

**CITY OF SACRAMENTO**

1231 I Street, Sacramento, CA 95814

Permit No: 0611651

Insp Area: 2

Thos Bros: 317C3

Site Address: 1601 POTRERO WY SAC

Parcel No: 017-0161-043

Sub-Type: RES

Housing (Y/N): N

**CONTRACTOR**CLARKE & RUSH MECH  
4411 AUBURN BL  
SACRAMENTO CA 95841**OWNER**EUNICE E LOUTHAN FAMILY TRU  
1601 POTRERO WAY  
SACRAMENTO, CA 95822**ARCHITECT**

Nature of Work: HVAC - C/O - SPLIT SYSTEM - ENERGY COMPL DOC'S REQ'D AT FINAL

**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 C-20License Number 608005Date 8-2-06Contractor 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: 2005

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 above mentioned property for inspection purposes.

Date 8-2-06Applicant/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 ZENITH INS COPolicy Number Z066385802Exp Date 10/01/2006

(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 8-2-06Applicant 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.**

Eunice Loutham

Project Title

1601 Protrero Way

Project Address

Sacramento CA 95822

Patricia Siedentopf

Documentation Author

916-609-2665

Telephone

Prescriptive

Compliance Method (Prescriptive)

12

Climate Zone

8/1/2006

Date

0611651

Building Permit #

Plan Check / Date

Field Check / Date

Enforcement Agency Use Only



Alternative Component Package Method: (check one) C X D (Alternative)

Package C and Package D choices require HERS rater field verification and/or diagnostic testing (see CF-1R page 3)

For Package D Alternative see Appendix B Table 151-C Footnotes 7-14

### GENERAL INFORMATION

Total Conditioned Floor Area (CFA) 1500 ft2 Average Ceiling Height: 8 ft

Maximum Allowed West Facing Fenestration Products Per Table 151-B or 151-C ---- (5% X CFA) NA ft2

Maximum Allowed Total Fenestration Products Per Table 151-B or 151-C ---- (20% X CFA) NA ft2

Building Type: (check one or more) X Single Family    Multifamily    Addition X Alteration

(If adding fenestration fill out WS-4R, Fenestration Maximum Allowed Area Worksheet and see Section 8.3.2 for Additions and 8.3.3 for Alterations.)

Number of Stories: 1 Number of Dwelling Units: 1

Floor Construction Type: raised Slab/Raised Floor (circle one or both)

Front Orientation: N North / South / East / West / All Orientations (input front orientation in degrees from True North and circle one).



RADIANT BARRIER (required in climate zones 2, 4, 8-15)

### OPAQUE SURFACES INCLUDING OPAQUE DOORS

Component Type (Wall, Roof, Floor, Slab Edge, Doors)	Frame Type (Wood or Metal)	Cavity Insulation R-Value	Continuous Insulation R-Value	Assembly Ufactor (for wood, metal frame and mass assemblies) 1	Joint Appendix IV Reference	Roof Radiant Barrier Installed Yes or No	Location/Comments (attic, garage, typical, etc.)

1) See Joint Appendix IV in Section IV.2, IV.3 and IV.4, which is the basis for the U-factor criterion. U-factors can not exceed prescriptive value to show equivalence to R-values.

Eunice Loutham

Project Title

Date

**FENESTRATION PRODUCTS – U-FACTOR AND SHGC**

FENESTRATION MAXIMUM ALLOWED AREA WORKSHEET WS-4R –must be included for New Construction, Additions and Alterations.

Fenestration #/Type/Pos. (Front, Left, Rear, Right, Skylight)	Orientation, N, S, E, W1	Area (ft2)	U-factor2	U-factor Source3	SHGC4	SHGC Source5	Exterior Shading/Overhangs6, 7 Ck box if WS-3R is included
							<input type="checkbox"/>
							<input type="checkbox"/>
							<input type="checkbox"/>
							<input type="checkbox"/>
							<input type="checkbox"/>
							<input type="checkbox"/>
							<input type="checkbox"/>

1) Skylights are now included in West-facing fenestration area if the skylights are tilted to the west or tilted in any direction when the pitch is less than 1:12. See §151(f)3C and in Section 3.2.3 of the Residential Manual

2) Enter values in this column are either NFRC Rated value or from Standards default Table 116A.

3) Indicate source either from NFRC or Table 116A,

4) Enter values in this column from NFRC or from Standards Default Table 116B or adjusted SHGC from WS-3R.

5) Indicate source either from NFRC or Table 116B.

6) Shading Devices are defined in Table 3-3 in the Residential Manual and see WS-3R to calculate Exterior Shading devices.

7) See Section 3.2.4 in the Residential Manual.

**HVAC SYSTEMS**

Heating Equipment Type and Capacity furnace, heat pump, boiler, etc.	Minimum Efficiency (AFUE or HSPF)	Distribution Type and Location (ducts, attic, etc.)	Duct or Piping R-Value	Thermostat Type	Configuration (split or package)
G/E	80 AFUE	ATTIC	4.2	Programable	
	0 HSPF				Split Sys
70000 BTU					

Cooling Equipment Type and Capacity (A/C, Heat Pump, Evap Cool)	Minimum Efficiency (SEER or EER)	Duct Location (attic, etc.)	Duct R-Value	Thermostat Type	Configuration (split or package)
G/E	15 SEER	ATTIC	4.2	Programable	
	13 EER				Split Sys
36000 BTU					

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Date

**SEALED DUCTS and TXVs (or Alternative Measures)**

A signed CF-4R Form must be provided to the building department for each home for which the following are required.

<input type="checkbox"/>	Sealed Ducts (all climate zones) (Installer testing and certification and HERS rater field verification required.)
<input type="checkbox"/>	TXVs, readily accessible (climate zones 2 and 8-15 only) (Installer testing and certification and HERS Rater field verification required.)
<input type="checkbox"/>	Refrigerant Charge (climate zones 2 and 8-15 only) (Installer testing and certification and HERS Rater field verification required.)

OR

<input type="checkbox"/>	Alternative to Sealed Ducts and Refrigerant Charge /TXVs (See Package D Alternative Package Features for Project Climate Zone in the RM Appendix B Table 151-C, Footnotes 7-14.
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OR

<input type="checkbox"/>	For additions and alterations, duct systems that are not documented to have been previously sealed as confirmed through field verification and diagnostic testing in accordance with procedures in the Residential ACM Manual and duct systems with more than 40 linear feet in unconditioned spaces shall meet the requirements of Section 150(m) and duct insulation requirements of Package D.
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**WATER HEATING SYSTEMS**

<input type="checkbox"/>	Check box if system meets criteria of a "Standard" system. Standard system is one gas-fired water heater per dwelling unit. If the water heater is a storage type, 50 gallons is the maximum capacity and recirculation system is not allowed.
<input type="checkbox"/>	Check box when using Preapproved Alternative Water Heating table, Table 5-4 in Chapter 5 in the Residential Manual. No water heating calculations are required, and the system complies automatically.
<input type="checkbox"/>	Check box if system does not meet criteria of "Standard" system, and does not comply with the Preapproved Alternative Water Heating table. In this case, the Performance Method must be used and must be included in the submittal.
<input type="checkbox"/>	Check box to verify that a time control is required for a recirculating system pump for a system serving multiple units

**Systems serving single dwelling units**

Water Heater Type/Fuel Type	Distribution Type	Number in System	Rated Input <sup>1</sup> (kW or Btu/hr)	Tank Capacity (gallons)	Energy Factor <sup>1</sup> or Thermal Efficiency	Standby <sup>1</sup> Loss (%)	Tank External Insulation R-Value

**System serving multiple dwelling units**

Water Heater Type/Fuel Type	Distribution Type	Number in System	Rated Input <sup>1</sup> (kW or Btu/hr)	Tank Capacity (gallons)	Energy Factor <sup>1</sup> or Thermal Efficiency	Standby <sup>1</sup> Loss (%)	Tank External Insulation R-Value

- 1 For small gas storage water heaters (rated inputs of less than or equal to 75,000 Btu/hr), electric resistance, and heat pump water heaters, list Energy Factor. For large gas storage water heaters (rated input of greater than 75,000 Btu/hr), list Rated Input, Recovery Efficiency, Thermal Efficiency and Standby Loss. For instantaneous gas water heaters, list Rated Input and Thermal Efficiencies.

**Pipe Insulation** (kitchen lines > 3/4 inches) All hot water pipes from the heating source to the kitchen fixtures that are 3/4 inches or greater in diameter shall be thermally insulated as specified by Section 150 (j) 2 A or 150 (j) 2 B.

Eunice Loutham

Project Title

Date

**SPECIAL FEATURES NOT REQUIRING HERS VERIFICATION (add extra sheets if necessary)**

Indicate which special features are part of this project. The list below represents special features relevant to the Prescriptive and Performance Method.

	Feature	Required Forms (if applicable)	Description
<input type="checkbox"/>	Metal Framed Walls	CF-1R	
<input type="checkbox"/>	Radiant Barriers	CF-1R	
<input type="checkbox"/>	Exterior Shades	WS-4R N/A; Performance Calculation	
<input type="checkbox"/>	Cool Roof	Required. Attach CRRC Label to Forms.	
<input type="checkbox"/>	Dedicated Hydronic Heating System	Performance Calculation Required; Attach Run to Forms.	
<input type="checkbox"/>	Combined Hydronic System	Performance Calculation Required; Attach Run to Forms.	
<input type="checkbox"/>	Gas Cooling	N/A; Performance Calculation Required.	
<input type="checkbox"/>	Buried Ducts	N/A; Indicate on building plans.	
<input type="checkbox"/>	Kitchen Pipe Insulation	See Section 5.6.2 Distribution Systems in Residential Manual.	
<input type="checkbox"/>	Multiple Water Heaters Per Dwelling Unit	See Table 5-13 or use Performance Calculation and attach Run to Forms.	
<input type="checkbox"/>	Central Water Heating System Serving Multiple Dwellings	Performance Calculation and attach Run to Forms.	
<input type="checkbox"/>	Non-NAECA Large Water Heater	CF-1R	
<input type="checkbox"/>	Indirect Water Heater	See Table 5-13 or use Performance Calculation and attach Run to Forms	
<input type="checkbox"/>	Instantaneous Gas Water Heater	See Table 5-13 or use Performance Calculation and attach Run to Forms	
<input type="checkbox"/>	Solar Water Heating System	See Table 5-13 or use Performance Calculation and attach Run to Forms	
<input type="checkbox"/>	Wood Stove Boiler	Performance Calculation and attach Run to Forms	

**SPECIAL FEATURES REQUIRING HERS RATER VERIFICATION**

(add extra sheets if necessary) Indicate to the HERS Rater which credits are part of this project and need verification.

	Feature	Required Forms (if applicable)	Description
<input type="checkbox"/>	Duct Sealing	CF-6R part 4 of 12	
<input type="checkbox"/>	Refrigerant Charge	CF-6R part 5 of 12	
<input type="checkbox"/>	Thermostatic Expansion Valve	CF-6R part 6 of 12	

Eunice Loutham

Project Title

Date

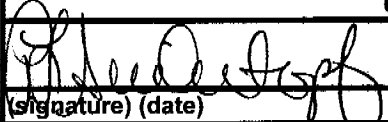
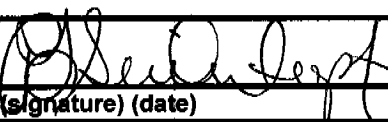
8-1-2006

**COMPLIANCE STATEMENT**

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 design responsibility. The undersigned recognizes that compliance using duct design, duct sealing, verification of refrigerant charge and TXVs, insulation installation quality, and building envelope sealing require installer testing and certification and field verification by an approved HERS rater.

Designer or Owner (per Business and Professions Code)

Documentation Author

Name: Patricia Siedentopf	Name: Patricia Siedentopf
Title/Firm: Clarke & Rush Mechanical	Title/Firm: Clarke & Rush Mechanical
Address: 4411 Auburn Blvd. Sacramento CA 95841	Address: 4411 Auburn Blvd. Sacramento CA 95841
Telephone: 916-609-2665	Telephone: 916-609-2665
License #: 608005	
 8-1-2006 (signature) (date)	 8-1-2006 (signature) (date)

**Enforcement Agency**

Name:	Comments:
Title	
Agency:	
Telephone:	
(signature / stamp) (date)	

CERTIFICATE OF FIELD VERIFICATION & DIAGNOSTIC TESTING (Page 1 of 8) CF-4R		
Project Address 1001 [REDACTED]		Builder Name
Builder Contact [REDACTED]	Telephone [REDACTED]	Plan Number
HERS Rater [REDACTED]	Telephone [REDACTED]	Sample Group Number 1
Compliance Method (Prescriptive)		Climate Zone 12
Certifying Signature (Electronically signed) [Signature]	Date 11/7/08	Sample House Number 2503
Firm [REDACTED]	HERS Provider [REDACTED]	
Street Address: 250 [REDACTED]	City/State/Zip: [REDACTED] CA 95031	

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 house 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 tape is used before a CP-4R may be released on every tested building. The HERS rater must not release the CP-4R until a properly completed and signed CP-6R has been received for the sample and tested buildings.

- ☐ The installer has provided a copy of CP-6R (Installation Certificate).
- ☐ New Distribution system is fully ducted (i.e., does not use building cavities as plenums or platform returns in lieu of ducts).
- ☐ New systems where 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 R C4.3.

### Duct Diagnostic Leakage Testing Results

NEW CONSTRUCTION:		
	Duct Pressurization Test Results (CFM @ 25 Pa)	Measured Values
1	Enter Tested Leakage Flow in CFM:	
2	Fan Flow: Calculated (Nominal: <input checked="" type="checkbox"/> Cooling <input type="checkbox"/> Heating) or <input checked="" type="checkbox"/> Measured Enter Total Fan Flow in CFM:	1200 <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
3	Pass if Leakage Percentage $\leq 6\%$ $[100 \times \frac{\text{Line \# 1}}{\text{Line \# 2}}]$	<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 CP-6R: 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.	57
6	Enter Reduction in Leakage for Altered Duct System $[\text{Line \# 4} \text{ Minus } \text{Line \# 5}]$ (Only if Applicable)	
7	Enter Tested Leakage Flow in CFM to Outside (Only if Applicable)	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
8	Enter New Duct System - Pass if Leakage Percentage $\leq 6\%$ $[100 \times \frac{\text{Line \# 5}}{\text{Line \# 2}}]$	<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 $\leq 15\%$ $[100 \times \frac{\text{Line \# 5}}{\text{Line \# 2}}]$	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail
10	Pass if Leakage to Outside Percentage $\leq 10\%$ $[100 \times \frac{\text{Line \# 7}}{\text{Line \# 2}}]$	<input type="checkbox"/> Pass <input type="checkbox"/> Fail
11	Pass if Leakage Reduction Percentage $\geq 60\%$ $[100 \times \frac{\text{Line \# 6}}{\text{Line \# 4}}]$ and Verification by Smoke Test and Visual Inspection	<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
Pass if One of Lines #9 through #12 pass		<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail

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

Project Address <b>1001 PULVER...</b>		Builder Name	
Builder Contact		Telephone	Plan Number
HERS Rater <b>Norm...</b>		Telephone <b>...</b>	Sample Group Number <b>1</b>
Compliance Method (Prescriptive)		Climate Zone <b>12</b>	
Certifying Signature <i>(Electronically signed)</i>		Date <b>10/17/05</b>	Sample House Number <b>2803</b>
Firm <b>Encl...</b>		HERS Provider <b>...</b>	
Street Address: <b>250 ...</b>		City/State/Zip: <b>San Jose CA 95131</b>	

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 house identified on this form complies with the diagnostic tested compliance requirements as checked on this form.

☒ The installer has provided a copy of CR-6R (Installation Certificate).☒ **THERMOSTATIC EXPANSION VALVE (TXV)**

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

				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Yes is a pass	Pass	Fail

☒ **REFRIGERANT CHARGE MEASUREMENT**

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

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

**Standard Charge Measurement (outdoor air dry-bulb 55 °F and above):**

Note: The system should be installed and charged in accordance with the manufacturer's specifications and installer verification shall be documented on CR-6R before starting this procedure. If outdoor air dry-bulb is below 55 °F rater shall use the Alternative Charge Measure Procedure.

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

<input checked="" type="checkbox"/> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	A copy of CR-6R (Installation Certificate) has been provided with refrigerant charge measurement documented.
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CERTIFICATE OF FIELD VERIFICATION & DIAGNOSTIC TESTING (Page 1 of 8)			CF-4R
Project Address 1601 Potrero Wy Sacramento CA 95822		Builder Name	
Builder Contact Installing Contractor Clark & Rush Mechanical	Telephone	Plan Number	
HERS Rater Home Enalasis	Telephone 760-768-3228	Sample Group Number 1	
Compliance Method (Prescriptive)		Climate Zone 12	
Certifying Signature (Electronically signed)	08/17/06 Date	Sample House Number 2503	
Firm Enalasis Corp	HERS Provider CBPCA		
Street Address 250 Campillo Ave	City/State/Zip Calexico CA 92231		

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 house 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 tape 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-6R has been received for the sample and tested buildings.

- ☐ The installer has provided a copy of CF-6R (Installation Certificate).
- ☐ New Distribution system is fully ducted (i.e., does not use building cavities as plenums or platform returns in lieu of ducts).
- ☐ New systems where 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 R C4.3.

### 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 (Nominal: <input type="checkbox"/> Cooling <input type="checkbox"/> Heating) or <input checked="" type="checkbox"/> Measured Enter Total Fan Flow in CFM:	1200	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3	Pass if Leakage Percentage $\leq 6\%$ $[100 \times \frac{\text{Line \# 1}}{\text{Line \# 2}}]$		<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-6R: 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.	57		
6	Enter Reduction in Leakage for Altered Duct System $[\text{Line \# 4} - \text{Line \# 5}]$ (Only if Applicable)			
7	Enter Tested Leakage Flow in CFM to Outside (Only if Applicable)		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
8	Enter New Duct System - Pass if Leakage Percentage $\leq 6\%$ $[100 \times \frac{\text{Line \# 5}}{\text{Line \# 2}}]$		<input type="checkbox"/> Pass	<input type="checkbox"/> Fail
<b>TEST OR VERIFICATION STANDARDS: For Altered Duct System and/or HVAC Equipment Change-Out</b>			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Use one of the following four Test or Verification Standards for compliance:				
9	Pass if Leakage Percentage $\leq 15\%$ $[100 \times \frac{57 \text{ (Line \# 5)}}{1200 \text{ (Line \# 2)}}]$	4.8	<input checked="" type="checkbox"/> Pass	<input type="checkbox"/> Fail
10	Pass if Leakage to Outside Percentage $\leq 10\%$ $[100 \times \frac{\text{Line \# 7}}{\text{Line \# 2}}]$		<input type="checkbox"/> Pass	<input type="checkbox"/> Fail
11	Pass if Leakage Reduction Percentage $\geq 60\%$ $[100 \times \frac{\text{Line \# 6}}{\text{Line \# 4}}]$ and Verification by Smoke Test and Visual Inspection		<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
Pass if One of Lines #9 through #12 pass			<input checked="" type="checkbox"/> Pass	<input type="checkbox"/> Fail

CERTIFICATE OF FIELD VERIFICATION & DIAGNOSTIC TESTING (Page 3 of 5)			CF-4R
Project Address 1601 Potrero Wy Sacramento CA 95822		Builder Name	
Builder Contact	Telephone	Plan Number	
HERS Rater Home Enalasy	Telephone 760-768-3228	Sample Group Number 1	
Compliance Method (Prescriptive)		Climate Zone 12	
Certifying Signature (Electronically signed) <i>E. J. L.</i>	08/17/06 Date	Sample House Number 2503	
Firm Enalasy Corp	HERS Provider CBPCA		
Street Address: 250 Campillo Ave		City/State/Zip: Calexico CA 92231	

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 house identified on this form complies with the diagnostic tested compliance requirements as checked on this form.

☒ The installer has provided a copy of CF-6R (Installation Certificate).

### ☒ THERMOSTATIC EXPANSION VALVE (TXV)

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

<input checked="" type="checkbox"/>	<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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Yes is a pass	Pass	Fail

### ☒ REFRIGERANT CHARGE MEASUREMENT

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

Outdoor Unit Serial #	2405E36608	
Location	Attic	
Outdoor Unit Make	Carrier	
Outdoor Unit Model	38TSA036-3	
Cooling Capacity	36000	Btu/hr
Date of Verification	08/02/06	
Date of Refrigerant Gauge Calibration	07/15/06	(must be checked monthly)
Date of Thermocouple Calibration	07/15/06	(must be checked monthly)

Standard Charge Measurement (outdoor air dry-bulb 55 °F and above):

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 below 55 °F rater shall use the Alternative Charge Measure Procedure.

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

<input checked="" type="checkbox"/> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	A copy of CF-6R (Installation Certificate) has been provided with refrigerant charge measurement documented.
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**INSTALLATION CERTIFICATE****(Page 3 of 12) CF-6R**

Site Address

1801 Potomac Street, Washington, DC 20001

Permit Number

0000000000

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 Type (pkg. heat pump)	CEC Certified Mfr. Name and Model Number	# of Identical Systems	Efficiency (AFUE, etc.) <sup>1</sup> (≥CF-1R value)	Duct Location (attic, etc.)	Duct or Piping R-value	Heating Load (Btu/hr)	Heating Capacity (Btu/hr)
Split AC + Coil	XXXXXXXXXX	1	80%	Attic	14	30000	70

**Cooling Equipment**

Equip Type (pkg. heat pump)	CEC Certified Mfr. Name and Model Number	# of Identical Systems	Efficiency (SEER or EER) <sup>1</sup> (≥CF-1R value)	Duct Location (attic, etc.)	Duct R-value	Cooling Load (Btu/hr)	Cooling Capacity (Btu/hr)
Split AC + Coil	XXXXXXXXXX	1	10%	Attic	14	33000	30000

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.

Installing Subcontractor (Co. Name) OR General Contractor (Co. Name) OR Owner	Mark A. [REDACTED]
Signature:	Date: 05/17/05

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

# INSTALLATION CERTIFICATE

(Page 4 of 12) CF-6R

Site Address

1601 ~~XXXXXX~~

Permit Number

~~XXXXXX~~

## INSTALLER COMPLIANCE STATEMENT FOR DUCT LEAKAGE

### 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
- ☒ New Distribution system is fully ducted (i.e., does not use building cavities as plenums or platforms returns in lieu of ducts).

### ☒ DUCT LEAKAGE REDUCTION

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

NEW CONSTRUCTION:			
	Duct Pressurization Test Results (CFM @ 25 Pa)	Measured Values	
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 output, enter total calculated or measured fan flow in CFM here:	1200	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
3	Pass if Leakage Percentage $\leq$ 6% for Final or $\leq$ 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.	67	
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)		<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
8	Entire New Duct System - Pass if Leakage Percentage $\leq$ 6% for Final [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:			<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
9	Pass if Leakage Percentage $\leq$ 15% [100 x [ <del>67</del> (Line # 5) / <del>1200</del> (Line # 2) ]]	4.8	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail
10	Pass if Leakage to Outside Percentage $\leq$ 10% [100 x [ (Line # 7) / (Line # 2) ]]		<input type="checkbox"/> Pass <input type="checkbox"/> Fail
11	Pass if Leakage Reduction Percentage $\geq$ 60% [100 x [ (Line # 6) / (Line # 4) ]] and Verification by Smoke Test and Visual Inspection		<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
Pass if One of Lines # 9 through # 12 pass			<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail

☒ 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.

Installing Subcontractor (Co. Name) OR General Contractor (Co. Name) OR Owner	<del>XXXXXX</del>
Signature:	Date: <del>XXXXXX</del>

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

Residential Compliance Forms

September 2005

# INSTALLATION CERTIFICATE

(Page 5 of 12) CF-6R

Site Address

1601 Polaris

Permit Number

000-10000

## ☒ THERMOSTATIC EXPANSION VALVE (TXV)

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

<input checked="" type="checkbox"/>	<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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Yes is a pass	Pass	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 #	[REDACTED]	
Location	[REDACTED]	
Outdoor Unit Make	[REDACTED]	
Outdoor Unit Model	[REDACTED]	
Cooling Capacity	[REDACTED]	Btu/hr
Date of Verification	[REDACTED]	
Date of Refrigerant Gauge Calibration	[REDACTED]	(must be checked monthly)
Date of Thermocouple Calibration	[REDACTED]	(must be checked monthly)

## Standard Charge Measurement Procedure (outdoor air dry-bulb 55°F 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)	[REDACTED]	°F
Return (evaporator entering) air dry-bulb temperature (Treturn, db)	[REDACTED]	°F
Return (evaporator entering) air wet-bulb temperature (Treturn, wb)	[REDACTED]	°F
Evaporator saturation temperature (Tevaporator, sat)	[REDACTED]	°F
Suction line temperature (Tsuction, db)	[REDACTED]	°F
Condenser (entering) air dry-bulb temperature (Tcondenser, db)	[REDACTED]	°F

### Superheat Charge Method Calculations for Refrigerant Charge

Actual Superheat = Tsuction, db - Tevaporator, sat	[REDACTED]	°F
Target Superheat (from Table RD-2)	[REDACTED]	°F
Actual Superheat - Target Superheat (System passes if between -5 and +5°F)	[REDACTED]	°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	[REDACTED]	°F
Target Temperature Split (from Table RD3)	[REDACTED]	°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)	[REDACTED]	°F

**INSTALLATION CERTIFICATE****(Page 3 of 12) CF-6R**Site Address  
1601 Potrero Wy Sacramento CA 95822Permit Number  
0611651

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 Type (pkg. heat pump)	CBC Certified Mfr. Name and Model Number	# of Identical Systems	Efficiency (AFUE, etc.) <sup>1</sup> (≥CF-1R value)	Duct Location (attic, etc.)	Duct or Piping R-value	Heating Load (Btu/hr)	Heating Capacity (Btu/hr)
Split AC + Coil	Carrier 58STX070-1-12	1	0.0	Attic	4	66000	70

**Cooling Equipment**

Equip Type (pkg. heat pump)	CBC Certified Mfr. Name and Model Number	# of Identical Systems	Efficiency (SEER or EER) <sup>1</sup> (≥CF-1R value)	Duct Location (attic, etc.)	Duct R-value	Cooling Load (Btu/hr)	Cooling Capacity (Btu/hr)
Split AC + Coil	Carrier 38TSA036-3	1	15.0	Attic	4	33000	36000

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.

Installing Subcontractor (Co. Name) OR General Contractor (Co. Name) OR Owner	Clark & Rush Mechanical
Signature:	Date: 08/17/06

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

# INSTALLATION CERTIFICATE

(Page 4 of 12) CF-6R

Site Address  
1601 Potrero Wy Sacramento CA 95822

Permit Number  
0611651

## INSTALLER COMPLIANCE STATEMENT FOR DUCT LEAKAGE

### 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
- ☒ New Distribution system is fully ducted (i.e., does not use building cavities as plenums or platforms returns in lieu of ducts).

### ☒ 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 output, enter total calculated or measured fan flow in CFM here:	1200	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
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
<b>ALTERATIONS: Duct System and/or HVAC Equipment Change-Out</b>			
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.	57	
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)		<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
8	Entire New Duct System - Pass if Leakage Percentage ≤ 6% for Final [100 x [ (Line # 5) / (Line # 2) ]]		<input type="checkbox"/> Pass <input type="checkbox"/> Fail
<b>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:</b>			<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
9	Pass if Leakage Percentage ≤ 15% [100 x [ 57 (Line # 5) / 1200 (Line # 2) ]]	4.8	<input checked="" 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) ]]		<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
<b>Pass if One of Lines # 9 through # 12 pass</b>			<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail

☒ 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.

Installing Subcontractor (Co. Name) OR General Contractor (Co. Name) OR Owner	Clark & Rush Mechanical
Signature:	Date: 08/17/06

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

Residential Compliance Forms

September 2005

**INSTALLATION CERTIFICATE****(Page 5 of 12) CF-6R**Site Address  
1601 Potrero Wy Sacramento CA 95822Permit Number  
0611651☒ **THERMOSTATIC EXPANSION VALVE (TXV)***Procedures for field verification of thermostatic expansion valves are available in RACM, Appendix RI.*

<input checked="" type="checkbox"/>	<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.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
			Yes is a pass	Pass	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 #	2405F36608	
Location	Inside	
Outdoor Unit Make	Carrier	
Outdoor Unit Model	38TSA036-3	
Cooling Capacity	36000	Btu/hr
Date of Verification	08/02/06	
Date of Refrigerant Gauge Calibration	07/15/06	(must be checked monthly)
Date of Thermocouple Calibration	07/15/06	(must be checked monthly)

**Standard Charge Measurement Procedure (outdoor air dry-bulb 55°F 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 (T <sub>supply</sub> , db)	48.4	°F
Return (evaporator entering) air dry-bulb temperature (T <sub>return</sub> , db)	77.7	°F
Return (evaporator entering) air wet-bulb temperature (T <sub>return</sub> , wb)	66.9	°F
Evaporator saturation temperature (T <sub>evaporator</sub> , sat)	97.8	°F
Suction line temperature (T <sub>suction</sub> , db)	95.9	°F
Condenser (entering) air dry-bulb temperature (T <sub>condenser</sub> , db)	90.8	°F

**Superheat Charge Method Calculations for Refrigerant Charge**

Actual Superheat = T <sub>suction</sub> , db - T <sub>evaporator</sub> , sat	1.9	°F
Target Superheat (from Table RD-2)	0.0	°F
Actual Superheat - Target Superheat (System passes if between -5 and +5°F)	1.9	°F

**Temperature Split Method Calculations for Adequate Airflow***Split Method Calculation is not necessary if Adequate Airflow credit is taken*

Actual Temperature Split = T <sub>return</sub> , db - T <sub>supply</sub> , db	29.4	°F
Target Temperature Split (from Table RD3)	17.2	°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)	12.2	°F