

CITY OF SACRAMENTO

Permit No: 0510686

1231 I Street, Sacramento, CA 95814

Insp Area: 3

Thos Bros: 318B3

Site Address: 4290 71ST ST SAC

Sub-Type: NDUP

Parcel No: 021-0172-060

Housing (Y/N): N

CONTRACTOR

OWNER

ARCHITECT

RAJ DEO/NALINI P
7631 NORTHLAND DR
SACRAMENTO, CA 95831

Nature of Work: NEW DUPLEX UNIT OF 908 SQ FT LIVING SPACE ATTACHED TO EXISTING DETACHED GARAGE

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);

NR 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).

SEP 11 2005
CITY OF SACRAMENTO
NEIGHBORHOODS PLANNING AND DEVELOPMENT SERVICES

I am exempt under Sec. B & PC for this reason:

Date 9-9-05 Owner Signature Nalini P. Raj

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 a ny 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 9-9-05 Applicant/Agent Signature Nalini P. Raj

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

NR (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 9-9-05 Applicant Signature Nalini P. Raj

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.

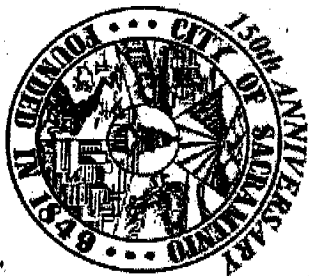
THIS PERMIT SHALL EXPIRE BY LIMITATION IF WORK IS NOT COMMENCED WITHIN 180 DAYS.

4290 71st St.

City of Sacramento 0510686
Development Services Department

PLANNING REVIEW FOR BUILDING PERMIT SUBMITTAL

ADDRESS: 4290 71 ST STREET		APN: 021-0172-060
DRPB AREA / PUD / SPD: Citywide		ZONING: R-1
EXISTING LAND USE: SFR		
PROPOSED USE: Detached Duplex (New 2 nd Unit)		
PLANNING STAFF WILL CHECK ONE OR MORE OF THE ITEMS BELOW:		
<input type="checkbox"/>	Planning review is NOT required.	
<input type="checkbox"/>	Use is NOT allowed; applicant CANNOT submit for plan check.	
<input type="checkbox"/>	Requires APPLICATION(s): PC ZA IR ER DR PB Required Planning application must be approved <i>before</i> project can be submitted for plan check	
<input type="checkbox"/>	Application(s) IN PROGRESS: File Number: ER05-093 received 5/3/2005 Application must be approved before project can be submitted for plan check.	
<input checked="" type="checkbox"/>	Application(s) COMPLETED: File Number & approval date: ER05-093 Approved June 6, 2005 Building permit must conform to approved plans and comply with all conditions of approval. Do NOT accept applications for a building permit prior to the end of the 10-day appeal period.	
<input checked="" type="checkbox"/>	Plans may be submitted for plan check. Plan checker(s) shall confirm compliance with Zoning Ordinance requirements and all applicable development standards <i>prior to issuance</i> of building permit.	
<input checked="" type="checkbox"/>	Meets setback & lot coverage requirements as shown on site plan provided. ** (Substituted Rear-yard)	
<input type="checkbox"/>	Plans to be submitted have been stamped/signed by Planning counter staff.	
<input type="checkbox"/>	Route to SITE for plan check and inspection.	
<input type="checkbox"/>	Route to SITE for inspection only, plan check not required.	
<input type="checkbox"/>	Preliminary review ONLY; the information on this form must be reviewed again and confirmed at the time of building permit submittal.	
CONDITIONS AND COMMENTS: Lot 9,040 sq ft – Existing SFR w/detached garage =1,406 sq ft Proposed new 2 nd unit=754 sq ft - **The proposed new 2 nd unit will utilize the substituted rear yard formula in order to meet the required setbacks. If the applicant/owner proposes <i>any</i> development within the interior side-yard in the future he will need to apply for a planning commission special permit. The proposed new 2 nd unit does not meet the citywide design review checklist because the face of the primary structure is not within 5 feet of the face of the garage, and the front porch does not include decorative columns or a decorative roof cover. The application is being elevated to Design Review staff-level for further review. The applicant has been made aware of this and has been asked to submit additional fees as a result of this issue. All other setbacks are okay, and lot coverage with the proposed new 2 nd unit shall be 23%. No other planning issues are apparent at this time.		
Building permit must conform to approved plans and comply with all conditions of approval for ER05-093.		
DATE: May 3, 2005 / June 8, 2005	BY: Darryl Wheeler / Elise Gumm	



CITY OF SACRAMENTO
DEVELOPMENT SERVICES DIVISION
FAXED PERMIT APPLICATION (certain restrictions apply)
Fax # 916-264-1901

DATE: 7/20/05

Faxed request must be received in this office by 3:00 p.m. to be processed the following work day.
Note: Contractors must have a current certificate of Worker's Compensation Insurance.

Note: Work started before a Building Permit is issued will be subject to quad fee

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

JOB ADDRESS: 4290 71st Street

CONTACT PERSON: DEORAJ

Property Owner: DEORAJ

Address: 4290 71st Street

City/State/Zip: SAC, CA 95824

Phone: (916) 616-6157

Contractor: DEORAJ

Address: 4290 71st Street

City/State/Zip: SAC, CA 95824

Phone: (916) 616-6157

Contractor Phone: 616-6157

License # 010929

Fax: 916-635-4173

NATURE OF REQUEST: Indicate from the selections below & provide details under description of work.

<input type="checkbox"/> REROOF (excluding tile) <input type="checkbox"/> TEAR-OFF <input type="checkbox"/> RESHET <input checked="" type="checkbox"/> HOUSE # STD RIES: GARAGE #SQUARES: _____ Material: _____ <input type="checkbox"/> SIDING <input type="checkbox"/> wood <input type="checkbox"/> T-111 <input type="checkbox"/> Horiz <input type="checkbox"/> Vinyl <input checked="" type="checkbox"/> stucco	<input type="checkbox"/> HVAC INSTALLATIONS (residential ONLY) <input type="checkbox"/> CHANGE-OUT <input type="checkbox"/> NEW <input type="checkbox"/> Heat Pump <input type="checkbox"/> Package <input type="checkbox"/> Split system <input type="checkbox"/> Roof mount <input type="checkbox"/> Cut-in <input type="checkbox"/> Heat pump or elect. unit to gas. <input type="checkbox"/> Wall furnace <input type="checkbox"/> Other (describe below)	<input type="checkbox"/> WATER HEATER (residential ONLY) <input type="checkbox"/> GAS <input type="checkbox"/> ELECTRIC <input type="checkbox"/> Change-out <input type="checkbox"/> Electric to Gas <input type="checkbox"/> Relocate <input type="checkbox"/> New	<input type="checkbox"/> MINOR ELECTRIC and/or MINOR PLUMBING (residential ONLY) <input type="checkbox"/> Electric Service Change # amps <input type="checkbox"/> New electric circuits <input type="checkbox"/> Re-wire <input type="checkbox"/> Water Service Replacement <input type="checkbox"/> Sewer Service Replacement <input type="checkbox"/> Gas Line Replacement <input type="checkbox"/> Re-plumb <input type="checkbox"/> Water <input type="checkbox"/> Waste	<input type="checkbox"/> PUBLIC UTILITIES SAFETY INSPECTION* (Residential and single apartment units ONLY) <input type="checkbox"/> SMUD <input type="checkbox"/> PGE
--	--	--	--	---

Note: Design Review approval may be required in certain areas.

Note: Design Review approval may be required for rooftop units.

Note: Design Review approval may be required in certain areas.

DESCRIPTION OF WORK: 941 D ADD TO (E) DET GARAGE

0510686

Bruce O. Young
Civil Engineer, Lic. No 014057
410 Blackwood Street
Sacramento, CA 95815-3702
Phone & Fax (916) 359-1554

June 9, 2006

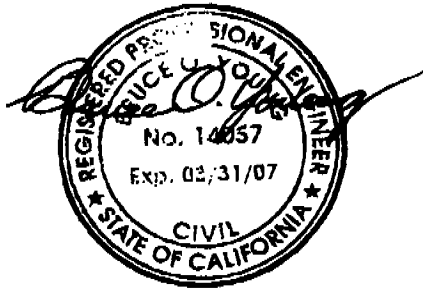
City of Sacramento Building Department
Sacramento, CA

Re: Permit No. 051-0686
New Residence-Deo Raj
4290 71rst Street
Sacramento, CA

According to the Catalog by Simpson Strong-Tie, PHD-2 Holdown bolts have an ultimate pullout strength of 12,520 lbs and an allowable strength in pullout of 3,610 lbs.

These should be more than adequate for the holdowns in this small building.

Sincerely,



4290 71st Street 0510686
 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; however, use of this form to provide the information is optional.) 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(b).

HVAC SYSTEMS:

Heating Equipment

Equip. Type (pkg. heat pump)	CEC Certified Mfr Name and Model Number	# of Identical Systems	Efficiency (AFUE, etc.) ¹ [\geq CF-1R value]	Duct Location (attic, etc.)	Duct or Piping R-value	Heating Load (Btu/hr)	Heating Capacity (Btu/hr)
Split Gas	Comfortmaker	1	AFUE = 80%	Attic	R-6	15,655	40,000
Model # N8MPL050B12B1							

Cooling Equipment

Equip. Type (pkg. heat pump)	CEC Certified Compressor Unit Mfr Name and Model Number	# of Identical Systems	Efficiency (SEER, etc.) ¹ [\geq CF-1R value]	Duct Location (attic, etc.)	Duct R-value	Cooling Load (Btu/hr)	Cooling Capacity (Btu/hr)
Split AC	Comfortmaker	1	SEER 13.0	Attic	R-6	16,200	23,000
Model # N2A32AKA200							

1. \geq reads greater than or equal to.
 1. the undersigned, verify that equipment listed above 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.

 Signature, Date Installing Subcontractor (Co. Name) OR General Contractor (Co. Name) OR Owner

WATER HEATING SYSTEMS:

Heater Type	CEC Certified Mfr Name & Model Number	Distribution Type (Std. Point-of-Use)	If Recirculation Control Type	# of Identical Systems	Rated ² Input (kW or Btu/hr)	Tank Volume (gallons)	Efficiency ² (EF, RE)	Standby ² Loss (%)	External Insulation R-value ³
Existing gas water heater.									

2. 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. For large gas storage water heaters (rated input of greater than 75,000 Btu/hr), list Recovery Efficiency, Standby Loss and Rated Input. For instantaneous gas water heaters, list Recovery Efficiency and Rated Input.
 3. R-12 external insulation is mandatory for storage water heaters with an energy factor of less than 0.58.

Faucets & Shower Heads:

All faucets and showerheads installed are certified to the Commission, pursuant to Title 24, Part 6, Section 111.
 1. 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.

 Signature, Date Installing Subcontractor (Co. Name) OR General Contractor (Co. Name) OR Owner

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

4290 71st Street

0510686

Site Address

Permit Number

FENESTRATION/GLAZING:

Manufacturer/Brand Name (GROUP LIKE PRODUCTS)	Product U-Factor ¹ (≤ CF-1R value) ²	Product SHGC ¹ (≤ CF-1R value) ²	# of Panes	Total Quantity of Like Product (Optional)	Square Feet	Exterior Shading Device or Overhang	Comments/Location/Special Features
1. Living Room	0.35	0.32	2	1	10	N/A	None
2. Living Room	0.54	0.32	2	1	16	N/A	None
3. Living Room	0.54	0.32	2	1	20	N/A	None
4. Bedroom	0.49	0.59	2	1	9	N/A	None
5. Bedroom	0.49	0.59	2	1	9	N/A	None
6. Bedroom	0.54	0.32	2	1	16	N/A	None
7. Bedroom	0.54	0.32	2	1	16	N/A	None
8. Bedroom	0.49	0.59	2	1	9	N/A	None
9.							
10.							
11.							
12.							
13.							
14.							
15.							

¹ Manufactured fenestration products use the values from the product label. Field fabricated fenestration products 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 (exterior 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.

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.

1-8
Item #s
(if applicable)

Signature, Date

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

IGNORE THIS LINE

Date

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

IGNORE THIS LINE

Date

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

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

4290 71st Street

0510686

Site Address

Permit Number

DUCT LEAKAGE AND DESIGN DIAGNOSTICS

HERS Duct Leakage Testing

DUCT LEAKAGE REDUCTION Not Required Per Calculations

Pressurization Test Results (CFM @ 25 PA)

Test Leakage (CFM) _____

Fan Flow

If Fan Flow is Calculated as 400 cfm/ton x number of tons, or as 21.7 x Heating Capacity in Thousands of Btu/hr, enter calculated value here _____

If fan flow is measured, enter measured value here _____

Leakage Fraction = Test Leakage / (Measured or Calculated Fan Flow) = _____

Pass if leakage fraction \leq 0.06

Pass Fail

For AEROSOL TYPE SEALANTS ONLY - The following diagnostic testing was completed:

Duct Fan Pressurization at rough-in measured leakage (CFM)

CHECK AFTER FINISHING WALL:

Yes No Pressure pan test or House pressurization test

Yes No Visual Inspection of Duct Connections

Pass Fail

THERMOSTATIC EXPANSION VALVE (TXV) TXV Not Required Per Calcs.

Yes No Thermostatic Expansion Valve is installed and Access is provided for inspection

Yes is a pass

Pass Fail

DUCT DESIGN

Yes No

ACCA Manual D Design calculations have been completed, Duct Design is on the plans and duct installation matches plans.

2. Yes No

TXV is installed or Fan flow has been verified. If no TXV, verified fan flow matches design from CF-1R.

Measured Fan Flow = _____

Yes for both 1 and 2 is a Pass

Pass Fail

I, the undersigned, verify that the above diagnostic test results and the work I performed associated with the test(s) is in conformance with the requirements for compliance credit. [The builder shall provide the HERS provider a copy of the CF-6R signed by the builder employees or sub-contractors certifying that diagnostic testing and installation meet the requirements for compliance credit.]

Tests

Performed

COPY TO:

Building Department
HERS Provider (if applicable)
Building Owner at Occupancy

Signature, Date

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

4290 71st Street

0510686

Site Address

Permit Number

RC&AM Not Required Per Calcs.

REFRIGERANT CHARGE AND AIRFLOW MEASUREMENT

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

Outdoor Unit Serial #
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 and Airflow Measurement (outdoor air dry-bulb 55 °F and above):

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

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

Superheat Charge Method Calculations for Refrigerant Charge
Actual Superheat = Tsuction, db - Tevaporator, sat °F
Target Superheat (from Table 1) °F
Actual Superheat - Target Superheat °F
(System passes if between -5 and +5°F)

Temperature Split Method Calculations for Adequate Airflow
Actual Temperature Split = Treturn, db - Tsupply, db °F
Target Temperature Split (from Table 2) °F
Actual Temperature Split - Target Temperature Split °F
(System passes if between -3°F and +3°F or, upon re-measurement, if between +3°F and -25°F)

Standard Charge and Airflow 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

System Passes yes or no

4290 71st Street

0510686

Site Address

Permit Number

Alternate Charge and Airflow Measurement (outdoor air dry-bulb below 55 °F):

Weight-In Charging Method for Refrigerant Charge

Actual liquid line length: _____ ft.

Manufacturers Standard liquid line length: _____ ft.

Difference (Actual - Standard): _____ ft.

Manufacturers correction (ounces per foot) _____ x difference in length = _____ ounces
(+ = add) (- = remove)

Measured Airflow Method for Adequate Airflow

Airflow criterion: Cooling Capacity _____ X 0.032 = _____ CFM

Measured Airflow is _____ CFM and passes since it is greater than the criterion.

Alternate Charge and Airflow Measurement Summary:

System charge shall be corrected and it shall also pass measured adequate airflow criterion.

System Passes _____ yes or _____ no

INSTALLATION CERTIFICATE

(Page 6 of 13)

CF-6R

4290 71st Street

0510686

Site Address

Permit Number

Table K-1: Target Superheat (Suction Line Temperature - Evaporator Saturation Temperature)

Condenser Air Dry-Bulb Temperature (°F)	Return Air Wet-Bulb Temperature (°F)																											
	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	
55	10.1	11.5	12.8	14.0	15.1	16.1	17.1	18.1	19.1	20.0	21.5	22.7	24.2	25.7	27.3	28.9	31.0	32.4	33.8	35.1	36.4	37.7	39.0	40.2	41.5	42.7	43.9	45.0
56	8.6	9.9	11.2	12.6	14.0	15.4	16.8	18.2	19.7	21.2	22.7	24.2	25.7	27.3	28.9	30.5	31.8	33.2	34.6	35.9	37.2	38.5	39.7	41.0	42.2	43.4	44.6	45.8
57	8.3	9.6	11.0	12.3	13.7	15.1	16.5	17.9	19.4	20.8	22.3	23.8	25.3	26.8	28.3	29.9	31.3	32.6	34.0	35.3	36.7	38.0	39.2	40.5	41.7	43.0	44.2	45.4
58	7.9	9.3	10.6	12.0	13.4	14.8	16.2	17.6	19.0	20.4	21.9	23.3	24.8	26.3	27.8	29.3	30.7	32.1	33.5	34.8	36.1	37.4	38.7	40.0	41.3	42.5	43.7	44.9
59	7.5	8.9	10.2	11.6	13.0	14.4	15.8	17.2	18.6	20.0	21.4	22.9	24.3	25.7	27.2	28.7	30.1	31.5	32.9	34.3	35.6	36.9	38.3	39.5	40.8	42.1	43.3	44.5
60	7.0	8.4	9.8	11.2	12.6	14.0	15.4	16.8	18.2	19.6	21.0	22.4	23.8	25.2	26.6	28.1	29.6	31.0	32.4	33.7	35.0	36.4	37.8	39.1	40.4	41.6	42.9	44.1
61	6.5	7.9	9.3	10.7	12.1	13.5	14.9	16.3	17.7	19.1	20.5	21.9	23.3	24.7	26.1	27.5	29.0	30.4	31.8	33.2	34.6	35.9	37.3	38.6	39.9	41.2	42.4	43.6
62	6.0	7.4	8.8	10.2	11.7	13.1	14.5	15.9	17.3	18.7	20.1	21.4	22.8	24.2	25.5	27.0	28.4	29.9	31.3	32.7	34.1	35.4	36.8	38.1	39.4	40.7	42.0	43.2
63	5.3	6.8	8.3	9.7	11.1	12.6	14.0	15.4	16.8	18.2	19.6	20.9	22.3	23.6	25.0	26.4	27.8	29.3	30.7	32.1	33.5	34.9	36.3	37.7	39.0	40.3	41.6	42.8
64	5.1	6.6	8.1	9.6	11.0	12.5	13.9	15.4	16.8	18.2	19.6	20.9	22.3	23.6	25.0	26.4	27.8	29.2	30.6	32.0	33.4	34.8	36.2	37.6	38.9	40.2	41.5	42.8
65	5.4	7.0	8.5	10.0	11.5	13.0	14.5	16.0	17.5	19.0	20.5	22.0	23.5	25.0	26.5	28.0	29.5	31.0	32.5	34.0	35.5	37.0	38.5	40.0	41.5	43.0	44.5	46.0
66	5.7	7.3	8.9	10.5	12.1	13.7	15.3	16.9	18.5	20.1	21.7	23.3	24.9	26.5	28.1	29.7	31.3	32.9	34.5	36.1	37.7	39.3	40.9	42.5	44.1	45.7	47.3	48.9
67	5.5	7.1	8.7	10.3	11.9	13.5	15.1	16.7	18.3	19.9	21.5	23.1	24.7	26.3	27.9	29.5	31.1	32.7	34.3	35.9	37.5	39.1	40.7	42.3	43.9	45.5	47.1	48.7
68	5.8	7.4	9.0	10.6	12.2	13.8	15.4	17.0	18.6	20.2	21.8	23.4	25.0	26.6	28.2	29.8	31.4	33.0	34.6	36.2	37.8	39.4	41.0	42.6	44.2	45.8	47.4	49.0
69	5.5	7.2	8.8	10.4	12.0	13.6	15.2	16.8	18.4	20.0	21.6	23.2	24.8	26.4	28.0	29.6	31.2	32.8	34.4	36.0	37.6	39.2	40.8	42.4	44.0	45.6	47.2	48.8
70	5.8	7.4	9.0	10.6	12.2	13.8	15.4	17.0	18.6	20.2	21.8	23.4	25.0	26.6	28.2	29.8	31.4	33.0	34.6	36.2	37.8	39.4	41.0	42.6	44.2	45.8	47.4	49.0
71	5.6	7.3	8.9	10.5	12.1	13.7	15.3	16.9	18.5	20.1	21.7	23.3	24.9	26.5	28.1	29.7	31.3	32.9	34.5	36.1	37.7	39.3	40.9	42.5	44.1	45.7	47.3	48.9
72	6.4	8.1	9.8	11.4	12.9	14.4	15.8	17.2	18.6	20.0	21.4	22.8	24.2	25.6	27.0	28.4	29.8	31.2	32.6	34.0	35.4	36.8	38.2	39.6	41.0	42.4	43.8	45.2
73	5.6	7.3	9.0	10.7	12.2	13.7	15.2	16.7	18.2	19.7	21.2	22.7	24.2	25.7	27.2	28.7	30.2	31.7	33.2	34.7	36.2	37.7	39.2	40.7	42.2	43.7	45.2	46.7
74	6.5	8.2	9.9	11.5	13.1	14.5	15.9	17.3	18.7	20.1	21.5	22.9	24.3	25.7	27.1	28.5	29.9	31.3	32.7	34.1	35.5	36.9	38.3	39.7	41.1	42.5	43.9	45.3
75	5.6	7.4	9.2	10.8	12.4	14.0	15.6	17.2	18.8	20.4	22.0	23.6	25.2	26.8	28.4	30.0	31.6	33.2	34.8	36.4	38.0	39.6	41.2	42.8	44.4	46.0	47.6	49.2
76	6.6	8.4	10.1	11.7	13.2	14.7	16.1	17.5	18.9	20.3	21.7	23.1	24.5	25.9	27.3	28.7	30.1	31.5	32.9	34.3	35.7	37.1	38.5	39.9	41.3	42.7	44.1	45.5
77	5.7	7.5	9.3	11.1	12.5	14.0	15.4	16.8	18.3	19.7	21.1	22.5	23.9	25.3	26.7	28.1	29.5	30.9	32.3	33.7	35.1	36.5	37.9	39.3	40.7	42.1	43.5	44.9
78	6.7	8.5	10.2	11.8	13.4	14.8	16.2	17.6	19.0	20.4	21.8	23.2	24.6	26.0	27.4	28.8	30.2	31.6	33.0	34.4	35.8	37.2	38.6	40.0	41.4	42.8	44.2	45.6
79	5.9	7.7	9.5	11.1	12.7	14.2	15.6	17.1	18.5	19.9	21.3	22.7	24.1	25.5	26.9	28.3	29.7	31.1	32.5	33.9	35.3	36.7	38.1	39.5	40.9	42.3	43.7	45.1
80	6.9	8.7	10.4	12.0	13.5	15.0	16.5	18.0	19.4	20.9	22.3	23.8	25.2	26.7	28.1	29.6	31.0	32.4	33.8	35.2	36.6	38.0	39.4	40.8	42.2	43.6	45.0	46.4
81	6.0	7.9	9.7	11.3	12.9	14.3	15.8	17.2	18.6	20.0	21.4	22.8	24.2	25.6	27.0	28.4	29.8	31.2	32.6	34.0	35.4	36.8	38.2	39.6	41.0	42.4	43.8	45.2
82	5.2	7.1	8.9	10.6	12.2	13.7	15.2	16.7	18.1	19.6	21.0	22.5	23.9	25.4	26.8	28.2	29.7	31.1	32.5	33.9	35.3	36.7	38.1	39.5	40.9	42.3	43.7	45.1
83	6.3	8.2	9.9	11.6	13.1	14.6	16.1	17.5	19.0	20.4	21.8	23.2	24.6	26.0	27.4	28.8	30.2	31.6	33.0	34.4	35.8	37.2	38.6	40.0	41.4	42.8	44.2	45.6
84	5.5	7.4	9.2	10.9	12.5	14.1	15.6	17.1	18.6	20.1	21.6	23.1	24.6	26.1	27.6	29.1	30.6	32.1	33.6	35.1	36.6	38.1	39.6	41.1	42.6	44.1	45.6	47.1
85	6.6	8.5	10.3	11.9	13.5	15.0	16.6	18.1	19.6	21.1	22.6	24.1	25.6	27.1	28.6	30.1	31.6	33.1	34.6	36.1	37.6	39.1	40.6	42.1	43.6	45.1	46.6	48.1
86	5.8	7.8	9.6	11.3	12.9	14.3	15.8	17.2	18.6	20.0	21.4	22.8	24.2	25.6	27.0	28.4	29.8	31.2	32.6	34.0	35.4	36.8	38.2	39.6	41.0	42.4	43.8	45.2
87	5.0	7.0	8.9	10.6	12.2	13.7	15.2	16.7	18.1	19.6	21.0	22.5	23.9	25.4	26.8	28.2	29.7	31.1	32.5	33.9	35.3	36.7	38.1	39.5	40.9	42.3	43.7	45.1
88	6.3	8.2	10.0	11.7	13.3	14.9	16.5	18.1	19.7	21.3	22.9	24.5	26.1	27.7	29.3	30.9	32.5	34.1	35.7	37.3	38.9	40.5	42.1	43.7	45.3	46.9	48.5	50.1
89	5.5	7.5	9.4	11.1	12.8	14.4	16.0	17.6	19.2	20.8	22.4	24.0	25.6	27.2	28.8	30.4	32.0	33.6	35.2	36.8	38.4	40.0	41.6	43.2	44.8	46.4	48.0	49.6
90	6.8	8.8	10.9	12.8	14.6	16.4	18.2	20.0	21.8	23.6	25.4	27.2	29.0	30.8	32.6	34.4	36.2	38.0	39.8	41.6	43.4	45.2	47.0	48.8	50.6	52.4	54.2	56.0

INSTALLATION CERTIFICATE

(Page 7 of 13)

CF-6R

4290 71st Street

0510686

Site Address

Permit Number

Table K-1: Target Superheat (Suction Line Temperature - Evaporator Saturation Temperature) (continued)

	Return Air Wet-Bulb Temperature (°F)																												
	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76		
91	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.1	8.1	10.3	12.2	14.1	15.9	17.8	19.7	21.5	23.2	25.2	27.1	28.9	30.8
92	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.5	9.8	11.7	13.5	15.4	17.3	19.2	21.1	22.9	24.8	26.7	28.5	30.4	
93	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.8	9.2	11.1	13.0	14.9	16.8	18.7	20.6	22.5	24.4	26.3	28.2	30.1	
94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.2	8.7	10.6	12.5	14.4	16.3	18.2	20.2	22.1	24.0	25.9	27.8	29.7	
95	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.6	8.1	10.0	12.0	13.9	15.8	17.8	19.7	21.6	23.6	25.5	27.4	29.4	
96	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.5	9.5	11.4	13.4	15.3	17.3	19.2	21.2	23.2	25.1	27.1	29.1		
97	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.0	8.9	10.9	12.9	14.9	16.8	18.8	20.8	22.7	24.7	26.7	28.7		
98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.4	8.4	10.4	12.4	14.4	16.4	18.3	20.3	22.3	24.3	26.3	28.3		
99	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.8	7.9	9.9	11.9	13.9	15.9	17.9	19.9	21.9	24.0	26.0	28.0		
100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.3	7.3	9.3	11.4	13.4	15.4	17.5	19.5	21.5	23.6	25.6	27.7		
101	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.8	8.8	10.9	12.9	15.0	17.0	19.1	21.1	23.2	25.3	27.3			
102	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.3	10.4	12.4	14.5	16.6	18.6	20.7	22.8	24.9	27.0				
103	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.7	7.8	9.9	11.9	14.0	16.1	18.2	20.3	22.4	24.5	26.7			
104	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.2	7.2	9.3	11.5	13.6	15.7	17.8	19.9	22.1	24.2	26.3			
105	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.7	8.8	11.0	13.1	15.2	17.4	19.5	21.7	23.8	26.0				
106	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.2	8.3	10.5	12.6	14.8	17.0	19.1	21.3	23.5	25.7				
107	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.7	7.9	10.0	12.2	14.4	16.6	18.7	21.0	23.2	25.4				
108	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.2	7.4	9.5	11.7	13.9	16.1	18.4	20.6	22.8	25.1				
109	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.9	9.1	11.3	13.5	15.7	18.0	20.2	22.5	24.7					
110	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.4	8.6	10.8	13.1	15.3	17.6	19.9	22.1	24.4					
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.9	8.1	10.4	12.6	14.9	17.2	19.5	21.8	24.1					
112	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.4	7.6	9.9	12.2	14.5	16.8	19.1	21.5	23.8					
113	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.2	9.5	11.8	14.1	16.4	18.8	21.1	23.5						
114	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.7	9.0	11.4	13.7	16.1	18.4	20.8	23.2						
115	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.2	8.6	10.9	13.3	15.7	18.1	20.5	22.9						

INSTALLATION CERTIFICATE

(Page 8 of 13)

CF-6R

4290 71st Street

0510686

Site Address

Permit Number

Table K-2: Target Temperature Split (Return Dry-Bulb – Supply Dry-Bulb)

	Return Air Wet-Bulb (°F) (T _{return, wb})																												
	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76		
Return Air Dry-Bulb (°F) (T _{return, db})	20.9	21.3	21.1	20.9	20.4	20.1	19.9	19.5	19.1	18.7	18.2	17.7	17.2	16.5	15.9	15.2	14.4	13.7	12.8	11.9	11.0	10.0	9.0	7.9	6.8	5.7	4.5	3.2	
	21.4	21.8	21.7	21.5	21.2	20.9	20.6	20.2	19.8	19.3	18.8	18.3	17.7	17.1	16.4	15.7	15.0	14.2	13.4	12.5	11.5	10.6	9.5	8.5	7.4	6.2	5.0	3.8	
	22.5	22.4	22.2	22.0	21.8	21.5	21.2	20.8	20.3	19.9	19.4	18.8	18.2	17.6	17.0	16.3	15.5	14.7	13.9	13.0	12.1	11.1	10.1	9.0	7.9	6.8	5.6	4.3	
	23.0	22.9	22.8	22.6	22.3	22.0	21.7	21.3	20.9	20.4	19.9	19.3	18.7	18.1	17.4	16.6	15.8	15.0	14.1	13.2	12.2	11.2	10.1	9.0	7.8	6.6	5.4	4.8	
	23.6	23.5	23.3	23.1	22.9	22.6	22.2	21.9	21.4	21.0	20.4	19.9	19.3	18.6	17.9	17.2	16.4	15.5	14.7	13.7	12.7	11.7	10.7	9.5	8.4	7.2	5.9	5.9	
	24.1	24.0	23.9	23.7	23.4	23.1	22.8	22.4	22.0	21.5	21.0	20.4	19.8	19.2	18.5	17.7	16.9	16.1	15.2	14.3	13.3	12.3	11.2	10.1	8.9	7.7	6.5	6.5	
	-	24.6	24.4	24.2	24.0	23.7	23.3	22.9	22.5	22.0	21.5	21.0	20.4	19.7	19.0	18.3	17.5	16.6	15.7	14.8	13.8	12.8	11.7	10.6	9.5	8.3	7.0	7.0	
	-	-	-	24.7	24.5	24.2	23.9	23.5	23.1	22.6	22.1	21.5	20.9	20.2	19.5	18.8	18.0	17.2	16.3	15.4	14.4	13.4	12.3	11.2	10.0	8.8	7.6	7.6	
	-	-	-	-	-	24.8	24.4	24.0	23.6	23.1	22.6	22.1	21.4	20.8	20.1	19.3	18.5	17.7	16.8	15.9	14.9	13.9	12.8	11.7	10.6	9.4	8.1	8.1	
	-	-	-	-	-	-	25.0	24.6	24.2	23.7	23.2	22.6	22.0	21.3	20.6	19.9	19.1	18.3	17.4	16.4	15.5	14.4	13.4	12.3	11.1	9.9	8.7	8.7	
	-	-	-	-	-	-	-	25.1	24.7	24.2	23.7	23.1	22.5	21.9	21.2	20.4	19.6	18.8	17.9	17.0	16.0	15.0	13.9	12.8	11.7	10.4	9.2	9.2	
	-	-	-	-	-	-	-	-	25.2	24.8	24.2	23.7	23.1	22.4	21.7	21.0	20.2	19.3	18.5	17.5	16.6	15.5	14.5	13.4	12.2	11.0	9.7	9.7	
	-	-	-	-	-	-	-	-	-	25.3	24.8	24.2	23.6	23.0	22.3	21.5	20.7	19.9	19.0	18.1	17.1	16.1	15.0	13.9	12.7	11.5	10.3	10.3	
	-	-	-	-	-	-	-	-	-	-	25.9	25.3	24.8	24.2	23.5	22.8	22.1	21.3	20.4	19.5	18.6	17.6	16.6	15.6	14.4	13.3	12.1	10.8	10.8

4290 71st Street

0510686

Site Address

Permit Number

DUCT LOCATION AND AREA REDUCTION DIAGNOSTICS

DUCT IN CONDITIONED SPACE N/A Per Energy Calcs.

Yes No Duct in conditioned space criteria matches CF-1R

Yes is a Pass Pass Fail

REDUCED DUCT SURFACE AREA N/A Per Energy Calcs.

Measured duct exterior surface area in the following unconditioned duct locations (square feet):

- Attics _____
- Crawlspace _____
- Basements _____
- Other (e.g., garages, etc.) _____

Yes No Duct surface area matches CF-1R?

Yes is a Pass Pass Fail

I, the undersigned, verify that the duct surface area and duct locations claimed for duct surface area reductions and duct location improvements beyond those covered by default assumptions match those on the plans. [The builder shall provide the HERS provider a copy of the CF-6R signed by the builder employees or sub-contractors certifying that diagnostic testing and installation meet the requirements for compliance credit.]

Tests Performed	Signature, Date	Installing Subcontractor (Co. Name) OR General Contractor (Co. Name)
COPY TO:	Building Department HERS Provider (if applicable) Building Owner at Occupancy	

4290 71st Street

0510686

Site Address

Permit Number

BUILDING ENVELOPE LEAKAGE DIAGNOSTICS

ENVELOPE SEALING INFILTRATION REDUCTION N/A Per Energy Calcs.

Diagnostic Testing Results

Building Envelope Leakage (CFM @ 50 Pa) as measured by Rater

- 1. Is measured envelope leakage less than or equal to the required level from CF-1R?
2. Is Mechanical Ventilation shown as required on the CF-1R?
2a. If Mechanical Ventilation is required on the CF-1R (Yes in line 2), has it been installed?
2b. Check this box yes if mechanical ventilation is required (Yes in line 2) and ventilation fan watts are no greater than shown on CF-1R.
3. Check this box yes if measured building infiltration (CFM @ 50 Pa) is greater than the CFM @ 50 values shown for an SLA of 1.5 on CF-1R
4. Check this box yes if measured building infiltration (CFM @ 50 Pa) is less than the CFM @ 50 values shown for an SLA of 1.5 on CF-1R, mechanical ventilation is installed and house pressure is greater than minus 5 Pascal with all exhaust fans operating.

Pass if:

- d. Yes in line 1 and line 3, or
e. Yes in line 1 and line 2, 2a, and 2b, or
f. Yes in line 1 and Yes in line 4

Otherwise fail.

Pass Fail

I, the undersigned, verify that the building envelope leakage meets the requirements claimed for building leakage reduction below default assumptions as used for compliance on the CF-1R. This is to certify that the above diagnostic test results and the work I performed associated with the test(s) is in conformance with the requirements for compliance credit.

Test Performed Signature Date Testing Subcontractor (Co. Name) OR General Contractor (Co. Name)

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

4290 71st Street

0510686

Site Address

Permit Number

The following is an explanation of many of the input values required on this form:

HVAC SYSTEMS

Heating Equipment Type must be one of the following:

Furnace:	Gas (including Liquefied Petroleum Gases) or oil-fired central furnace & space heater
Boiler:	Gas or oil-fired boiler
PckgHeatPump:	Packaged central heat pump
SplitHeatPump:	Split central heat pump
RoomHeatPump:	Room heat pump
LgPkgHeatPump:	Large packaged heat pump (≥ 65,000 Btu/hr output)
Electric:	Electric resistance heating (fixed HSPF = 3.413); radiant electric resistance (fixed HSPF = 3.55)
CombinedHydro:	Reference water heater under water heating systems below

CEC Certified Manufacturer Name & Model Number from applicable Commission approved appliance directory.

of Identical Systems is for those systems with the same efficiency, duct location, duct R-value and capacity.

Efficiency from applicable Commission certified appliance directory.

Duct (or Piping) Location is attic, crawl space, CVC crawl space, conditioned space, unconditioned space or none.

Duct (or Piping) R-Value from Directory of Certified Insulation Materials and/or manufacturer's data.

Heating/Cooling Load refer to Commission approved load calculation procedure.

Heating/Cooling Capacity from the applicable Commission certified appliance directory. Note: location elevations over 2,000 ft above sea level require a derating of output capacity (refer to manufacturer's literature).

Cooling Equipment Type must be one of the following:

SplitAirCond:	Split system air conditioner
PckgAirCond:	Packaged air conditioner
Split Heat Pump:	Split system heat pump
PckgHeatPump:	Packaged heat pump
RoomHeatPump:	Room heat pump
LgPkgHeatPump:	Large packaged heat pump (≥ 65,000 Btu/hr output). Substitute EER for SEER when SEER is not available
RoomAirCond:	Room air conditioner. Minimum SEER varies*
LgPkgAirCond:	Large packaged air conditioner (≥ 65,000 Btu/hr output). Substitute EER for SEER when SEER is not available
EvapDirect:	Direct evaporative cooling system. For compliance calculation purposes, fixed values: SEER = 11.0; duct location = attic; duct insulation R-value = 4.2
EvapIndirect:	Indirect evaporative cooling system. For compliance calculation purposes, fixed values: SEER = 13.0; duct location = attic; duct insulation R-value = 4.2

*Refer to Energy Commission publication *Appliance Efficiency Regulations*, P400-92-029

4290 71st Street

0510686

Site Address

Permit Number

The following is an explanation of many of the input values required on this form:

WATER HEATING SYSTEMS

Distribution Systems Refer to *Residential Manual* for more details:

Standard:	Standard – Supply pressure based system, no pumps
Pipe Insulation:	Pipe Insulation on all 3/4-inch pipes
POU/HWR:	Point of Use/Hot Water Recovery System
Recirc/NoControl:	Recirculation loop with no controls
Recirc/Timer:	Recirculation loop with a timer
Recirc/Temp:	Recirculation loop with temperature control
Recirc/Time+Temp:	Recirculation loop with a timer and temperature control
Recirc/Demand:	Recirculation loop with demand control

Water Heater Type

Information Needed

	<u>Energy Factor</u>	<u>Recovery Efficiency</u>	<u>Standby Loss</u>	<u>Rated Input</u>
Storage Gas, Oil or Electric	Yes	No	No	No
Heat Pump	Yes	No	No	No
Instantaneous Gas	No	Yes	No	No
Instantaneous Electric	Yes	No	No	No
Large Storage Gas	No	Yes	Yes	Yes
Indirect Gas (Boiler)	No	Yes (APUE)	No	Yes

FENESTRATION/GLAZING

Fenestration:	Windows, sliding glass doors, French doors, skylights, garden windows, and any door with more than one square foot of glass
Operator Type:	Slider, hinged, fixed
U-Factor:	Installed U-Factor must be less than or equal to value from CF-1R OR Installed weighted average U-Factor for the total fenestration area is less than or equal to value from CF-1R
SHGC:	Installed SHGC must be less than or equal to value from CF-1R OR Installed weighted SHGC for the total fenestration area is less than or equal to value from CF-1R OR An interior shading device, overhang, or exterior shading device is installed consistent with the CF-1R
Shading Device:	Include when the building complied using an <i>exterior</i> shading device: woven sunscreen, louvered sunscreen, low sun angle sunscreen, roll-down awning, roll-down blinds or slats (do not list bug screen), or an overhang (include depth in feet)

4290 71st Street

0510686

Site Address

Permit Number

The following is an explanation of many of the input values required on the Diagnostic portion of this form (page 3 of 6):

TYPE OF CREDIT

Refer to *Residential Manual* Chapters 4 and 5 for more details:

Reduced Duct Surface Area:	Calculated as the outside area of the duct. Areas must be measured and verified by a HERS rater.
Improved Duct Location:	Supply duct located in other than attic, as verified by location of registers (does not require HERS rater verification).
Catastrophic Leakage:	Pressure pan test readings must be less than 1.5 Pascal at a house pressure of 25 Pascal.
TXV:	Access cover required to facilitate verification.
Infiltration Reduction:	Infiltration is measured without mechanical ventilation operating. Mechanical ventilation is required for very tight house construction when credits for infiltration reduction using diagnostic testing are being used for achieving compliance. These very tight houses are defined as those with SLA of less than 1.5. The compliance documentation (CF-IR) will contain the measured CFM target value from a blower door test at 50 Pascal pressure difference that represents this SLA of 1.5. Mechanical ventilation is also required if the builder chooses to design the building to use mechanical ventilation and claims a credit for infiltration below an SLA of 3.0. The compliance documentation (CF-IR) will contain the measured CFM target value that represents this 3.0 SLA. If the builder claims credit in a design for infiltration reduction that is at an SLA of 3.0 or higher, and the actual measured SLA is 1.5 or greater, then mechanical ventilation is not required. If the SLA in this case were below 1.5, then mitigation (such as mechanical ventilation) would be required.