

CITY OF SACRAMENTO
1231 I Street, Sacramento, CA 95814

Permit No: 0611406
Insp Area: 3
Thos Bros: 317G2

Site Address: 4032 39TH ST SAC
Parcel No: 020-0071-015

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

CONTRACTOR

OWNER
SANCHEZ EDGAR
PO BOX 163796
SACRAMENTO, CA 95816

ARCHITECT

Nature of Work: NEW SFR 1013 SQ FT LIVEABLE SPACE, 333 SQ FT GARAGE, 76 SQ FT PORCH--IN DESIGN REVIEW AREA--

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 _____ License Number _____ Date _____ Contractor 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 complete 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).

PAID
CITY OF SACRAMENTO
AUG 28 2006

P.S. I am exempt under Sec. _____ B & PC for this reason: _____
Date 8-28-06 Owner Signature [Signature]

NEIGHBORHOODS PLANNING
AND DEVELOPMENT SERVICES

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

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

Date 8-28-06 Applicant/Agent Signature [Signature]

WORKER'S COMPENSATION DECLARATION: I hereby affirm under penalty of perjury one of the following declarations:
I have and will maintain a certificate of consent to self-insure for workers' compensation as provided for by Section 3700 of the Labor Code, for the performance of work for which the permit is issued.

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

Carrier _____ Policy Number _____ Exp Date _____

P.S. (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 8-28-06 Applicant Signature [Signature]

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

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



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

OWNER BUILDER VERIFICATION

1. Check one below - I or my immediate family (parent, spouse, or child) will perform:

- A - [X] all the work authorized by this permit.
B - [] a portion of the work.
C - [] none of the work.

If B or C is checked, complete 2 or 3 below.

2. A State licensed contractor (*) will be hired to do:

- [] all of the authorized work. [] a portion of the authorized work.

Name _____ Phone _____

Address _____

Type of Work _____

Name _____ Phone _____

Address _____

Type of Work _____

Name _____ Phone _____

Address _____

Type of Work _____

Name _____ Phone _____

Address _____

Type of Work _____

3. [] I will utilize unlicensed person(s) other than my immediate family to perform all or portions of the authorized work. A Certificate of Workers Compensation must be on file at this office.

I declare under penalty of perjury that the above is true and correct. I have read and understand the owner-builder information on the reverse side of this form.

Signed: Property Owner PEDRO SANCHEZ (Printed name) [Signature] (Signature)

Date 8-28-06 Case No. Permit No. 0611406

Job Address 4032 - 39th St. Sac. ca-95820

Note: * Information regarding unknown contractors or change in subcontractors shall be submitted to the Building Inspection field office.

TITLE 24 REPORT

PERMIT # 0611486

Title 24 Report for:
Sanchez Home
4032 39th Street
Sacramento, CA 95820

AUG 28 2006

CITY OF SACRAMENTO
NORTH PERMIT
CENTER

Project Designer:

e.j. rinchak & associate
7419 myrtle vista avenue
Sacramento, CA 95831
(916) 428-2076

JUL 26 2006
RECEIVED

Report Prepared By:

Eric Rinchak
E.J. Rinchak & Associates
7419 Myrtle Vista Avenue
Sacramento, CA 95831
(916) 428-2076

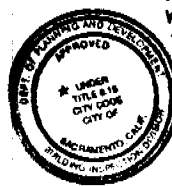
4032

Job Number:

5907-cd

Date:

5/3/2006



This set of plans and specifications must be kept on the job at all times and it is unlawful to make any changes or alterations from the same without written permission from the Building Inspection Division. The approval of this plan and specification SHALL NOT be held to permit or approve violation of any City Ordinance or State Law. Approved By _____

The EnergyPro computer program has been used to perform the calculations summarized in this compliance report. This program has approval and is authorized by the California Energy Commission for use with both the Residential and Nonresidential 2005 Building Energy Efficiency Standards. This program developed by EnergySoft, LLC - www.energysoft.com.

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Certificate Of Compliance : Residential

(Part 1 of 3) **CF-1R**

5/3/2006

Sanchez Home

Project Title

4032 39th Street Sacramento

Project Address

E. J. Rinchak & Associates

Documentation Author

(916) 428-2076

Telephone

12

Climate Zone

Date

Building Permit #

Plan Check/Date

Field Check/Date

EnergyPro

Compliance Method

Source Energy Use (kBtu/sf-yr)	Standard Design	Proposed Design	Compliance Margin
Space Heating	19.22	19.24	-0.02
Space Cooling	10.43	10.25	0.18
Fans	2.57	2.65	-0.09
Domestic Hot Water	18.25	17.22	1.03
Pumps	0.00	0.00	0.00
Totals	50.46	49.36	1.10
			2.2%

Percent better than Standard:

BUILDING COMPLIES - NO HERS VERIFICATION REQUIRED

Building Type:	<input checked="" type="checkbox"/> Single Family	<input type="checkbox"/> Addition	Total Conditioned Floor Area:	1,013 ft ²
	<input type="checkbox"/> Multi Family	<input type="checkbox"/> Existing + Add/Alt	Existing Floor Area:	n/a ft ²
Building Front Orientation:	(East) 90 deg		Raised Floor Area:	0 ft ²
Fuel Type:	Natural Gas		Slab on Grade Area:	1,013 ft ²
Fenestration:			Average Ceiling Height:	9.0 ft
Area:	138 ft ²	Avg. U: 0.25	Number of Dwelling Units:	1.00
Ratio:	13.6%	Avg. SHGC: 0.33	Number of Stories:	1

BUILDING ZONE INFORMATION

Zone Name	Floor Area	Volume	# of Units	Zone Type	Thermostat Type	Hgt.	Vent Area
Res HVAC	1,013	9,117	1.00	Conditioned	Setback	2	n/a

OPAQUE SURFACES

Type	Frame	Area	U-Fac	Insulation Cav.	Cont.	Act. Azm.	Tilt	Gains Y/N	Condition Status	JA IV Reference	Location / Comments
Roof	Wood	1,013	0.026	R-38	R-0.0	0	22	X	New	01-A8	Whole House
Wall	Wood	377	0.091	R-15	R-0.0	0	90	X	New	09-A22	Whole House
Wall	Wood	225	0.091	R-15	R-0.0	90	90	X	New	09-A22	Whole House
Door	None	20	1.450	None	R-0.0	90	90	X	New	28-A1	Whole House
Wall	Wood	418	0.091	R-15	R-0.0	180	90	X	New	09-A22	Whole House
Wall	Wood	225	0.091	R-15	R-0.0	270	90	X	New	09-A22	Whole House

Run Initiation Time: 05/03/06 17:39:54

Run Code: 1146703194

EnergyPro 4.0 by EnergySoft

User Number: 5425

Job Number: 5907-cd

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Certificate Of Compliance : Residential

(Part 2 of 3) CF-1R

Sanchez Home
Project Title

5/3/2006
Date

FENESTRATION SURFACES

#	Type	Area	U-Factor ¹	SHGC ²	True Azm.	Tilt	Cond. Stat.	Glazing Type	Location/ Comments
1	Window Right (North)	10.0	0.280 NFRC	0.33 NFRC	0	90	New	Certainteed Thermoact w/Argon	Whole House
2	Window Right (North)	10.0	0.280 NFRC	0.33 NFRC	0	90	New	Certainteed Thermoact w/Argon	Whole House
3	Window Right (North)	15.0	0.280 NFRC	0.33 NFRC	0	90	New	Certainteed Thermoact w/Argon	Whole House
4	Window Right (North)	20.0	0.280 NFRC	0.33 NFRC	0	90	New	Certainteed Thermoact w/Argon	Whole House
5	Window Front (East)	28.0	0.280 NFRC	0.33 NFRC	90	90	New	Certainteed Thermoact w/Argon	Whole House
6	Window Left (South)	8.0	0.280 NFRC	0.33 NFRC	180	90	New	Certainteed Thermoact w/Argon	Whole House
7	Window Left (South)	8.0	0.280 NFRC	0.33 NFRC	180	90	New	Certainteed Thermoact w/Argon	Whole House
8	Window Rear (West)	24.0	0.280 NFRC	0.33 NFRC	270	90	New	Certainteed Thermoact w/Argon	Whole House
9	Window Rear (West)	20.0	0.280 NFRC	0.33 NFRC	270	90	New	Certainteed Thermoact w/Argon	Whole House

1. Indicate source either from NFRC or Table 116A.

2. Indicate source either from NFRC or Table 116B.

INTERIOR AND EXTERIOR SHADING

#	Exterior Shade Type	SHGC	Window		Overhang				Left Fin			Right Fin		
			Hgt.	Wd.	Len.	Hgt.	LExt.	RExt.	Dist.	Len.	Hgt.	Dist.	Len.	Hgt.
1	Bug Screen	0.76	5.0	2.0	2.0	0.1	2.0	2.0						
2	Bug Screen	0.76	5.0	2.0	2.0	0.1	2.0	2.0						
3	Bug Screen	0.76	5.0	3.0	2.0	0.1	2.0	2.0						
4	Bug Screen	0.76	4.0	5.0	2.0	0.1	2.0	2.0						
5	Bug Screen	0.76	8.0	5.0	4.0	0.1	4.0	4.0						
6	Bug Screen	0.76	4.0	2.0	2.0	0.1	2.0	2.0						
7	Bug Screen	0.76	1.5	4.0	2.0	0.1	2.0	2.0						
8	Bug Screen	0.76	4.0	6.0	1.0	0.1	1.0	1.0						
9	Bug Screen	0.76	4.0	5.0	1.0	0.1	1.0	1.0						

THERMAL MASS FOR HIGH MASS DESIGN

Type	Area (sf)	Thick. (in.)	Heat Cap.	Inside Cond.	R-Val.	JA IV Reference	Condition Status	Location/ Comments

PERIMETER LOSSES

Type	Length	R-Val.	Insulation Location	JA IV Reference	Condition Status	Location/ Comments
Slab Perimeter	146	None	No Insulation	26-A1	New	Whole House

Certificate Of Compliance : Residential

(Part 3 of 3)

CF-1R

5/3/2006

Sanchez Home
Project Title

Date

HVAC SYSTEMS

Location	Heating Type	Minimum Eff	Cooling Type	Minimum Eff	Condition Status	Thermostat Type
Res HVAC	Central Furnace	92% AFUE	Split Air Conditioner	12.0 SEER	New	Setback

HVAC DISTRIBUTION

Location	Heating	Cooling	Duct Location	Duct R-Value	Condition Status	Ducts Tested?
Res HVAC	Ducted	Ducted	Attic (Covered)	4.2	New	No

Hydronic Piping System Name	Pipe Length	Pipe Diameter	Insul. Thick.

WATER HEATING SYSTEMS

System Name	Water Heater Type	Distribution	# in Syst.	Rated ¹ Input (Btu/hr)	Tank Cap. (gal)	Condition Status	Energy Factor or RE ¹	Standby ¹ Loss (%)	Tank Insul. R-Value Ext.
RHEEM 44V50	Small Gas	No Pipe Insulation	1	40,000	50	New	0.61	n/a	n/a

Multi-Family Central Water Heating Details

Control	Hot Water Pump			Hot Water Piping Length (ft)			Add 1/2" Insulation
	#	HP	Type	In Plenum	Outside	Buried	

¹ For small gas storage (rated input <= 75000 Btu/hr), electric resistance and heat pump water heaters, list energy factor. For large gas storage water heaters (rated input > 75000 Btu/hr), list Rated Input, Recovery Efficiency and Standby Loss. For instantaneous gas water heaters, list Rated Input, and Recovery Efficiency.

REMARKS

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 & Professions Code)

Name: ERIC J. RINCHAK
 Title/Firm: e.j. rinchak & associates
 Address: 7419 myrtle vista avenue
Sacramento, CA 95831
 Telephone: (916) 428-2076
 Lic. #: 95570

Documentation Author

Name: Eric Rinchak
 Title/Firm: E.J. Rinchak & Associates
 Address: 7419 Myrtle Vista Avenue
Sacramento, CA 95831
 Telephone: (916) 428-2076

(signature) [Signature] (date) 5/3/06

(signature) [Signature] (date) 5/3/06

Enforcement Agency

Name: _____
 Title/Firm: _____
 Address: _____
 Telephone: _____

(signature/stamp) _____ (date) _____

Sanchez Home

Project Title

5/3/2006

Date

Special Features and Modeling Assumptions

The local enforcement agency should pay special attention to the items specified in this checklist. These items require special written justification and documentation, and special verification to be used with the performance approach. The local enforcement agency determines the adequacy of the justification, and may reject a building or design that otherwise complies based on the adequacy of the special justification and documentation submitted.

	Plan	Field
The Roof "R-38 Roof(R.38.2x12.16) (1) (1)" includes credit for a Radiant Barrier installed per Section 3.3.3 of the Residential Manual.		

HERS Required Verification

Items in this section require field testing and/or verification by a certified home energy rater under the supervision of a CEC-approved HERS provider using CEC approved testing and/or verification methods and must be reported on the CF-4R installation certificate.

	Plan	Field

NOTE: Low-rise residential buildings subject to the Standards must contain these measures regardless of the compliance approach used. More stringent compliance requirements from the Certificate of Compliance supercedes the items marked with an asterisk (*) below. When this checklist is incorporated into the permit documents, the features noted shall be considered by all parties as minimum component performance specifications for the mandatory measures whether they are shown elsewhere in the documents or on this checklist only.

DESCRIPTION	Instructions: Check or initial applicable boxes when completed or check N/A if not applicable.		
	N/A	DESIGNER	ENFORCE- MENT
Building Envelope Measures			
* § 150(a): Minimum R-19 in wood ceiling insulation or equivalent U-factor in metal frame ceiling.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
§ 150(b): Loose fill insulation manufacturer's labeled R-Value: _____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
* § 150(c): Minimum R-13 wall insulation in wood framed walls or equivalent U-factor in metal frame walls (does not apply to exterior masonry walls).	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
* § 150(d): Minimum R-13 raised floor insulation in framed floors or equivalent U-factor.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
§ 150(e): Installation of Fireplaces, Decorative Gas Appliances and Gas Logs.			
1. Masonry and factory-built fireplaces have:			
a. closable metal or glass door covering the entire opening of the firebox	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. outside air intake with damper and control, flue damper and control	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. No continuous burning gas pilot lights allowed.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
§ 150(f): Air retarding wrap installed to comply with §151 meets requirements specified in the ACM Residential Manual.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
§ 150(g): Vapor barriers mandatory in Climate Zones 14 and 16 only.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
§ 150(i): Slab edge insulation - water absorption rate for the insulation alone without facings no greater than 0.3%, water vapor permeance rate no greater than 2.0 perm/inch.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
§ 118: Insulation specified or installed meets insulation installation quality standards. Indicate type and include CF-9R Form: _____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
§ 116-17: Fenestration Products, Exterior Doors, and Infiltration/Exfiltration Controls.			
1. Doors and windows between conditioned and unconditioned spaces designed to limit air leakage.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Fenestration products (except field fabricated) have label with certified U-Factor, certified Solar Heat Gain Coefficient (SHGC), and infiltration certification.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Exterior doors and windows weatherstripped; all joints and penetrations caulked and sealed.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Space Conditioning, Water Heating and Plumbing System Measures			
§ 110-13: HVAC equipment, water heaters, showerheads and faucets certified by the Energy Commission.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
§ 150(h): Heating and/or cooling loads calculated in accordance with ASHRAE, SMACNA or ACCA.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
§ 150(i): Setback thermostat on all applicable heating and/or cooling systems.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
§ 150(j): Water system pipe and tank insulation and cooling systems line insulation.			
1. Storage gas water heaters rated with an Energy Factor less than 0.55 must be externally wrapped with insulation having an installed thermal resistance of R-12 or greater.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Back-up tanks for solar systems, unfired storage tanks, or other indirect hot water tanks have R-12 external insulation or R-16 internal insulation and indicated on the exterior of the tank showing the R-value.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. The following piping is insulated according to Table 150-A/B or Equation 150-A Insulation Thickness:			
1. First 5 feet of hot and cold water pipes closest to water heater tank, non-recirculating systems, and entire length of recirculating sections of hot water pipes shall be insulated to Table 150B.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Cooling system piping (suction, chilled water, or brine lines), piping insulated between heating source and indirect hot water tank shall be insulated to Table 150-B and Equation 150-A.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Steam hydronic heating systems or hot water systems > 15 psi, meet requirements of Table 123-A.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Insulation must be protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Insulation for chilled water piping and refrigerant suction piping includes a vapor retardant or is enclosed entirely in conditioned space.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Solar water-heating systems/collectors are certified by the Solar Rating and Certification Corporation.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
EnergyPro 4.0 by EnergySoft	User Number: 5425	Job Number: 5907-cd	Page: 7 of 9

NOTE: Low-rise residential buildings subject to the Standards must contain these measures regardless of the compliance approach used. More stringent compliance requirements from the Certificate of Compliance supercede the items marked with an asterisk (*) below. When this checklist is incorporated into the permit documents, the features noted shall be considered by all parties as minimum component performance specifications for the mandatory measures whether they are shown elsewhere in the documents or on this checklist only.

DESCRIPTION	Instructions: Check or initial applicable boxes when completed or check N/A if not applicable.		
	N/A	DESIGNER	ENFORCEMENT
Space Conditioning, Water Heating and Plumbing System Measures: (continued)			
§ 150(m): Ducts and Fans			
1. All ducts and plenums installed, sealed and insulated to meet the requirements of the CMC Sections 601, 602, 603, 604, 605, and Standard 6-5; supply-air and return-air ducts and plenums are insulated to a minimum installed level of R-4.2 or enclosed entirely in conditioned space. Openings shall be sealed with mastic, tape or other duct-closure system that meets the applicable requirements of UL 181, UL 181A, or UL 181B or aerosol sealant that meets the requirements of UL 723. If mastic or tape is used to seal openings greater than 1/4 inch, the combination of mastic and either mesh or tape shall be used.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Building cavities, support platforms for air handlers, and plenums defined or constructed with materials other than sealed sheet metal, duct board or flexible duct shall not be used for conveying conditioned air. Building cavities and support platforms may contain ducts. Ducts installed in cavities and support platforms shall not be compressed to cause reductions in the cross-sectional area of the ducts.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Joints and seams of duct systems and their components shall not be sealed with cloth back rubber adhesive duct tapes unless such tape is used in combination with mastic and draw bands.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Exhaust fan systems have back draft or automatic dampers.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Gravity ventilating systems serving conditioned space have either automatic or readily accessible, manually operating dampers.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Protection of insulation. Insulation shall be protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind. Cellular foam insulation shall be protected as above or painted with a coating that is water retardant and provides shielding from solar radiation that can cause degradation of the material.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Flexible ducts cannot have porous inner cores.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
§ 114: Pool and Spa Heating Systems and Equipment			
1. A thermal efficiency that complies with the Appliance Efficiency Regulations, on-off switch mounted outside of the heater, weatherproof operating instructions, no electric resistance heating and no pilot light.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. System is installed with:			
a. At least 36" of pipe between filter and heater for future solar heating.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Cover for outdoor pools or outdoor spas.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Pool system has directional inlets and a circulation pump time switch.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
§ 115: Gas fired fan-type central furnaces, pool heaters, spa heaters or household cooking appliances have no continuously burning pilot light. (Exception: Non-electrical cooking appliances with pilot < 150 Btu/hr)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
§ 118 (f): Cool Roof material meets specified criteria	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lighting Measures			
§ 150(k): HIGH EFFICACY LUMINAIRES OTHER THAN OUTDOOR HID: contain only high efficacy lamps as outlined in Table 150-C, and do not contain a medium screw base socket (E24/E26). Ballasts for lamps 13 Watts or greater are electric and have an output frequency no less than 20 kHz.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
§ 150(k)1: HIGH EFFICACY LUMINAIRES - OUTDOOR HID: contain only high efficacy lamps as outlined in Table 150-C, luminaire has factory installed HID ballast.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
§ 150(k)2: Permanently installed luminaires in kitchens shall be high efficacy luminaires. Up to 50% of the Wattage, as determined in Section 130(c), of permanently installed luminaires in kitchens may be in luminaires that are not high efficacy luminaires, provided that these luminaires are controlled by switches separate from those controlling the high efficacy luminaires.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
§ 150(k)3: Permanently installed luminaires in bedrooms, garages, laundry rooms, utility rooms shall be high efficacy luminaires. OR are controlled by an occupant sensor(s) certified to comply with Section 119(d).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
§ 150(k)4: Permanently installed luminaires located other than in kitchens, bedrooms, garages, laundry rooms, and utility rooms shall be high efficacy luminaires (except closets less than 70 ft) OR are controlled by a dimmer switch OR are controlled by an occupant sensor that complies with Section 119(d) that does not turn on automatically or have an always on option.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
§ 150(k)5: Luminaires that are recessed into insulated ceilings are approved for zero clearance insulation cover (IC) and are certified to ASTM E283 and labeled as air tight (AT) to less than 2.0 CFM at 75 Pascals.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
§ 150(k)6: Luminaires providing outdoor lighting and permanently mounted to a residential building or to other buildings on the same lot shall be high efficacy luminaires (not including lighting around swimming pools/water features or other Article 680 locations) OR are controlled by occupant sensors with integral photo control certified to comply with Section 119(d).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
§ 150(k)7: Lighting for parking lots for 8 or more vehicles shall have lighting that complies with Sections 130, 132, and 147. Lighting for parking garages for 8 or more vehicles shall have lighting that complies with Section 130, 131, and 146.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
§ 150(k)8: Permanently installed lighting in the enclosed, non-dwelling spaces of low-rise residential buildings with four or more dwelling units shall be high efficacy luminaires OR are controlled by occupant sensor(s) certified to comply with Section 119(d).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
EnergyPro 4.0 by EnergySoft	User Number: 5425	Job Number: 5907-cd	Page: 8 of 9

HVAC SYSTEM HEATING AND COOLING LOADS SUMMARY

PROJECT NAME	Sanchez Home	DATE	5/3/2006
SYSTEM NAME	Res HVAC	FLOOR AREA	1,013

ENGINEERING CHECKS

Number of Systems	1
Heating System	
Output per System	37,000
Total Output (Btuh)	37,000
Output (Btuh/sqft)	36.5
Cooling System	
Output per System	29,000
Total Output (Btuh)	29,000
Total Output (Tons)	2.4
Total Output (Btuh/sqft)	28.6
Total Output (sqft/Ton)	419.2

SYSTEM LOAD

	COIL COOLING PEAK			COIL HTG. PEAK	
	CFM	Sensible	Latent	CFM	Sensible
Total Room Loads	439	10,889	218	450	16,984
Return Vented Lighting		0			
Return Air Ducts		1,330			2,179
Return Fan		0			0
Ventilation	0	0	0	0	0
Supply Fan		0			0
Supply Air Ducts		1,330			2,179
TOTAL SYSTEM LOAD		13,548	218		21,342

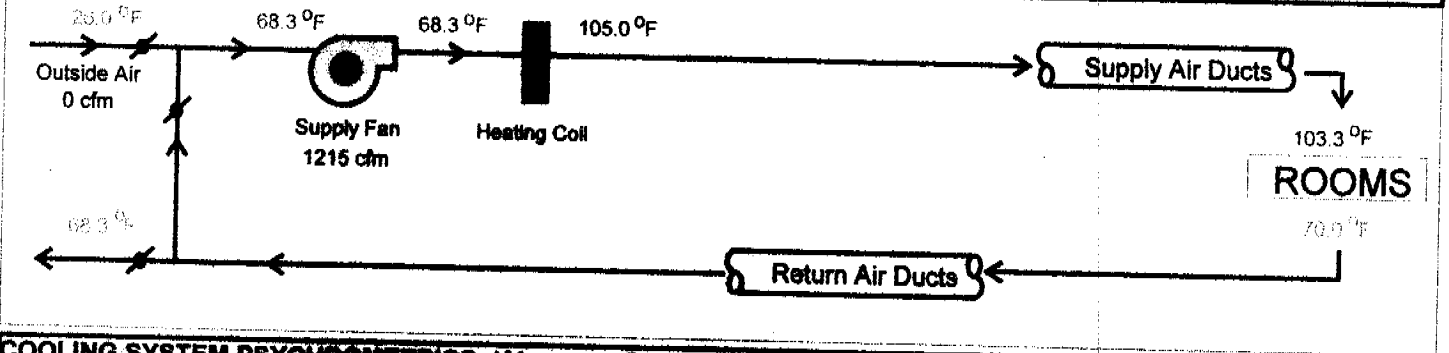
Air System	
CFM per System	1,215
Airflow (cfm)	1,215
Airflow (cfm/sqft)	1.20
Airflow (cfm/Ton)	502.6
Outside Air (%)	0.0
Outside Air (cfm/sqft)	0.00

HVAC EQUIPMENT SELECTION

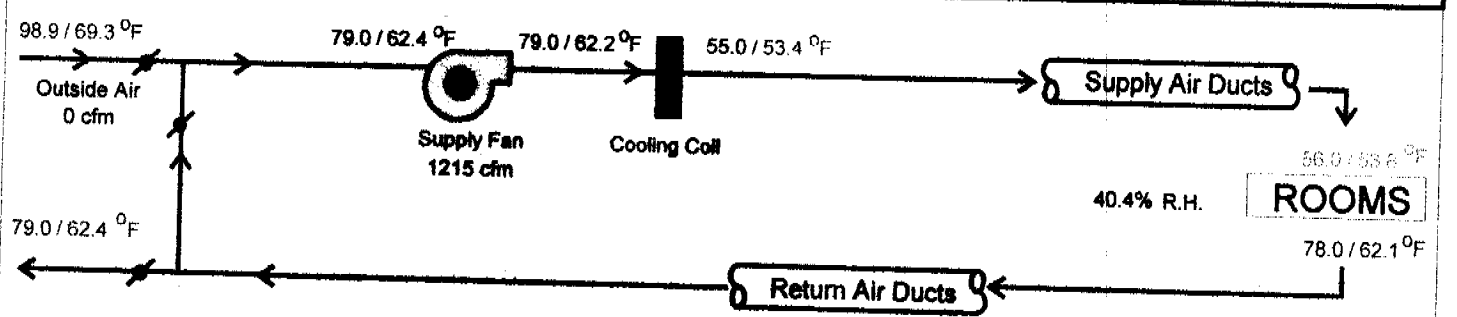
BDP CO. 563AN030-A	23,477	2,839	37,000
Total Adjusted System Output (Adjusted for Peak Design Conditions)			
	23,477	2,839	37,000
TIME OF SYSTEM PEAK		Aug 2 pm	Jan 12 am

Note: values above given at ARI conditions

HEATING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Heating Peak)



COOLING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Cooling Peak)



INSTALLATION CERTIFICATE

(Page 8 of 12) CF-6R

Site Address **4032 39th St.**

Permit Number
0611406

FAN WATT DRAW

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

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

ADEQUATE AIRFLOW VERIFICATION

Procedures for measuring the airflow are available in RACM, Appendix RE3.1.

<input checked="" type="checkbox"/> Method For Airflow Measurement			
<input type="checkbox"/>	RE4.1.1	Diagnostic Fan Flow Using Flow Capture Hood	
<input type="checkbox"/>	RE4.1.2	Diagnostic Fan Flow Using Plenum Pressure Matching	
<input type="checkbox"/>	RE4.1.3	Diagnostic Fan Flow Using Flow Grid Measurement	
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Duct design exists on plans	
		Measured Airflow:	Total cfm
		Rated Tons cfm/ton	cfm/ton
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Measured airflow is greater than the criteria in Table RE-2	<input checked="" type="checkbox"/> <input checked="" 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.	<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 type="checkbox"/> Yes	<input type="checkbox"/> No	EER values of installed systems match the CF-1R	
2	<input checked="" type="checkbox"/>	<input 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"/> Yes to 1 and 2; and 3 (If Required) is a pass Pass Fail
3	<input checked="" type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Time Delay Relay Verified (If Required)	<input type="checkbox"/> <input type="checkbox"/> Pass Fail

Installing Subcontractor (Co. Name) OR General Contractor (Co. Name) OR Owner	Homeowner
Signature: <i>Edgar</i>	Date: 12/27/07

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

INSTALLATION CERTIFICATE		(Page 3 of 12) CF-6R
Site Address 4032 39th St.	Permit Number 06 11406	

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.) ¹ (≥CF-IR value)	Duct Location (attic, etc.)	Duct or Piping R-value	Heating Load (Btu hr)	Heating Capacity (Btu hr)
furnace-split	Kelvinator	1	81	attic	R6		48K
	KG6RA030C-12A						

Cooling Equipment

Equip Type (pkg. heat pump)	CEC Certified Mfr. Name and Model Number	# of Identical Systems	Efficiency (SEER or EER) ¹ (≥CF-IR value)	Duct Location (attic, etc.)	Duct R-value	Cooling Load (Btu hr)	Cooling Capacity (Btu hr)
A/C - split	Coleman	1	14	attic	R6		2.5 Ton
	ERCA0301BB						

1. ≥ symbol reads *greater than or equal to what is indicated on the CF-IR 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	Homeowner
Signature: <i>Edgar Nunez</i>	Date: 12/27/07

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

INSTALLATION CERTIFICATE**(Page 6 of 12) CF-6R**Site Address **4032 39th St.**Permit Number
0611406**Standard Charge Measurement Summary:**

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

<input checked="" type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> 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.
Weigh-In Charging Method for Refrigerant Charge

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

N/A

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

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

Alternate Charge Measurement Summary:

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

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

Installing Subcontractor (Co. Name) OR General Contractor (Co. Name) OR Owner	Homeowner
Signature: <i>Edger Sawy</i>	Date: 12/27/07

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

INSTALLATION CERTIFICATE

(Page 5 of 12) CF-6R

Site Address **4032 39th St.**

Permit Number
0611406

THERMOSTATIC EXPANSION VALVE (TXV)

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

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

REFRIGERANT CHARGE MEASUREMENT

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

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

Standard Charge Measurement Procedure (outdoor air dry-bulb 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)		°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)	N/A	°F
Condenser (entering) air dry-bulb temperature (Tcondenser, db)		°F

Superheat Charge Method Calculations - Refrigerant Charge

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

Temperature Split Method Calculations for Adequate Airflow

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

Actual Temperature Split = 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 -100°F)		°F

INSTALLATION CERTIFICATE

(Page 4 of 12) CF-6R

Site Address
4032 39th St.

Permit Number
0611406

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 FOR NEW DUCTS:

- 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 on new 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 type="checkbox"/> Cooling <input checked="" type="checkbox"/> Heating) or <input type="checkbox"/> Measured If Fan Flow is Calculated as 400 cfm/ton x number of tons or as 21.7 cfm/(kBtu/hr) x Heating Capacity in Thousands of Btu/hr, enter total calculated or measured fan flow in CFM here:	1041	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
3	Pass if Leakage Percentage < 6% for Final or < 4% at Rough-in without air handle: [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.	58	
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)]]	5.6	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail
TEST OR VERIFICATION STANDARDS: For Altered Duct System and/or HVAC Equipment Change-Out Use one of the following four Test or Verification Standards for compliance:			
9	Pass if Leakage Percentage < 15% [100 x [(Line # 5) / (Line # 2)]]		<input type="checkbox"/> Pass <input type="checkbox"/> Fail
10	Pass if Leakage to Outside Percentage < 10% [100 x [(Line # 7) / (Line # 2)]]		<input type="checkbox"/> Pass <input type="checkbox"/> Fail
11	Pass if Leakage Reduction Percentage > 60% [100 x [(Line # 6) / (Line # 4)]] and Verification by Smoke Test and Visual Inspection		<input type="checkbox"/> Pass <input type="checkbox"/> Fail
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 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	Homeowner
Signature: <i>Edger Jones</i>	Date: 12/27/07

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

*Attention
Pedro -*

ABC INSULATION & SUPPLY CO.
11386 AMALGAM WAY
RANCHO CORDOVA, CA 95670
 Phone (916) 635-7171
 Fax (916) 635-7717
 State License No. 369263

THIS IS TO CERTIFY THAT INSULATION HAS BEEN INSTALLED IN CONFORMANCE WITH CURRENT ENERGY REGULATIONS, CALIFORNIA ADMINISTRATIVE CODE, TITLE 24, STATE OF CALIFORNIA, IN THE BUILDING LOCATED AT:

LOT# _____ TRACT _____
 STREET 4032-39th STREET CITY SACRAMENTO

EXTERIOR WALLS:

Manufacturer CERTAINTEED Thickness 3 1/2" R Value 15

CEILINGS:

Batts
 Manufacturer N/A Thickness _____ R Value _____

Blown In
 Manufacturer N/A Thickness _____ R Value _____

Square footage covered _____

Garage ceiling - living space above
 Manufacturer N/A Thickness _____ R Value _____

FLOORS:

Manufacturer N/A Thickness _____ R Value _____

POLYSEAL/CAULK PER TITLE 24: YES

GENERAL CONTRACTOR _____

CALIFORNIA CONTRACTORS LICENSE# _____ DATE _____

SIGNATURE	TITLE
INSULATION CONTRACTOR <u>ABC INSULATION & SUPPLY CO.</u> DATE <u>12/26/07</u>	
<u>Cheryl Prother</u>	<u>SECRETREAS</u>
SIGNATURE	TITLE

NOTE: OWNER INSTALLED CEILING INSULATION Green good

BRAND Green good
 THICKNESS 12"
 R-VALUE R-38

SIGNATURE Pedro Sanchez