CITY OF SACRAMENTO

1231 I Street, Sacramento, CA 95814

Permit No: 0101152

Insp Area: 3

Site Address: 2948 25TH ST SAC
Parcel No: 013-0082-010

Sub-Type: REM
Housing (Y/N): N

CONTRACTOR
CHAMPAS CONSTRUCTION
2316 J STREET SUITE B
SACTO, CA. 95816

OWNER
JOE HAYES
2948 25TH ST
SACRAMENTO CA 95818

ARCHITECT

Nature of Work: ADD PARTITIONS TO EXISTING BASEMENT
RE-ROOF

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'sAddress_____

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

License Class_____ License Number_____ Date_____ Contractor Signature_____

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

____ 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 that he/she did not build or improve for the purpose of sale.)

____ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractors License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractors License Law.)

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

Date_____ Owner 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 herby authorize representative(s) of this city to enter upon the abovementioned property for inspection purposes.

Date_____ Applicant/Agent 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, forthe performance of work for which the permit is issued.

__X__ 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:

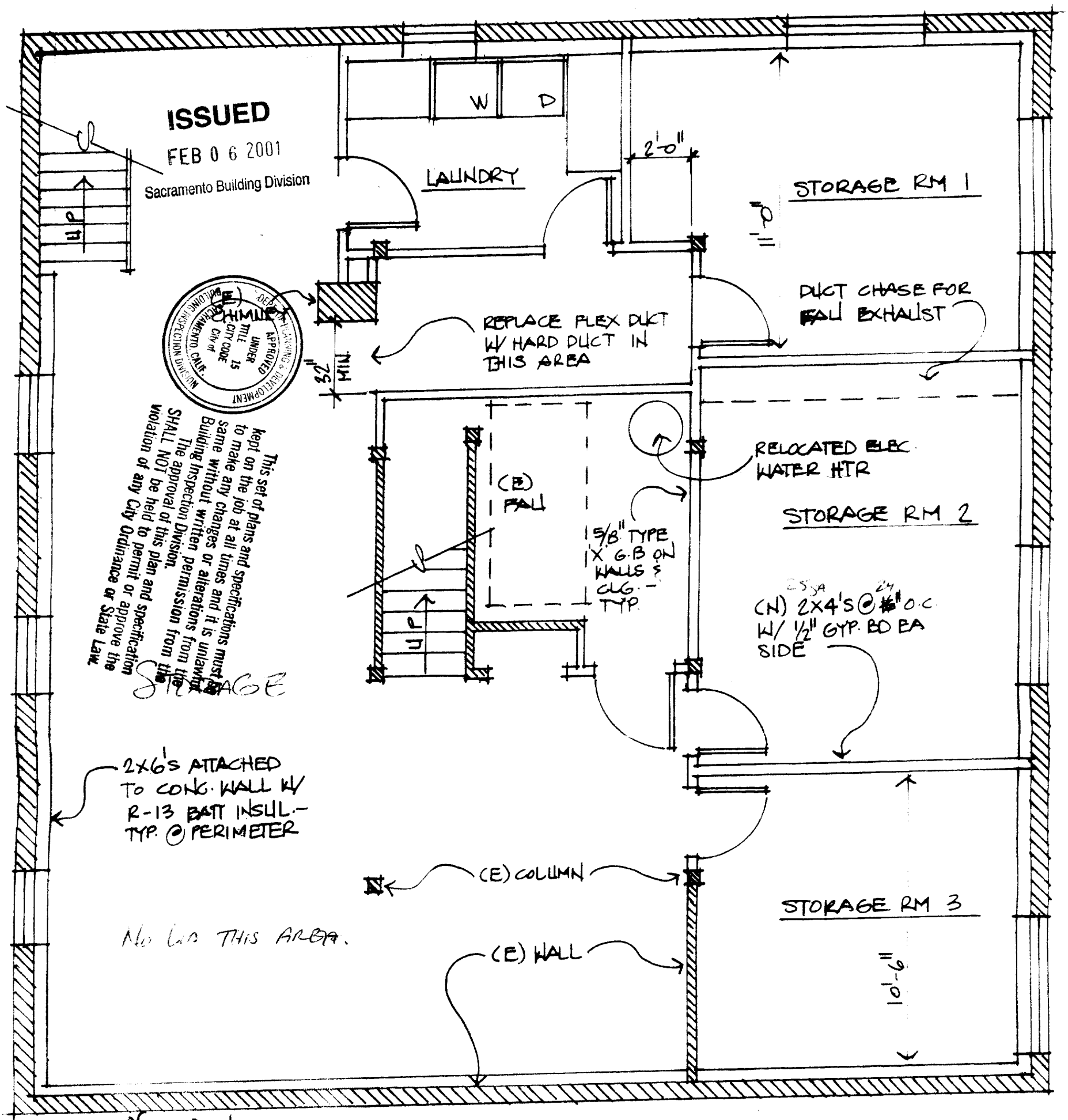
Carrier ~~STATE FUND~~ Policy Number ~~713 744~~ Exp Date 10/02/2001

____ (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 2/16/ Applicant Signature_____

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

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



Scope of Work:
Add partitions to existing basement, for use as residential storage & existing laundry.
~~Basement areas not shown on this plan~~ Areas shown on this plan shall not be used as living room, family room, bedroom, sleeping room, bathroom, kitchen or any other residential-type use other than as non-habitable storage.

REVISED BASEMENT PLAN
1/4" = 1'-0"
9.28.00

HAYES RESIDENCE
2948 25th ST
SACRAMENTO, CA

0101152R

Reviewed by Matt P 2/6/01

OWNER-BUILDER VERIFICATION

ATTENTION PROPERTY OWNERS

An owner-builder building permit has been applied for in your name and bearing your signature.

Please complete and return this information in the envelope provided at your earliest opportunity to avoid unnecessary delay in processing and issuing your building permit. No building permit will be issued until this verification is received.

1. I personally plan to provide the major labor and materials for construction of the proposed Improvement (yes or no) Yes

2. I (have/have not) Have not signed an application for A building permit for the proposed work.

3. I have contracted with the following person (firm) to provide the proposed construction:

   Name _____ Address _____

   City _____ Telephone _____

   Contractors License No. _____

4. I plan to provide portions of the work, but I have hired the following person to coordinate, Supervise, and provide the major work.

   Name _____ Address _____

   City _____ Telephone _____

   Contractors License No. _____

5. I will provide some of the work but I have contracted (hired) the following to provide the Work indicated:

Name	Address	Phone	Type of work

Signed _____

Job Address 3856 12th Ave

Permit No. C16345

TITLE 24 REPORT FOR:

Hayes Residence Addition
2948 25th Street
Sacramento, California

PROJECT DESIGNER:

Kaufmann Architects
1808 Q Street
Sacramento, CA 95814
(916) 446-2558

REPORT PREPARED BY:

Accurate Energy
3713 Laguna Way
Sacramento, CA 95864
(916) 483-7313

Job Number: 21263

Date: May 25, 2001

Building Department Copy

Project Title.. .... Hayes Residence Addition Date..05/25/01 10:45:11
Project Address. .... 2948 25th Street *******
Sacramento, California *v5.10*
Documentation Author.. Todd Ferris *******
Accurate Energy
3713 Laguna Way
Sacramento, CA 95864
916-483-7313
Climate Zone..... 12
Compliance Method..... MICROPAS5 v5.10 for 1998 Standards by Enercomp, Inc.

Building Permit #

Plan Check / Date

Field Check/ Date

MICROPAS5 v5.10 File-21263 Wth-CTZ12S92 Program-TOC
User#-MP2093 User-Accurate Energy Run-Compliance Documentation

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Project Address..... 2948 25th Street *******
Sacramento, California *v5.10*
Documentation Author.. Todd Ferris *******
Accurate Energy
3715 Laguna Way
Sacramento, CA 95864
916-483-7313
Climate Zone..... 12
Compliance Method..... MICROPAS5 v5.10 for 1998 Standards by Enercomp, Inc.

Building Permit #
Plan Check / Date
Field Check/ Date

MICROPAS5 v5.10 File-21263 Wth-CTZ12S92 Program-FORM CF-1R
User#-MP2093 User-Accurate Energy Run-Compliance Documentation

GENERAL INFORMATION

Conditioned Floor Area.....	1443 sf
Building Type.....	Single Family Detached
Construction Type	Addition Alone
Building Front Orientation.	Front Facing 90 deg (E)
Number of Dwelling Units...	0.34
Number of Stories.....	2
Floor Construction Type....	Raised Floor
Glazing Percentage.....	2.1 % of floor area
Average Glazing U-value....	0.87 Btu/hr-sf-F
Average Glazing SHGC.....	0.7
Average Ceiling Height.....	7.5 ft

BUILDING SHELL INSULATION

Component Type	Frame Type	Cavity R-value	Sheathing R-value	Total R-value	Assembly U-value	Location/Comments
Wall	None	R-0	R-0	R-0	0.549	Typ Block
Wall BaseA	n/a	R-n/a	R-n/a	R-0	0.064	Shallow Bsmt
Wall BaseB	n/a	R-n/a	R-n/a	R-0	0.064	Medium Bsmt
Wall BaseC	n/a	R-n/a	R-n/a	R-0	0.064	Deep Bsmt
Floor Base	n/a	R-n/a	R-n/a	R-0	0.290	Slab Bsmt Cvr

FENESTRATION

Orientation		Area (sf)	U-Value	SHGC	Interior Shading	Exterior Shading	Over-hang/ Fins
Window	Left (S)	2.5	0.870	0.700	Standard	Standard	None
Window	Left (S)	2.5	0.870	0.700	Standard	Standard	None
Window	Left (S)	2.5	0.870	0.700	Standard	Standard	None
Window	Back (W)	2.5	0.870	0.700	Standard	Standard	None
Window	Back (W)	5.0	0.870	0.700	Standard	Standard	None
Window	Right (N)	5.0	0.870	0.700	Standard	Standard	None
Window	Right (N)	5.0	0.870	0.700	Standard	Standard	None
Window	Right (N)	5.0	0.870	0.700	Standard	Standard	None

MICROPAS5 v5.10 File-21263 Wth-CTZ12S92 Program-FORM CF-1R
User#-MP2093 User-Accurate Energy Run-Compliance Documentation

THERMAL MASS

Type	Exposed	Area (sf)	Thickness (in)	Location/Comments
ExteriorVert	No	302	8.0	Shallow Bsmt
ExteriorVert	No	606	8.0	Medium Bsmt
ExteriorVert	No	2	8.0	Deep Bsmt
ExteriorHorz	No	1443	3.5	Cvr Slab Bsmt

HVAC SYSTEMS

Equipment Type	Minimum Efficiency	Duct Location	Duct R-value	Tested Duct Leakage	ACCA Manual D	Thermostat Type
Furnace	0.920 AFUE	Attic	R-4.2	No	No	Setback
ACSplit	12.00 SEER	Attic	R-4.2	No	No	Setback

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.

REMARKS

Default metal windows were used in the calculations. These units have the following U-value/Solar Heat Gain Coefficients:
Operable = 0.87/0.70

Project Title..... Hayes Residence Addition Date..05/25/01 10:45:11

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User#-MP2093 User-Accurate Energy Run-Compliance Documentation

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.... Mr. Jim Bob Kaufmann	Name.... Todd Ferris
Company. Kaufmann Architects	Company. Accurate Energy
Address. 1808 Q Street	Address. 3713 Laguna Way
Sacramento, CA 95814	Sacramento, CA 95864
Phone... (916) 446-2558	Phone... 916-483-7313
License. C23097	
Signed.. Jim Bob Kaufmann 5/29/01 (date)	Signed.. Todd Ferris 5/23/2001 (date)

ENFORCEMENT AGENCY

Name.... _____
Title... _____
Agency.. _____
_____
Phone... _____

Signed.. _____ (date)

Project Title..... Hayes Residence Addition Date..05/25/01 10:45:11
Project Address..... 2948 25th Street *******
Sacramento, California *v5.10*
Documentation Author... Todd Ferris *******
Accurate Energy
3713 Laguna Way
Sacramento, CA 95864
916-483-7313
Climate Zone..... 12
Compliance Method..... MICROPAS5 v5.10 for 1998 Standards by Enercomp, Inc.

Building Permit #

Plan Check / Date

Field Check/ Date

MICROPAS5 v5.10 File-21263 Wth-CTZ12S92 Program-FORM MF-1R
User#-MP2093 User-Accurate Energy Run-Compliance Documentation

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.

BUILDING ENVELOPE MEASURES

	Designer	Enforcement
*150(a): Minimum R-19 ceiling insulation.		
150(b): Loose fill insulation manufacturer's labeled R-Value.		
*150(c): Minimum R-13 wall insulation in wood framed walls or equivalent U-value in metal frame walls (does not apply to exterior mass walls)		
*150(d): Minimum R-13 raised floor insulation in framed floors.		
150(f): Slab edge insulation - water absorption rate no greater than 0.3%, water vapor transmission rate no greater than 2.0 perm/inch.		
150: Insulation specified or installed meets CEC quality standards. Indicate type and form.		
150-17: Fenestration Products, Exterior Doors and Infiltration/ exfiltration controls		
1. Doors and windows between conditioned and unconditioned spaces designed to limit air leakage. Fenestration products (except field fabricated) have label with certified U-value, certified solar heat gain coefficient, and infiltration certification.		
2. Exterior doors and windows weatherstripped; all joints and penetrations caulked and sealed.		
150(g): Vapor barriers mandatory in Climate Zones 14 and 16 only.		
150(f): Special infiltration barrier installed to comply with Sec. 151 meets Commission quality standards.		
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.		

Project Title..... Hayes Residence Addition Date..05/25/01 10:45:11

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SPACE CONDITIONING, WATER HEATING AND PLUMBING SYSTEM MEASURES

	Designer	Enforcement
110.3: HVAC equipment, water heaters, showerheads and faucets certified by the 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): Pipe and Tank insulation a. Storage gas water heaters rated with an Energy Factor of less than 0.58 must be externally wrapped with insulation having an installed thermal resistance of R-12 or greater. b. First 5 feet of pipes closest to water heater tank, non-recirculating systems, insulated (R-4 or greater). c. 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. d. All buried or exposed piping insulated in recirculating sections of hot water system. e. Cooling system piping below 55 degrees insulated. f. Piping insulated between heating source and indirect hot water tank.	____	____
*150.(m): Ducts and Fans a. All ducts and plenums constructed, installed, insulated, fastened, and sealed to comply with the ICBO 1997 UMC sections 601 and 603; ducts insulated to a minimum installed R-4.2 or ducts enclosed entirely within 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 and other applicable specified tests for longevity given in Sec. 150(m). b. Exhaust fan systems have backdraft or automatic dampers. c. Gravity ventilating systems serving conditioned space have either automatic or readily accessible, manually operated dampers.	____	____
150.(n): Pool and Spa Heating Systems and Equipment a. System is certified with 78% thermal efficiency, on-off switch, weatherproof operating instructions, no electric resistance heating and no pilot light. b. 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. c. Pool system has directional inlets and a circulation pump time switch.	____	____
150.(o): 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)	____	____

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LIGHTING MEASURES

	Designer	Enforcement
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.	_____	_____
150(k)2: Rooms with a shower or bathtub must either have 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.	_____	_____

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Sacramento, CA 95864
916 483-7313

Building Permit #
Plan Check / Date
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Climate Zone..... 12
Compliance Method..... MICROPAS5 v5.10 for 1998 Standards by Enercomp, Inc.

MICROPAS5 v5.10 File-21263 Wth-CTZ12S92 Program-FORM C-2R
User#-MP2093 User-Accurate Energy Run-Compliance Documentation

MICROPAS5 ENERGY USE SUMMARY

Energy Use (kBtu/sf-yr)	Standard Design	Proposed Design	Compliance Margin
Space Heating.....	16.75	10.52	6.23
Space Cooling.....	0.01	0.42	-0.41
Total	16.76	10.94	5.82

*** Water Heating not calculated ***

GENERAL INFORMATION

Conditioned Floor Area.....	1443 sf
Building Type.....	Single Family Detached
Construction Type	Addition Alone
Building Front Orientation.	Front Facing 90 deg (E)
Number of Dwelling Units...	0.34
Number of Building Stories.	2
Weather Data Type.....	ReducedYear
Floor Construction Type....	Raised Floor
Number of Building Zones...	1
Conditioned Volume.....	10823 cf
Slab-On-Grade Area.....	0 sf
Glazing Percentage.....	2.1 % of floor area
Average Glazing U-value....	0.87 Btu/hr-sf-F
Average Glazing SHGC.....	0.7
Average Ceiling Height.....	7.5 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	1443	10823	0.34	Yes	Setback	8.0	Standard	No

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OPAQUE SURFACES

Surface	Area (sf)	U-value	Insul R-val	Act Azm	Tilt	Solar Gains	Form 3 Reference	Location/ Comments
HOUSE - New								
1 Wall	56	0.549	0	90	90	Yes	BLOCK WALL	Typ Block
2 Wall	51	0.549	0	180	90	Yes	BLOCK WALL	
3 Wall	48	0.549	0	270	90	Yes	BLOCK WALL	
4 Wall	44	0.549	0	0	90	Yes	BLOCK WALL	
1 ExteriorVert	(Thermal Mass)			New				
5 WallBaseA	302	0.064	0	90	90	No	None	Shallow Bsmt
2 ExteriorVert	(Thermal Mass)			New				
6 WallBaseB	606	0.064	0	90	90	No	None	Medium Bsmt
3 ExteriorVert	(Thermal Mass)			New				
7 WallBaseC	2	0.064	0	90	90	No	None	Deep Bsmt
4 ExteriorHorz	(Thermal Mass)			New				
8 FloorBase	1443	0.290	0	n/a	0	No	None	Slab Bsmt Cvr

FENESTRATION SURFACES

Orientation			Area (sf)	U-Value	SHGC	Act Azm	Tilt	Exterior Shade Type/SHGC	Interior Shade Type/SHGC
HOUSE - New									
1 Window	Left	(S)	2.5	0.870	0.700	180	90	Standard/0.76	Standard/0.68
2 Window	Left	(S)	2.5	0.870	0.700	180	90	Standard/0.76	Standard/0.68
3 Window	Left	(S)	2.5	0.870	0.700	180	90	Standard/0.76	Standard/0.68
4 Window	Back	(W)	2.5	0.870	0.700	270	90	Standard/0.76	Standard/0.68
5 Window	Back	(W)	5.0	0.870	0.700	270	90	Standard/0.76	Standard/0.68
6 Window	Right	(N)	5.0	0.870	0.700	0	90	Standard/0.76	Standard/0.68
7 Window	Right	(N)	5.0	0.870	0.700	0	90	Standard/0.76	Standard/0.68
8 Window	Right	(N)	5.0	0.870	0.700	0	90	Standard/0.76	Standard/0.68

THERMAL MASS

Mass Type	Area (sf)	Thick (in)	Heat Cap	Conduct-ivity	UIMC	Surface R-value	Location/Comments
HOUSE - New							
1 ExteriorVert	302	8.0	15.7	0.44	1.80	R-13.0	Shallow Bsmt
2 ExteriorVert	606	8.0	15.7	0.44	1.80	R-13.0	Medium Bsmt
3 ExteriorVert	2	8.0	15.7	0.44	1.80	R-13.0	Deep Bsmt
4 ExteriorHorz	1443	3.5	28.0	0.98	1.80	R-2.00	Cvr Slab Bsmt

HVAC SYSTEMS

System Type	Minimum Efficiency	Duct Location	Duct R-value	Tested Duct Leakage	ACCA Manual D	Duct Eff
HOUSE						
Furnace	0.920 AFUE	Attic	R-4.2	No	No	0.773
ACSplit	12.00 SEER	Attic	R-4.2	No	No	0.696

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User#-MP2093 User-Accurate Energy Run-Compliance Documentation

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.

REMARKS

Default metal windows were used in the calculations. These units have the following U-value/Solar Heat Gain Coefficients:
Operable = 0.87/0.70

Project Title..... Hayes Residence Addition Date..05/25/01 10:45:11

MICROPAS5 v5.10 File-21263 Wth-CTZ12S92 Program-FORM 3R
User#-MP2093 User-Accurate Energy Run-Compliance Documentation

Parallel Path Method

Reference Name . BLOCK WALL

Description .... CMU Wall

Type ..... Wall

R-Value ..... 0 Hr-sf-F/Btu

Framing
Material ..... NO.FRAME
Type ..... None
Description .. no framing
Spacing ..... 16 inches on center
Framing Frac.. 0.15

Sketch of Construction Assembly

LIST OF CONSTRUCTION COMPONENTS

	Material Name	Description	Cavity R-Value	Frame R-Value
1.	FILM.EX	Exterior air film: winter value	0.17	0.17
2.	BLOCK.8	8 in filled block	0.97	0.97
3.	FILM.IN.WLL	Inside air film: heat sideways	0.68	0.68
		Total Unadjusted R-Values	1.82	1.82

FRAMING ADJUSTMENT CALCULATION

	Cavity		Framing		Total
U-Value:	(1 / 1.82 x 0.85)	+	(1 / 1.82 x 0.15)	=	0.549 Btu/hr-sf-F
Total R-Value:			1 / 0.549	=	1.82 hr-sf-F/Btu

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916-483-7313
Climate Zone..... 12
Compliance Method..... MICROPAS5 v5.10 for 1998 Standards by Enercomp, Inc.

Building Permit #

Plan Check / Date

Field Check/ Date

MICROPAS5 v5.10 File-21263 Wth-CTZ12S92 Program-HVAC SIZING
User#-MP2093 User-Accurate Energy Run-Compliance Documentation

GENERAL INFORMATION

Floor Area	1443 sf
Volume	10822.5 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	No
Exterior Shading Used	No
Overhang Shading Used	No
Latent Load Fraction	0.20

HEATING AND COOLING LOAD SUMMARY

Description	Heating (Btuh)	Cooling (Btuh)
Opaque Conduction and Solar	20503	12067
Glazing Conduction	914	574
Glazing Solar	n/a	845
Infiltration	6852	2619
Internal Gain	n/a	0
Ducts	2827	1611
Sensible Load	31096	17716
Latent Load	n/a	3543
Minimum Total Load	31096	21259

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.