

B

Type

Plans

BLD07-6167

Permit Number

22205

Street Number

Uyland Cir.

Street Name

TIM

Community Code

109-420-025

APN

COUNTY OF SONOMA - PERMIT AND RESOURCE MANAGEMENT DEPARTMENT

2550 Ventura Avenue, Santa Rosa, CA 95403 (707) 565-1900 FAX (707) 565-1103

Please Print Your Name: <u>THOMAS A. GIACINTO</u>	Date Applied: <u>12/12/07</u>
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INFORMATION WITHIN HEAVY LINE TO BE COMPLETED BY APPLICANT

SITE LOCATION INFORMATION - PRINT CLEARLY			
Site Address: <u>22205 UMLAND CIR.</u>	City: _____	ZIP: _____	
Cross-Street: <u>Ruoff DR</u>	APN: <u>109-420-025</u>	Project Phone #: () _____	Project Fax #: () _____
Directions: <u> Hwy 1 to Timberline Rd then left on Ruoff Dr to Umland Cir</u>	Subd. Name: _____	Unit #: _____	Lot #: _____
Describe Project: <u>Garage for Single Family Res</u>	Living Area: <u>1080 sq'</u>	Contract Price: _____	
Garage: <u>200 sq'</u>	Decks: <u>200 sq'</u>		

OWNER NAME AND ADDRESS	APPLICANT NAME AND ADDRESS
Name: <u>TOM GIACINTO</u>	Name: _____
Mailing Address: <u>22110 AMANITA CIR</u>	Mailing Address: _____
City: <u>TIMBERLINE</u> State: <u>CA</u> ZIP: <u>95450</u>	City: _____ State: _____ ZIP: _____
Day Ph: <u>707 817-3888</u> Fax: <u>707 817-3308</u>	Day Ph: () _____ Fax: () _____

CONTRACTOR INFORMATION	OTHER PERSONS (ARCHITECT, ENGINEER, ETC.)
Company Name: <u>Giaccinto Construction</u>	Name: _____
Address: _____	Address: _____
City: _____ State: _____ ZIP: _____	City: _____ State: _____ ZIP: _____
Day Ph: () _____ Fax: () _____	Day Ph: () _____ Fax: () _____
License No: _____	Exp. Date: _____

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 worker's compensation, as provided for by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued.

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

Carrier: _____
Policy No.: _____

(This section need not be completed if the permit is for one hundred dollars (\$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 worker's compensation laws of California, and agree that if I should become subject to the worker's compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

Exp. Date: _____ Applicant: [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 FEES.

CONSTRUCTION LENDING DECLARATION

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.)

Lenders Name: _____
Lenders Address: _____

OWNER-BUILDER DECLARATION

I hereby affirm under penalty of perjury that I am exempt from the Contractor's 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 Contractor's License Law (Chapter 9 (commencing with Section 7000) of Division 3 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).):

I, as 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 Professions 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 or 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 or 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 & P.C. for this reason _____

Date: 12/12/08 Owner: Tom Giacinto

FOR DEPARTMENT USE

Zoning: RR-1A-5.1 Acres: 1.47

Existing Use/Structures: VACANT

Proposed Use/Structures: NEW SFD, GAR.

Zoning Min. Yard Requirements: Front _____ Left _____ Right _____ Back _____

NOTE: Fire Safe Standards require all parcels greater than 1 Acre to have a min. 30' setback unless mitigated. Mitigation Required Address subject to change

Approval for Permit: _____ Approval for Occupancy: _____

By: [Signature] Date: _____

Conditions: _____

0107-002

LICENSED CONTRACTOR'S 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.

Lic. Class: B1 Lic. No.: 305693

Exp. Date: _____ Contractor: Giaccinto Const

Sewer Connection: Available Fees Paid

Approved by: _____ Date: _____

Road Encroachment: Fees Paid

Approved by: [Signature] Date: 12-12-07

Septic System Permit Clearance: SEP071005

Approved by: [Signature] Date: 5/19/08

Flood Zone: Yes No 100 Year Flood Elevation: _____

Site Review: SEP07-0996

Drainage Review: _____ Date: _____

Fire: _____ Date: 12.12.07

Code Enforcement Violation Yes No Violation # _____

This permit is limited to _____ days.

ASBESTOS DECLARATION

Written asbestos notification pursuant to Part 61 of Title 40 of the Code of Federal Regulations is required when asbestos exists in buildings, or portions thereof, undergoing demolition. I hereby declare that demolition authorized by this permit is from construction that does does not contain asbestos, or that no demolition is authorized by this permit.

Work Authorized: 1080 sf SFD, 200 sf garage, 200 sf carport

I certify that I have read this application and affirm under penalty of perjury that the above information is correct. I agree to comply with all local Ordinances and State laws relating to building construction. I hereby authorize representatives of the County of Sonoma to enter upon the above-mentioned property for inspection purposes. If, after making the Certificate of Exemption for the Worker's Compensation provision of the Labor Code I should become subject to such provisions, I will forthwith comply. In the event I do not comply with the Workman's Compensation law, this permit shall be deemed revoked.

PERMITTEE SIGNATURE: [Signature]

ADDRESS: 22110 Amanita Cir CITY: Timberline ZIP: 95450

Contractor Owner Other Licensed Professional

<input checked="" type="checkbox"/> Plans Approved	<input type="checkbox"/> Post FIRM	<input type="checkbox"/> Alquist Priolo Report Available
<input type="checkbox"/> No Plans Subject to Field Inspection	<input type="checkbox"/> Pre FIRM	<input type="checkbox"/> Geotechnical report Available
Plancheck Checked By: <u>B. Waters</u> Date: <u>5/14/08</u>	Type of Construction: <u>V-N</u>	Occupancy: <u>R-3/A1</u>
Permit Checked by: <u>CJ</u> Date: <u>5-20-08</u>	Auto. Fire Sprinklers Req'd: <u>Yes</u>	No. of Units: _____
		Certificate of Occupancy: _____

PAYMENT REC'D

\$ _____

MAY 20 2008

PERMIT AND RESOURCE MANAGEMENT DEPARTMENT
COUNTY OF SONOMA

Final Date: _____ Inspector: _____

THIS PERMIT SHALL EXPIRE IN THREE(3) YEARS FROM DATE FEES ARE PAID UNLESS OTHERWISE NOTED BY CODE ENFORCEMENT

JOB ADDRESS: 22205 Umland Cir TIM PERMIT NUMBER: 0107-6167 INSPECTION AREA: 02

131) SPECIAL INSPECTION REQUIRED		<input checked="" type="checkbox"/> YES	<input type="checkbox"/> NO	IF YES, SEE ADDITIONAL SHEET
INSPECTION RECORD	DATE	NAME	REMARKS	
101) ROUGH GRADING				
103) FOUNDATION	6-27-08	S.A.	Welding	
FORMS/SETBACK				
FOOTING				
WALLS				
106) UFER GROUND #	6-27-08	S.A.		
104) CAISSONS/PIERS				
105) SLAB	6-27-08	S.A.		
107) UNDERGROUND UTILITIES				
110) MASONRY				
109) RETAINING WALLS				
113) FIREPLACE				
FOOTING				
HEARTH/PROTECTION				
THROAT				
114) CHIMNEY				
120) UNDERFLOOR/UNDERSLAB	6-27-08	S.A.		
115) HYDRONICS	6-25-08	S.A.		
116) U/F ELECTRICAL				
117) U/F MECHANICAL				
118) U/F PLUMBING	6-11-08	S.A.		
119) U/F FRAMING				
139) U/F INSULATION				
126) SHEAR WALLS	9-12-08	RP		
<input checked="" type="checkbox"/> INTERIOR				
<input checked="" type="checkbox"/> EXTERIOR				
127) DIAPHRAGMS	9-12-08	RP		
<input checked="" type="checkbox"/> ROOF				
<input type="checkbox"/> FLOOR				
134) SIDING/SHEATHING	6-15-09	S.A.		
125) HOLD DOWNS	9-12-08	RP		
132) CLOSE-IN	PAR.			
122) ROUGH ELECTRICAL				
123) ROUGH MECHANICAL				
124) ROUGH PLUMBING				
128) ROUGH FRAME	PAR.			
160) SMOKE DETECTORS	6-15-09	S.A.		
139) INSULATION				
142) WALLBOARD	2-2-09	S.A.		
143) FIREWALLS				
135) STUCCO/PLASTER				
<input type="checkbox"/> LATH				
<input type="checkbox"/> SCRATCH				
137) ROOFING	6-15-09	S.A.		
130) TUB/SHOWER PAN	2-2-09	S.A.		
162) FIRE DAMPERS/DOORS				
164) SUSPENDED CEILING				
<input type="checkbox"/> ROUGH ELEC.				
<input type="checkbox"/> ROUGH MECH.				
165) EXITING - RAMPS/STAIRS				
163) HANDRAILS/GUARDRAILS				
CORRIDORS/DOORS				
166) ACCESSIBILITY COMPLIANCE				
144) WATER TANKS				
<input type="checkbox"/> SLAB				
<input type="checkbox"/> WALLS				
170) TEMPORARY OCCUPANCY				
171) TEMPORARY ELECTRICAL				
172) TEMPORARY GAS				
174) ELECTRIC METER AUTHORIZATION	7-7-06	S.A.		
152) PANEL BOARDS/SERVICE	6-15-09	S.A.		
189) SEPTIC ELECTRIC FINAL				
175) GAS METER AUTHORIZATION				
153) GAS PRESSURE TEST	2-2-09	S.A.		
HOUSE				
YARD				
190) MANUF. HOME FOUNDATION				
191) MANUF. HOME INSTALLATION				
CONTINUITY				
STAIRS/SKIRTS				
RIDGE BOLTING				
193) MANUF. HOME COND. FINAL				
SWIMMING POOLS				
194) PRE-GUNITE				
195) PRE-DECK				
196) PRE-PLASTER/FENCE				
197) VINYL/FIBERGLASS POOL EXCAVATION				
102) GRADING FINAL				
176) ELECTRICAL FINAL	6-15-09	S.A.		
177) MECHANICAL FINAL				
178) PLUMBING FINAL				
199) FINAL	12-26-09	S.A.		
OCCUPANCY (OK TO OCCUPY)				
650) SUSMP INSPECTION				
651) NPDES EROSION COMPLIANCE				
652) NPDES SEDIMENT COMPLIANCE				
653) NPDES DOCS/SWPPP				
FIRE INSPECTION REQUIRED			DATE	NAME
<input type="checkbox"/> Yes	<input type="checkbox"/> No			
759) KNOX BOX				
760) PROPANE TANK HOLD DOWNS				
770) SPRINKLER FINAL				
771) ABOVEGROUND HYDROSTATIC				
772) UNDERGROUND HYDROSTATIC				
773) UNDERGROUND FLUSH				
774) THRUST BLOCKS				
775) PIPE WELD				
776) HYDRANTS/APPLIANCES				
777) PUMP ACCEPTANCE				
778) WATER SUPPLY/TANK				
779) ALARM SYSTEM				
780) HOOD & DUCT SYSTEM				
781) ABOVEGROUND TANK/DISPENSER				
198) FIRE FINAL				
CLEARANCES:				
FIRE	<input type="checkbox"/> Local	<input type="checkbox"/> County		
HEALTH DEPARTMENT				
ZONING				
SANITATION				
PLAN RETENTION REQUIRED?				
<input type="checkbox"/> Yes	<input type="checkbox"/> No			

PERMIT # B1807.6167

INSTALLATION CERTIFICATE

(Page 1 of 12) CF-6R

Site Address

22205 Umland Circle, Timber Cove

Permit Number

BLD-07-6167

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, Point-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
WGA	SURE DHW	N/A		1	40,000	40	.58	N/A	N/A
WGA	90% BATER			1	80,000	0	90	0	

- 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.
- 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	owner
Signature: <i>[Signature]</i>	Date: 4/16/09

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

INSTALLATION CERTIFICATE

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Site Address

222 05 Umlans Circle - Timber Cove 95950

Permit Number

BLD-07-6167

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).

FENESTRATION/GLAZING:

Item	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)	Area Square Feet	Exterior Shading Device or Overhang	Comments/Location/ Special Features
1.	Anderson	.300	.34	2	Anderson	72	Br/Screen	.76
2.		.33	.30	2	400S	6		.76
3.		.29	.36	2	400F	42		.76
4.		.32	.25	2	400CA	20		.76
5.		.300	.34	2	400 F	15		.76
6.		.300	.34	2	400 CA	9		.76
7.		.290	.34	2	410 CA	15		.76
8.		.330	.36	2	400 F	2		.76
9.		.290	.30	2	400 S	18		.76
10.		.290	.36	2	400 F	4		.76
11.		.300	.25	2	400DPA	26.6		.76
12.		.290	.36	2	400 F	20		.76
13.		.300	.34	2	400CA	20		.76
14.		.300	.34	2	400CA	35		.76
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 (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. 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 <i>[Signature]</i>	Date 4/15/07	Installing Subcontractor (Co. Name) OR General Contractor (Co. Name) OR Owner OR Window Distributor <i>EMANTO CONSTRUCTION OWNER</i>
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, HERS Rater (if applicable) Building Owner at Occupancy

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).

HVAC SYSTEMS:

Heating Equipment

N/A RADIANT / SOLAR THERMALS

Equip Type (p.k.g. heat pump)	CBC 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)
90% SPACE HEAT BOILER	RADIANT		90% DEF	SLAB FLOOR	N/A	80,000	10

Cooling Equipment

N/A

Equip Type (p.k.g. heat pump)	CBC 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)

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-IR) 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	GRACIATO CONSTRUCTION
Signature: <i>[Signature]</i>	SOLAR / ADVANCED ENERGY SYSTEMS
	Date: 9/16/09

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

INSTALLATION CERTIFICATE

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Permit Number

INSTALLER COMPLIANCE STATEMENT FOR DUCT LEAKAGE

INSTALLER COMPLIANCE STATEMENT

The building was: Tested at Final Tested at Rough-in

INSTALLER VISUAL INSPECTION AT FINAL CONSTRUCTION STAGE:

- Remove at least one supply and one return register, and verify that the spaces between the register boot and the interior finishing wall are properly sealed.
- If the house rough-in duct leakage test was conducted without an air handler installed, inspect the connection points between the air handler and the supply and return plenums to verify that the connection points are properly sealed.
- Inspect all joints to ensure that no cloth backed rubber adhesive duct tape is used

DUCT LEAKAGE REDUCTION *N/A*

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

NEW CONSTRUCTION:

	Duct Pressurization Test Results (CFM @ 25 Pa)	Measured Values	
1	Enter Tested Leakage Flow in CFM:		
2	Fan Flow: Calculated (Nominal: <input checked="" type="checkbox"/> Cooling <input checked="" type="checkbox"/> Heating) or <input checked="" 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:		✓ ✓
3	Pass if Leakage Percentage ≤ 6% for Final or ≤ 4% at Rough-in: [100 x [_____ (Line # 1) / _____ (Line # 2)]]		<input type="checkbox"/> Pass <input type="checkbox"/> Fail

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.		
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)		✓ ✓
8	Entire New Duct System - Pass if Leakage Percentage ≤ 6% for Final or ≤ 4% at Rough-in [100 x [_____ (Line # 5) / _____ (Line # 2)]]		<input type="checkbox"/> Pass <input type="checkbox"/> Fail

TEST OR VERIFICATION STANDARDS: For Altered Duct System and/or HVAC Equipment Change-Out Use one of the following four Test or Verification Standards for compliance:

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	
Signature:	Date:

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

Site Address

Permit Number

THERMOSTATIC EXPANSION VALVE (TXV)

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

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

REFRIGERANT CHARGE MEASUREMENT

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

Outdoor Unit Serial #		
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 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)		°F
Condenser (entering) air dry-bulb temperature (Tcondenser, db)		°F

Superheat Charge Method Calculations for Refrigerant Charge

Actual Superheat = Tsuction, db – Tevaporator, sat		°F
Target Superheat (from Table RD-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 = T return, 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

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Site Address

Permit Number

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) (- = remove)		

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	
Signature:	Date:

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

INSTALLATION CERTIFICATE

(Page 7 of 12) **CF-6R**

Site Address

Permit Number

MISCELLANEOUS CREDITS

DIAGNOSTIC SUPPLY DUCT LOCATION, SURFACE AREA AND R-VALUE

Procedures for field verification and diagnostic testing for this group compliance credits are available in RACM, Appendix RC, RE & RH.

LESS THAN 12 LINEAL FEET OF SUPPLY DUCT OUTSIDE OF CONDITIONED SPACE

COMPLIANCE CREDIT

<input checked="" type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Less than 12 lineal feet of supply duct outside of conditioned space.
Yes to this compliance credit is a pass			
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Pass
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Fail

SUPPLY DUCTS LOCATED IN CONDITIONED SPACE COMPLIANCE CREDIT

<input checked="" type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Ducts are located within the conditioned volume of building.
Yes to this compliance credit is a pass			
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Pass
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Fail

Duct System Design verification is required for a compliance credit for the following:

1. Supply duct surface area reduction
2. Buried supply ducts on the ceiling
3. Deeply buried supply ducts

DUCT SYSTEM DESIGN VERIFICATION

<input checked="" type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Adequate airflow verified
<input checked="" type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No	The duct system design plan meets the requirements specified in RACM, Appendix RE, Section RE.4.2
<input checked="" type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No	The duct system design plan exists on building plans
<input checked="" type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Duct sizes, duct system layout and locations of supply & return registers match the duct system design plan
Yes to all is a pass			
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Pass
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Fail

SUPPLY DUCTS SURFACE AREA REDUCTION COMPLIANCE CREDIT

Attic	Crawl Space	Basement	Covered	Deeply Covered	Other	Duct Diameter	R-4.2 Surface Area	R-6.0 Surface Area	R-8.0 Surface Area	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>					
Total Surface Area for Each R-Value =										
<input checked="" type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Matches Performance's CF-1R?					<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Yes to all is a pass							<input type="checkbox"/>	Pass	<input type="checkbox"/>	Fail

BURIED DUCTS ON THE CEILING COMPLIANCE CREDIT

<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Buried Ducts on the Ceiling
<input type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Verified High Insulation Installation Quality
Yes to duct system design, supply duct surface area reduction and this compliance credit is a pass			
	<input type="checkbox"/>	<input type="checkbox"/>	Pass
	<input type="checkbox"/>	<input type="checkbox"/>	Fail

DEEPLY BURIED DUCTS COMPLIANCE CREDIT

<input checked="" type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Deeply Buried Ducts
<input checked="" type="checkbox"/>	<input type="checkbox"/> Yes	<input type="checkbox"/> No	Verified High Insulation Installation Quality
Yes to duct system design, supply duct surface area reduction and this compliance credit is a pass			
	<input type="checkbox"/>	<input type="checkbox"/>	Pass
	<input type="checkbox"/>	<input type="checkbox"/>	Fail

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

INSTALLATION CERTIFICATE

Site Address	Permit Number
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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 airflow verification)			cfm
		Enter results of Watts/cfm			Watts/cfm
			✓	✓	
<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	Measured fan watt/cfm draw is equal to or lower than the fan watt/cfm draw documented in CF-1R	<input type="checkbox"/>	<input 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 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 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.	✓	✓
				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	✓	✓
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"/>
				Yes to 1 and 2; and 3 (If Required) is a pass	Pass	Fail

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

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).

BUILDING ENVELOPE LEAKAGE DIAGNOSTICS

ENVELOPE SEALING INFILTRATION REDUCTION

Procedures for field verification and diagnostic testing of envelope leakage are available in RACM, Appendix RC.

Diagnostic Testing Results

		✓	✓	Building Envelope Leakage (CFM @ 50 Pa) as measured by Rater:		
1.	<input type="checkbox"/> Yes	<input type="checkbox"/> No		Measured envelope leakage less than or equal to the required level from CF-1R?		
2.	<input type="checkbox"/> Yes	<input type="checkbox"/> No		Is Mechanical Ventilation shown as required on the CF-1R?		
2a.	<input type="checkbox"/> Yes	<input type="checkbox"/> No		If Mechanical Ventilation is required on the CF-1R ('Yes' in line 2), has it been installed?		
2b.	<input type="checkbox"/> Yes	<input type="checkbox"/> No		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. Measured Watts =		
3.	<input type="checkbox"/> Yes	<input type="checkbox"/> No		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 (If this box is checked no, mechanical ventilation is required.)		
4.	<input type="checkbox"/> Yes	<input type="checkbox"/> No		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:	✓	✓
				a. Yes in line 1 and line 3, or		
				b. Yes in line 1 and line 2, 2a, and 2b, or		
				c. Yes in line 1 and Yes in line 4.		
				Otherwise fail.	<input checked="" type="checkbox"/> Pass	<input type="checkbox"/> 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. (The builder shall provide the HERS provider a copy of the CF-6R signed by the builder employees or subcontractors certifying that diagnostic testing and installation meet the requirements for compliance credit.)

Test Performed	
Installing Subcontractor (Co. Name) OR General Contractor (Co. Name) OR Owner	
Signature: <i>Adam D. Green</i>	Date: <i>4/16/09</i>

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

Site Address

Permit Number

Insulation Installation Quality Certificate

Description of Insulation, (CF-6R, formerly IC-1) signed by the installer stating: insulation manufacturer's name, material identification, installed R-values, and for loose-fill insulation: minimum weight per square foot and minimum inches

Installation meets all applicable requirements as specified in the High Quality Insulation Installation Procedures (ACM, Appendix RH)

<input checked="" type="checkbox"/> FLOOR			
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	All floor joist cavity insulation installed to uniformly fit the cavity side-to-side and end-to-end
Yes	No	NA	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Insulation in contact with the subfloor or rim joists insulated
Yes	No	NA	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Insulation properly supported to avoid gaps, voids, and compression
Yes	No	NA	
<input checked="" type="checkbox"/> WALLS			
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Wall stud cavities caulked or foamed to provide an air tight envelope
Yes	No	NA	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Wall stud cavity insulation uniformly fills the cavity side-to-side, top-to-bottom, and front-to-back
Yes	No	NA	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No gaps
Yes	No	NA	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No voids over 3/4" deep or more than 10% of the batt surface area.
Yes	No	NA	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Hard to access wall stud cavities such as; corner channels, wall intersections, and behind tub/shower enclosures insulated to proper R-Value
Yes	No	NA	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Small spaces filled
Yes	No	NA	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Rim-joists insulated
Yes	No	NA	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Loose fill wall insulation meets or exceeds manufacturer's minimum weight-per-square-foot requirement
Yes	No	NA	
<input checked="" type="checkbox"/> ROOF/CEILING PREPARATION			
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	All draft stops in place to form a continuous ceiling and wall air barrier
Yes	No	NA	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	All drops covered with hard covers
Yes	No	NA	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	All draft stops and hard covers caulked or foamed to provide an air tight envelope
Yes	No	NA	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	All recessed light fixtures IC and air tight (AT) rated and sealed with a gasket or caulk between the housing and the ceiling
Yes	No	NA	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Floor cavities on multiple-story buildings have air tight draft stops to all adjoining attics
Yes	No	NA	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Eave vents prepared for blown insulation - maintain net free-ventilation area
Yes	No	NA	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Knee walls insulated or prepared for blown insulation
Yes	No	NA	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Area under equipment platforms and cat-walks insulated or accessible for blown insulation
Yes	No	NA	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Attic rulers installed
Yes	No	NA	

INSTALLATION CERTIFICATE

(Page 11 of 12) CF-6R

Site Address	Permit Number
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✓ **ROOF/CEILING BATTS**

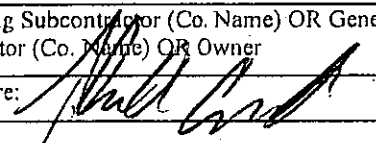
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No gaps
Yes	No	NA	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	No voids over ¼ in. deep or more than 10% of the batt surface area.
Yes	No	NA	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Insulation in contact with the air-barrier
Yes	No	NA	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Recessed light fixtures covered
Yes	No	NA	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Net free-ventilation area maintained at eave vents
Yes	No	NA	

✓ **ROOF/CEILING LOOSE-FILL**

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Insulation uniformly covers the entire ceiling (or roof) area from the outside of all exterior walls.
Yes	No	NA	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Baffles installed at eaves vents or soffit vents - maintain net free-ventilation area of eave vent
Yes	No	NA	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Attic access insulated
Yes	No	NA	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Recessed light fixtures covered
Yes	No	NA	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Insulation at proper depth – insulation rulers visible and indicating proper depth and R-value
Yes	No	NA	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Loose-fill insulation meets or exceeds manufacturer's minimum weight and thickness requirements for the target R-value. Target R-value <u>30</u> . Manufacturer's minimum required weight for the target R-value _____ (pounds-per-square-foot). Manufacturer's minimum required thickness at time of installation _____. Manufacturer's minimum required settled thickness _____. Note: To receive compliance credit the HERS rater shall verify that the manufacturer's minimum weight and thickness has been achieved for the target R-value. (CF-6R only)
Yes	No	NA	

DECLARATION

✓ I hereby certify that the installation meets all applicable requirements as specified in the Insulation Installation Procedures.

Installing Subcontractor (Co. Name) OR General Contractor (Co. Name) OR Owner	Date: <u>4/16/09</u>
Signature: 	

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

INSTALLATION CERTIFICATE		(Page 12 of 12) CF-6R
Site Address	Permit Number	
County Subdivision	Lot Number	

Description of Insulation (Formerly IC-1 Form)

1. RAISED FLOOR
 Material N/A
 Thickness (inches) _____
 Brand Name _____
 Thermal Resistance (R-Value) _____

2. SLAB FLOOR/PERIMETER
 Material R-13
 Thickness (inches) 1 1/2 in. AT
 Perimeter Insulation Depth (inches) 30"
 Brand Name Owens Corning
 Thermal Resistance (R-Value) R-13

3. EXTERIOR WALL
 Frame Type 2x6"
 A. Cavity Insulation
 Material R-19
 Thickness (inches) 6 1/2"
 Brand Name Corning
 Thermal Resistance (R-Value) 19
 B. Exterior Foam Sheathing
 Material _____
 Thickness (inches) _____
 Brand Name _____
 Thermal Resistance (R-Value) _____

4. FOUNDATION WALL
 Material N/A
 Thickness (inches) _____
 Brand Name _____
 Thermal Resistance (R-Value) _____

5. CEILING
 Batt or Blanket Type Batt
 Thickness (inches) 10 1/2"
 Loose Fill Type _____
 Contractor's min installed weight/ft² _____ lb
 Manufacturer's installed weight per square foot to achieve Thermal Resistance (R-Value) _____
 Brand Name Owens Corning
 Thermal Resistance (R-Value) R-30
 Brand _____
 Minimum thickness _____ inches

6. ROOF
 Material _____
 Thickness (inches) _____
 Brand Name _____
 Thermal Resistance (R-Value) _____

Declaration

I hereby certify that the above insulation was installed in the building at the above location in conformance with the current *Energy Efficiency Standards* for residential buildings (Title 24, Part 6, California Code of Regulations) as indicated on the Certificate of Compliance, where applicable.

Item #s (if applicable)	Signature 	Date <u>4/10/09</u>	Installing Subcontractor (Co. Name) OR General Contractor (Co. Name) OR Owner OR Window Distributor <u>Mark Cook - Anderson</u>
Item #s (if applicable)	Signature 	Date	Installing Subcontractor (Co. Name) OR General Contractor (Co. Name) OR Owner OR Window Distributor <u>Insulation Contractor of America</u>
Item #s (if applicable)	Signature	Date	Installing Subcontractor (Co. Name) OR General Contractor (Co. Name) OR Owner OR Window Distributor <u>RE: Invoice</u>

Grading Permit Questionnaire

BPC-017

Purpose: This form is used to determine if your project requires a grading permit in addition to a building permit. Grading is defined in Appendix Chapter 33 of the 2001 California Building Code (CBC) as "any excavating or filling or combination thereof." Grading can take the form of excavating and/or filling for foundations of structures, driveway construction and modification of topography. No person shall commence any grading without first having obtained a grading permit unless exempt as determined by the Permit and Resource Management Department (PRMD).

To determine if your project requires a grading permit, please answer the following questions. If you are unable to answer any questions, you should contact your design professional for assistance and/or consult with a PRMD plans examiner. **Incorrect answers may cause delays processing and/or issuing the permit(s) for your project.**

- Yes No Unknown 1. Does the project include a fill of 6 inches or more within the Flood Prone Urban Area? See map on reverse side of this form for the location of the Flood Prone Urban Area.
- Yes No Unknown 2. Does the project include a fill 1 foot or more in depth and placed on natural terrain with a slope steeper than 1 unit vertical in 5 units horizontal?
- Yes No Unknown 3. Does the project include a fill 3 feet or more in depth?
- Yes No Unknown 4. Does the project include an excavation that (1) is 2 feet or more in depth or (2) creates a cut slope greater than 5 feet in height and steeper than 1 unit vertical in 1 1/2 units horizontal that is not an excavation below finished grade for a basement, footing, retaining wall or other structure authorized by a valid building permit?
- Yes No Unknown 5. Does the project include a fill that is intended to support structures?
- Yes No Unknown 6. Does the project include a fill that exceeds 50 cubic yards on any one lot?
- Yes No Unknown 7. Does the project include the construction of a driveway that exceeds 122 feet in length?
- Yes No Unknown 8. Does the project include an excavation or fill that alters or obstructs a drainage course?

Acknowledgment:

I, as the applicant, understand that a "Yes" answer to any of the above questions means that a grading permit is required and shall be obtained before issuance of a building permit for the site. If any answers are "Unknown" to me, I should contact my design professional immediately to determine if a grading permit is required.

Thomas A. Giacinto
Applicant Signature

THOMAS A. GIACINTO
Applicant Printed Name

105-420-025
Assessor's Parcel Number(s)

12/12/07
Date

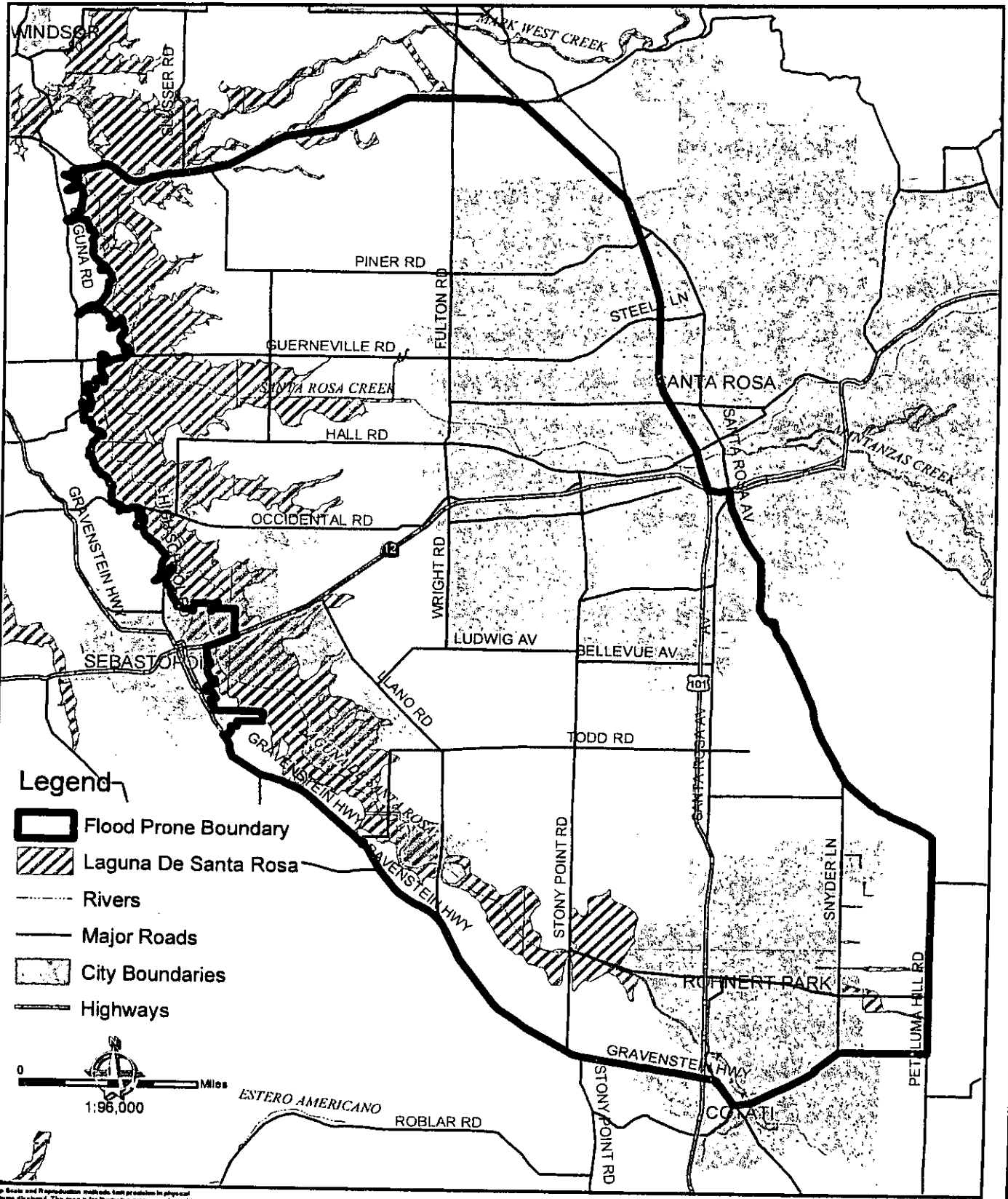
22205 UMLAND CIR. TIMBER LAKE
Property Address

BL007-6167
Building Permit (BLD) Number







Sonoma County Permit and Resource Management Department

2550 Ventura Avenue ❖ Santa Rosa, CA ❖ 95403-2829 ❖ (707) 565-1900 ❖ Fax (707) 565-2210

Flood Prone Area



Legend

-  Flood Prone Boundary
-  Laguna De Santa Rosa
-  Rivers
-  Major Roads
-  City Boundaries
-  Highways



Map Scale and Representation methods. Best practices in physical features, do not apply. This map is for illustrative purposes only, and is not suitable for any specific decision making.

Sonoma County

Permit and Resource Management Department



2550 Ventura Avenue, Santa Rosa, California 95403
707-565-1900

FAX 707-565-1103





Timber Cove Homes Association

P. O. Box 115
Cazadero, CA 95421
(707) 632-6368

1.25.08

Tom & Claudia Giacinto
22210 Amanita Circle
Jenner, Ca 95450

Project Address: 22205 Umland Circle
Jenner, CA 95450
APN 109-420-025
BLD07-6167

Attention Planning Dept,

The project at 22205 Umland Circle has been approved by The Timber Cove Homes Association based on the plans dated 9.25.07. If you have any questions please don't hesitate to call me at 707-632-6368.

Respectfully,

Cathy Scherzer
Cathy Scherzer

RETAIN

Special Inspection and Testing Requirements

CNI-012

MAY 14 2008

GIACINTO
Project Name

Project Address

PERMIT AND RESOURCE MANAGEMENT DEPARTMENT
BUILDING PLAN CHECK

Reinforced Concrete, Gunite, Grout and Mortar:
CBC 1701.5.1

Concrete	Gunite	Grout	Mortar	
				Aggregate Tests
				Reinforcing Tests
				Mix Designs
				Reinforcing Placement
				Batch Plant Inspection
				Inspect Placing
				Cast Samples
				Pick-up Samples
				Compression Tests

Embedded Bolts or Inserts: CBC 1701.5.2 and .5
 Bolt/insert Placement Inspection _____ %
 Bolt/insert Tension Test _____ %
 Bolt/insert Shear Test _____ %
 Epoxy Mix & Placement Observation _____ %

Structural Steel / Welding: CBC 1701.5.5 and .6
 Sample and Test (list specific members below)
 Shop Material Identification _____
 Welding Inspection Shop Field
 Ultra Sonic Inspection _____ Shop _____ Field
 High-Stress Bolting Inspection _____
 A325 _____ Shop _____ Field
 A490 _____ N _____ X _____ F
 Metal Deck Welding Inspection _____
 Reinforcing Steel Welding Inspection _____
 Metal Stud Welding Inspection _____
 Concrete Insert Welding Inspection _____

CBC 1701.5.1 and .4

Piers	Grade Beams	Pre-tens	Pre-cast	
				Aggregate Tests
				Reinforcing Tests
				Tendon Tests
				Mix Designs
				Reinforcing Placement
				Insert Placement
				Concrete Batching
				Installation Inspection
				Cast Samples
				Pick-up Samples
				Compression Tests

Structural Wood: CBC 1701.5.15
 Horizontal Diaphragms _____
 Shear Wall Nailing Inspection _____
 Inspection of Glulam Fabrication _____
 Inspection of Truss Joint Fabrication _____
 Sample and Test Components _____

Geotechnical/Foundation: CBC 1701.5.11 and .13
 Soils Engineer Plan Review Acceptance Letter _____
 Foundation Excavation _____
 Pier Holes _____
 Site Drainage _____
 Fill Material _____
 Placement Inspection _____
 Field Density _____
 Acceptance Letter _____
 Acceptance Letter _____

Structural Observation by Architect or Engineer:
CBC 1702

	Foundation Observation
	Framing Observation
	Final Observation
	General Conformance Letters

Fireproofing: CBC 1701.5.10
 Placement Inspection _____
 Density Tests _____
 Thickness Tests _____
 Inspect Batching _____

Insulating Concrete: CBC 1701.5.9
 Sample and Test _____
 Placement Inspection _____
 Unit Weights _____

Masonry: CBC 1701.5.7
 Special Inspection Stresses Used _____
 Preliminary Acceptance Test (Masonry Units, Wall Prisms) _____
 Subsequent Tests (Mortar, Grout, Field Wall Prisms) _____
 Placement Inspection of Units _____

Additional Instructions/Other Tests & Inspections:

Plans Examiner _____
 Requirements specified by (Architect/Engineer of record) John Butcher CE
 Contractor _____
 Owner _____

Date _____
 Date 5-1-08
 Date _____
 Date _____

THESE ATTACHMENTS ARE PART
OF THE APPROVED PLANS.

*** DO NOT REMOVE THEM ***

MAY 14 2008

STRUCTURAL CALCULATION AND RESOURCE
MANAGEMENT DEPARTMENT
BUILDING PLAN CHECK
FOR THE PERMIT # 2007-6167

GIACINTO RESIDENCE

22205 UMLAND CIRCLE

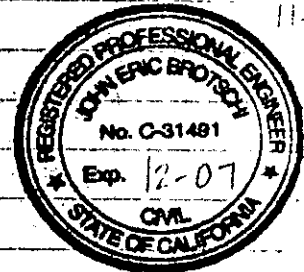
TIMBER COVE CA. 95450

OWNERS: THOMAS AND CLAUDIA GIACINTO
22110 AMANITA CIRCLE
TIMBER COVE CA. 95450

BY:

John E. Brotschi

John E. Brotschi, R.C.E. #31491
708 Gravenstein Hwy. North, #115
Sebastopol, Ca. 95473
(707) 823-7313



DESIGN CRITERIA: 2001 CBC

CONTENTS: GRAVITY LOADS G-1
LATERAL LOADS L-1 - L-6

Certificate Of Compliance : Residential

(Part 1 of 4) **CF-1R**

Giacinto Residence
 Project Title
 22205 Umland Circle Timber Cove
 Project Address
 SOL*DATA ENERGY CONSULTING
 Documentation Author
 EnergyPro
 Compliance Method

(707) 545-4440
 Telephone
 CA Climate Zone 01
 Climate Zone

12/10/2007
 Date
 Building Permit #
 Plan Check/Date
 Field Check/Date

TDV (kBtu/sf-yr)	Standard Design	Proposed Design	Compliance Margin
Space Heating	58.98	51.57	7.41
Space Cooling	0.12	0.10	0.01
Fans	1.54	0.02	1.52
Domestic Hot Water	33.27	33.46	-0.19
Pumps	0.00	0.00	0.00
Totals	93.91	85.16	8.76

Percent better than Standard: 9.3%

BUILDING COMPLIES - NO HERS VERIFICATION REQUIRED

Building Type: Single Family Addition Multi Family Existing + Add/Alt
 Total Conditioned Floor Area: 1,080 ft²
 Existing Floor Area: n/a ft²
 Building Front Orientation: (SW) 213 deg
 Raised Floor Area: 0 ft²
 Fuel Type: Propane
 Slab on Grade Area: 1,080 ft²
 Fenestration:
 Area: 332 ft² Avg. U: 0.30 Average Ceiling Height: 9.5 ft
 Ratio: 30.7% Avg. SHGC: 0.33 Number of Dwelling Units: 1.00
 Number of Stories: 1

BUILDING ZONE INFORMATION

Zone Name	Floor Area	Volume	# of Units	Zone Type	Thermostat Type	Vent Hgt.	Vent Area
90% Space Heat Boiler	1,080	10,228	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	1,110	0.033	R-30	R-0.0	213	18	X	New	02-A27	Giacinto Residence
Wall	Wood	325	0.074	R-19	R-0.0	213	90	X	New	09-A5	Giacinto Residence
Wall	Wood	38	0.074	R-19	R-0.0	258	90	X	New	09-A5	Giacinto Residence
Wall	Wood	315	0.074	R-19	R-0.0	303	90	X	New	09-A5	Giacinto Residence
Wall	Wood	46	0.074	R-19	R-0.0	348	90	X	New	09-A5	Giacinto Residence
Wall	Wood	405	0.074	R-19	R-0.0	33	90	X	New	09-A5	Giacinto Residence
Door	None	20	0.700	None	R-0.0	33	90	X	New	28-A2	Giacinto Residence
Wall	Wood	87	0.074	R-19	R-0.0	78	90	X	New	09-A5	Giacinto Residence
Wall	Wood	210	0.074	R-19	R-0.0	123	90	X	New	09-A5	Giacinto Residence
Wall	Wood	49	0.074	R-19	R-0.0	168	90	X	New	09-A5	Giacinto Residence

Run Initiation Time: 12/10/07 14:48:54 Run Code: 1197326934

Certificate Of Compliance : Residential

(Part 2 of 4) **CF-1R**

Giacinto Residence

12/10/2007

Project Title

Date

FENESTRATION SURFACES

#	Type	Area	U-Factor ¹	SHGC ²	True Azm.	Cond. Tilt	Stat. Glazing Type	Location/ Comments
1.	Window Front (SW)	72.0	0.300 NERC	0.34 NERC	213	90 New	Andersen 400 c/a	Giacinto Residence
2	Window Front (SW)	6.0	0.330 NERC	0.30 NERC	213	90 New	Andersen 400 s	Giacinto Residence
3.	Window Front (SW)	42.0	0.290 NERC	0.36 NERC	213	90 New	Andersen 400 f	Giacinto Residence
4	Window Front (SW)	20.0	0.320 NERC	0.25 NERC	213	90 New	Andersen 400 is door	Giacinto Residence
5	Window Front (W)	15.0	0.300 NERC	0.34 NERC	258	90 New	Andersen 400 c/a	Giacinto Residence
6	Window Front (W)	4.0	0.290 NERC	0.36 NERC	258	90 New	Andersen 400 f	Giacinto Residence
7	Window Left (NW)	15.0	0.300 NERC	0.34 NERC	303	90 New	Andersen 400 c/a	Giacinto Residence
8	Window Left (N)	2.0	0.290 NERC	0.36 NERC	348	90 New	Andersen 400 f	Giacinto Residence
9	Window Rear (NE)	18.0	0.330 NERC	0.30 NERC	33	90 New	Andersen 400 s	Giacinto Residence
10	Window Rear (NE)	4.0	0.290 NERC	0.36 NERC	33	90 New	Andersen 400 f	Giacinto Residence
11	Window Rear (NE)	26.6	0.320 NERC	0.25 NERC	33	90 New	Andersen 400 is door	Giacinto Residence
12	Window Rear (E)	2.0	0.290 NERC	0.36 NERC	78	90 New	Andersen 400 f	Giacinto Residence
13	Window Right (SE)	70.0	0.300 NERC	0.34 NERC	123	90 New	Andersen 400 c/a	Giacinto Residence
14	Window Right (S)	35.0	0.300 NERC	0.34 NERC	168	90 New	Andersen 400 c/a	Giacinto Residence

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												
2	Bug Screen	0.76												
3	Bug Screen	0.76												
4	Bug Screen	0.76												
5	Bug Screen	0.76												
6	Bug Screen	0.76												
7	Bug Screen	0.76												
8	Bug Screen	0.76												
9	Bug Screen	0.76												
10	Bug Screen	0.76												
11	Bug Screen	0.76												
12	Bug Screen	0.76												
13	Bug Screen	0.76												
14	Bug Screen	0.76												

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	174	R-5	24 in. vertical	27-B17	New	Giacinto Residence

Certificate Of Compliance : Residential

(Part 3 of 4) **CF-1R**

Giacinto Residence

12/10/2007

Project Title

Date

HVAC SYSTEMS

Location	Heating Type	Minimum Eff	Cooling Type	Minimum Eff	Condition Status	Thermostat Type
90% Space Heat Boiler	Boiler	see below	No Cooling	13.0 SEER	New	Setback

HVAC DISTRIBUTION

Location	Heating	Cooling	Duct Location	Duct R-Value	Condition Status	Ducts Tested?
90% Space Heat Boiler	Radiant Floor	Ducted	Attic	6.0	New	No

Hydronic Piping

System Name	Pipe Length	Pipe Diameter	Insul. Thick.
90% Boiler (Space Heating)	8	0.50	0.50

WATER HEATING SYSTEMS

System Name	Water Heater Type	Water Heater Distribution	# in Syst.	Rated Input (Btu/hr)	Tank Cap. (gal)	Condition Status	Energy Factor or RE	Standby Loss (%)	Tank Insul. R-Value Ext.
0.58 EF - 40 Gallon DHW	Small Gas	No Pipe Insulation	1	40,000	40	New	0.58	n/a	n/a
90% Boiler (Space Heating)	Instant Gas	Hydronic Heating	1	80,000	0	New	0.90	0	n/a

Multi-Family Central Water Heating Details

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

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: _____
 Title/Firm: Tom Giacinto
 Address: P. O. Box
 Jenner, CA 95450
 Telephone: (707) 847-3888
 Lic. # _____
 (signature) *Tom Giacinto* (date) _____

Documentation Author

Name: Sean Plikuhn
 Title/Firm: SOL*DATA ENERGY CONSULTING
 Address: 401-C College Ave.
 Santa Rosa, CA 95401
 Telephone: (707) 545-4440
 (signature) *Sean Plikuhn* (date) 12/10/07

Enforcement Agency

Name: _____
 Title/Firm: _____
 Address: _____
 Telephone: _____
 (signature) _____ (date) _____

NOTE: Lowrise 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	Check or initial applicable boxes or check NA if not applicable and included with the permit application documentation.			ENFORCE- MENT
	N/A	DESIGNER		
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 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 mass 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 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 b. outside air intake with damper and control, flue damper and control 2. No continuous burning gas pilot lights allowed.	<input 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 type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
§ 150(g): Vapor barriers mandatory in Climate Zones 14 and 16 only.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
* § 150(l): 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
§ 118: Insulation specified or installed meets insulation installation quality standards. Indicate type and include CF-6R 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. 2. Fenestration products (except field fabricated) have label with certified U-Factor, certified Solar Heat Gain Coefficient (SHGC), and infiltration certification. 3. Exterior doors and windows weatherstripped; all joints and penetrations caulked and sealed.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
§ 150(h): Heating and/or cooling loads calculated in accordance with ASHRAE, SMACNA or ACCA.	<input type="checkbox"/>	<input checked="" 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 0.58 must be externally wrapped with insulation having an installed thermal resistance of R-12 or greater. 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. 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. 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. 4. Steam hydronic heating systems or hot water systems > 15 psi, meet requirements of Table 123-A. 5. Insulation must be protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind. 6. Insulation for chilled water piping and refrigerant suction piping includes a vapor retardant or is enclosed entirely in conditioned space. 7. Solar water-heating systems/collectors are certified by the Solar Rating and Certification Corporation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

NOTE: Lowrise 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.			ENFORCE- MENT
	N/A	DESIGNER		
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 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 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 type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4. Exhaust fan systems have back draft or automatic dampers.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
5. Gravity ventilating systems serving conditioned space have either automatic or readily accessible, manually operating dampers.	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7. Flexible ducts cannot have porous inner cores.	<input 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 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 type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b. Cover for outdoor pools or outdoor spas.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3. Pool system has directional inlets and a circulation pump time switch.	<input 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
§ 118 (i): Cool Roof material meets specified criteria	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Lighting Measures				
§ 150(k)1: 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 type="checkbox"/>	<input checked="" 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 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
§ 150(k)3: Permanently installed luminaires in bathrooms, 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
§ 150(k)4: Permanently installed luminaires located other than in kitchens, bathrooms, 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 type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" 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 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 type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

John E. Brotschi
Civil Engineering – R.C.E. #31491

THESE ATTACHMENTS ARE PART
OF THE APPROVED PLANS.
*** DO NOT REMOVE THEM ***

Tom Giacinto, (707) 847-3800 / 847-3888
22110 Amanita Circle, Timber Cove, Ca. 95450

MAY 14 2008

Sonoma County Building Inspection Department

PERMIT AND RESOURCE
MANAGEMENT DEPARTMENT
BUILDING PLAN CHECK

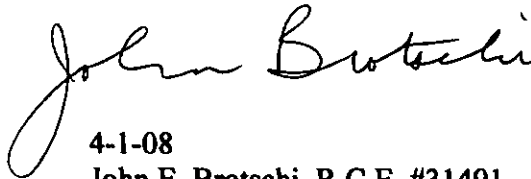
Ref: Truss Engineering, 22205 Umland Circle, Timber Cove, Ca.

PERMIT # 2007-6167

Gentlemen:

I have reviewed the following 17 truss calculations for the Giacinto residence at 22205 Umland Circle, Timber Cove: Layout plan and list, calculations for trusses 3745758 to 3745773, by CompuTrus Inc. for Walters Lumber Inc. of Penngrove.

The trusses are in general conformance with the structural plans, and are suitable for approval and fabrication.



4-1-08
John E. Brotschi, R.C.E. #31491
P.O. Box 435, Sebastopol, Ca. 95473
(707) 823-7313

