B

Type

X

Plans

BLD11 - 1724

Permit Number

1690

Street Number

Barlow Ln

Street Name

TW1

Community Code

061 - 050 - 055

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:	Date Applied:

JOB ADDRESS: 1690 BARLOW LN TWI PERMIT NUMBER: BLD11-1724 INSPECTION AREA: 7

INFORMATION WITHIN HEAVY LINE TO BE COMPLETED BY APPLICANT

SITE LOCATION INFORMATION - PRINT CLEARLY

Site Address: 1690 Barlow ln City: Sebastopol ZIP: 95472

Cross-Street: Occidental Rd. APN: 061-050-055 Project Phone #: (707) 217-0307 Project Fax #: (707) 823-0887

Directions: Email address: Paul@SmallVines.com Unit # — Lot # —

Describe Project: Remodel old Farm House new Dec + Porch B1d08-0748

Living Area New 310 @ 485 Contract Price:

Garage

Decks Cvd 207 112

OWNER NAME AND ADDRESS

Name: Paul Sloan

Mailing Address: 2160 Green Hill Rd.

City: Sebastopol State: CA ZIP: 95472

Day Ph: (707) 217-0307 Fax: (707) 823-0886

APPLICANT NAME AND ADDRESS

Name:

Mailing Address:

City: State: ZIP:

Day Ph: ( ) Fax: ( )

CONTRACTOR INFORMATION

Company Name:

Address:

City: State: ZIP:

Day Ph: ( ) Fax: ( )

OTHER PERSONS (ARCHITECT, ENGINEER, ETC.)

Name:

Address:

City: State: ZIP:

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:

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 _____

By my signature below I acknowledge that, except for my personal residence in which I must have resided for at least one year prior to completion of the improvements covered by this permit, I cannot legally sell a structure that I have built as an owner-builder if it has not been constructed in its entirety by licensed contractors. I understand that a copy of the applicable law, Section 7044 of the Business and Professions Code, is available upon request when this application is submitted or at the following website: http://www.leginfo.ca.gov/calaw.html.

5/5/11 Date

Signature of Property Owner or Authorized Agent

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 Lic. No.

Exp. Date Contractor

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.

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

2160 Green Hill Rd. Sebastopol 95472

ADDRESS CITY ZIP

☐ Contractor ☑ Owner ☐ Other Licensed Professional

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

FOR DEPARTMENT USE

Zoning DA 10 SR File No. Acres

Existing Use/Structures SFD Storage - Bldg

Proposed Use/Structures SFD Remodel - Add

Zoning Min. Yard Requirements: Front 30 Left 10 Right 10 Back 20

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 Issuance: By: Date:

Approval for Occupancy: By: Nick Chase Date: 3/4/05

Conditions:

Sewer Connection: ☐ Available ☐ Fees Paid

Approved by: Date:

Road Encroachment: ☐ Fees Paid VEN10-0001

Approved by: Date: 5-5-11

Septic System Permit/Clearance # 5/15/08

Approved by: Samantha Bt Dave Boyce Date:

Flood Zone: ☐ Yes ☐ No 100 Year Flood Elevation:

Site Review

Drainage Review:

Approved by: Date:

Fire N.R. CB Boyce

Approved by: Date: 3/4/08

Code Enforcement Violation ☒ Yes ☐ No Violation #

This permit is limited to _____ days.

Work Authorized: Renew / TO Complete work from B2008-0748

☐ Plans Approved ☒ No Plans Subject to Field Inspection

☐ Post FIRM ☐ Pre FIRM ☐ Alquist Priolo Report Available ☐ Geotechnical report Available

Planchet Cleared By	Date	Type of Construction	Occupancy	No. of Stories	No. of Bedrooms
	5/5/11	VB	R3	2	4

Permit Cleared for Issuance By	Date:	Auto. Fire Sprinklers Req'd	No of Units	Certificate of Occupancy
	5-5-11	NO		

Machine Space for Permit Fee

PAYMENT REC'D

$ 0.00

MAY 05 2011

PERMIT AND RESOURCE MANAGEMENT DEPARTMENT COUNTY OF SONOMA

Distribution: White - File Canary - Applicant Blue - Assessor Cardstock - Inspector

cmuller s:\handouts\css\CIS-007.cdr Revised: 01/29/2009

131) SPECIAL INSPECTION REQUIRED	☐ YES ☒ NO	IF YES, SEE ADDITIONAL SHEET

INSPECTION RECORD	DATE	NAME
101) ROUGH GRADING		
103) FOUNDATION		
FORMS/SETBACK		
FOOTING		
WALLS		
106) UFER GROUND #		
104) CAISSONS/PIERS		
105) SLAB		
107) UNDERGROUND UTILITIES		
110) MASONRY		
109) RETAINING WALLS		
113) FIREPLACE		
FOOTING		
HEARTH/PROTECTION		
THROAT		
114) CHIMNEY		
120) UNDERFLOOR/UNDERSLAB		
115) HYDRONICS		
116) U/F ELECTRICAL		
117) U/F MECHANICAL		
118) U/F PLUMBING		
119) U/F FRAMING		
139) U/F INSULATION		
126) SHEAR WALLS		
☐ INTERIOR ☐ EXTERIOR		
127) DIAPHRAGMS		
☐ ROOF ☐ FLOOR		
134) SIDING/SHEATHING		
125) HOLD DOWNS	8-30-11	RP
132) CLOSE-IN	8-30-11	RP
122) ROUGH ELECTRICAL		
123) ROUGH MECHANICAL	8-30-11	RP
124) ROUGH PLUMBING		
128) ROUGH FRAME		
160) SMOKE DETECTORS		
139) INSULATION		
142) WALLBOARD	9-6-11	RP
143) FIREWALLS		
135) STUCCO/PLASTER		
☐ LATH ☐ SCRATCH		
137) ROOFING		
130) TUB/SHOWER PAN	9-30-11	RP
162) FIRE DAMPERS/DOORS		
164) SUSPENDED CEILING		
☐ ROUGH ELEC. ☐ ROUGH MECH.		
165) EXITING - RAMPS/STAIRS		
163) HANDRAILS/GUARDRAILS	( )	
CORRIDORS/DOORS		
166) ACCESSIBILITY COMPLIANCE		
144) WATER TANKS		
☐ SLAB ☐ WALLS		
170) TEMPORARY OCCUPANCY		
171) TEMPORARY ELECTRICAL		
172) TEMPORARY GAS		
174) ELECTRIC METER AUTHORIZATION	8-25-11	RP
152) PANEL BOARDS/SERVICE		
189) SEPTIC ELECTRIC FINAL		
175) GAS METER AUTHORIZATION		
153) GAS PRESSURE TEST		
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	12-16-11	RP
177) MECHANICAL FINAL		
178) PLUMBING FINAL		
199) FINAL	12-20-11	RP
OCCUPANCY (OK TO OCCUPY)		

REMARKS

Complete Bld08-0748
SFD Add + Remodel

(103,104) 9-23-11 Piers @ front deck porch RP

(127) 11-16-11 S. porch roof. RP

(140) Discused Framing issues, CO detectors, Heating system, insulation 8-1-11 MW

(199) 12-16-11 Ok to final with exterior handrails & Encroachment. RP

650)	SUSMP INSPECTION
651)	NPDES EROSION COMPLIANCE
652)	NPDES SEDIMENT COMPLIANCE
653)	NPDES DOCS/SWPPP

FIRE INSPECTION REQUIRED ☒ Yes ☐ No	DATE	NAME
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 ☐ Local ☐ County
HEALTH DEPARTMENT
ZONING
SANITATION

PLAN RETENTION REQUIRED? ☐ Yes ☐ No

PERMIT # Bldl-1784

sennis CIS-008.cdr Rev. 04/15/04

Certificate Of Compliance : Residential (Part 1 of 3) CF-1R

Paul Sloan
Project Title

2/20/2008
Date

1690 Barlow Lane Sebastopol
Project Address

Building Permit #

NRG Compliance, Inc (707) 237-6957
Documentation Author Telephone

Plan Check/Date

EnergyPro CA Climate Zone 02
Compliance Method Climate Zone

Field Check/Date

TDV (kBtu/sf-yr)	Standard Design	Proposed Design	Compliance Margin
Space Heating	65.11	57.06	8.04
Space Cooling	43.29	37.85	5.44
Fans	10.15	8.87	1.28
Domestic Hot Water	9.86	9.86	0.00
Pumps	0.00	0.00	0.00
Totals	128.41	113.64	14.77
Percent better than Standard:			11.5%

BUILDING COMPLIES - NO HERS VERIFICATION REQUIRED

Building Type: [X] Single Family [ ] Addition
[ ] Multi Family [X] Existing + Add/Alt

Building Front Orientation: (N) 0 deg
Fuel Type: Natural Gas
Fenestration:
Area: 360 ft^2 **Avg. U:** 0.57
Ratio: 13.6% **Avg. SHGC:** 0.63

Total Conditioned Floor Area: 2,643 ft^2
Existing Floor Area: 2,333 ft^2
Raised Floor Area: 1,864 ft^2
Slab on Grade Area: 0 ft^2
Average Ceiling Height: 9.2 ft
Number of Dwelling Units: 1.00
Number of Stories: 2

BUILDING ZONE INFORMATION

Zone Name	Floor Area	Volume	# of Units	Zone Type	Thermostat Type	Vent Hgt.	Vent Area
HVAC System	2,643	24,361	1.00	Conditioned	Setback	8	n/a

OPAQUE SURFACES

Type	Frame	Area	U-Fac.	Insulation Cav.	Insulation Cont.	Act. Azm.	Tilt	Gains Y	Gains N	Condition Status	JA IV Reference	Location / Comments
Floor	Wood	1,709	0.099	None	R-0.0	0	180		X	Existing	20-A1	1st Floor
Wall	Wood	392	0.356	None	R-0.0	0	90	X		Existing	09-A1	1st Floor
Door	None	33	0.500	None	R-0.0	0	90	X		New	28-A4	1st Floor
Door	None	20	0.500	None	R-0.0	0	90	X		Removed	28-A4	1st Floor
Wall	Wood	354	0.356	None	R-0.0	90	90	X		Existing	09-A1	1st Floor
Wall	Wood	208	0.356	None	R-0.0	180	90	X		Existing	09-A1	1st Floor
Wall	Wood	165	0.356	None	R-0.0	180	90	X		Removed	09-A1	1st Floor
Wall	Wood	304	0.356	None	R-0.0	270	90	X		Existing	09-A1	1st Floor
Wall	Wood	52	0.356	None	R-0.0	270	90	X		Removed	09-A1	1st Floor
Roof	Wood	1,085	0.079	R-11	R-0.0	0	0	X		Existing	01-A2	1st Floor
Floor	Wood	155	0.037	R-19	R-0.0	0	180		X	New	20-A4	1st Floor
Wall	Wood	117	0.102	R-13	R-0.0	180	90	X		New	09-A3	1st Floor
Door	None	17	0.500	None	R-0.0	180	90	X		New	28-A4	1st Floor
Wall	Wood	56	0.102	R-13	R-0.0	270	90	X		New	09-A3	1st Floor
Wall	Wood	240	0.356	None	R-0.0	0	90	X		Existing	09-A1	2nd Floor
Door	None	17	0.500	None	R-0.0	0	90	X		Existing	28-A4	2nd Floor
Wall	Wood	204	0.356	None	R-0.0	90	90	X		Existing	09-A1	2nd Floor
Wall	Wood	182	0.356	None	R-0.0	180	90	X		Existing	09-A1	2nd Floor
Wall	Wood	54	0.356	None	R-0.0	180	90	X		Removed	09-A1	2nd Floor
Wall	Wood	150	0.356	None	R-0.0	270	90	X		Existing	09-A1	2nd Floor
Wall	Wood	65	0.356	None	R-0.0	270	90	X		Removed	09-A1	2nd Floor
Roof	Wood	608	0.079	R-11	R-0.0	0	0	X		Existing	01-A2	2nd Floor
Wall	Wood	81	0.102	R-13	R-0.0	0	90	X		New	09-A3	2nd Floor
Wall	Wood	172	0.102	R-13	R-0.0	180	90	X		New	09-A3	2nd Floor
Wall	Wood	50	0.102	R-13	R-0.0	270	90	X		New	09-A3	2nd Floor

Certificate Of Compliance : Residential (Part 1 of 3) CF-1R

Paul Sloan
Project Title

2/20/2008
Date

1690 Barlow Lane Sebastopol
Project Address

Building Permit #

NRG Compliance, Inc
Documentation Author

(707) 237-6957
Telephone

Plan Check/Date

EnergyPro
Compliance Method

CA Climate Zone 02
Climate Zone

Field Check/Date

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Space Cooling	43.29	37.85	5.44
Fans	10.15	8.87	1.28
Domestic Hot Water	9.86	9.86	0.00
Pumps	0.00	0.00	0.00
Totals	128.41	113.64	14.77

Percent better than Standard: 11.5%

BUILDING COMPLIES - NO HERS VERIFICATION REQUIRED

Building Type: [X] Single Family [ ] Addition [ ] Multi Family [X] Existing + Add/Alt

Building Front Orientation: (N) 0 deg

Fuel Type: Natural Gas

Fenestration:
Area: 360 ft² Avg. U: 0.57
Ratio: 13.6% Avg. SHGC: 0.63

Total Conditioned Floor Area: 2,643 ft²
Existing Floor Area: 2,333 ft²
Raised Floor Area: 1,864 ft²
Slab on Grade Area: 0 ft²
Average Ceiling Height: 9.2 ft
Number of Dwelling Units: 1.00
Number of Stories: 2

BUILDING ZONE INFORMATION

Zone Name	Floor Area	Volume	# of Units	Zone Type	Thermostat Type	Vent Hgt.	Vent Area

OPAQUE SURFACES

Type	Frame	Area	U-Fac.	Insulation Cav.	Insulation Cont.	Act. Azm.	Tilt	Gains Y	Gains N	Condition Status	JA IV Reference	Location / Comments
Roof	Wood	155	0.036	R-30	R-0.0	270	15	X		New	02-A9	2nd Floor

Certificate Of Compliance : Residential (Part 2 of 3) CF-1R

Paul Sloan — Project Title

2/20/2008 — Date

FENESTRATION SURFACES

#	Type			Area	U-Factor[1]		SHGC[2]		True Azm.	Tilt	Cond. Stat.	Glazing Type	Location/ Comments
1	Window	Front	(N)	66.0	0.580	116-A	0.65	116-B	0	90	Existing	Double Non Metal Clear	1st Floor
2	Window	Left	(E)	92.7	0.580	116-A	0.65	116-B	90	90	Existing	Double Non Metal Clear	1st Floor
3	Window	Rear	(S)	18.0	0.580	116-A	0.65	116-B	180	90	New	Double Non Metal Clear	1st Floor
4	Window	Rear	(S)	19.5	0.580	116-A	0.65	116-B	180	90	Removed	Double Non Metal Clear	1st Floor
5	Window	Rear	(S)	23.1	0.580	116-A	0.65	116-B	180	90	Removed	Double Non Metal Clear	1st Floor
6	Window	Right	(W)	16.0	0.580	116-A	0.65	116-B	270	90	New	Double Non Metal Clear	1st Floor
7	Window	Right	(W)	55.0	0.580	116-A	0.65	116-B	270	90	Existing	Double Non Metal Clear	1st Floor
8	Window	Right	(W)	20.0	0.580	116-A	0.65	116-B	270	90	Removed	Double Non Metal Clear	1st Floor
9	Window	Rear	(S)	6.0	0.580	116-A	0.65	116-B	180	90	New	Double Non Metal Clear	1st Floor
10	Window	Right	(W)	16.0	0.580	116-A	0.65	116-B	270	90	New	Double Non Metal Clear	1st Floor
11	Window	Left	(E)	18.3	0.580	116-A	0.65	116-B	90	90	Existing	Double Non Metal Clear	2nd Floor
12	Window	Rear	(S)	44.0	0.580	116-A	0.65	116-B	180	90	Existing	Double Non Metal Clear	2nd Floor
13	Window	Rear	(S)	9.8	0.580	116-A	0.65	116-B	180	90	Removed	Double Non Metal Clear	2nd Floor
14	Window	Right	(W)	22.0	0.580	116-A	0.65	116-B	270	90	Removed	Double Non Metal Clear	2nd Floor
15	Skylight	Front	(N)	16.0	0.390	NFRC	0.29	NFRC	0	0	New	Velux Comfort+(74) Lowe2/Arg	2nd Floor
16	Window	Rear	(S)	12.0	0.580	116-A	0.65	116-B	180	90	New	Double Non Metal Clear	2nd Floor

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 Hgt.	Window Wd.	Overhang Len.	Overhang Hgt.	Overhang LExt.	Overhang RExt.	Left Fin Dist.	Left Fin Len.	Left Fin Hgt.	Right Fin Dist.	Right Fin Len.	Right Fin 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	3.0	2.0	8.0	0.1	8.0	8.0						
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												
15	None	1.00												
16	Bug Screen	0.76												

THERMAL MASS FOR HIGH MASS DESIGN

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

PERIMETER LOSSES

Type	Length	R-Val.	Insulation Location	JA IV Reference	Condition Status	Location/ Comments

Certificate Of Compliance : Residential (Part 3 of 3) CF-1R

Paul Sloan — Project Title

2/20/2008 — Date

HVAC SYSTEMS

Location	Heating Type	Minimum Eff	Cooling Type	Minimum Eff	Condition Status	Thermostat Type
HVAC System	Central Furnace	80% AFUE	No Cooling	13.0 SEER	Existing	Setback

HVAC DISTRIBUTION

Location	Heating	Cooling	Duct Location	Duct R-Value	Condition Status	Ducts Tested?
HVAC System	Ducted	Ducted	Attic	4.2	Existing	No

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

WATER HEATING SYSTEMS

System Name	Water Heater Type	Distribution	# in Syst.	Rated Input (Btu/hr)	Tank Cap. (gal)	Condition Status	Energy Factor or RE	Standby Loss (%)	Tank Insul. R-Value Ext.
Standard Gas 50 gal or Less	Small Gas	No Pipe Insulation	1	40,000	50	Existing	0.57	n/a	n/a

Multi-Family Central Water Heating Details

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

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: Rick Rocklewitz
Address: 2732 Village Side Drive
Santa Rosa, CA 95405
Telephone: 707-568-8425 Lic. #:

(signature) (date)

Documentation Author

Name: Rick Rocklewitz
Title/Firm: NRG Compliance, Inc
Address: PO Box 3777
Santa Rosa, Ca 95402
Telephone: (707) 237-6957

(signature) 2/20/08 (date)

Enforcement Agency

Name:
Title/Firm:
Address:
Telephone:

(signature) (date)

Mandatory Measures Summary: Residential (Page 1 of 2) MF-1R

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.	N/A	DESIGNER	ENFORCE-MENT
Building Envelope Measures			
*§ 150(a): Minimum R-19 in wood ceiling insulation or equivalent U-factor in metal frame ceiling.	☐	☒	☐
§ 150(b): Loose fill insulation manufacturer's labeled R-Value:_____.	☐	☐	☐
*§ 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).	☐	☒	☐
*§ 150(d): Minimum R-13 raised floor insulation in framed floors or equivalent U-factor.	☐	☒	☐
§ 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.	☐	☐	☐
§ 150(f): Air retarding wrap installed to comply with §151 meets requirements specified in the ACM Residential Manual.	☐	☐	☐
§ 150(g): Vapor barriers mandatory in Climate Zones 14 and 16 only.	☐	☐	☐
§ 150(i): Slab edge insulation - water absorption rate for the insulation alone without facings no greater than 0.3%, water vapor permeance rate no greater than 2.0 perm/inch.	☐	☐	☐
§ 118: Insulation specified or installed meets insulation installation quality standards. Indicate type and include CF-6R Form: _____	☐	☒	☐
§ 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	☐	☒	☐
Space Conditioning, Water Heating and Plumbing System Measures			
§ 110-13: HVAC equipment, water heaters, showerheads and faucets certified by the Energy Commission.	☐	☒	☐
§ 150(h): Heating and/or cooling loads calculated in accordance with ASHRAE, SMACNA or ACCA.	☐	☐	☐
§ 150(i): Setback thermostat on all applicable heating and/or cooling systems.	☐	☐	☐
§ 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.	☐	☐	☐

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.	N/A	DESIGNER	ENFORCE-MENT
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 minumum 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.	☐	☒	☐
	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.	☐	☒	☐
	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.	☐	☒	☐
	4. Exhaust fan systems have back draft or automatic dampers.	☐	☐	☐
	5. Gravity ventilating systems serving conditioned space have either automatic or readily accessible, manually operating dampers.	☐	☐	☐
	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.	☐	☒	☐
	7. Flexible ducts cannot have porous inner cores.	☐	☒	☐
§ 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.	☐	☐	☐
	2. System is installed with:			
	a. At least 36" of pipe between filter and heater for future solar heating.	☐	☐	☐
	b. Cover for outdoor pools or outdoor spas	☐	☐	☐
	3. Pool system has directional inlets and a circulation pump time switch	☐	☐	☐
§ 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)	☐	☒	☐
§ 118 (i):	Cool Roof material meets specified criteria	☐	☐	☐
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.	☐	☒	☐
§ 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.	☐	☒	☐
§ 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.	☐	☒	☐
§ 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) certfied to comply with Section 119(d).	☐	☒	☐
§ 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.	☐	☒	☐
§ 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.	☐	☒	☐
§ 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).	☐	☒	☐
§ 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.	☐	☐	☐
§ 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).	☐	☐	☐

INSTALLATION CERTIFICATE		CF-6R-MECH-20-HERS
Duct Leakage Test – Completely New or Replacement Duct System		**(Page 1 of 2)**
Site Address: 1690 Barlow Lane, Sebastopol CA 95472 (System 1)	**Enforcement Agency:** County of Sonoma	**Permit Number:** BLD11-1724

Enter the Duct System Name or Identification/Tag: **System 1**

Enter the Duct System Location or Area Served: **Whole House**

Note: Submit one Installation Certificate for each duct system that must demonstrate compliance in the dwelling.

This certificate is required for compliance for completely new duct systems installed in new dwelling construction, and also for completely new or replacement duct systems in existing dwellings. For existing dwellings, a completely new or replacement duct system can also include existing parts of the original duct system (e.g., register boots, air handler, coil, plenums, etc.) if those parts are accessible and they can be sealed.

Duct Leakage Diagnostic Test - completely new or replacement duct system

Enter a value for the Allowed Leakage (CFM) for the duct system leakage verification. The value entered must be the VLLDCS criteria or one of the three calculated leakage rates described below.

Verified Low Leakage Ducts in Conditioned Space (VLLDCS) Compliance Credit. If compliance credit for verified low leakage ducts in conditioned space is shown in the special features section of the CF-1R, the leakage to outside test method must be used to verify duct leakage (refer to RA3.1.4.3.4), and 25 CFM must be entered for Allowed Leakage.	Allowed Leakage (CFM)
Allowed leakage calculation – (select one calculation method from this section). Use 6% (*leakage factor* = 0.06) for calculations if tested at "final" or 4% (*leakage factor* = 0.04) if tested at "rough." When utilizing Low Leakage Air Handler (LLAH) credit, the allowed duct leakage may be specified by the CF-1R to be less than 6%, in which case the user-specified leakage rate must be used in the calculations below. For example, if the user-specified leakage (specified as a percentage of fan airflow) is reported on the CF-1R as 3%, then use a*leakage factor* of 0.03 in the calculations below. Cooling system method: Nominal capacity of condenser in Tons _____ x 400 x *leakage factor* = _____ CFM ✔ Heating system method: 21.7 x **85.5** Output Capacity in Thousands of Btu/hr x *leakage factor* = **111.32** CFM Measured airflow method (RA3.3): Enter measured fan flow in CFM here _____ x *leakage factor* = _____ CFM	
Enter value for **Actual** leakage (CFM) in the right column, from measurement using applicable duct leakage pressurization test procedure from Reference Residential Appendix RA3.1(CFM @ 25 Pa).	Actual Leakage (CFM)
List **Actual** Leakage from duct leakage test(CFM)	**79**
Pass if Actual Leakage is equal to or less than Allowed Leakage	✔ **Pass** **Fail**
For complete replacement of duct systems only, if the 6 percent leakage rate criteria cannot be met, a smoke test should be performed to verify that the excess leakage is coming only from a pre-existing furnace cabinet (air handler cabinet), and not from other accessible portions of the duct system. A HERS rater must verify the installation (No sampling allowed). List **Actual** Leakage from smoke test(CFM)	
Pass if all accessible leaks (except for existing air handler) are sealed using smoke	**Pass** **Fail**

INSTALLATION CERTIFICATE		CF-6R-MECH-20-HERS
Duct Leakage Test – Completely New or Replacement Duct System		**(Page 2 of 2)**
Site Address: 1690 Barlow Lane, Sebastopol CA 95472 (System 1)	**Enforcement Agency:** County of Sonoma	**Permit Number:** BLD11-1724

Compliance Method

This dwelling was: (select one of the following two choices):

✔ Tested at Final

Tested at Rough-in (requires installer to complete the visual inspection at final construction stage described below)

Visual Inspection at Final Construction Stage (if applicable)

After installing the interior finishing wall and verifying that the above rough-in tests was completed, the following procedure must be performed:

For all supply and return registers, 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.

✔ Outside air (OA) ducts for Central Fan Integrated (CFI) ventilation systems, shall not be sealed/taped off during duct leakage testing. CFI OA ducts that utilize controlled motorized dampers, that open only when OA ventilation is required to meet ASHRAE Standard 62.2, and close when OA ventilation is not required, may be configured to the closed position during duct leakage testing.

✔ All supply and return register boots must be sealed to the drywall

✔ New duct installations cannot utilize building cavities as plenums or platform returns in lieu of ducts.

✔ Mastic and draw bands must be used in combination with Cloth backed, rubber adhesive duct tape to seal leaks at duct connections.

DECLARATION STATEMENT

- I certify under penalty of perjury, under the laws of the State of California, the information provided on this form is true and correct.
- I am eligible under Division 3 of the Business and Professions Code to accept responsibility for construction, or an authorized representative of the person responsible for construction (responsible person).
- I certify that the installed features, materials, components, or manufactured devices identified on this certificate (the installation) conforms to all applicable codes and regulations, and the installation is consistent with the plans and specifications approved by the enforcement agency.
- I understand that a HERS rater will check the installation to verify compliance, and that that if such checking identifies defects, I am required to take corrective action at my expense. I understand that Energy Commission and HERS provider representatives will also perform quality assurance checking of installations, including those approved as part of a sample group but not checked by a HERS rater, and if those installations fail to meet the requirements of such quality assurance checking, the required corrective action and additional checking/testing of other installations in that HERS sample group will be performed at my expense.
- I reviewed a copy of the Certificate of Compliance (CF-1R) form approved by the enforcement agency that identifies the specific requirements for the installation. I certify that the requirements detailed on the CF-1R that apply to the installation have been met.
- **I will ensure that a completed, signed copy of this Installation Certificate shall be posted, or made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a signed copy of this Installation Certificate is required to be included with the documentation the builder provides to the building owner at occupancy.** I will ensure that all Installation Certificates will come from a HERS provider data registry for multiple orientation alternatives, and beginning October 1, 2010, for all low-rise residential buildings.

Company Name: (Installing Subcontractor or General Contractor or Builder/Owner) **FRANCO'S MECHANICAL**		
Responsible Person's Name: **juan franco**		Responsible Person's Signature: juan franco
CSLB License: **962011**	Date Signed: **12/15/2011**	Position With Company (Title):
Is this installation monitored by a Third Party Quality Control Program (TPQCP)? Yes No		Name of TPQCP (if applicable):

INSTALLATION CERTIFICATE	(Page 1 of 12) CF-6R
Site Address: 1090 BARLOW LANE, SEBASTOPOL	Permit Number: Bld 11-1724

Installation certificates (CF-6R) are required for each and every dwelling unit. When the installation of measures that require field verification and diagnostic testing is complete, the builder or the builder's subcontractor shall complete diagnostic testing and the procedures specified in this section. When the installation is complete, the builder or the builder's subcontractor shall complete the CF-6R (Installation Certificate), and keep it at the building site for review by the building department. The builder also shall provide a copy of the Installation Certificate to the HERS rater for any measures requiring field verification and diagnostic testing, 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)[1]	Standby Loss (%)[2]	External Insulation R-value[2]
TANK		STD			40,000		82%		

1 For **small gas storage** (rated input of less than or equal to 75,000 Btu/hr), **electric resistance** and **heat pump water heaters**, list Energy Factor (EF). For **large gas storage water heaters** (rated input of greater than 75,000 Btu/hr), list Recovery (RE), Thermal Efficiency, Standby Loss and Rated Input. For **instantaneous gas water heaters**, list Thermal Efficiency and Rated Input.

2. R-12 external insulation is mandatory for storage water heaters with an energy factor of less than 0.58.

Kitchen Piping:
If indicated on the CF-1R, all hot water piping ≥ 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	SEAN HENSLEY PLUMBING CO
Signature:	Date: 12/15/11

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

#823-0887

INSTALLATION CERTIFICATE	(Page 12 of 12) CF-6R
Site Address 1690 Barlow Ln. Sebastopol	Permit Number
County Subdivision	Lot Number

Description of Insulation (Formerly IC-1 Form)

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

2. SLAB FLOOR/PERIMETER
   Material _____ Brand Name _____
   Thickness (inches) _____ Thermal Resistance (R-Value) _____
   Perimeter Insulation Depth (inches) _____

3. EXTERIOR WALL R-19 2x6's Batts Oversized
   Frame Type R-13 2x4's
   A. Cavity Insulation
   Material _____ Brand Name Guardian
   Thickness (inches) 3½ - 6¼ Thermal Resistance (R-Value) 13-19
   B. Exterior Foam Sheathing
   Material _____ Brand Name _____
   Thickness (inches) _____ Thermal Resistance (R-Value) _____

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

5. CEILING
   Batt or Blanket Type R-30 Brand Name Guardian
   Thickness (inches) 9½" Thermal Resistance (R-Value) 30
   Loose Fill Type _____ Brand _____
   Contractor's min installed weight/ft² _____ lb Minimum thickness _____ inches
   Manufacturer's installed weight per square foot to achieve Thermal Resistance (R-Value) _____

6. ROOF
   Material _____ Brand Name _____
   Thickness (inches) _____ 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	Installing Subcontractor (Co. Name) OR General Contractor (Co. Name) OR Owner OR Window Distributor
		12-8-11	Mead Clark Lbr Co.
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

INSTALLATION CERTIFICATE		CF-6R-MECH-04
Space Conditioning Systems, Ducts and Fans		(Page 2 of 2)
Site Address: 1690 Badow Ln.	Enforcement Agency: PRMD	Permit Number: BLD 11-1724

Ducts and Fans

§150(m): Duct and Fans

☑ 1. All air-distribution system ducts and plenums installed, sealed and insulated to meet the requirements of 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; and

☑ 1. 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.

☑ 2D. 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.

☑ 7. Exhaust fan systems have back draft or automatic dampers.

☑ 8. Gravity ventilating systems serving conditioned space have either automatic or readily accessible, manually operated dampers.

☑ 9. 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.

☑ 10. Flexible ducts cannot have porous inner cores.

DECLARATION STATEMENT

- I certify under penalty of perjury, under the laws of the State of California, the information provided on this form is true and correct.
- I am eligible under Division 3 of the Business and Professions Code to accept responsibility for construction, or an authorized representative of the person responsible for construction (responsible person).
- I certify that the installed features, materials, components, or manufactured devices identified on this certificate (the installation) conforms to all applicable codes and regulations, and the installation is consistent with the plans and specifications approved by the enforcement agency.
- I reviewed a copy of the Certificate of Compliance (CF-1R) form approved by the enforcement agency that identifies the specific requirements for the installation. I certify that the requirements detailed on the CF-1R that apply to the installation have been met.
- **I will ensure that a completed, signed copy of this Installation Certificate shall be posted, or made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a signed copy of this Installation Certificate is required to be included with the documentation the builder provides to the building owner at occupancy.**

Company Name: (Installing Subcontractor or General Contractor or Builder/Owner) T-L. Brown Construction Services.		
Responsible Person's Name: Tim Brown		Responsible Person's Signature: Tim Brown
CSLB License: 741204	Date Signed: 12/14/11	Position With Company (Title): Owner

INSTALLATION CERTIFICATE		CF-6R-MECH-04
Space Conditioning Systems, Ducts and Fans		(Page 1 of 2)
Site Address: 1690 Borlow Ln. Seb.	Enforcement Agency: PRMD	Permit Number: BLD11-1724

Space Conditioning Systems

Heating Equipment

Equip Type (package-heat pump)	CEC Certified Mfr. Name and Model Number	ARI Reference Number [2]	# of Identical Systems	Efficiency (AFUE, etc.)[1,3] (≥CF-1R value)[4]	Duct Location (attic, crawl-space, etc.)	Duct R-value	Heating Load (Btu/hr)	Heating Capacity (Btu/hr)
	RUUD AS-100717-03		1	95%	Yes	6.2	90,000	90,000

Cooling Equipment

Equip Type (package heat pump)	CEC Certified Mfr. Name and Model Number	ARI Reference Number [2]	# of Identical Systems	Efficiency (SEER and EER) [1,3] (≥CF-1R value)[4]	Duct Location (attic, crawl-space, etc.)	Duct R-value	Cooling Load (Btu/hr)	Cooling Capacity (Btu/hr)

N/A

1. If project is new construction, see Footnotes to Standards Table 151-B and Table 151-C for duct ceiling alternative compliance.

2. ARI Reference Number can be found by entering the equipment model number at http://www.aridirectory.org/ari/ac.php#

3. Listed efficiency on this page must be greater than or equal (≥) to the value shown on the CF-1R form.

4. When CF-1R is reference it is also applicable to the CF-1R, CF-1R-AA or CF-1R-ALT

ALL BOXES MUST BE CHECKED TO BE A VALID FORM

☑ §110-§113: HVAC equipment is certified by the California Energy Commission.

☑ §150(h): Heating and/or cooling loads calculated in accordance with ASHRAE, SMACNA, or ACCA.

☑ §150(i): Setback Thermostat on all applicable heating and/or cooling systems meet the requirements of §112(c).

☑ §150(j)2: Pipe insulation for cooling system refrigerant suction, chilled water and brine lines meets minimum requirements of Table 150-B and includes a vapor retardant or is enclosed entirely in conditioned space.

Scott Hunter Ph.D. P.E. *Buildings and Bridges*

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

MAY 08 2008

PERMIT AND RESOURCE MANAGEMENT DEPARTMENT
BUILDING PLAN CHECK
PERMIT # B08-0698

Calculations for Sloan Addition
1690 Barlow Lane, Sebastopol CA

February 2008

2 story addition filling in a reentrant corner. Interior walls moved require framing changes.

Engineer of Record: SH
Design engineer: SH

REGISTERED PROFESSIONAL ENGINEER
SCOTT HUNTER
No. C048066
Exp. 12/31/09
CIVIL
STATE OF CALIFORNIA

MAR 02 2008

Mail: P.O. Box 59, Graton CA 95444 Office: 9060 Graton Rd. (entrance on Ross Rd.)
(707) 875-8949, scott@scotthunter-engr.com