

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, 3rd 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 _____

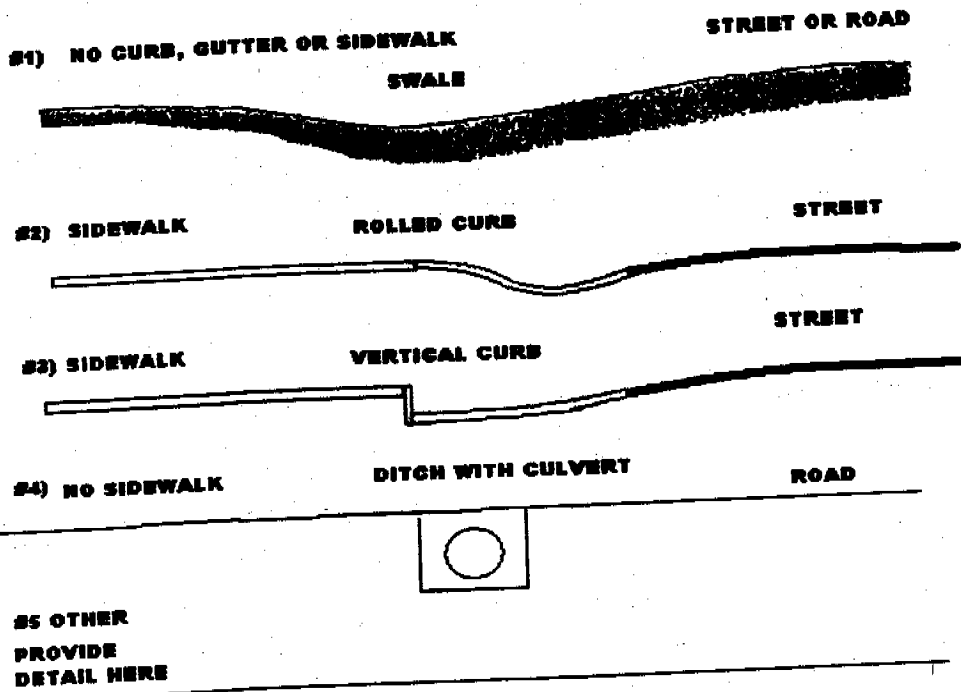
The City of Sacramento requires a building site to be graded to drain correctly and site drainage routed to an approved location. To help us understand the site drainage for your project and determine if a driveway permit or an encroachment permit is required please answer the following questions. All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



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) ¹ >(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) ¹ >(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 (Teaporator, 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 - Teaporator, 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) | | 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 | No | Adequate airflow verified (see adequate airflow credit) |
| 2 | <input type="checkbox"/> | Yes | No | Refrigerant charge is TXV |
| 3 | <input type="checkbox"/> | Yes | No | Duct Leakage reduction credit verified |
| 4 | <input type="checkbox"/> | Yes | 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 | No | EER values of installed systems match the CF-1R |
| 2 | <input checked="" type="checkbox"/> | Yes | No | For split system, indoor coil is matched to outdoor coil |
| 3 | <input type="checkbox"/> | Yes | 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: | Total CMF |
|-------------------------------------|--|---|--|
| <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 | |
| | | Rated Tons: | cfm/ton |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> Yes <input type="checkbox"/> No | Measured airflow is greater than the criteria in Table RE-2 | <input checked="" type="checkbox"/> <input type="checkbox"/> |
| | | 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

| |
|---------------------------------|
| (Page 1 of 12) CF-6R |
| INSTALLATION CERTIFICATE |
| 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, RE) | Standby Loss (%) | Exterior Insulation R-value |
|------------|---------------------------------------|---|----------------------------------|-----------------------|--------------------------------|-----------------------|---------------------|------------------|-----------------------------|
| | | | | | | | | | |
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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

| | |
|--|-----------------------------|
| INSTALLATION CERTIFICATE | (Page 1 of 12) CF-6R |
| 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).

*

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) ¹ | Tank Volume (gallons) | Efficiency (EF, RE) ² | Standby Loss (%) ² | External Insulation R-value ² |
|-------------|---------------------------------------|---|-------------------------------|------------------------|---|-----------------------|----------------------------------|-------------------------------|--|
| | <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

Rinnai.

www.rinnai.us

Ignition system

Water temperature control

Water flow control

Minimum/maximum water supply pressure

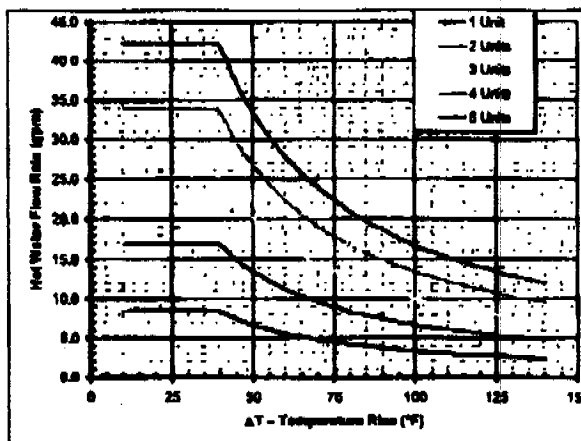
Water Flow Capacity Curves
(For 1 to 5 units manifolded in parallel)

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

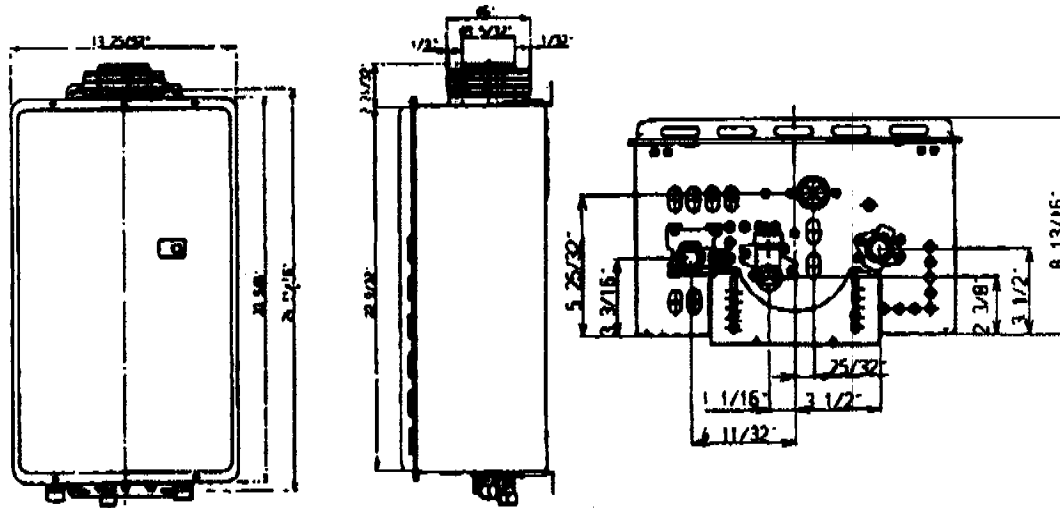
Technical Support: 1-800-621-9419

12/05

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 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(e).

FENESTRATION/GLAZING:

| Item | Manufacturer/Brand Name (GROUP LIKE PRODUCTS) | Product U-factor ¹ (CF-1R value) ² | Product SHGC ² (CF-1R value) ² | # of Panes | Total Quantity of Like Product (Optional) | Area Square Feet | Exterior Shading Device or Overhang | Comments/Location/Signify 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. | | | | | | | | |

- ¹ 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.
 - ² 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 (awning 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 | | | 38 | | | R-19 | | |
| 3 1/2 | | | 12" | | | 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 | <i>[Signature]</i> | TITLE | | DATE | |

REMARKS

SECRET FICAT 201