

TRANSMISSION VERIFICATION REPORT

TIME : 05/11/2006 12:34
 NAME : CITY OF SACRAMENTO
 FAX : 9168085543
 TEL : 9168085656
 SER.# : BROH4J832840

DATE, TIME : 05/11 12:34
 FAX NO./NAME : 96355426
 DURATION : 00:00:31
 PAGE(S) : 02
 RESULT : OK
 MODE : STANDARD
 ECM

*Central
 Aire*

**CITY OF SACRAMENTO
 CASHIER'S WORKSHEET**

RECEIPT NUMBER: R0608472

TRANSACTION DATE: 05/11/2006
 TRANSACTION AMOUNT: 190.80
 NOTATION:

ISSUED
CITY OF SACRAMENTO
 MAY 11 2006
**DOWNTOWN PERMIT
 CENTER**

See

APD #: **0606731**
 SITE ADDRESS: 5 NEWLAND CT SAC
 PARCEL: 117-1060-021

TYPE: Bldg Minor Permit
 SUB-TYPE: RES
 HOUSING: N
 STATUS: **ISSUED**

Mixed Income Housing
 Fee Program
 ??

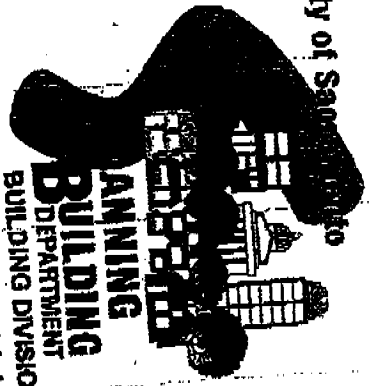
TRANSACTION LIST

Type	Method	Description	Pymt Amount
Payment	Credit C	TEETER	190.80

RECEIPT ACCOUNT ITEM LIST

Class #	Description	Item #	Total Fee	Prev Pymt	Current Pymt
200	Permit--Building-Res	1100	175.00	.00	175.00
206	City Business Oper Tax	1730	3.49	.00	3.49
213	General Plan Surcharge	1760	5.31	.00	5.31
259	Bldg-Technology Surcharg	1750	7.00	.00	7.00

City of Sacramento



FAXBACK PERMIT APPLICATION

(certain restrictions apply)

Faxed request received in this office before 3:00 p.m. will be processed the following work day. Contractors must have a current certificate of Worker's Compensation Insurance. Work started before a Building Permit is issued will be subject to quad fees.

Permits requiring plan review are not eligible for FAXBACK

In order to process this request, ALL of the following information MUST be provided:

RESIDENTIAL APARTMENTS (4+ units per building) COMMERCIAL (limited)

Credit Card Info on File? Yes No

Fax # (916) 264-1901

Inspection Request # (916) 264-7622

Job Address: 5 Newland Ct Sacramento CA 95823

Parcel Number: [blank]

Contact Person: VANESSA JONES

Property Owner: JOHN CAMPBELL

Address: 5 Newland Ct Sacramento CA 95823

City/State/Zip: Sacramento CA 95823

Phone: 916-395-6555

Description of Work: Replace HVAC System like for like

NATURE OF WORK: (Provide detailed description of work & indicate type of work in selections below.)

<input type="checkbox"/> REROOF (excluding tile) <input type="checkbox"/> TEAR-OFF <input type="checkbox"/> RESHEET <input type="checkbox"/> HOUSE # SQUARES <input type="checkbox"/> GARAGE # Stories: 1 2 3+ Material:	(Residential ONLY) <input type="checkbox"/> HVAC INSTALLATIONS <input checked="" type="checkbox"/> NEW CHANGE-OUT <input type="checkbox"/> Heat Pump <input type="checkbox"/> Package <input checked="" type="checkbox"/> Split system <input type="checkbox"/> Roof mount <input type="checkbox"/> Cut-in <input type="checkbox"/> Heat pump or sled unit to gas. <input type="checkbox"/> Wall furnace <input type="checkbox"/> Fireplace insert <input type="checkbox"/> Other (describe below) Value of duct work: \$ NA Equipment: \$ NA Cut-in: \$	(Residential ONLY) <input type="checkbox"/> WATER HEATER <input type="checkbox"/> GAS <input type="checkbox"/> ELECTRIC <input type="checkbox"/> Change-out <input type="checkbox"/> Electric to Gas <input type="checkbox"/> Relocate <input type="checkbox"/> New <input type="checkbox"/> DRY ROT OR TERMITTE DAMAGE REPAIR <input type="checkbox"/> Flooring/Joists <input type="checkbox"/> Roof Structure <input type="checkbox"/> Exterior <input type="checkbox"/> Mud sill/Studs <input type="checkbox"/> PUBLIC UTILITIES SAFETY INSPECTION* (Residential and single apartment units ONLY) <input type="checkbox"/> SMUD <input type="checkbox"/> PG&E	(Residential ONLY) MINOR ELECTRICAL and/or MINOR PLUMBING <input type="checkbox"/> Electric Service Change # amps <input type="checkbox"/> New electric circuits <input type="checkbox"/> Re-wire <input type="checkbox"/> Replacement <input type="checkbox"/> Water Service <input type="checkbox"/> Sewer Service <input type="checkbox"/> Gas Line <input type="checkbox"/> Re-plumb <input type="checkbox"/> Water <input type="checkbox"/> Waste
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* Design Review approval may be required.

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*NOTE: Correction Notice items will require an additional building permit.

NVR Faxback Permit updated 12/09/01

CalCERTS - Certificate

CERTIFICATE OF FIELD VERIFICATION & DIAGNOSTIC TESTING (Page 5 of 8) CF-4R

<u>5 Newland Ct.</u> Project Address	<u>Central Aire, Inc / 836537</u> Contractor Name / License No.
<u>John Gustason</u> Contractor Contact	<u>0606731</u> Permit Number
<u>HERS Rater</u> HERS Rater	<u>916-768-9459</u> Telephone
<u>[Signature]</u> Certifying Signature	<u>32371</u> Sample Group Number
<u>Energy Analysis and Comfort Solutions,</u> Firm: Inc.	<u>July 11, 2006</u> Date
<u>PO Box 2233</u> Street Address:	<u>CC14-1798372954</u> Certificate Number
	HERS Provider: CalCERTS
	City/State/Zip: <u>Orangevale / CA / 95662</u>

Copies to: Homeowner, HERS Provider and Building Department
 This CF-4R has been registered with the CalCERTS® registry in accordance with the Title 24 & Title 20 of the CCR.
 CalCERTS® is an approved HERS provider by the California Energy Commission.

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 house identified on this form complies with the diagnostic tested compliance requirements as checked on this form.
 The installer has provided a copy of the CF-6R (Installation Certificate).

HIGH EER AIR CONDITIONER:
 Procedures for verification are available in RACM, Appendix RI.

1	<input type="checkbox"/> Yes <input type="checkbox"/> No	EER values of installed systems match the CF-1R
2	<input type="checkbox"/> Yes <input type="checkbox"/> No	For split systems, indoor coil is matched to outdoor coil
3	<input type="checkbox"/> Yes <input type="checkbox"/> No	Time Delay Relay Verified (If Required)

HVAC System: Yes to 1 and 2; and 3 (If Required) is a pass Pass Fail

CERTIFICATE OF FIELD VERIFICATION & DIAGNOSTIC TESTING (Page 3-4 of 8)

CF-4R

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<u>John Gustason</u> Contractor Contact		<u>916-768-9459</u> Telephone	<u>2606731</u> Permit Number
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THERMOSTATIC EXPANSION VALVE (TXV):

Access is provided for inspection. The procedure shall consist of visual verification that the TXV is installed on the system and installation of the specific equipment shall be verified.

HVAC System TXV Pass Fail

INSTALLATION CERTIFICATE

(Page 3 of 12)

CF- 6R

5 Newland Ct.

Sacramento CA CA

~~R0608472~~ 606731
Permit Number

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).

HVAC SYSTEMS:
Heating Equipment

Equip Typ (pkg. heat pump)	CEC Certified Mfr. Name, Model and Serial Number	# of Identical Systems	Efficiency (AFUE, etc.) ¹ >(CF-1R value)	Duct Location (attic, etc.)	Duct or Piping R-value	Heating Load (Btu/hr)	Heating Capacity (Btu/hr)
Split	AMERICAN STANDARD	1	93.00 AFUE	Attic	R 4.2	0	70000
	AUY060R9V3W						

Cooling Equipment

Equip Typ (pkg. heat pump)	CEC Certified Mfr. Name, Model and Serial Number	# of Identical Systems	Efficiency (AFUE, etc.) ¹ >(CF-1R value)	Duct Location (attic, etc.)	Duct or Piping R-value	Cooling Load (Btu/hr)	Cooling Capacity (Btu/hr)
Split	AMERICAN STANDARD	1	15.00 SEER	Attic	R 4.2	0	36000
	2A7A43036B1000A		12.50 EER				
Coil	Same as Condenser Mfg						
	CA03609E71MC						

1. > symbol reads greater than or equal to what is indicated on the CF-1R value.
Include both SEER and EER if compliance credit for high EER air conditioner is claimed.

I, the undersigned, verify that equipment listed above is: 1) is the actual equipment installed, 2) equivalent to or more efficient than that specified in the certificate of compliance (Form CF-1R) submitted for compliance with the Energy Efficiency Standards for residential buildings, and 3) equipment that meets or exceeds the appropriate requirements for manufactured devices (from the Appliance Efficiency Regulations or Part 6), where applicable.

[Signature] 5/11/09
Signature, Date

Central Aire, Inc
Installing Subcontractor (Co. Name) 40009
OR General Contractor (Co. Name) OR Owner 1095

COPY TO: Building Department
HERS Rater (if applicable)
Building Owner at Occupancy

INSTALLATION CERTIFICATE
 5 Newland Ct.
 Site Address

Sacramento CA CA

R0608472 2606731
 Permit Number

INSTALLER COMPLIANCE STATEMENT FOR DUCT LEAKAGE

Copies to: Builder, HERS Rater, Building Owner at Occupancy and Building Department

INSTALLER COMPLIANCE STATEMENT

The building was: Tested at Final Tested at Rough-in

INSTALLER VISUAL INSPECTION AT FINAL CONSTRUCTION STAGE:

- Remove at least one supply and one return register, and verify that the spaces between the register boot and the interior finishing wall are properly sealed.
- If the house rough-in duct leakage test was conducted without an air handler installed, inspect the connection points between the air handler and the supply and return plenums to verify that the connection points are properly sealed.
- Inspect all joints to ensure that no cloth backed rubber adhesive duct tape is used

DUCT LEAKAGE REDUCTION

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

NEW CONSTRUCTION:	Measured Values		
Duct Pressurization Test Results (CFM @ 25 Pa)			
1 Enter Tested Leakage Flow in CFM:			
2 Fan Flow: Calculated (Nominal: <input checked="" type="checkbox"/> Cooling <input type="checkbox"/> Heating) or <input type="checkbox"/> Measured If Fan Flow is Calculated as 400 cfm/ton x number of tons or as 21.7 cfm/(kBtu/hr) x Heating Capacity in Thousands of Btu/hr, enter total calculated or measured fan flow in CFM here:	1200		
3 Pass if Leakage Percentage < 6% for Final or < 4% at Rough-In: [100 x [(Line # 1) / (Line # 2)]]		<input type="checkbox"/> Pass <input type="checkbox"/> Fail	
ALTERATIONS: Duct System and/or HVAC Equipment Change-Out			
4 Enter Tested Leakage Flow in CFM from Pre-Test of Existing Duct System Prior to Duct System Alteration and/or Equipment Change-Out.			
5 Enter Tested Leakage Flow in CFM from Final Test of New Duct System or Altered Duct System for Duct System Alteration and/or Equipment Change-Out.	146		
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% for Final or < 4% at Rough-in [100 x [(Line # 5) / Line # 2]]		<input type="checkbox"/> Pass <input type="checkbox"/> Fail	
TEST OR VERIFICATION STANDARDS: For Altered Duct System and/or HVAC Equipment Change-Out			
Use one of the following four Test or Verification Standards for compliance:			
9 Pass if Leakage Percentage < 15% [100 x [146 (Line # 5) / 1200 (Line # 2)]]	12%	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<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	<input type="checkbox"/> Pass <input type="checkbox"/> Fail
11 Pass if Leakage Reduction Percentage > 60% [100 x [(Line # 6) / (Line # 4)]]		<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail
12 Pass if Sealing of all Accessible Leaks and Verification by Smoke Test and Visual Inspection		<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail
		Pass if One of Lines # 9 through # 12 pass	

I, the undersigned, verify that the above diagnostic test results were performed in conformance with the requirements for compliance credit. I, the undersigned, also certify that the newly installed or retrofit Air-Distribution System Ducts, Plenums and Fans comply with Mandatory requirements specified in Section 150 (m) of the 2005 Building Energy Efficiency Standards.

Signature

Date

Central Aire, Inc

Installing Subcontractor (Co. Name) OR
 General Contractor (Co. Name)

40009
 1095

INSTALLATION CERTIFICATE

5 Newland Ct.

(Page 5 of 12)

CF-6R

Site Address

Sacramento CA CA

R0608472 060673
Permit Number

THERMOSTATIC EXPANSION VALVE (TXV)

Procedures for field verification of thermostatic expansion valves are available in RACM, Appendix RI.

<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Access is provided for inspection. The procedure shall consist of visual verification that the TXV is installed on the system and installation of the specific equipment shall be verified.		
		Yes is a pass	<input checked="" type="checkbox"/> Pass	<input type="checkbox"/> Fail

REFRIGERANT CHARGE MEASUREMENT

Verification for Required Refrigerant Charge and Adequate Airflow for Split System Space Cooling Systems without Thermostatic Expansion Valves

Outdoor Unit Serial #	
Location	
Outdoor Unit Make	
Outdoor Unit Model	
Cooling Capacity	Btu/hr
Date of Verification	
Date of Refrigerant Gauge Calibration	(must be checked monthly)
Date of Thermocouple Calibration	(must be checked monthly)

Standard Charge Measurement Procedure (outdoor air dry-bulb 55oF and above):

Procedures for Determining Refrigerant Charge using the Standard Method are available in RACM, Appendix RD2.

Note: The system should be installed and charged in accordance with the manufacturer's specifications before starting this procedure.

Measured Temperatures

Supply (evaporator leaving) air dry-bulb temperature (Tsupply, db)		F
Return (evaporator entering) air dry-bulb temperature (Treturn, db)		F
Return (evaporator entering) air wet-bulb temperature (Treturn, wb)		F
Evaporator saturation temperature (Tevaporator, sat)		F
Suction line temperature (Tsuction, db)		F
Condenser (entering) air dry-bulb temperature (Tcondenser, db)		F

Superheat Charge Method Calculations for Refrigerant Charge

Actual Superheat = Tsuction, db - Tevaporator, sat		F
Target Superheat (from Table RD-2)		F
Actual Superheat - Target Superheat (System passes if between -5 and +5°F)		F

Temperature Split Method Calculations for Adequate Airflow

Split Method Calculation is not necessary if Adequate Airflow credit is taken

Actual Temperature Split = T return, db - Tsupply, db		F
Target Temperature Split (from Table RD3)		F
Actual Temperature Split - Target Temperature Split (System passes if between -3°F and +3°F or, upon remeasurement, if between -3°F and -100°F)		F

INSTALLATION CERTIFICATE

(Page 6 of 12)

5 Newland Ct.

Sacramento CA CA

CF-6R

Site Address

R0608472 2606731

Permit Number

Standard Charge Measurement Summary:

System shall pass both refrigerant charge and adequate airflow calculation criteria from the same measurements. If corrective actions were taken, both criteria must be remeasured and recalculated.

<input type="checkbox"/>	Yes	<input type="checkbox"/>	No	System Passes
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Alternate Charge Measurement Procedure (outdoor air dry-bulb below 55 oF)

Note: The system should be installed and charged in accordance with the manufacturer's specifications and installer verification shall be documented on CF-6R before starting this procedure. If outdoor air dry-bulb is 55 oF or above, installer shall use the Standard Charge Measure Procedure:

Procedures for Determining Refrigerant Charge using the Alternate Method are available in RACM, Appendix RD3. Weigh-In Charging Method for Refrigerant Charge

Actual liquid line length:		ft
Manufacturer's Standard liquid line length:		ft
Difference (Actual - Standard):		ft
Manufacturer's correction (ounces per foot)		ounces
x difference in length =		
(+ = add) (- = remove)		

Measured Airflow Method for Adequate Airflow Verification available in RACM, Appendix RD2.6

Calculated Airflow: Cooling Capacity (Btu/hr)	X 0.033 (cfm/Btu-hr) =	CFM
Measured Airflow is	CFM (Measured airflow must be greater than the calculated airflow).	

Alternate Charge Measurement Summary:

System shall pass both refrigerant charge and adequate airflow calculation criteria from the same measurements. If corrective actions were taken, both criteria must be remeasured and recalculated.

<input type="checkbox"/>	Yes	<input type="checkbox"/>	No	System Passes
--------------------------	-----	--------------------------	----	---------------

Walter Jones 5/10/06
Signature, Date

Central Aire, Inc

Installing Subcontractor (Co. Name) OR

General Contractor (Co. Name) OR Owner

40009

1095

COPY TO: Building Department
HERS Rater (if applicable)
Building Owner at Occupancy