

**CITY OF SACRAMENTO**  
1231 I Street, Sacramento, CA 95814

Permit No: 0614224

Insp Area: 1  
Thos Bros: 297J5

Site Address: 751 50TH ST SAC  
Parcel No: 004-0313-013

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

**CONTRACTOR**  
BRADLEY BUILDERS  
(DBA) JTB ENTERPRISES INC  
5150 FAIR OAKS BLVD. SUITE 101-318 95608

**OWNER**  
BURGAT BARBARA  
751 50TH ST  
SACRAMENTO, CA 95819

**ARCHITECT**

Nature of Work: 1925 SQ FT BEDROOM ADDITION WITH MASTER BATHROOM, AND REROOF, TEAR OFF, RESHEET, INSTALL 2 SQ OF 40 YR LAM DIM COMP

**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.

X License Class \_\_\_\_\_ License Number 830523 Date 9-13-06 Contractor Signature *William Blunt*

**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 violation 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.

X Date 9-13-06 Applicant/Agent Signature *William Blunt*

**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.

X X 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 FUND Policy Number 713-0012237 Exp Date 06/01/2007

(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.

X Date 9-13-06 Applicant Signature *William Blunt*

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.

PAID  
CITY OF SACRAMENTO  
SEP 13 2006  
NEIGHBORHOOD PLANNING  
AND DEVELOPMENT SERVICES



**CITY OF SACRAMENTO**

www.cityofsacramento.org  
 Help Line: 1-916-808-5656 OR 1-866-EZ-PERMIT  
 Inspection: 1-916-808-7622

New City Hall  
 915 I Street, 3<sup>rd</sup> Floor  
 Sacramento, CA 95814

North Permit Center  
 2101 Arena Blvd., Suite 200  
 Sacramento, CA 95834

**SITE DRAINAGE AND ENCROACHMENT QUESTIONNAIRE**

PARCEL # 004-0313-013 PERMIT # 0614224  
 SITE ADDRESS 751 50th Street ACREAGE \_\_\_\_\_

The City of Sacramento requires a building site to be graded to drain correctly and site drainage routed to an approved location. To help us understand the site drainage for your project and determine if a driveway permit or an encroachment permit is required please answer the following questions. All questions must be answered.

1. Are there existing structures on the site?	Y	N	Y
2. Is there an existing concrete or paved driveway to this parcel from the street?	Y	*N	Y
3. Will the existing access to this parcel be changed in any way for this project?	*Y	N	N
4. Are all portions of the lot higher than the crown of the street?	Y	*N	Y
5. Are all portions of the lot higher than the back of the sidewalk?	Y	*N	N
6. Is there a curb and gutter at the street level?	*Y	N	N
7. Is there a sidewalk with a curb and gutter at the street?	*Y	N	N
8. Is the curb at the street square?	*Y	N	N/A
9. Is there a rolled curb at the street?	Y	N	N/A
10. Is there a drainage ditch or culvert at the street?	Y	*N	N/A
11. Does the lot drain from back to front?	Y	*N	Y
12. Does the lot drain from front to rear?	Y	*N	Y
13. Does another lot drain across this parcel?	*Y	N	N
14. Does the lot drain from side to side?	*Y	N	N
15. Does the site have an existing low area or drainage swale?	*Y	N	N
16. Does the drainage swale drain to an adjacent parcel?	*Y	N	N/A
17. Does the drainage swale drain to the street?	Y	*N	N/A
18. Will existing drainage be re-routed?	*Y	N	N
19. Will drainage ditches or culverts be constructed or modified?	*Y	N	N/A
20. Did this project require approval from the Zoning Administrator?	*Y	N	N
21. Did the project require approval from the Planning Administrator?	*Y	N	N


# SITE DRAINAGE AND ENCROACHMENT QUESTIONNAIRE

22. Is there any tree, telephone pole, guy wire or similar obstruction located at the front of the property adjacent to the street or road?	*Y	N	<del>N</del> Y
23. Is this a corner lot?	*Y	N	N
24. Is the posted speed limit on this street greater than 25 MPH?	*Y	N	N
25. Is this parcel located on a four-lane street?	*Y	N	<del>N</del>
26. If site is greater than 1/2 acre has an erosion and sediment control plan been submitted?	Y	*N	N/A
27. If site disturbs 1 acre or more has a copy of the State General Permit NOI and SWPPP been submitted?	Y	*N	N/A
28. If site is part of a larger subdivision greater than 1 acre has a copy of the State General Permit NOI and SWPPP been submitted?	Y	*N	N/A

**CIRCLE THE DRAWING NUMBER BELOW THAT BEST ILLUSTRATES THE EXISTING CONDITION AT THE LOCATION OF THE PROPOSED DRIVEWAY OR SITE ACCESS.**

**#1) NO CURB, GUTTER OR SIDEWALK**


**SWALE**



**STREET OR ROAD**

**#2) SIDEWALK**

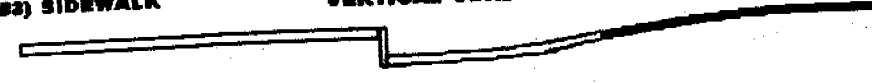
**ROLLED CURB**



**STREET**

**#3) SIDEWALK**


**VERTICAL CURB**



**STREET**

**#4) NO SIDEWALK**

**DITCH WITH CULVERT**



**ROAD**

**#5 OTHER**

PROVIDE  
DETAIL HERE

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The information provided on this document is accurate. I understand that if this form is incomplete, contains inaccurate or misleading information, the project located at this address may be delayed until any drainage or encroachment issues are resolved to the satisfaction of the City of Sacramento.

SIGNED *William Blund* DATE 9-13-06

TITLE Supervisor

PHONE NO. 919-6796

**INSTALLATION CERTIFICATE**

(Page 3 of 12)

CF-6R

751 50TH STREET  
Site Address

SACRAMENTO

CA

95819

Permit Number: 0614224

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).

**ORIGINAL**

**HVAC SYSTEMS:**

**Heating Equipment**

Equip. Type (pkg. heat)	CEC Certified Mfg. Name, Model, and Serial No.	# of Identical Systems	Efficiency (AFUE, etc) <sup>1</sup> >(CF-1R value)	Duct Location	Duct or Piping R-Value	Heating Load (kBtu/hr)	Heating Capacity (kBtu/hr)
Split	TRANE	1	93.00 AFUE	Attic	6		100
Furnace	TUY100R9V4W 62734287						

**Cooling Equipment**

Equip. Type (pkg. heat pump)	CEC Certified Mfg. Name, Model, and Serial No.	# of Identical Systems	Efficiency (AFUE, etc) <sup>1</sup> >(CF-1R value)	Duct Location	Duct or Piping R-Value	Cooling Load (kBtu/hr)	Cooling Capacity (kBtu/hr)
Split	TRANE	1	15.00 SEER	Attic	6		42
A/C	ZTTX4042B1000A 645211TLF		12.00 EER				
Coil	ADP TE50460C215 7106K35668						

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.

If, 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.

8/15/2007

Ray O. Cook Co.

Signature and Date

Installing Subcontractor (Co. Name)

5025-198

OR General Contractor (Co. Name) OR Owner

COPY TO: Building Department

HERS Rater (if applicable)

Building Owner at Occupancy

# INSTALLATION CERTIFICATE

751 50TH STREET  
Site Address

SACRAMENTO

CA

95819

Permit Number: 0614224

**THERMOSTATIC EXPANSION VALVE (TXV)**

Procedures for field verification of thermostatic expansion valves are available in RACM, Appendix R1.

<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 PROCEDURE**

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	Btuh
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 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

**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-3)		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 = Treturn, 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 +10°F)	3°F and +3°F	F

INSTALLATION CERTIFICATE

751 50TH STREET

SACRAMENTO

CA

95819

Site Address

Permit Number: 0614224

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.

Yes  No System Passes

Alternate Charge Measurement Procedure (outdoor air dry-bulb below 55 °F)

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 °F 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.

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

Measured Airflow Method for Adequate Airflow Verification available in RACM, Appendix

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)		

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.

Yes  No System Passes

8/15/2007

Ray O. Cook Co.

Signature, Date

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

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

5025-198

751 60TH STREET  
Site Address

SACRAMENTO

CA

95819

Permit Number: 0614224

**FAN WATT DRAW**

Procedures for measuring the air handler watt draw are available in RACM, Appendix RE3.2.

Method For Fan Watt Draw Measurement			
<input type="checkbox"/>	<input type="checkbox"/>	RE3.2.1	Portable Watt Meter Measurement
<input type="checkbox"/>	<input type="checkbox"/>	RE3.2.2	Utility Revenue Meter Measurement
Measured Fan Watt Draw:			Enter results of Watts/cfm
Measured Fan Flow (Enter total cfm from airflow verification)			
			Enter results of Watts/cfm
<input type="checkbox"/> Yes	<input type="checkbox"/> No	Calculated fan watt/cfm is equal to or lower than the fan watt/cfm draw documented in CF-1R	
			Yes is a pass
			Pass <input type="checkbox"/> Fail <input type="checkbox"/>

**ADEQUATE AIRFLOW VERIFICATION:**

Procedures for field verification and diagnostic testing of adequate airflow are available in RACM, Appendix RE4.1.

Method For Airflow Measurement			
<input type="checkbox"/>	<input type="checkbox"/>	Yes	No
Duct design exists on plans			
<input type="checkbox"/>	<input type="checkbox"/>	RE4.1.1	Diagnostic Fan Flow Using Flow Capture Hood
<input type="checkbox"/>	<input type="checkbox"/>	RE4.1.2	Diagnostic Fan Flow Using Plenum Pressure Matching
<input type="checkbox"/>	<input type="checkbox"/>	RE4.1.3	Diagnostic Fan Flow Using Flow G/ID Measurement
Measured Airflow:			cm/ton
<input type="checkbox"/>	<input type="checkbox"/>	Yes	No
			Measured airflow is greater than the criteria in Table RE-2
			Pass <input type="checkbox"/> Fail <input type="checkbox"/>

**MAXIMUM COOLING CAPACITY**

Procedures for determining maximum cooling load capacity are available in RACM, Appendix RF3.

1	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No	Adequate airflow verified (see adequate airflow credit)
2	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No	Refrigerant charge is TXV
3	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No	Duct Leakage reduction credit verified
4	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No	Cooling capacities of installed systems are ≤ to maximum cooling capacity indicated on the Performance's CF-1R and RF-3.
5	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No	If the cooling capacities of installed systems are > than maximum cooling capacity in the CF-1R, then the electrical input for the installed systems must be ≤ to electrical input in the CF-1R.
Yes to 1, 2, and 3; and Yes to either 4 or 5 is a pass					
					Pass <input type="checkbox"/> Fail <input type="checkbox"/>

**HIGH EER AIR CONDITIONER**

Procedures for verification are available in RACM, Appendix RI.

1	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No	EER values of installed systems match the CF-1R
2	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No	For split system, indoor coil is matched to outdoor coil
3	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No	Time Delay Relay Verified (if Required)
Yes to 1 and 2; and 3 (if Required) is a pass					
					Pass <input checked="" type="checkbox"/> Fail <input type="checkbox"/>


*[Handwritten Signature]*

8/15/2007

Ray O. Cook Co.

Tests Performed Signature / Date

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

CERTIFICATE OF FIELD VERIFICATION & DIAGNOSTIC TESTING (Page 3 of 8)		CF-4R
Project Address 751 50TH STREET - SACRAMENTO, CA 95819		Builder or Installer Name Ray O. Cook Co. / 829858
Builder or Installer Contact Krispel, Zak	Telephone 916-784-8525	Plan/Permit (Additions or Alterations) Number 0814224
HERS Rater Mike McDermott	Telephone 916-704-2810	Sample Gross Number 73084
Compliance Method (Procedure)		Climate Zone: 12
Certify Signature 	Date 8/15/2007	Sample House Number CC14-1798413646
Firm EACS Associate / Rapoza HVAC Consulting		HERS Provider CalCERTS, Inc.
Street Address 1453 34th Ave		City/State/Zip Sacramento / CA / 95822

Copies to: HOMEOWNER, 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 checked="" 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 #	
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 (outdoor air dry-bulb 55oF 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 dry-bulb is below 55oF rater shall use the Alternative Charge measure Procedure

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

Yes  No A copy of the CF-6R (Installation Certificate) has been provided with refrigerant charge measured documented.



CERTIFICATE OF FIELD VERIFICATION & DIAGNOSTIC TESTING (Page 5 of 8)		CF-4R
Project Address 751 50TH STREET - SACRAMENTO, CA 95810		Builder or Installer Name Ray O. Cook Co. / 829856
Builder or Installer Contact Kriegel, Zak	Telephone 916-784-8525	Plan/Permit (Additions or Alterations) Number 0614224
HERS Rater Mike McDermott	Telephone 916-704-2810	Sample Group Number 73084
Compliance Method (Prescriptive)		Climate Zone 12
Certify Signature 	Date 8/15/2007	Sample House Number CC14-1798413646
Firm EACS Associate / Rapoza HVAC Consulting		HERS Provider CalCERTS, Inc.
Street Address 1453 34th Ave		City/State/Zip Sacramento / CA / 95822

Copies to: HOMEOWNER, 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).

### ADEQUATE AIR FLOW VERIFICATION

Procedures for field verification and diagnostic testing of adequate airflow are available in RACM, Appendix RE4.1.

Method For Airflow Measurement		Measured Airflow:	Rated Tons:	Total CMF cfm/ton
<input checked="" type="checkbox"/>	<input type="checkbox"/> Yes <input type="checkbox"/> No	Duct design exists on plans		
<input type="checkbox"/>	<input type="checkbox"/> RE4.1.1	Diagnostic Fan Flow Using Flow Capture Hood		
<input type="checkbox"/>	<input type="checkbox"/> RE4.1.2	Diagnostic Fan Flow Using Plenum Pressure Matching		
<input type="checkbox"/>	<input type="checkbox"/> RE4.1.3	Diagnostic Fan Flow Using Flow Grid Measurement		
<input checked="" type="checkbox"/>	<input type="checkbox"/> Yes <input type="checkbox"/> No	Measured airflow is greater than the criteria in Table RE-2		
		Yes is a Pass	Pass	Fail

### MAXIMUM COOLING CAPACITY

Procedures for determining maximum cooling load capacity are available in RACM, Appendix RF3.

1	<input checked="" type="checkbox"/>	<input type="checkbox"/> Yes <input type="checkbox"/> No	Adequate airflow verified (see adequate airflow credit)			
2	<input checked="" type="checkbox"/>	<input type="checkbox"/> Yes <input type="checkbox"/> No	Refrigerant charge or TXV			
3	<input checked="" type="checkbox"/>	<input type="checkbox"/> Yes <input type="checkbox"/> No	Duct Leakage reduction credit verified			
4	<input checked="" type="checkbox"/>	<input type="checkbox"/> Yes <input type="checkbox"/> No	Cooling capacities of installed systems are ≤ to maximum cooling capacity indicated on the Performance's CF-1R and RF-3.			
5	<input checked="" type="checkbox"/>	<input type="checkbox"/> Yes <input type="checkbox"/> No	If the cooling capacities of installed systems are > than maximum cooling capacity in the CF-1R, then the electrical input for the installed systems must be ≤ to electrical input in the CF-1R and RF-4.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
				Yes to 1, 2, and 3; and Yes to either 4 or 5 is a pass	Pass	Fail

### HIGH EER AIR CONDITIONER

Procedures for verification are available in RACM, Appendix RI.

1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	EER values of installed systems match the CF-1R			
2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	For split system, indoor coil is matched to outdoor coil	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
3	<input checked="" type="checkbox"/>	<input type="checkbox"/> Yes <input type="checkbox"/> No	Time Delay Relay Verified (if Required)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
				Yes to 1 and 2; and 3 (if Required) is a pass	Pass	Fail

**ORIGINAL**

Aug 06 07 08:52a Todd and Jennifer Ferris

(916) 483-7911

p.1

<b>(Page 1 of 12) CF-6R</b>
<b>INSTALLATION CERTIFICATE</b>
Site Address _____
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).

**WATER HEATING SYSTEMS:**

Water Type	CEC Certified Mfg Name & Model Number	Manufacturer Type (Std. Pkg. or Spec. Pkg.)	# of Recirculation Control Tanks	# of Modified Systems	Rated Input (Btu/hr or Btu/hr)	Tank Volume (gallons)	Efficiency (EF, UEF)	Standby Loss (%)	Exterior Insulation R-value

1. For small gas storage (rated input of less than or equal to 75,000 Btu/hr), electric resistance and heat pump water heaters, list Energy Factor (EF). For large gas storage water heaters (rated input of greater than 75,000 Btu/hr), list Recovery (RE), Thermal Efficiency, Standby Loss and Rated Input. For instantaneous gas water heaters, list Thermal Efficiency and Rated Input.
2. R-12 exterior insulation is mandatory for storage water heaters with an energy factor of less than 0.58.

**Kitchen Piping:**  
If indicated on the CF-1R, all hot water piping  $\geq 3/4$  inches in diameter that runs from the hot water source to the kitchen fixtures is insulated.

**Faucets & Shower Heads:**  
All faucets and showerheads installed are certified to the Energy Commission, pursuant to Title 24, Part 6, Section 111.

**Central Water Heating in Buildings with Multiple Dwelling Units (required for prescriptive)**

- All hot water piping in main circulating loop is insulated to requirements of §150(f)
- Central hot water systems serving six or fewer dwelling units which have (1) less than 25' of distribution piping outdoors; (2) zero distribution piping underground; (3) no recirculation pump; and (4) insulation on distribution piping that meets the requirements of Section 150(i)
- Central hot water systems serving more than 6 dwelling units - presence of either a time control or a time/temperature control

I, the undersigned, verify that equipment listed above my signature is: 1) 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	<i>SCOTT COLMAR PLUMBING</i>
Signature: <i>Scott Colmar</i>	Date: _____

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

<b>INSTALLATION CERTIFICATE</b>	<b>(Page 1 of 12) CF-6R</b>
Site Address <i>751 50th Street, Sacramento</i>	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).

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**WATER HEATING SYSTEMS:**

Heater Type	CEC Certified Mfr Name & Model Number	Distribution Type (Std. Points-of-Use, etc)	If Recirculation Control Type	# of Identical Systems	Rated Input (kW or Btu/hr) <sup>1</sup>	Tank Volume (gallons)	Efficiency (EF, RE) <sup>2</sup>	Standby Loss (%) <sup>2</sup>	External Insulation R-value <sup>2</sup>
	<i>RENAAT 2532 FPU</i>	<i>ON DEMAND</i>			<i>180,000</i>	<i>N/A</i>	<i>82%</i>	<i>N/A</i>	<i>N/A</i>

1. For small gas storage (rated input of less than or equal to 75,000 Btu/hr), electric resistance and heat pump water heaters, list Energy Factor (EF). For large gas storage water heaters (rated input of greater than 75,000 Btu/hr), list Recovery (RE), Thermal Efficiency, Standby Loss and Rated Input. For instantaneous gas water heaters, list Thermal Efficiency and Rated Input.
2. R-12 external insulation is mandatory for storage water heaters with an energy factor of less than 0.58.

**Kitchen Piping:**

If indicated on the CF-1R, all hot water piping  $\geq$  3/4 inches in diameter that runs from the hot water source to the kitchen fixtures is insulated.

**Faucets & Shower Heads:**

All faucets and showerheads installed are certified to the Energy Commission, pursuant to Title 24, Part 6, Section 111.

**Central Water Heating in Buildings with Multiple Dwelling Units (required for prescriptive)**

- All hot water piping in main circulating loop is insulated to requirements of §150(j)
- Central hot water systems serving six or fewer dwelling units which have (1) less than 25' of distribution piping outdoors; (2) zero distribution piping underground; (3) no recirculation pump; and (4) insulation on distribution piping that meets the requirements of Section 150(j)
- Central hot water systems serving more than 6 dwelling units - presence of either a time control or a time/temperature control

I, the undersigned, verify that equipment listed above my signature is: 1) 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	
Signature:	Date:

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

# Rinnai

800.621.9419

Name:

Scott Colmar

Registration Number:

99302

Date:

2/20/2006

Rinnai Tankless Water Heater  
Installation Training Course

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# Rinnai.

[www.rinnai.us](http://www.rinnai.us)

Ignition system

Water temperature control

Water flow control

Minimum/maximum water supply pressure

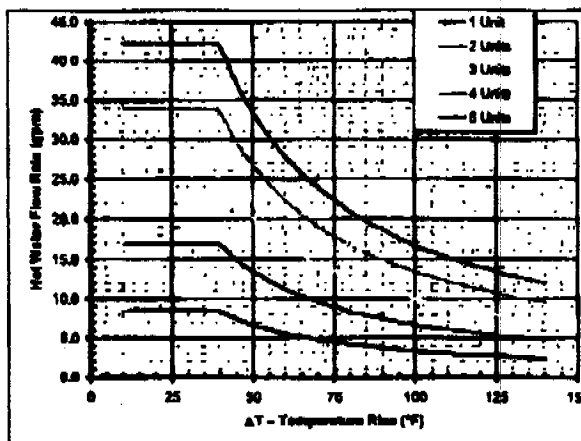
Water Flow Capacity Curves  
(For 1 to 5 units manifolded in parallel)

Direct electronic ignition

Simulation feed forward and feedback

Water flow sensor, electronic water control device, and electronic by-pass control device

20 - 150 PSI (50 or above is recommended for maximum flow)



Safety Devices

- Flame failure - Flame rod
- Boiling protection - 203°F
- Combustion fan rpm check
- Over current - Glass fuse (3 amp)
- Remaining flame (OHS)
- Thermal fuse 264°F
- Automatic frost protection

Remote Controls

MC-91-1US (included)  
Deluxe Controller: MC-100V-1US (optional)  
Bathroom Controller: BC-100V-1US (optional)

Remote control cable

Non-polarized two-core cable

Clearances from combustibles

- Top of heater ..... 6"
- Front of heater ..... 6"
- Sides of heater ..... 2"
- Suitable for Closet, Attic, and Crawl Space Installations
- Back of heater ..... 0"
- Bottom of Heater ..... 12"
- From Vent Pipe ..... 0"

Clearances from non-combustibles

- Top of heater ..... 2"
- Front of heater ..... 6"
- Sides of heater ..... 1/2"
- Back of heater ..... 0"
- Bottom of heater ..... 2"
- From Vent Pipe ..... 0"

Vent Terminal Clearances (Outside)

- Below Eave, Porch, Overhang ... 36"
- From any Internal Corner ..... 12"
- From an Opening, Window, Door ... 12"
- Above Ground ..... 12"

Min. and Max. gas supply pressure

Natural Gas: Min. 6" W.C. (NAT) Max. 10.5" W.C.  
Propane Gas: Min. 10" W.C. (LPG) Max. 14" W.C.

Manifold Gas Pressure  
(Inches W.C.)

Natural Gas: 3.7" W.C. high fire 0.77" W.C. low fire  
Propane Gas: 4.2" W.C. high fire 0.93" W.C. low fire

Warranty

Residential only; heat exchanger 10 years; all other parts 5 years; 3 years if used as a circulating water heater within a circulation loop

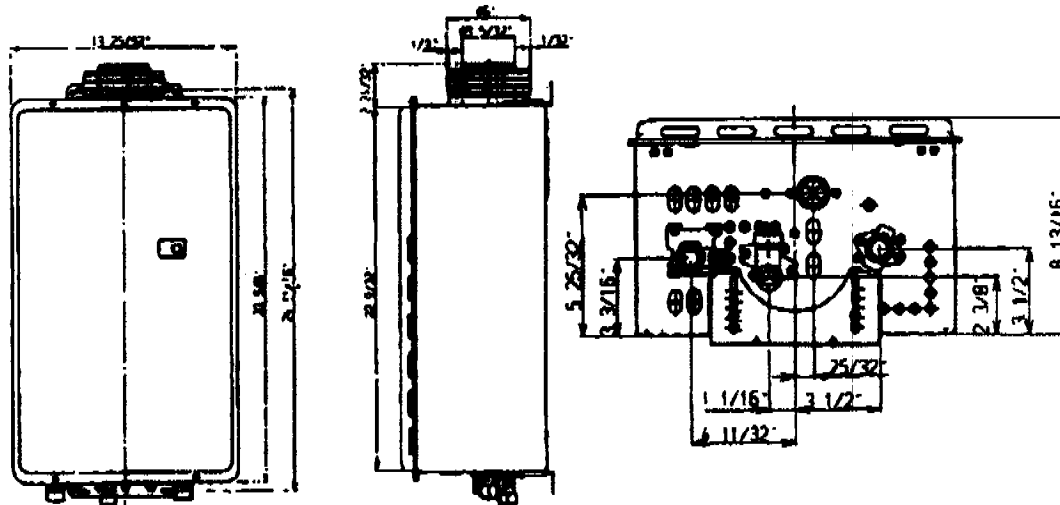
**Rinnai**

Technical Support: 1-800-621-9419

# Rinnai

## 2532FFU

Type of Appliance	Temperature controlled, continuous flow, gas hot water system.	
Operation	With or without remote controls, mounted in kitchen, bathroom, etc.	
Exhaust system	Direct vent, forced combustion	
Rinnai model number	REU-2532FFU-US	
Minimum/Maximum gas rate (Input Btuh)	15,000 BTU's - 180,000 Btuh	Natural Gas or Propane
Electrical	Appliance - AC 120 Volts - 60Hz. Remote control - DC 12 Volts	
Electrical consumption	Normal	75 watts
	Standby	5 watts
	Anti-frost protection	100 watts
Hot water capacity	0.5 to 6.5 GPM (50°F rise);	0.7 to 8.5 GPM (35°F rise)
Temperature range (with remote)	98 - 140° F	
Temperature (without remote)	120°F (Factory Default)	
Approved gas types	Natural or Propane - Ensure unit matches gas type it's being installed on.	
Installation	Internal	
Dimensions		



Weight	48 Lbs.	
Energy Factor	Natural Gas: 0.82	Propane: 0.87
Thermal Efficiency	Natural Gas: 82%	Propane: 87%
Service Connections	Gas supply 3/4" MNPT Cold water inlet 3/4" MNPT Hot water outlet 3/4" MNPT	

**Rinnai**

2532FFU SP-1

ORIGINAL

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

Site Address: 751 South St San Permit Number: \_\_\_\_\_

An installation certificate is required to be passed 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(e).

**FENESTRATION/GLAZING:**

Item	Manufacturer/Brand Name (GROUP LIKE PRODUCTS)	Product U-factor <sup>1</sup> (CF-1R value) <sup>2</sup>	Product SHGC <sup>2</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/Signal Fenestration
1.	LOWE	.32	.31	2		92.4	none	Head Windows
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 (sunscreen 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	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
Item #s (if applicable)	Signature	Date	Installing Subcontractor (Co. Name) OR General Contractor (Co. Name) OR Owner OR Window Distributor

Copies to: Building Department, MERS User (if applicable) Building Owner at Occupancy

ORIGINAL

F.M. GRAPHICS, INC. (800) 821-7825 290328

### CERTIFICATION OF INSULATION

ADDRESS: JTB enterprises lot # custom dba Bradley Builders 751 50th st Carmichael CA		SACRAMENTO BUILDING PRODUCTS	
		<input checked="" type="checkbox"/> P.O. BOX 854, WEST SACRAMENTO, CA 95691 LIC. #202026 <input type="checkbox"/> 1309 MELODY ROAD, MARYSVILLE, CA 95901 LIC. #202026 <input type="checkbox"/> P.O. BOX 9651, FRESNO, CA 93793-9651 LIC. #202026 <input type="checkbox"/> P.O. BOX 1681, RENO, NV 89505 LIC. #10675 <input type="checkbox"/> 3326 A PONDEROSA WAY, LAS VEGAS, NV 89118 LIC. #10675	
		DATE INSULATION COMPLETED 3-28-7	

SQUARE FEET)			SQUARE FEET)			SQUARE FEET)		
TYPE OF INSULATION			TYPE OF INSULATION			TYPE OF INSULATION		
MATERIAL	FIBERGLASS		MATERIAL	FIBERGLASS		MATERIAL	FIBERGLASS	
FORM	BATTS		FORM	BATTS & BLOW		FORM	BATTS	
MANUFACTURER'S PRODUCT I.D.			MANUFACTURER'S PRODUCT I.D.			MANUFACTURER'S PRODUCT I.D.		
CT	OC	JM	CT	OC	JM	CT	OC	JM
R-13			3 1/2			38		
12"			R-19			5 1/2		

MATERIAL	FIBERGLASS	FORM	BATTS	R VALUE	MANUFACTURER		
					CT	OC	JM

MATERIAL	Foam	MANUFACTURER	
		HILT	HANDY FOAM

SIGNATURE — INSULATION CONTRACTOR	<i>Jeff Cable</i>	TITLE	MANAGER	DATE	8-15-7
SIGNATURE — GENERAL CONTRACTOR		TITLE		DATE	

REMARKS

SECRET FICAT 201