-only alteration is made to an existing home. Use one form for each system being altered. This is system # _____ of _____ systems altered in this house.</p>			
<p><b>Section 6 - Minimum Requirements for Equipment to be Installed/Altered.</b> Installed equipment must match (specification and meet or exceed efficiency/EER values.</p>			
28	Configuration: <input type="checkbox"/> Split system <input type="checkbox"/> Package Unit		
29 <input type="checkbox"/>	Air Handler	Gas furnace, AFUE <b>80%</b>	<input type="checkbox"/> Heat pump FAU <input type="checkbox"/> Hybrid FAU <input type="checkbox"/> Other
30 <input type="checkbox"/>	Heat Exchanger		
31 <input type="checkbox"/>	Outdoor Condensing Unit	DAC <input type="checkbox"/> Heat pump	Efficiency: <b>SEER13</b> EER (cool):
32 <input type="checkbox"/>	Coil(s) or heating coil	DAC <input type="checkbox"/> Heat pump <input type="checkbox"/> Hybrid:	
33 <input type="checkbox"/>	Ducts <b>R-6</b>	Location <b>Roof</b>	Length (ft) <b>60</b> R-value:
<p>All mandatory measures apply to any altered component. See MF-1R-ALT form.</p>			
<p><b>Compliance Statement:</b> This certificate of compliance lists the building features and specifications needed to comply with Title 24, Parts 1 and 6 of the California Code of Regulations, and the administrative regulations to implement them. This certificate has been signed by the individual with overall project responsibility. The undersigned recognizes that compliance using duct sealing, verification of refrigerant charge, and TXV require installer testing and certification and verification by an approved HERS rater.</p>			
Home Owner or Authorized Agent		Documentation Author	
Name: 		Name: <b>John Bryant</b>	
Address:		Company Name: <b>Bryant Heating &amp; AC</b>	
City/State/Zip:		Address: <b>6003 Barbours Dr</b>	
Phone:		City/State/Zip: <b>Carmichael CA 95608</b>	
Signature:		Phone: <b>(916) 224-9253</b>	
Enforcement Agency (Building Department)		Signature: 	
Name:		Title/Comments:	
Title:			
Department:			
Phone #:			
Fax #:			
Signature or Stamp:			
<p><b>Required forms:</b>          CF-1R-ALT: by anyone. Required at time of permit application. Copies to home owner, enforcement agency, HERS rater.          CF-6R-ALT: by installing contractor. Required to close permit. Copies to home owner, enforcement agency, HERS rater.          CF-4R-ALT: by HERS rater. Required to close permit. Copies to home owner, enforcement agency, installer. The CF-4R forms for a sample group shall not be released until all testing and verification is completed and passed for the entire group.</p>			

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This form can only be used on projects being verified by CalCERTS certified raters.

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Permit 0610389

Project Title: <b>HVAC</b>		Date: <b>3-30-07</b>	© 2006 CalCERTS		
Project Address: <b>8439 Madeferrin Way 12</b>		Climate Zone:	Enforcement Agency Use Only		
Installing Contractor: <b>John Bryant</b>		Telephone: <b>916 228-9253</b>	Building Permit #		
Company Name: <b>Bryant Heating &amp; Air Conditioning</b>			Plan Check Date		
			Field Check Date		
<p><b>IMPORTANT:</b> This CF-6R form is only for use when an HVAC-only alteration is made to an existing home. Use one form for each system being altered. This is system # <u>1</u> of <u>1</u> systems altered in this house. Copies to: Homeowner, HERS Rater, and Building Department.</p> <p>List the specifications for the newly installed equipment. These must match the installed equipment exactly. Installed equipment must match type/location and meet or exceed efficiency/EER values from CF-1R.</p>					
Equipment Type	Manufacturer	Model Number	Efficiency	Load**	Capacity**
Furnace			AFUE		
Heat Exchanger			N/A		
Heat Pump fan coil			N/A		
Hydronic fan coil			N/A		
Other FAU					
Describe					
Package gas/AC	<b>Bryant</b>	<b>574ANW02</b>	AFUE 80% SEER 13		
Package heatpump			HSPF SEER		
A/C Condenser			EER SEER		
Heatpump Condenser			HSPF SEER		
Indoor DX coil			EER*		
Hydronic coil					
<p>* Provide EER if needed for compliance (line 24 of CF-1R-ALT). Installer must provide adequate documentation to verify EER. In some cases the specific furnace may need to be verified in order to achieve a specific EER. In some cases a time delay relay and/or TXV may need to be verified in order to achieve a specific EER.</p> <p>** Loads are sensible for cooling.</p> <p>*** Capacities are sensible at design conditions for cooling and adjusted (altitude, downflow, etc.) output for heating.</p>					
<p>TXV: If TXV is required by the CF-1R form (line 23 on CF-1R-ALT form), it has been installed and access has been provided for visual verification by HERS rater. Sampling is allowed for TXV verification.</p>					
<p>Entirely New Duct System: (Line 5 of CF-1R-ALT) OK For Entirely new duct systems, the required leakage is 6% rather than 15% for altered systems. The alternative to duct sealing by increasing the efficiency of the equipment is not an option for entirely new duct systems.</p>					
<p>I, the undersigned, verify that the equipment listed above is: 1) the actual equipment installed in the home; 2) equal to or more efficient than required by the Certificate of Compliance (CF-1R-ALT Form); and 3) equipment that meets or exceeds the appropriate requirements for manufactured devices (Appliance Efficiency Standards), where applicable.</p> <p>I, the undersigned, verify that diagnostic test results listed on this form were performed in conformance with the requirements for compliance and that the newly installed or retrofitted mechanical system components conform with the Mandatory requirements specified in Section 150(m) of the 2005 Building Energy Efficiency Standards.</p>					
Signed (Installer):		Date: <b>3-30-07</b>			
Notes:					

Permit 0610389

Installation Certificate Prescriptive Method - HVAC-only Alteration CF-6R-ALT

Project Title: HVAC		Date: 3-30-07	© 2005 CalCERTS
<p><b>IMPORTANT:</b> This CF-6R form is only for use when an HVAC-only alteration is made to an existing home. Use one form for each system being altered. This is system # _____ of _____ systems altered in this house. Copies to Homeowner, HERS Rater, and Building Department</p>			
<p><b>Duct Leakage Test Results (if duct testing is required per CF-1R-ALT form)</b></p>			
<p>Step 1 - Pre-test Leakage of the system before any alterations. This test is optional and is only used for the 60% reduction option</p>			
1	Pre-test leakage:	10 CFM25	
2	Line 1 x 0.4 =	4	target for 60% reduction
<p>Step 2 - Determine Total System Fan Flow. Use any of these methods. Use values for equipment after alterations.</p>			
3	Cooling: Condenser tonnage: 2 tons x 400 CFM/ton =	800	CFM
4	Heating: Furnace output: 90,000 Btu/h x .8217 CFM/Btu/h =	868	CFM
5	Measured: (refer to ACM Manual Appendix RE, section 4.1) =		CFM
6	Measurement method: <input type="checkbox"/> flow hood <input type="checkbox"/> pressure matching <input type="checkbox"/> flow grid		
7	Total system fan flow value to be used:	868	CFM may use highest of lines 3, 4, or 5.
<p>Step 3 - Determine Targets:</p>			
8a	Total System fan flow (line 7 from above) x 0.85 =	526.8	CFM25 = 85% leakage target (new duct systems)
8b	Total System fan flow (line 7 from above) x 0.15 =	N/A	CFM25 = 15% leakage target
9	Total System fan flow (line 7 from above) x 0.10 =	N/A	CFM25 = 10% leakage to outside target
<p>Step 4 - Alterations: Must be completed with the CF-1R form.</p>			
10	<input type="checkbox"/> Seal all new connections with approved methods.		
11	<input type="checkbox"/> No newly constructed portions of the system can have unducted building air to convey system air.		
12	<input type="checkbox"/> If adding or replacing more than 40 feet of duct, insulate new ducts per package D for that climate zone		
<p>Step 5 - Final Leakage (per ACI duct leakage test, for 15% total and 60% reduction)</p>			
13	Leakage =	196	CFM25 refer to 2006 ACM appendix RC, Sections RC 4.3.1
14a	<input type="checkbox"/> If line 13 is less than line 8a, house passes the 85% leakage requirement. Go to Step 6.		
14b	<input type="checkbox"/> If line 13 is less than line 8b, house passes the 15% leakage requirement. Go to Step 6.		
15	<input type="checkbox"/> If line 13 is less than line 9, house passes the 60% reduction requirement, continue.		
16	<input type="checkbox"/> If either of lines 14a, 14b or 15 are checked, HERS verification is required. Sampling can be used.		
17	<input type="checkbox"/> If line 13 is checked, but not 14a or 14b, Smoke Test and Visual Inspection of Accessible Duct Sealing is required. Go to Step 6.		
<p>Step 6 - Leakage to Outside. Similar to a regular duct blaster test but the house is pressurized to 25 pascals at the same time.</p>			
18	Leakage =		CFM25 refer to 2006 ACM appendix RC, Sections RC 4.3.3
19	<input type="checkbox"/> If line 18 is less than line 9, house passes the 10% leakage to outside requirement.		
20	<input type="checkbox"/> If line 18 passes, HERS verification is required. Sampling can be used.		
<p>Step 7 - If the house does not pass any of lines 14, 15 or 18.</p>			
21	<input type="checkbox"/> Smoke Test and Visual Inspection of Accessible Duct Sealing is required. See Step 6.		
22	<input type="checkbox"/> Install required label per ACM Appendix RC, Sections RC 4.3.5.		
<p>Step 8 - Smoke Test and Visual Verification (per 2006 Residential ACM Appendix RC, Sections RC 4.3.5-7)</p>			
23	<input type="checkbox"/> Perform smoke test per ACM Appendix RC, Sections RC 4.3.5.		
24	<input type="checkbox"/> Perform Visual Inspection and repair of unacceptably damaged ducts per ACM Appendix RC, Sections RC 4.3.7.		
25	<input type="checkbox"/> Seal register leaks to surrounding material per ACM Appendix RC, Sections RC 4.3.7.		
<p>HERS Verification</p>			
26	<input type="checkbox"/> If line 14 is checked, 15% leakage to be verified by HERS rater. Sampling is allowed.		
27	<input type="checkbox"/> If line 15 is checked, 60% leakage reduction to be verified by HERS rater (post test only) AND Smoke Test and Visual Verification to be performed by HERS Rater. Sampling is allowed.		
28	<input type="checkbox"/> If line 18 is checked, 10% leakage to outside to be verified by HERS rater. Sampling is allowed.		
29	<input type="checkbox"/> If none of lines 14, 15 or 18 are checked Smoke Test and fix all accessible leaks. No sampling allowed.		
<p>Sampling - Only if house passes on lines 14, 15 or 18.</p>			
30	<input checked="" type="checkbox"/> 1.) Homeowner chooses to be put into a group of homes for random third party HERS sampling. 2.) Homeowner, installer and rater must sign the three-party agreement. 3.) All above tests must be completed by the installer or their representative, not the third party rater.		
<p>No Sampling - House does not pass for lines 14, 15 or 18 OR homeowner chooses not to be part of a sample group</p>			
31	<input type="checkbox"/> 1.) House to be tested by a third party HERS rater selected by installer. 2.) Homeowner, installer and rater must sign the three-party agreement. 3.) All above tests may be completed by the installer or their representative, and then verified by a third party rater. OR, all above tests may be performed solely by the third party rater.		
32	<input type="checkbox"/> 1.) House to be tested by third party HERS rater selected by homeowner. 2.) All above tests may be completed by the installer or their representative, and then verified by a third party rater. OR, all above tests may be performed solely by the third party rater.		