



Type



Doc.



Plans

22004 - 60434

Building Permit Number

22172

Street Number

Umland Circle

Street Name

Community Code

APN

Project Title..... SCHWARTZ/HALE RESIDENCE Date..08/05/03 10:31:16
 Project Address..... 22172 UNLAND CIRCLE *****
 TIMBER COVE, CA *v6.01*
 Documentation Author... GREG BEAUDETTE, CEPE *****
 Beaudette Energy Consulting
 2261 Morello Ave, Ste. .
 Pleasant Hill, CA 94523
 925-689-9135
 Climate Zone.... 01
 Compliance Method..... MICROPAS6 v6.01 for 2001 Standards by Enacomp, Inc.

Building Permit #
Plan Check / Date
Field Check/ Date

MICROPAS6 v6.01 File-SCHHALE Wth-CFZ01S92 Program-FORM CF-1R
 User#-MP0890 User-Beaudette Energy Consulti Run-SCHWARTZ/HALE RESIDENCE

GENERAL INFORMATION

Conditioned Floor Area..... 1200 sf
 Building Type..... Single Family Detached
 Construction Type New
 Building Front Orientation. Front Facing 5 deg (N)
 Number of Dwelling Units... 1
 Number of Stories..... 1
 Floor Construction Type.... Raised Floor
 Glazing Percentage..... 39.8 % of floor area
 Average Glazing U-factor... 0.34 Btu/hr-sf-F
 Average Glazing SHGC..... 0.34
 Average Ceiling Height..... 9.2 ft

BUILDING SHELL INSULATION

Component Type	Frame Type	Cavity R-value	Sheathing R-value	Total R-value	Assembly U-factor	Location/Comments
Wall	Wood	R-19	R-0	R-19	0.065	TYP.
Roof	Wood	R-38	R-0	R-38	0.024	TYP.
Floor	Wood	R-30	R-n/a	R-30	0.028	typ.

FENESTRATION

Orientation	Area (sf)	U-Factor	SHGC	Interior Shading	Exterior Shading	Overhang/Fins	
Window	Right (W)	24.0	0.350	0.350	Standard	Standard	None
Window	Right (W)	24.0	0.350	0.350	Standard	Standard	None
Window	Right (W)	30.0	0.350	0.350	Standard	Standard	None
Window	Right (W)	20.0	0.350	0.350	Standard	Standard	None
Window	Back (S)	30.0	0.350	0.350	Standard	Standard	None
Window	Back (S)	30.0	0.350	0.350	Standard	Standard	None
Door	Back (S)	60.0	0.320	0.320	Standard	Standard	None
Door	Back (S)	60.0	0.320	0.320	Standard	Standard	None
Window	Left (E)	20.0	0.350	0.350	Standard	Standard	None
Window	Left (E)	30.0	0.350	0.350	Standard	Standard	None
Window	Left (E)	30.0	0.350	0.350	Standard	Standard	None
Window	Left (E)	30.0	0.350	0.350	Standard	Standard	None
Window	Left (E)	24.0	0.350	0.350	Standard	Standard	None
Window	Left (E)	24.0	0.350	0.350	Standard	Standard	None
Window	Left (E)	24.0	0.350	0.350	Standard	Standard	None
Door	Left (E)	18.0	0.320	0.320	Standard	Standard	None

Project Title..... SCHWARTZ/HALE RESIDENCE

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MICROPAS6 v6.04 File-SCHHALE Wth-CTZ01S92 Program-FORM CF-1R
 User#-MP0890 User-Beaudette Energy Consulti Run-SCHWARTZ/HALE RESIDENCE

THERMAL MASS

Type	Exposed	Area (sf)	Thickness (in)	Location/Comments
InteriorHorz	Yes	350	1.0	ENTRY/KITCH BATHS

HVAC SYSTEMS

Equipment Type	Minimum Efficiency	Refrigerant Charge and Airflow	Duct Location	Duct R-value	Tested Duct Leakage	ACCA Manual D	Thermostat Type
Gas ACSplit	0.800 AFUE 10.00 SEER	n/a No	Crawlspace Crawlspace	R-4.2 R-4.2	No No	No No	Setback Setback

WATER HEATING SYSTEMS

Tank Type	Heater Type	Distribution Type	Number in System	Energy Factor	Tank Size (gal)	External Insulation R-value
Water Heater to meet minimum CEC Standards						

SPECIAL FEATURES AND MODELING ASSUMPTIONS

*** Items in this section should be documented on the plans, ***
 *** installed to manufacturer and CEC specifications, and ***
 *** verified during plan check and field inspection. ***

This building incorporates a High Mass Design.

This building incorporates non-standard Duct Location.

This building incorporates Ducts in a Crawlspace or Basement Location.
 All supply registers must be within 2 ft of floor.

HERS REQUIRED VERIFICATION

*** Items in this section require field testing and/or ***
 *** verification by a certified home energy rater under ***
 *** the supervision of a CEC-approved HERS provider using ***
 *** CEC approved testing and/or verification methods, and ***
 *** must be reported on the CF-6R installation certificate. ***

This building incorporates non-standard Duct Location.

This building incorporates Ducts in a Crawlspace or Basement Location. The local enforcement agency may waive HERS verification for these locations.

Project Title..... SCHWARTZ/HALE RESIDENCE

Date.:08/05/03 10:31:16

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User#-MP0890 User-Beaudette Energy Consulti Run-SCHWARTZ/HALE RESIDENCE

REMARKS

PRIMARY HEATING SOURCE TO BE PROPANE FORCED AIR SYSTEM.

COMPLIANCE STATEMENT

This certificate of compliance lists the building features and performance 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. When this certificate of compliance is submitted for a single building plan to be built in multiple orientations, any shading feature that is varied is indicated in the Special Features Modeling Assumptions section.

DESIGNER or OWNER

DOCUMENTATION AUTHOR

Name.... JOHN HOWLAND
Company. JOHN HOWLAND ARCHITECT
Address. 366 EL DIVISADERO AVE.
WALNUT CREEK, CA
Phone... (925)967-8203
License. _____

Name.... GREG BEAUDETTE, CEPE
Company. Beaudette Energy Consulting
Address. 2261 Morello Ave, Ste. B
Pleasant Hill, CA 94523
Phone... 925-689-9135

Signed.. _____
(date)

Signed.. Greg Beaudette 8/5/03
(date)

ENFORCEMENT AGENCY

Name.... _____
Title... _____
Agency.. _____
Phone... _____
Signed.. _____
(date)

MANDATORY MEASURES CHECKLIST: 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. Items marked with an asterisk (*) may be superseded by more stringent compliance requirements listed on the Certificate of Compliance. 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.

Instructions: Check or initial applicable boxes when completed or enter N/A if not applicable.

DESCRIPTION	DESIGNER	ENFORCEMENT
Building Envelope Measures:		
* §150(a): Minimum R-19 ceiling insulation. (Weighted Average)	X	
§150(b): Loose fill insulation manufacturer's labeled R-Value.	N/A	
* §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).	X	
* §150(d): Minimum R-13 raised floor insulation in framed floors.	X	
§150(l): Slab edge insulation - water absorption rate no greater than 0.3%, water vapor transmission rate no greater than 2.0 perm/inch.	N/A	
§118: Insulation specified or installed meets insulation quality standards. Indicate type and form.	X	
§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.	X	
§150(g): Vapor barriers mandatory in Climate Zones 14 and 16 only.	N/A	
§150(f): Special infiltration barrier installed to comply with § 151 meets Commission quality standards.	N/A	
§150(e): Installation of Fireplaces, Decorative Gas Appliances and Gas Logs. 1. Masonry and factory-built fireplaces have: a. Closeable metal or glass door b. Outside air intake with damper and control c. Flue damper and control 2. No continuous burning gas pilot lights allowed.	X	
Space Conditioning, Water Heating and Plumbing System Measures:		
§110-§113: HVAC equipment, water heaters, showerheads and faucets certified by the Commission.	X	
§150(h): Heating and/or cooling loads calculated in accordance with ASHRAE, SMACNA or ACCA.	X	
§150(i): Setback thermostat on all applicable heating and/or cooling systems.	X	
§150(j): Pipe and tank 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. First 5 feet of pipes closest to water heater tank, non-recirculating systems, insulated (R-4 or greater) 3. Back-up tanks for solar systems, unfired storage tanks, or other indirect hot water tanks have R-12 external insulation or R-16 combined internal/external insulation. 4. All buried or exposed piping insulated in recirculating sections of hot water systems. 5. Cooling system piping below 55° F insulated. 6. Piping insulated between heating source and indirect hot water tank.	X	

MANDATORY MEASURES CHECKLIST: RESIDENTIAL (Page 2 of 2) MF-1R

Note: Likewise residential buildings subject to the Standards must contain these measures regardless of the compliance approach used. Items marked with an asterisk (*) may be superseded by more stringent compliance requirements listed on the Certificate of Compliance. 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.

Instructions: Check or initial applicable boxes when completed or enter N/A if not applicable.

DESCRIPTION	DESIGNER	ENFORCEMENT
Space Conditioning, Water Heating and Plumbing System Measures: (continued)		
<p>§150(m): Ducts and Fans</p> <p>1. All ducts and plenums installed, sealed and insulated to meet the requirement of the 1998 CMC Sections 601, 603, 604, and Standard 6-3; ducts insulated to a minimum installed level of R-4.2 or enclosed entirely in conditioned space. Openings shall be sealed with mastic, tape, aerosol sealant, or other duct-closure system that meets the applicable requirements of UL 181, UL 181A, or UL 181B. 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. Building cavities shall not be used for conveying conditioned air. 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 drawbands.</p> <p>2. Exhaust fan systems have back draft or automatic dampers.</p> <p>3. Gravity ventilating systems serving conditioned space have either automatic or readily accessible, manually operated damper.</p>	X	
<p>§114: Pool and Spa Heating Systems and Equipment.</p> <p>1. System is certified with 78% thermal efficiency, on-off switch, weatherproof operating instructions, no electric resistance heating and no pilot light.</p> <p>2. System is installed with:</p> <p style="margin-left: 20px;">a. At least 36" of pipe between filter and heater for future solar heating.</p> <p style="margin-left: 20px;">b. Cover for outdoor pools or outdoor spas.</p> <p>3. Pool system has directional inlets and a circulation pump time switch.</p>	N/A	
<p>§115: Gas fired 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)</p>	X	
Lighting Measures:		
<p>§150(k)1.: Luminaires for general lighting in kitchens shall have lamps with an efficacy of 40 lumens/watt or greater for general lighting in kitchens. This general lighting shall be controlled by a switch on a readily accessible lighting control panel at an entrance to the kitchen.</p>	X	
<p>§150(k)2.: Rooms with a shower or bathtub must have either at least one luminaire with lamps with an efficacy of 40 lumens/watt or greater switched at the entrance to the room or one of the alternatives to this requirement allowed in §150(k)2.; and recessed ceiling fixtures are IC (insulation cover) approved.</p>	X	

Special Inspection and Testing Acknowledgement

CNI-011

I have read and agree to comply with the terms and conditions of this agreement.

Barry / [Signature]
Owner

11/2/03
Date

Contractor

Date

License Number

Special Inspection Agency

Date

Staff Engineer's License Number

Fabricator

Date

E.P. 50157
I.C.B.O. Approval Number

Geotechnical Engineer

Date

License Number

[Signature]
Architect or Engineer of Record

10/21/03
Date

214806
License Number

Accepted for Permit and Resource Management Department
Construction-Building Inspection Section

By: _____

Date _____

Sonoma County Permit and Resource Management Department

2530 Ventura Avenue • Santa Rosa, CA • 95403-2629 • (707) 546-1800 • Fax (707) 546-1103

Division Manufacturing-011.WPD 12/3/01

