

CITY OF SACRAMENTO

Permit No: 9805434

1231 I Street, Sacramento, CA 95814

Insp Area: 3

Site Address: 5301 48TH ST SAC

Sub-Type: ASFR

Parcel No: 0220213014

Housing (Y/N): N

CONTRACTOR

PETR MIKOLAVICH HELMIKOV
4150 SOLEDAD AV
SACRAMENTO CA 95820

OWNER

SALTER RAYMOND P/VICKY K MC
SACRAMENTO C A. 95824

ARCHITECT

Nature of Work: ADDING 142 SF AND CONVERT GARAGE BACK TO A GARAGE

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 B License Number 724336 Date 06-26-98 Contractor Signature Peter Melnikov

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

Date 06-26-98 Applicant/Agent Signature Peter Melnikov

WORKER'S COMPENSATION DECLARATION: I hereby affirm under penalty of perjury on 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.

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: FRO Insurance Brokers Inc Policy Number WIC 000708400

(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 06-26-98 Applicant Signature Peter Melnikov

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.

CITY OF SACRAMENTO
DEVELOPMENT SERVICES DIVISION

EXPRESS PLAN REVIEW

Contractor Petr Helmikov

451-1667

SUBMITTAL DATES					
First Review		2nd Review		3rd Review	
IN	OUT	IN	OUT	IN	OUT
/ /	/ /	/ /	/ /	/ /	/ /

PLAN CHECK # 9805434 R
 ADDRESS: 5301 - 48th St
 Commercial Residential

ACCEPTED by (Staff):



DISCIPLINE	1ST REVIEW			2ND REVIEW			3RD REVIEW		
	Status	Staff	Date	Status	Staff	Date	Status	Staff	Date
LIFE SAFETY	3	5	6/26						
STRUCTURAL	13	47	6/25/98						
MECHANICAL/PLUMBING			6/26						
ELECTRICAL			6/26						
FIRE									
PLANNING									

STAFF COMMENTS: _____



**City of Sacramento Development Services Division
Planning and Zoning Information Request**

Project Address: 5301 48th St.

Assessor's Parcel Number: 022-0213-014

Current Land Use: SF1

Description of Request/Proposed Use:

convert garage to living
area Now converting back
to garage

Zoning Designation: R-1

Prior Applications for Project Site(P#,Z#,DRPB#): _____

Comments: Reqs FA ~~Spec~~ Permit Variance
to install parking, or convert
back to garage

Are There Any Planning Issues?: (Circle One) YES NO

Site Plan Check Required? (Circle One) YES NO

Design Review/ Preservation Required?: (Circle One) YES NO

Planning Review by/Date: S. Taylor 6/16/98

A list of items that must be reviewed by Planning is provided on the reverse side of this form.



**City of Sacramento Development Services Division
Planning and Zoning Information Request**

Project Address: 1448 - 48th St

Assessor's Parcel Number: 002 - 0334 - 010

Current Land Use: SFR R3

Description of Request/Proposed Use:

addition to SFR

Zoning Designation: R-1

Prior Applications for Project Site(P#,Z#,DRPB#): _____

Comments: LOT CORNER + SETBACKS

OK

Are There Any Planning Issues?: (Circle One) YES NO

Site Plan Check Required? (Circle One) YES NO

Design Review/ Preservation Required?: (Circle One) YES NO

Planning Review by/Date: [Signature] 6-24-98

A list of items that must be reviewed by Planning is provided on the reverse side of this form.

CITY OF SACRAMENTO
 1231 I Street, Sacramento, CA 95814

FEE SUMMARY
FOR PERMIT #9805434
 as of 06/17/1998 Permit Status: **APPLIED**

Site Address: **5301 48TH ST SAC**
 Parcel No: 0220213014

CONTRACTOR
 PETER MIKOL AVICH HELMIKOV
 4150 SOLEDAD AV
 SACRAMENTO CA 95820
 Phone: 916-451-1667

OWNER
 SACRAMENTO C.A.
 95824
 Phone:

ARCHITECT
 SALTER RAYMOND P/VICKY K MC
 Phone:

Nature of Work: ADDING 142 SF AND CONVERT GARAGE BACK TO A GARAGE

Permit Valuation: \$12,000.00
 Square Footage: 142

Building Permit.....:	\$336.00	Water Development Fee:	\$0.00
Plan Review/Processing:	\$113.00	Sewer Development Fee:	\$0.00
Strong Motion Fee.....:	\$1.20	Regional Sanitation Fee:	\$0.00
Coach Recording Fee..:	\$0.00	Bell Avenue Sewer.....:	\$0.00
Manuf Housing Fee.....:	\$0.00	Granite Park Fee.....:	??
Auth to Start Work.....:	\$0.00	Pocket Area Bridge.....:	\$0.00
Penalty Fee.....:	\$0.00	Pocket Area Road.....:	\$0.00
Inspections.....:	\$0.00	Quimby Park Fee.....:	\$0.00
Cert of Occupancy.....:	\$0.00	Housing Trust Fund.....:	\$0.00
Replace Cards/Plans....:	\$0.00	Natomas Dev Fees.....:	\$0.00
Hsg Process/Surcharge:	\$0.00	FBA-South Natomas....:	\$0.00
Technology Fee.....:	\$17.96	FBA-Jacinto Creek.....:	\$0.00
City Bus Oper Tax.....:	\$4.80	Amount Deferred.....:	\$0.00
Const Excise Tax.....:	\$66.46	Refund.....:	\$0.00
Res Const Tax.....:	\$0.00		
Processing Fees.....:	\$0.00		
Review Fees.....:	??	Subtotal.....:	\$539.42
		Additional Fees.....:	\$0.00
		TOTAL FEES.....:	\$539.42
		Payments.....:	\$113.00
		BALANCE DUE.....:	\$426.42

OWNER-BUILDER VERIFICATION

ATTENTION PROPERTY OWNER

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) and draft
2. I (have/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.

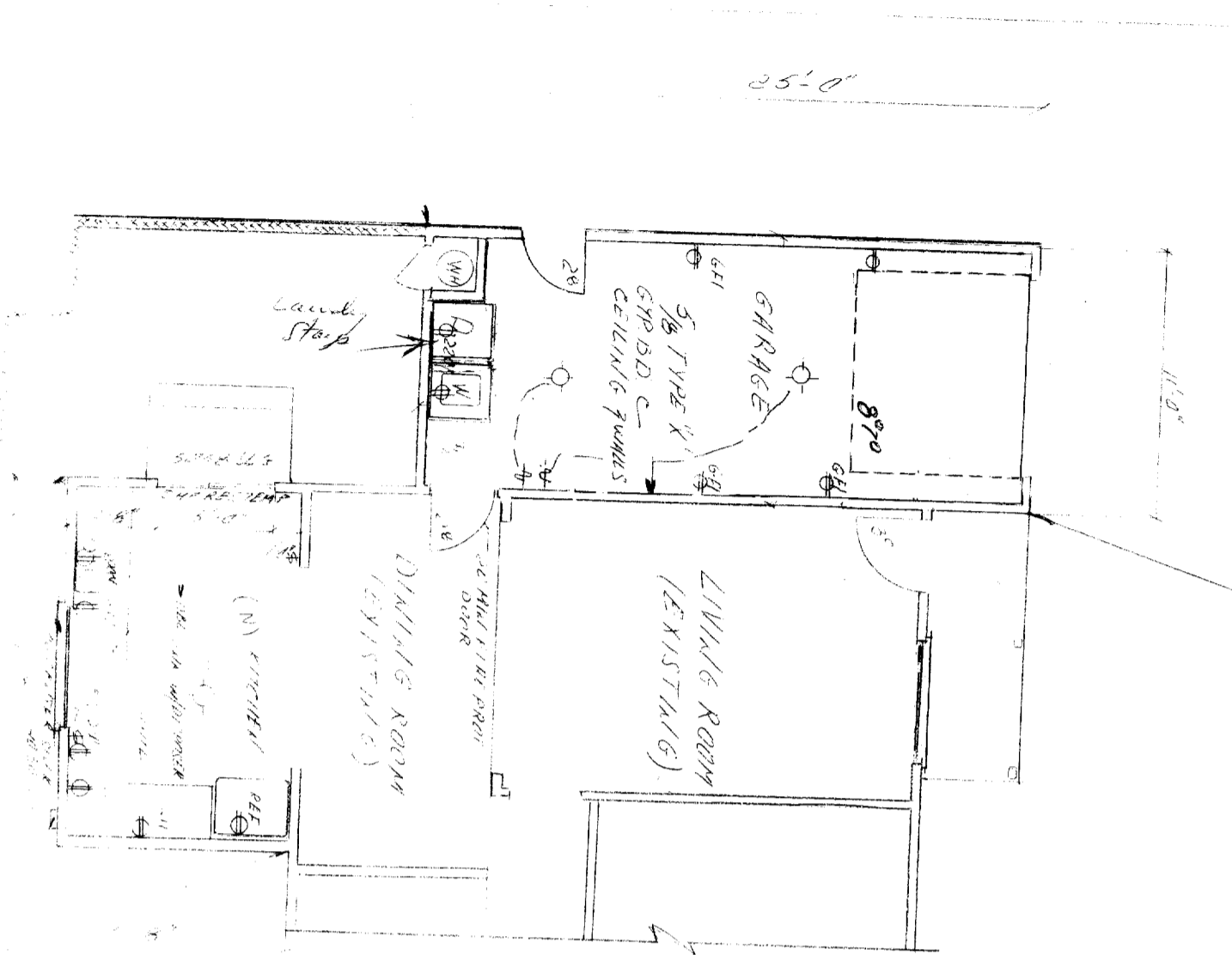
Name _____ Address _____
City _____ Telephone _____
Contractors License No. _____

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 [Signature]
Job Address [Address] Date 6/18/98
Permit No.: _____

GARAGE 1166 S.H.C. CONVERTED TO LIVING AREA



RECEIVED

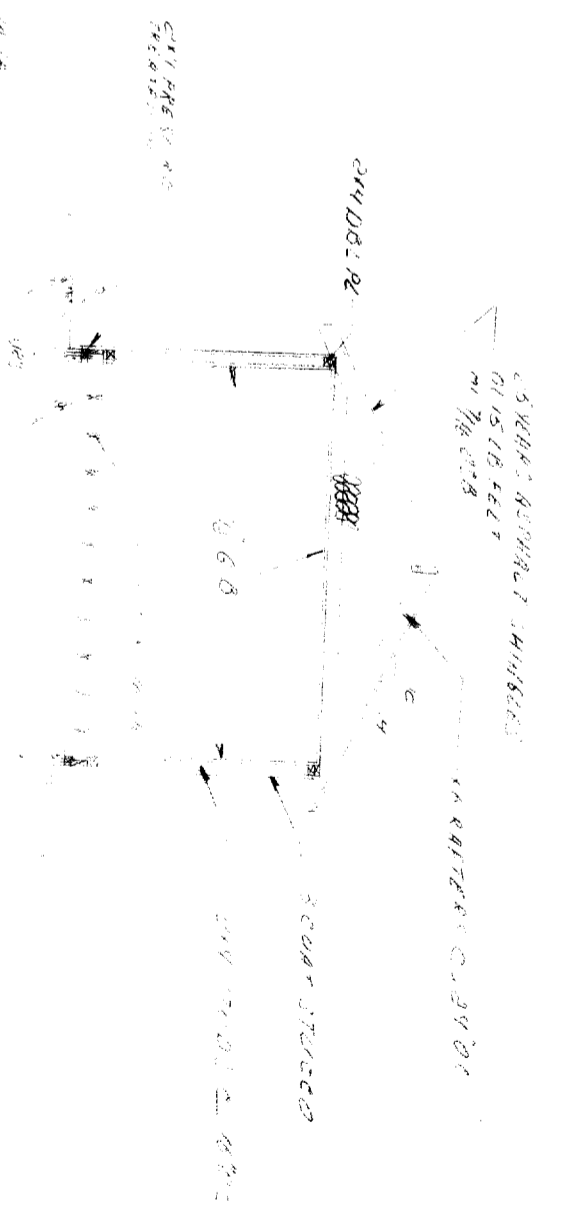
JUN 17, 1998

Building Inspection Division

Armstrong
5301 48th St
622-2213-014
98054342
142 2/F

EXISTING WALL

DEMOLISHING WALL



CROSS SECTION H-H'

WORK IN THE GARAGE

EXISTING WALL

SCALE		APPROVED BY	
DATE		DRAWN BY	
REVISED		REVISED	
DRAWING NUMBER		DRAWING NUMBER	

**CITY OF SACRAMENTO - BUILDING INSPECTION DIVISION
SPECIAL PACKAGE D/E FOR RESIDENTIAL ADDITIONS IN CLIMATE ZONE 12
100 TO 999 SQUARE FEET**

NOTE: ADDITIONS OF 100 SQUARE FEET OR L. WITH 50% OR LESS GLAZING NEED MEET ONLY APPLICABLE FEATURES OF MANDATORY MEASURES CHECKLIST ON BACK OF THIS FORM.

CERTIFICATE OF COMPLIANCE OF IR ADDITION

Project Title _____ Date 06-16-98
 Project Address 5301 48TH ST SACRAMENTO, CA, 95820
 Total Floor Area Addition 142 Addition and existing total 1000
 Total Glazing Area Addition 45 Glazing removed existing 24

REQUIREMENTS THAT APPLY TO NEW AREA: BUILDING SHELL INSULATION:

COMPONENT	TYPE (BATT OR BLOWN)	100 SQUARE FEET R VALUE MINIMUM	101 - 999 SQUARE FEET R VALUE MINIMUM
Ceiling	<u>R-38</u>	R - 19	R - 38
Wall	<u>R-13</u>	R - 13	R - 13
Raised Floor	<u>R-19</u>	R - 13	R - 19
Shading			
North/South Facing Glazing	0.66 maximum	Enter Shading Device: _____	
East/West Facing Glazing	0.40 maximum	Enter Shading Device: <u>BLIND</u>	
Fenestration (Glazing)	<u>DOUBLE REQUIRED</u>		U = .75 MAX

Maximum Glazing Area of New Addition 16% (Example: New Glazing (-) Removal of Existing Glazing + Total Area Additional Square Footage)

$21 \cdot 142 = 2.982$ 15%

Thermal Mass: Package D = 20 per cent _____ COMPLETE ATTACHED WORKSHEET
 See Worksheet Package E = 05 per cent _____

NEW HEATING, COOLING OR DOMESTIC WATER HEATING:

Systems installed in conjunction with addition must comply with the appliance standards applicable to new residences. Complete the following standards if new equipment is being installed in conjunction with the room addition; cannot add electric resistant heat

HVAC SYSTEMS Type (Furnace, air conditioner, heat pump)	Minimum Efficiency (SE, SEER, HSPF)	Duct Insulation	Output (Btuh)	Manufacturer/Model # (Or approved equal)
<u>AIR CONDITIONER</u>	<u>78% / 6.8</u>	<u>R - 4.2</u>		
<u>HEAT PUMP</u>	<u>10.0 / 9.7</u>	<u>R - 4.2</u>		

HOT WATER SYSTEMS

System Type (Storage gas, etc.)	Type Capacity	Manufacturer/Model # (or approved equal)	Special Features
<u>Gas</u>	<u>40 gal</u>		<u>EXISTING</u>

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/Remarks section.

Designer or Owner (per Business & Professions Code)

Name: Peter Melnikov
 Title/Firm: PETER MELNIKOV CONSULT
 Address: 1150 SORREDA WAY
SACRAMENTO, CA 95820
 Telephone: 916-1667
 Lic #: _____
 Signature: Peter Melnikov Date: 06-16-98

Documentation Author

Name: _____
 Title/Firm: _____
 Address: See above
 Telephone: _____
 Signature: Peter Melnikov Date: 06-16-98

Enforcement Agency

Name: _____
 Title: _____
 Agency: _____
 Telephone: _____
 Signature/Stamp: _____ Date: _____

CITY OF SACRAMENTO - BUILDING INSPECTION DIVISION
SPECIAL PACKAGE D/E FOR RESIDENTIAL ADDITIONS IN CLIMATE ZONE 12
100 TO 999 SQUARE FEET

NOTE: ADDITIONS OF 100 SQUARE FEET OR LESS WITH 50% OR LESS GLAZING NEED MEET ONLY APPLICABLE FEATURES OF MANDATORY MEASURES CHECKLIST ON BACK OF THIS FORM.

CERTIFICATE OF COMPLIANCE OF IR ADDITION

Project Title _____ Date 06-16-98
Project Address 5301 48TH ST SACRAMENTO, CA, 95820
Total Floor Area Addition 142 Addition and existing total 1090
Total Glazing Area Addition 45 Glazing removed existing 29

REQUIREMENTS THAT APPLY TO NEW AREA: BUILDING SHELL INSULATION:

COMPONENT	TYPE (BATT OR BLOWN)	100 SQUARE FEET R VALUE MINIMUM	101 - 999 SQUARE FEET R VALUE MINIMUM
Ceiling	<u>R-32</u>	R - 19	R - 38
Wall	<u>R-13</u>	R - 13	R - 13
Raised Floor	<u>R-19</u>	R - 13	R - 19
Shading			
North/South Facing Glazing	0.66 maximum	Enter Shading Device: _____	
East/West Facing Glazing	0.40 maximum	Enter Shading Device: <u>BLIND</u>	
Fenestration (Glazing)	<u>DOUBLE REQUIRED</u>		<u>U = .75 MAX</u>

Maximum Glazing Area of New Addition 16% (Example: New Glazing (-) Removal of Existing Glazing + Total Area Additional Square Footage
21 / 142 = 0.147 = 15%

Thermal Mass: Package D = 20 per cent _____ COMPLETE ATTACHED WORKSHEET
See Worksheet Package E = 05 per cent _____

NEW HEATING, COOLING OR DOMESTIC WATER HEATING:

Systems installed in conjunction with addition must comply with the appliance standards applicable to new residences. Complete the following standards if new equipment is being installed in conjunction with the room addition; cannot add electric resistant heat.

HVAC SYSTEMS	Minimum Efficiency (SE, SEER, HSPF)	Duct Insulation	Output (Btuh)	Manufacturer/Model # (Or approved equal)
<u>CONDENSER</u>	<u>78% / 6.8</u>	<u>R-4.2</u>		
<u>EVAP</u>	<u>10.0 / 9.7</u>	<u>R-4.2</u>		

HOT WATER SYSTEMS

System Type (Storage, gas, etc.)	Type Capacity	Manufacturer/Model # (or approved equal)	Special Features
<u>WATER</u>	<u>40 gal</u>		<u>EXISTING</u>

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/Remarks section.

Designer or Owner (per Business & Professions Code)

Name: Peter Melnikov
Title/Firm: PETER MELNIKOV CONSULT
Address: 1150 SERRADA WAY
SACRAMENTO, CA 95820
Telephone: 951-1667
Lic # _____

Peter Melnikov 06-16-98
(signature) (date)

Documentation Author

Name: _____
Title/Firm: _____
Address: See me
Telephone: _____

Peter Melnikov 06-16-98
(signature) (date)

Enforcement Agency

Name: _____
Title: _____
Agency: _____
Telephone: _____

Signature/Stamp _____ (date)

CITY OF SACRAMENTO - BUILDING INSPECTION DIVISION
SPECIAL PACKAGE D/E FOR RESIDENTIAL ADDITIONS IN CLIMATE ZONE 12
100 TO 999 SQUARE FEET

NOTE: ADDITIONS OF 100 SQUARE FEET OR LESS WITH 50% OR LESS GLAZING NEED MEET ONLY APPLICABLE FEATURES OF MANDATORY MEASURES CHECKLIST ON BACK OF THIS FORM.

CERTIFICATE OF COMPLIANCE OF IR ADDITION

Project Title _____ Date 06-16-98
 Project Address 5301 43RD ST SACRAMENTO, CA 95820
 Total Floor Area Addition 192 Addition and existing total 1000
 Total Glazing Area Addition 92 Glazing removed existing 27

REQUIREMENTS THAT APPLY TO NEW AREA: BUILDING SHELL INSULATION:

COMPONENT	TYPE (BATT OR BLOWN)	100 SQUARE FEET R VALUE MINIMUM	101 - 999 SQUARE FEET R VALUE MINIMUM
Ceiling	<u>R-38</u>	R - 19	R - 38
Wall	<u>R-13</u>	R - 13	R - 13
Raised Floor	<u>R-19</u>	R - 13	R - 19
Shading		Enter Shading Device: _____	Enter Shading Device: <u>BLINDS</u>
North/South Facing Glazing	0.66 maximum	Enter Shading Device: _____	Enter Shading Device: _____
East/West Facing Glazing	0.40 maximum	Enter Shading Device: _____	Enter Shading Device: _____
Fenestration (Glazing)	DOUBLE REQUIRED	_____	_____ U = .75 MAX

Maximum Glazing Area of New Addition 16% (Example: New Glazing (-) Removal of Existing Glazing + Total Area Additional Square Footage 1142 - 1147 15%)

Thermal Mass: Package D = 20 per cent _____ COMPLETE ATTACHED WORKSHEET
 See Worksheet Package E = 05 per cent _____

NEW HEATING, COOLING OR DOMESTIC WATER HEATING:

Systems installed in conjunction with addition must comply with the appliance standards applicable to new residences. Complete the following standards if new equipment is being installed in conjunction with the room addition; cannot add electric resistant heat:

HVAC SYSTEMS	Minimum Efficiency (SE, SEER, HSPF)	Duct Insulation	Output (Btuh)	Manufacturer/Model # (Or approved equal)
<u>HEAT PUMP</u>	<u>78% / 6.8</u>	<u>R-4.2</u>	_____	_____
<u>LIGHT</u>	<u>10.0 / 9.7</u>	<u>R-4.2</u>	_____	_____

HOT WATER SYSTEMS

System Type (Storage gas, etc)	Type Capacity	Manufacturer/Model # (or approved equal)	Special Features
<u>WATER</u>	<u>40 GALL</u>	_____	<u>EXISTING</u>

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/Remarks section.

Designer or Owner (per Business & Professions Code)

Name: John McLesney
 Title/Firm: INTER RELATIONS CONSULT
 Address: 1150 SOLID WOOD WAY
SPRINGFIELD CA 95820
 Telephone: 916-1667
 Lic. #: _____
 _____ 06-16-98
 (signature) (date)

Documentation Author

Name: _____
 Title/Firm: _____
 Address: SAME
 Telephone: _____
 _____ 06-16-98
 (signature) (date)

Enforcement Agency

Name: _____
 Title: _____
 Agency: _____
 Telephone: _____

 (signature/stamp) (date)

Mandatory Measures Checklist: Residential

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 binding minimum component performance specifications for the mandatory measures whether they are shown elsewhere in the documents or on this checklist only.

DESCRIPTION	DESIGNER	ENFORCEMENT
Building Envelope Measures		
* §150(a): Minimum R-19 ceiling insulation.	P.H	
§150(b): Loose fill insulation manufacturer's labeled R-Value.	P.M	
* §150(c): Minimum R-13 wall insulation in framed walls (does not apply to exterior mass walls).	P.H	
* §150(d): Minimum R-13 raised floor insulation in framed floors; minimum R-8 in concrete raised floors.	P.M	
§150(f): Slab edge insulation - water absorption rate no greater than 0.3%, water vapor transmission rate no greater than 2.0 perm/inch.	—	
§118: Insulation specified or installed meets California Energy Commission quality standards. Indicate type and form.	P.H	
§116-17: Fenestration Products, Exterior Doors and Infiltration/Exfiltration Controls		
a. Doors and windows between conditioned and unconditioned spaces designed to limit air leakage.	P.M	
b. Manufactured fenestration products have label with certified U-value, and infiltration certification.	P.M	
c. Exterior doors and windows weatherstripped; all joints and penetrations caulked and sealed.	P.M	
§150(g): Vapor barriers mandatory in Climate Zones 14 and 16 only.	—	
§150(f): Special infiltration barrier installed to comply with §151 meets Commission quality standards.	—	
§150(e): Installation of Fireplaces, Decorative Gas Appliances and Gas Logs		
Masonry and factory-built fireplaces have:	P.M	
a. Closeable metal or glass door	P.H	
b. Outside air intake with damper and control	P.M	
c. Flue damper and control		
No continuous burning gas pilots allowed.		
Space Conditioning, Water Heating and Plumbing System Measures		
§110-13: HVAC equipment, water heaters, showerheads and faucets certified by the Commission.	P.H	
§150(i): Setback thermostat on all applicable heating systems.	P.M	
§150(j): Pipe and Tank Insulation		
1. Indirect hot water tanks (e.g., unfired storage tanks or backup solar hot water tanks) have insulation blanket (R-12 or greater) or combined interior/exterior insulation (R-16 or greater).	P.M	
2. First 5 feet of pipes closest to water heater tank, non-recirculating systems, insulated (R-4 or greater).	P.M	
3. All buried or exposed piping insulated in recirculating sections of hot water system.	P.M	
4. Cooling system piping below 55°F insulated.		
5. Piping insulated between heating source and indirect hot water tank.		
* §150(m): Ducts and Fans		
1. Ducts constructed, installed and sealed to comply with UMC Sections 1002 and 1004; ducts insulated to a minimum installed value of R-4.2 or ducts enclosed entirely within conditioned space.	P.M	
2. Exhaust fan systems have backdraft or automatic dampers	P.M	
3. Gravity ventilating systems serving conditioned space have either automatic or readily accessible, manually operated dampers.	P.M	
§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 3/8" pipe between filter and heater for future solar heating.	—	
b. Cover for outdoor pools or outdoor spa.		
3. Pool system has directional inlets and a circulation pump time switch.		
§115: Gas-fired central furnace, pool heater, spa heater or household cooking appliance have no continuously burning pilot light. (Exception: Non-electrical cooking appliance with pilot < 150 Btu/hr.)	P.M	
Lighting Measures		
§150(k): 40 lumens/watt or greater for general lighting in kitchens and rooms with water closets; and recessed ceiling fixtures IC (insulation cover) approved.	P.M	

Revised January 1992