

CITY OF SACRAMENTO

1231 I Street, Sacramento, CA 95814

Permit No: 0510011

Insp Area: 3

Thos Bros: 317G2

Site Address: 3480 38TH ST SAC

Parcel No: 013-0402-004

Sub-Type: NSFR

Housing (Y/N): N

CONTRACTOR  
OWNER BUILDER

OWNER  
SHERYLS LLC  
7031 WATT AVE  
NORTH HIGHLAND, CA 95660

ARCHITECT

Nature of Work: NEW 1-STORY SFD W/1,421 SF OF LIVABLE/357 SF OF ATTACHED GARAGE/75 SF OF PATIO COVER--  
-DESIGN REVIEW AREA--

CONSTRUCTION LENDING AGENCY : I hereby affirm under penalty of perjury that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civ. C).

Lender's Name \_\_\_\_\_ Lender's Address \_\_\_\_\_

LICENSED CONTRACTORS DECLARATION: I hereby affirm under penalty of perjury that I am licensed under provisions of Chapter 9 (commencing with section 7000) of Division 3 of the Business and Professions Code and my license is in full force and effect.

License Class \_\_\_\_\_ License Number 0 \_\_\_\_\_ Date \_\_\_\_\_ Contractor Signature \_\_\_\_\_

OWNER-BUILDER DECLARATION: I hereby affirm under penalty of perjury that I am exempt from the contractors License Law for the following reason (Sec. 7031.5, Business and Professions Code; any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he or she is licensed pursuant to the provisions of the Contractors License Law (Chapter 9 (commencing with Section 7000) of Division 8 of the Business and Professions Code) or that he or she is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars (\$500.00);

I, as a owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professional Code: The Contractors License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or herself or through his/her own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving the project 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 & PC for this reason: \_\_\_\_\_

Date 08/17/05 Owner Signature *[Signature]*

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

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

Date 08/17/05 Applicant/Agent Signature *[Signature]*

WORKER'S COMPENSATION DECLARATION: I hereby affirm under penalty of perjury one of the following declarations:

I have and will maintain a certificate of consent to self-insure for workers' compensation as provided for by Section 3700 of the Labor Code, for the performance of work for which the permit is issued.

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

Carrier \_\_\_\_\_ Policy Number \_\_\_\_\_ Exp Date \_\_\_\_\_

(This section need not be completed if the permit is for \$100 or less) I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the workers' compensation laws of California and agree that if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

Date 8/17/05 Applicant Signature *[Signature]*

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

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

# ENGEL INSULATION, INC.

CALIFORNIA CONTRACTOR'S LICENSE #745646

460 Roseville Road • Roseville, CA 95678

(916) 786-2088 / (916) 786-2064

0510011

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

TRACT \_\_\_\_\_ LOT \_\_\_\_\_  
STREET 3480 38<sup>th</sup> Street CITY Sacramento

EXTERIOR WALLS:

MANUFACTURER CT THICKNESS 3/2 R-VALUE 13  
under platform  
CEILING AREA: BATT

MANUFACTURER CT THICKNESS 10 R-VALUE 35

CEILINGS: BLOWN IN

MANUFACTURER insulSafe THICKNESS 1 1/4 R-VALUE 38

SQUARE FOOTAGE 1778 NUMBER OF BAGS USED \_\_\_\_\_

FLOOR AREA:

MANUFACTURER \_\_\_\_\_ THICKNESS \_\_\_\_\_ R-VALUE \_\_\_\_\_

EXTERIOR KNEEWALL:

MANUFACTURER \_\_\_\_\_ THICKNESS \_\_\_\_\_ R-VALUE \_\_\_\_\_

INTERIOR KNEEWALL:

MANUFACTURER \_\_\_\_\_ THICKNESS \_\_\_\_\_ R-VALUE \_\_\_\_\_

APPLIED CAULK & SEALANT TO ALL EXTERIOR  
OPENINGS & PENETRATIONS

YES  NO \_\_\_\_\_

GENERAL CONTRACTOR \_\_\_\_\_

CALIFORNIA CONTRACTORS  
LICENSE # \_\_\_\_\_ DATE \_\_\_\_\_

SIGNATURE

TITLE

Juan Padilla  
INSULATION CONT. SIGNATURE

Boonwaper  
TITLE

06/26/00  
DATE

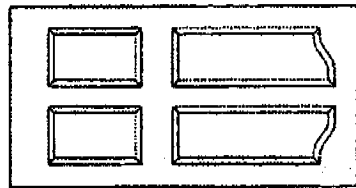


Molded Panel Doors ~ 1-3/4" Solid Core



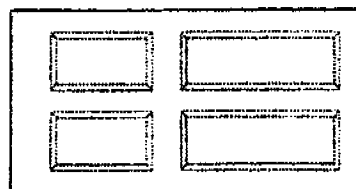
SIX PANEL

TEXTURED  
OR  
SMOOTH



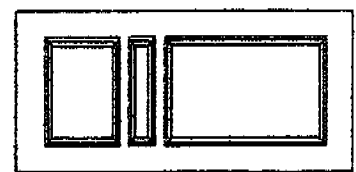
FOUR PANEL  
ARCH TOP

TEXTURED



FOUR PANEL

TEXTURED  
OR  
SMOOTH



THREE PANEL

TEXTURED

DOOR ONLY - 1-3/4" ~ 20 Minute Stamp

L

Meeks - Elk Grove  
10549 E. Stockton Blvd  
(916) 685-8035  
Elk Grove, CA 95624

SHERYL'S, LLC/ SHERYL HAYDEN  
7031 WATT AVENUE  
NORTH HIGHLANDS, CA 95660

SHERYL'S, LLC/ SHERYL HAYDEN  
JB:3480 38TH STREET  
SACRAMENTO, CA

SUB: 16 Shipent #: 1

08L0570 CASH SALE 177920 10/11/05 885 166125 10/24/05

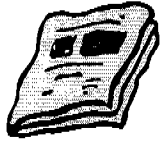
1	0	1 EA	3/8 6/8 1-3/4 MTL DL22105H 4-3/8 FJ W/BRKMLD 1RH *3068 PO # 812392 VEND # W003 Qty : 1 Expected : 10/26/05	202.850	202.85*
1	0	1 EA	2/8 6/8 1-3/4 MTL 6PNL 4-3/8 FJ W/BRKMLD 1RH *2868 PO # 812392 VEND # W003 Qty : 1 Expected : 10/26/05	182.850	182.85*
1	0	1 EA	2/8 6/8 1-3/4 COMIN EPNL 4-5/8 FJ 2-1/4 COL CRS 1RH *2668 PO # 812392 VEND # W003 Qty : 1 Expected : 10/26/05	174.300	174.30*

PAYMENT BY:

DESCRIPTION	REFERENCE/CHECK #	EXPIR	AUTH CODE	DATE	AMOUNT
AMERICAN EXP	00498948	1206	00	10/11/05	603.40

CHANGE: 0

July 11, 2006 11:30:45	DT:890	1 / 4	560.00
*****			0.00
* REPRINT INVOICE *			
*****			7.750%
	PAGE 1 OF 1		43.40
ED FORBES			0.00
			603.40



Dee Anne Ross, DAREnergy Consulting  
5700 62<sup>nd</sup> Street, Sacramento CA 95824  
916-452-5275

**ISSUED**  
City of Sacramento  
JUL 05 2006  
**NORTH PERMIT  
CENTER**

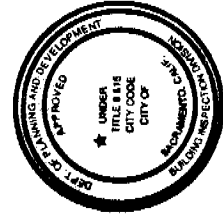
**TITLE 24 REPORT FOR:**

3480 38<sup>th</sup> St.  
Sacramento, CA

**PROJECT OWNER/BUILDER:**

Rob Martinson, Sheryl LLC  
7031 Watt Ave., North Highlands, CA 95660  
916-334-9467

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



07.05.2006  
DR

**MINIMUM ENERGY FEATURES SUMMARY:**

<u>WALLS</u>	R-13 insulation with 1" rigid insulation in exterior walls, R-13 in 2x4 garage walls
<u>ROOF</u>	R-38 insulation (radiant barrier <i>not</i> modeled)
<u>GLAZING</u>	Windows and doors are vinyl frame, with dual pane, Low-E glass
<u>HVAC</u>	7.5 HSPF heat pump and 10.1 SEER cooling (Thermostatic Expansion Valve <i>not</i> modeled)
<u>DUCTS</u>	R-4.2 duct insulation, installed in any location (tested duct leakage <i>not</i> modeled)
<u>WATER HEATING</u>	Electric storage water heater, 94% efficiency or higher

**Job Copy**

**Bldg Dept Copy**

Job Number: 26123

Date: June 23, 2006

Project Title..... Compliance Documentation Date..06/23/06 11:05:36  
 Project Address..... 3480 38th St. \*\*\*\*\*  
 Sacramento, CA 95817 \*v6.01\*  
 Documentation Author... Dee Anne Ross \*\*\*\*\*  
 DAREnergy Consulting  
 5700 62nd St.  
 Sacramento, CA 95824  
 (916) 452-5275  
 Climate Zone..... 12  
 Compliance Method..... MICROPAS6 v6.01 for 2001 Standards by Enercomp, Inc.

Building Permit #
Plan Check / Date
Field Check/ Date

MICROPAS6 v6.01 File-26123 Wth-CTZ12S92 Program-FORM CF-1R  
 User#-MP2105 User-DAREnergy Consulting Run-26123

GENERAL INFORMATION

Conditioned Floor Area..... 1420 sf  
 Building Type..... Single Family Detached  
 Construction Type ..... New  
 Building Front Orientation. Front Facing 90 deg (E)  
 Number of Dwelling Units... 1  
 Number of Stories..... 1  
 Floor Construction Type.... Slab On Grade  
 Glazing Percentage..... 11.4 % of floor area  
 Average Glazing U-factor... 0.35 Btu/hr-sf-F  
 Average Glazing SHGC..... 0.29  
 Average Ceiling Height..... 8 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-13	R-5	R-18	0.059	
Wall	Wood	R-13	R-0	R-13	0.081	
Door	None	R-0	R-0	R-0	0.330	
Roof	Wood	R-38	R-n/a	R-38	0.025	
SlabEdge	None	R-0	R-0		F2=0.760	
SlabEdge	None	R-0	R-0		F2=0.510	

FENESTRATION

Orientation	Area (sf)	U-Factor	SHGC	Exterior Shading	Over-hang/ Fins	Location/Comments
Wind Front (E)	20.0	0.340	0.270	Standard	Yes	Int'l Vinyl Low-E
Wind Left (S)	16.0	0.340	0.270	Standard	Yes	Int'l Vinyl Low-E
Wind Left (S)	16.0	0.340	0.270	Standard	Yes	Int'l Vinyl Low-E
Wind Back (W)	13.5	0.340	0.270	Standard	None	Int'l Vinyl Low-E
Wind Back (W)	13.5	0.340	0.270	Standard	None	Int'l Vinyl Low-E
Door Back (W)	33.4	0.360	0.330	Standard	None	Int'l Vinyl SGD Low-E
Wind Right (N)	4.0	0.340	0.270	Standard	Yes	Int'l Vinyl Low-E
Wind Right (N)	12.0	0.340	0.270	Standard	Yes	Int'l Vinyl Low-E
Door Right (N)	33.4	0.360	0.330	Standard	Yes	Int'l Vinyl SGD Low-E

Project Title..... Compliance Documentation

Date..06/23/06 11:05:36

MICROPAS6 v6.01 File-26123 Wth-CTZ12S92 Program-FORM CF-1R  
 User#-MP2105 User-DAREnergy Consulting Run-26123

SLAB SURFACES

Slab Type	Area (sf)
Standard Slab	1420

HVAC SYSTEMS

Equipment Type	Minimum Efficiency	Refrigerant Charge and Airflow	Duct Location	Duct R-value	Tested Duct Leakage	ACCA Manual D	Thermostat Type
HPSplit	7.50 HSPF	n/a	Attic	R-4.2	No	No	Setback
HPSplit	10.10 SEER	No	Attic	R-4.2	No	No	Setback

WATER HEATING SYSTEMS

Tank Type	Heater Type	Distribution Type	Number in System	Energy Factor	Tank Size (gal)	External Insulation R-value
Storage	Electric	PointOfUse	1	0.94	40	R- n/a

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 non-standard Water Heating System

REMARKS

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MICROPAS6 v6.01 File-26123 Wth-CTZ12S92 Program-FORM CF-1R  
User#-MP2105 User-DAREnergy Consulting Run-26123

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.... Rob Martinson  
Company. Sheryl LLC  
Address. 7031 Watt Ave.  
North Highlands, CA 95660  
Phone... (916) 334-9467  
License. \_\_\_\_\_

Name.... Dee Anne Ross  
Company. DAREnergy Consulting  
Address. 5700 62nd St.  
Sacramento, CA 95824  
Phone... (916) 452-5275

Signed.. *[Signature]* 6/23/06  
(date)

Signed.. *[Signature]* 6/23/06  
(date)

ENFORCEMENT AGENCY

Name.... \_\_\_\_\_  
Title... \_\_\_\_\_  
Agency.. \_\_\_\_\_  
Phone... \_\_\_\_\_  
Signed.. \_\_\_\_\_  
(date)



Project Title..... Compliance Documentation Date..06/23/06 11:05:36  
 Project Address..... 3480 38th St. \*\*\*\*\*  
 Sacramento, CA 95817 \*v6.01\*  
 Documentation Author... Dee Anne Ross \*\*\*\*\*  
 DAREnergy Consulting Building Permit #  
 5700 62nd St. Plan Check / Date  
 Sacramento, CA 95824 Field Check/ Date  
 (916) 452-5275  
 Climate Zone..... 12  
 Compliance Method..... MICROPAS6 v6.01 for 2001 Standards by Enercomp, Inc.

MICROPAS6 v6.01 File-26123 Wth-CTZ12S92 Program-FORM MF-1R  
 User#-MP2105 User-DAREnergy Consulting Run-26123

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.

	Design- er	Enforce- ment
*150(a): Minimum R-19 ceiling insulation.	<u>X</u>	_____
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).	<u>X</u>	_____
*150(d): Minimum R-13 raised floor insulation in framed floors.	<u>n/a</u>	_____
150(l): Slab edge insulation - water absorption rate no greater than 0.3%, water vapor transmission rate no greater than 2.0 perm/inch.	<u>n/a</u>	_____
118: Insulation specified or installed meets insulation quality standards. Indicate type and 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.	<u>X</u>	_____
150(g): Vapor barriers mandatory in Climate Zones 14 and 16 only.	<u>n/a</u>	_____
150(f): Special infiltration barrier installed to comply with Sec. 151 meets Commission quality standards.	<u>n/a</u>	_____

Project Title..... Compliance Documentation

Date..06/23/06 11:05:36

MICROPAS6 v6.01 File-26123 Wth-CTZ12S92 Program-FORM MF-1R  
 User#-MP2105 User-DAREnergy Consulting Run-26123

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 pilots allowed.

n/a \_\_\_\_\_

SPACE CONDITIONING, WATER HEATING AND PLUMBING SYSTEM MEASURES

	Design- er	Enforce- ment
110-113: HVAC equipment, water heaters, showerheads and faucets certified by the Commission.	<u>X</u>	_____
150(h): Heating and/or cooling loads calculated in accordance with ASHRAE, SMACNA or ACCA.	<u>X</u>	_____
150(i): Setback thermostat on all applicable heating and/or cooling systems.	<u>X</u>	_____
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 system, 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 system.		
5. Cooling system piping below 55 degrees insulated.		
6. Piping insulated between heating source and indirect hot water tank.	<u>X</u>	_____
*150(m): Ducts and Fans		
1. All ducts and plenums installed, sealed and insulated, to meet the requirements of the 1998 CMC sections 601, 603, and 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 UL181, UL181A, or UL181B. 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.		
2. Exhaust fan systems have backdraft or automatic dampers.		
3. Gravity ventilating systems serving conditioned space have either automatic or readily accessible, manually operated dampers.	<u>X</u>	_____

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MICROPAS6 v6.01 File-26123 Wth-CTZ12S92 Program-FORM MF-1R  
 User#-MP2105 User-DAREnergy Consulting Run-26123

114: Pool and Spa Heating Systems and Equipment

1. System is certified with 78% thermal efficiency, on-off switch, weatherproof operating instructions, no electric resistance heating and no pilot light.
2. System is installed with:
  - a. At least 36 inches 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.

n/a \_\_\_\_\_

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).

n/a \_\_\_\_\_

LIGHTING MEASURES

Design- Enforce-  
er            ment

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.

X \_\_\_\_\_

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 Sec. 150(k)2.; and recessed ceiling fixtures are IC (insulation cover) approved.

X \_\_\_\_\_

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 User#-MP2105 User-DAREnergy Consulting Run-26123

MICROPAS6 ENERGY USE SUMMARY			
Energy Use (kBtu/sf-yr)	Standard Design	Proposed Design	Compliance Margin
Space Heating.....	23.46	20.24	3.22
Space Cooling.....	5.84	3.47	2.37
Water Heating.....	16.38	21.70	-5.32
Total	45.68	45.41	0.27
*** Building complies with Computer Performance ***			

GENERAL INFORMATION

Conditioned Floor Area..... 1420 sf  
 Building Type..... Single Family Detached  
 Construction Type ..... New  
 Building Front Orientation. Front Facing 90 deg (E)  
 Number of Dwelling Units... 1  
 Number of Building Stories. 1  
 Weather Data Type..... ReducedYear

Floor Construction Type.... Slab On Grade  
 Number of Building Zones... 1  
 Conditioned Volume..... 11360 cf  
 Slab-On-Grade Area..... 1420 sf  
 Glazing Percentage..... 11.4 % of floor area  
 Average Glazing U-factor... 0.35 Btu/hr-sf-F  
 Average Glazing SHGC..... 0.29  
 Average Ceiling Height..... 8 ft

BUILDING ZONE INFORMATION

Zone Type	Floor Area (sf)	Volume (cf)	# of Dwell Units	Cond- itioned	Thermostat Type	Vent Height (ft)	Vent Area (sf)	Air Leakage Credit
HOUSE Residence	1420	11360	1.00	Yes	Setback	2.0	Standard	No

Project Title..... Compliance Documentation

Date..06/23/06 11:05:36

MICROPAS6 v6.01 File-26123 Wth-CTZ12S92 Program-FORM C-2R  
 User#-MP2105 User-DAREnergy Consulting Run-26123

OPAQUE SURFACES

Surface	Area (sf)	U-factor	Insul R-val	Act Azm	Solar Tilt	Gains	Form 3 Reference	Location/Comments
HOUSE								
1 Wall	80	0.059	18	90	90	Yes	W.13.2X4.R5	
2 Wall	240	0.059	18	180	90	Yes	W.13.2X4.R5	
3 Wall	180	0.059	18	270	90	Yes	W.13.2X4.R5	
4 Wall	465	0.059	18	0	90	Yes	W.13.2X4.R5	
5 Wall	318	0.081	13	90	90	No	W.13.GAR	
6 Door	20	0.330	0	90	90	Yes	None	
7 Door	20	0.330	0	90	90	No	None	
8 Roof	1420	0.025	38	n/a	0	Yes	None	

PERIMETER LOSSES

Surface	Length (ft)	F2 Factor	Insul R-val	Solar Gains	Location/Comments
HOUSE					
9 SlabEdge	143	0.760	R-0	No	
10 SlabEdge	42	0.510	R-0	No	

FENESTRATION SURFACES

Orientation	Area (sf)	U-factor	SHGC	Act Azm	Tilt	Exterior Shade Type	Location/Comments
HOUSE							
1 Wind Front (E)	20.0	0.340	0.270	90	90	Standard	Int'l Vinyl Low-E
2 Wind Left (S)	16.0	0.340	0.270	180	90	Standard	Int'l Vinyl Low-E
3 Wind Left (S)	16.0	0.340	0.270	180	90	Standard	Int'l Vinyl Low-E
4 Wind Back (W)	13.5	0.340	0.270	270	90	Standard	Int'l Vinyl Low-E
5 Wind Back (W)	13.5	0.340	0.270	270	90	Standard	Int'l Vinyl Low-E
6 Door Back (W)	33.4	0.360	0.330	270	90	Standard	Int'l Vinyl SGD Low-E
7 Wind Right (N)	4.0	0.340	0.270	0	90	Standard	Int'l Vinyl Low-E
8 Wind Right (N)	12.0	0.340	0.270	0	90	Standard	Int'l Vinyl Low-E
9 Door Right (N)	33.4	0.360	0.330	0	90	Standard	Int'l Vinyl SGD Low-E

OVERHANGS AND SIDE FINIS

Surface	Area (sf)	Window		Overhang		Left Fin		Right Fin		
		Wdth	Hgth	Dpth	Hght	Ext	Ext	Ext	Dpth	Hght
HOUSE										
1 Window	20.0	4	5	5	1	n/a	3	n/a	n/a	n/a
2 Window	16.0	4	4	1.5	0.25	n/a	n/a	n/a	n/a	n/a
3 Window	16.0	4	4	1.5	0.25	n/a	n/a	n/a	n/a	n/a
7 Window	4.0	2	2	1.5	0.25	n/a	n/a	n/a	n/a	n/a

Project Title..... Compliance Documentation

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 User#-MP2105 User-DAREnergy Consulting Run-26123

OVERHANGS AND SIDE FINNS

Surface	Area (sf)	Window		Overhang		Left Fin		Right Fin				
		Wdth	Hgth	Dpth	Hght	Ext	Ext	Ext	Dpth	Hght		
8 Window	12.0	4	3	1.5	0.25	n/a	n/a	n/a	n/a	n/a	n/a	n/a
9 Door	33.4	6	6.7	1.5	0.25	n/a	n/a	n/a	n/a	n/a	n/a	n/a

SLAB SURFACES

Slab Type	Area (sf)
HOUSE Standard Slab	1420

HVAC SYSTEMS

System Type	Minimum Efficiency	Refrigerant Charge and Airflow	Duct Location	Duct R-value	Tested Duct Leakage	ACCA Manual D	Duct Eff
HOUSE							
HPSplit	7.50 HSPF	n/a	Attic	R-4.2	No	No	0.772
HPSplit	10.10 SEER	No	Attic	R-4.2	No	No	0.674

WATER HEATING SYSTEMS

Tank Type	Heater Type	Distribution	Type	Number in System	Energy Factor	Tank Size (gal)	External Insulation R-value
1 Storage	Electric	PointOfUse		1	0.94	40	R- n/a

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 non-standard Water Heating System

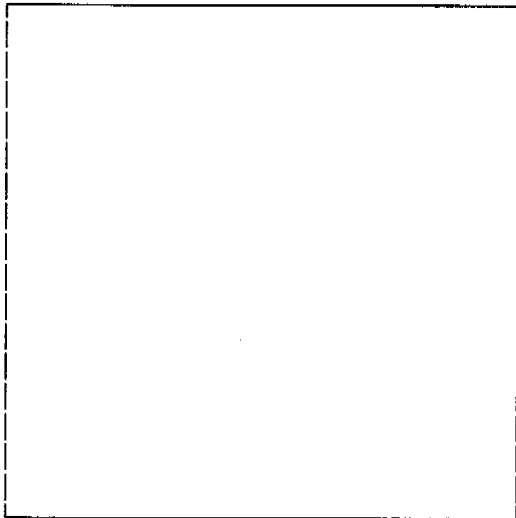
REMARKS

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Project Title..... Compliance Documentation

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 User#-MP2105 User-DAREnergy Consulting Run-26123



Sketch of Construction Assembly

Parallel Path Method

Reference Name . W.13.2X4.R5

Description .... Wall R-13 w/ 1-in EPS

Type ..... Wall

R-Value ..... 18 Hr-sf-F/Btu

Framing

Material ..... FIR.2X4

Type ..... Wood

Description .. 2x4 fir

Spacing ..... 16 inches on center

Framing Frac.. 0.15

LIST OF CONSTRUCTION COMPONENTS

Material Name	Description	Cavity R-Value	Frame R-Value
O. FILM.EX	Exterior air film: winter value	0.17	0.17
1. STUCCO.0.375	0.375 in stucco	0.08	0.08
2. BLDG.PAPER	Building paper (felt)	0.06	0.06
3. R 5.00 RIGID	R-5.00 Insulated Sheathing	5.00	5.00
4c. BATT.R13	R-13 batt insul (cavity = 3.5 in)	13.00	--
4f. FIR.2X4	2x4 fir	--	3.46
5. GYP.0.50	0.50 in gypsum or plaster board	0.45	0.45
I. FILM.IN.WLL	Inside air film: heat sideways	0.68	0.68
Total Unadjusted R-Values		19.44	9.90

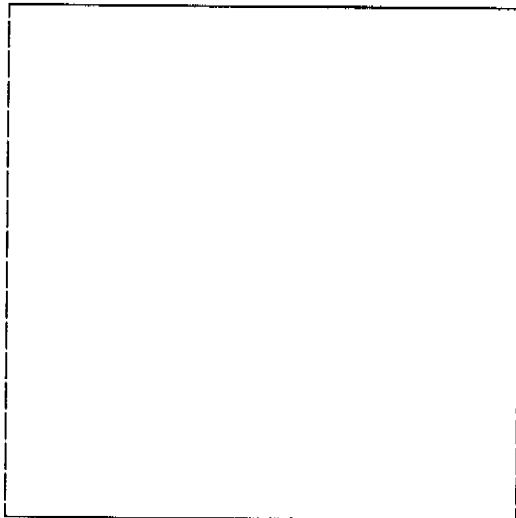
FRAMING ADJUSTMENT CALCULATION

Cavity	Framing	Total
U-Factor: $(1 / 19.44 \times 0.85) + (1 / 9.90 \times 0.15) = $		
		<u>0.059 Btu/hr-sf-F</u>
Total R-Value: $1 / 0.059 = $		
		16.98 hr-sf-F/Btu

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MICROPAS6 v6.01 File-26123 Wth-CTZ12S92 Program-FORM 3R  
 User#-MP2105 User-DAREnergy Consulting Run-26123



Sketch of Construction Assembly

Parallel Path Method

Reference Name . W.13.GAR

Description .... Garage Wall R-13

Type ..... Wall

R-Value ..... 13 Hr-sf-F/Btu

Framing

Material ..... FIR.2X4

Type ..... Wood

Description .. 2x4 fir

Spacing ..... 16 inches on center

Framing Frac.. 0.15

LIST OF CONSTRUCTION COMPONENTS

Material Name	Description	Cavity R-Value	Frame R-Value
0. FILM.IN.WLL	Inside air film: heat sideways	0.68	0.68
1. GYP.0.63	0.625 in gypsum or plaster board	0.56	0.56
2c. BATT.R13	R-13 batt insul (cavity = 3.5 in)	13.00	--
2f. FIR.2X4	2x4 fir	--	3.46
3. GYP.0.50	0.50 in gypsum or plaster board	0.45	0.45
I. FILM.IN.WLL	Inside air film: heat sideways	0.68	0.68
Total Unadjusted R-Values		15.37	5.83

FRAMING ADJUSTMENT CALCULATION

Cavity	Framing	Total
$U\text{-Factor: } (1 / 15.37 \times 0.85) + (1 / 5.83 \times 0.15) = \underline{\underline{0.081 \text{ Btu/hr-sf-F}}}$		
$\text{Total R-Value: } 1 / 0.081 = 12.34 \text{ hr-sf-F/Btu}$		



Project Title..... Compliance Documentation      Date..06/23/06 11:05:36  
 Project Address..... 3480 38th St.      \*\*\*\*\*  
                                  Sacramento, CA 95817      \*v6.01\*  
 Documentation Author... Dee Anne Ross      \*\*\*\*\*  
                                  DAREnergy Consulting  
                                  5700 62nd St.  
                                  Sacramento, CA 95824  
                                  (916) 452-5275  
 Climate Zone..... 12  
 Compliance Method..... MICROPAS6 v6.01 for 2001 Standards by Enercomp, Inc.

Building Permit #
Plan Check / Date
Field Check/ Date

MICROPAS6 v6.01 File-26123 Wth-CTZ12S92 Program-HVAC SIZING
User#-MP2105 User-DAREnergy Consulting Run-26123

#### GENERAL INFORMATION

Floor Area..... 1420 sf  
 Volume..... 11360 cf  
 Front Orientation..... Front Facing 90 deg (E)  
 Sizing Location..... SACRAMENTO CO  
 Latitude..... 38.6 degrees  
 Winter Outside Design..... 35 F  
 Winter Inside Design..... 70 F  
 Summer Outside Design..... 100 F  
 Summer Inside Design..... 78 F  
 Summer Range..... 32 F  
 Interior Shading Used..... Yes  
 Exterior Shading Used..... Yes  
 Overhang Shading Used..... Yes  
 Latent Load Fraction..... 0.20

#### HEATING AND COOLING LOAD SUMMARY

Description	Heating (Btuh)	Cooling (Btuh)
Opaque Conduction and Solar.....	9147	3149
Glazing Conduction.....	1972	1240
Glazing Solar.....	n/a	2003
Infiltration.....	5332	2083
Internal Gain.....	n/a	2500
Ducts.....	1645	1097
Sensible Load.....	18096	12072
Latent Load.....	n/a	2414
Minimum Total Load	18096	14487

Note: The loads shown are only one of the criteria affecting the selection of HVAC equipment. Other relevant design factors such as air flow requirements, outside air, outdoor design temperatures, coil sizing, availability of equipment, oversizing safety margin, etc., must also be considered. It is the HVAC designer's responsibility to consider all factors when selecting the HVAC equipment.