

CITY OF SACRAMENTO

Permit No: 9805985

1231 I Street, Sacramento, CA 95814

Insp Area: 1

Site Address: 671 SAN ANTONIO WY SAC

Sub-Type: NSFR

Parcel No: 0040286033

Housing (Y/N): N

CONTRACTOR

OWNER

ARCHITECT

OROPEZA, ANTHONY
671 SAN ANTONIO WY
SAC CA 95819

Nature of Work: NEW SFR 1596 SF&DET 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 _____ 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 7/2/98 Owner Signature William Schmeider

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 7/2/98 Applicant/Agent Signature William Schmeider

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 _____

____ (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 7/2/98 Applicant Signature William Schmeider

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.

SACRAMENTO CITY UNIFIED SCHOOL DISTRICT

CERTIFICATION OF COMPLIANCE

SCHOOL DISTRICT DEVELOPMENT FEES

PROPERTY OWNER'S NAME <i>M. Anthony DiPozza</i>	
OWNER'S ADDRESS <i>109 San Miguel Way Sacramento, CA 95819</i>	
PROJECT ADDRESS <i>671 San Antonio Way, Sacramento, CA 95819</i>	
PARCEL NUMBER <i>004-1215-0300</i>	LOT NUMBER
SUBDIVISION NAME	
NUMBER OF UNITS <i>1</i>	
APPLICANT'S SIGNATURE <i>M. DiPozza</i>	
TITLE OF APPLICANT <i>Owner</i>	
DATE <i>July 1, 1998</i>	TELEPHONE NUMBER
PLAN IDENTIFICATION NUMBER	
BUILDING TYPE (CHECK ONE)	
<input checked="" type="checkbox"/> RESIDENTIAL <input type="checkbox"/> APARTMENT/CONDOMINIUM <input type="checkbox"/> COMMERCIAL/INDUSTRIAL	
SQUARE FEET OF CHARGEABLE BUILDING AREA <i>1596</i>	
SIGNATURE <i>Bill McDowell</i>	
TITLE <i>Electrical Inspector</i>	DATE <i>6-30-98</i>
DISTRICT CERTIFICATION NUMBER <i>103910</i>	
EXEMPT	COMMENTS
RESIDENTIAL / APARTMENT / ETC.	<i>1596</i> SQ. FT. X \$ <i>1.72</i> = \$ <i>2745.12</i>
COMMERCIAL / INDUSTRIAL	_____ SQ. FT. X \$ _____ = \$ _____
OTHER FEE _____ TYPE _____	_____ SQ. FT. X \$ _____ = \$ _____
TOTAL FEES COLLECTED..... \$ <i>2745.12</i>	
<p><i>This certification covers only the amount of square footage indicated above. Any additions or corrections to the square footage for this project will require an amendment to the Certificate of Compliance.</i></p> <p><i>As the authorized school district official, I hereby certify that the requirements of Government Code Section 65995 and any other authorized requirements have been complied with by the above signed applicant.</i></p>	
SIGNATURE <i>[Signature]</i>	
TITLE <i>CIVIC CENTER PERMITS</i> DATE <i>7/1/98</i>	

91a certcomp

Distribution: Original--School District; 1st Copy--School District; 2nd Copy--Building Department; 3rd Copy--Applicant



CITY OF SACRAMENTO

DEPARTMENT OF PLANNING AND DEVELOPMENT

1231 J Street

Sacramento Ca 95814

Administration

Room 300 449-5571

Building Inspections

Room 200 449-5716

Planning

Room 200 449-5604

WATER DEVELOPMENT FEE WAIVERS

Applicant: ANTHONY OROPEZA Date 6/30/98

Property Address: 671 SAN ANTONIO WY

APN: 004 02860 0330 Phone 452 6349

Number of Units: 1 Zoning: R-3

This project qualifies because it is in a:

REDEVELOPMENT AREA

DESIGNATED INFILL AREA OR

INFILL AREA AND MEETS ALL OF THE FOLLOWING:

- 1. The site is located in a neighborhood where the median year of housing construction 1965 or earlier as shown on the Neighborhood Statistics Boundary Map or the applicant has proof to the satisfaction of the Planning Director that the median age of housing within 500 feet of the site was developed prior to 1965; and
- 2. The lot is surrounded on three sides by existing or approved development; and
- 3. The project is consistent with the General Plan or more specific plan designation; and
- 4. The site is no more than 5 acres in size for single family development or 2 acres for multiple family development; and
- 5. The site has City sewer, water and drainage services or is within proposed or existing assessment district for these services. The services provided are capable of serving the proposed development to the satisfaction of the Public Works Director.

Fee Waiver Denied By: B. Larsen Date _____

Fee Waiver Authorized By: _____ Date _____

WD NO: _____



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

Project Address: 671 SAN ANTONIO WY

Assessor's Parcel Number: 004-0286-0330

Current Land Use: Vacant

Description of Request/Proposed Use:

New SFD w/ Detached
Garage

Zoning Designation: R-1

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

Comments: MUST PROVIDE MIN. 10x20
AD GARAGE OR OBTAIN ZONING.
ADMIN. VAR

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: W Tibour 6/30/98

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

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) Yes

2. I (have/have not) have 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.

Paul R. Freese

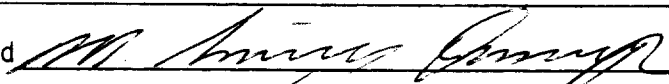
Name Freese Construction Address 107 Jumper Court

City Folsom, CA. 95629 Telephone (916) 985-4725

Contractors License No. CA. Lic. #B510664

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 671 San Antonio Way, Sacramento, CA. 95819 Date July 1, 1998

Permit No.: _____



EXHIBIT 1

I have read and am familiar with the contents of City's standard Owner-Builder Notification and Owner-Builder Verification, as required by California Health and Safety Code Section 19830 and 19831.

I authorize my agent(s) William Schneider & Associates
529 San Antonio Way
Sacramento, CA 95819
to sign the Owner-Builder Verification on my behalf.

Signature

M. Anthony Oropeza

Print Name

M. Anthony Oropeza

Address

609 San Miguel Way
Sacramento, CA 95819

Telephone

(916) 446-3181

(SUBSTANTIAL IMPROVEMENTS)
AGREEMENT REGARDING
THE RISK OF FLOODING

A 99

RECITALS

A. The undersigned have contracted for construction of the improvements located at 671 SAN ANTONIO WAY... SAC CA 95819 and described in the attached building permit (the "Improvements").

B. The undersigned expressly acknowledge that the Improvements may be subject to flooding hazards due to their location in a 100-year floodplain, as described in the Flood Insurance Rate Map dated November 15, 1989, ("FIRM"), prepared by the Federal Emergency Management Agency ("FEMA").

C. The undersigned acknowledge that they have read the Notice to Building Permit Applicants Regarding the Risk of Flooding attached as Exhibit "B."

D. Despite the potential for flood damage, the undersigned intend that the Improvements be constructed even though they will not be at least one foot above the 100-year floodplain elevation levels identified in the Preliminary Work Map dated January, 1989, prepared by the U.S. Army Corps of Engineers.

E. The undersigned acknowledge that the City of Sacramento (the "City") recommends obtaining flood insurance for the Improvements.

AGREEMENT

In consideration of the issuance of a building permit for construction of the Improvements, the undersigned agree as follows:

1. Flood-Related Property Damage. For purposes of this Agreement, the term "flood-related property damage" shall mean any property damage due to flooding resulting from an overtopping out of the channels of the Sacramento River, American River, Dry Creek, Arcade Creek or Morrison Creek levee systems or a break in those levee systems.

2. Assumption of Risk. The undersigned expressly assume the risk that the Improvements may be subject to flood-related property damage.

3. Waiver of Property Damage Claims. The undersigned unconditionally waive any flood-related property damage claim asserting liability on the part of the City, or its officers, agents or employees premised on the issuance of a permit for the Improvements,

9. Succession. The undersigned expressly intend that the obligations contained herein shall run with the Improvements and shall bind their respective heirs, assignees and successors in interest.

10. Termination. All of the obligations set forth in this Agreement shall terminate at such time as FEMA determines that the area in which the Improvements are located has attained at least 100-year flood protection.

DATED: 7-1-1998

M. Anthony Dropeza
SIGNATURE

Title of Signatory if Signing for an Entity

M. Anthony Dropeza
Name
609 San Miguel Way
Address
Sacramento CA 95819

SIGNATURE

Title of Signatory if Signing for an Entity

Name

Address

fluorescents, however, are used with medium base incandescent lamp sockets, so they do not qualify. Hard-wired compact fluorescents where the ballast is part of the luminaire and that have an efficacy of at least 40 lumens per watt do meet these requirements.

The mandatory requirement for recessed incandescent lighting fixtures states:

"All incandescent lighting fixtures recessed into insulated ceilings shall be approved for zero-clearance insulation cover (I.C.) by Underwriters Laboratories or other testing/rating laboratories recognized by the International Conference of Building Officials."

[EES, Sec. 150(k)4]

See 2.4 and Figures 2-11 and 2-12 for a complete explanation of all the mandatory lighting requirements, including all installation criteria.

Low-Rise Residential

Any building of occupancy group R, excluding all hotels, all motels and apartment buildings with four or more habitable stories.

Lumens/Watt

A lumen is a measure of the amount of light available from a given light source. A watt is a measure of the power requirement for that light source. The efficacy of a light source is measured by dividing the lumens by the wattage. The more usable light that a light source provides per watt, the greater its energy efficiency.

Manufactured Device

A manufactured device is "... any heating, cooling, ventilation, lighting, water heating, refrigeration, cooking, plumbing fitting, insulation, door, fenestration product, or any other appliance, device, equipment or system subject to Sections 110 through 119 of Title 24 Part 6."

[EES, Sec. 101]

Mixed Occupancy

A building designed and constructed for more than one type of occupancy, such as a three story building with ground floor retail and second and third floor residential apartments (see Section 8.2.).

Multi-Family

A dwelling unit of occupancy type R, as defined by the UBC, sharing a common wall and/or ceiling/floor with at least one other dwelling unit (see Section 8.1).

NFRC

National Fenestration Rating Council. A national organization of manufacturers of fenestration products, glazing and related materials, plus utilities, state energy offices, laboratories, home builders, specifiers (architects) and public interest groups.

This organization is responsible for rating the U-values of manufactured fenestration products (i.e., windows, skylights, glazed doors) that must be used in compliance calculations. All manufactured fenestration products must be labeled with the NFRC ratings or else the default U-values listed in Tables G-4 through G-6 must be used for compliance with the Standards. Section 8.5 includes a full discussion of fenestration products and NFRC ratings.

See also *Fenestration Area* and *Fenestration Product*.

North-Facing

"North-facing is oriented to within 45 degrees of true north, including 45°0'0" east of north (NE), but excluding 45°0'0" west of north (NW)."

[EES, Sec. 101]

This definition only applies to the point system, the prescriptive packages, and master plans analyzed according to the cardinal orientation method. In the computer methods the actual building orientation must be used, except in the case of master plans as stated above.

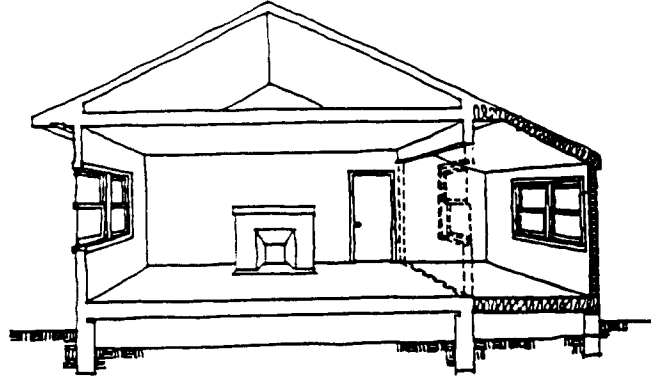
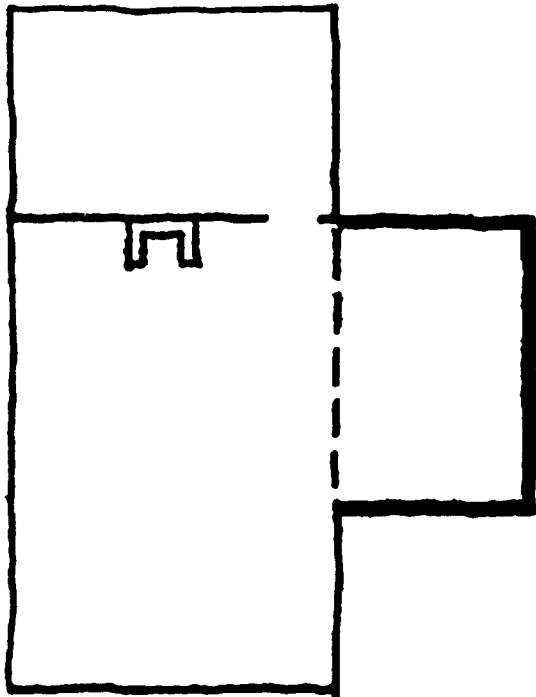


Figure 7-1: Additions Are Increases in Both Conditioned Floor Area and Conditioned Volume

Additions

An addition is defined as any change to a building that increases conditioned floor area and conditioned volume (see *Standards* §101(b) and Figure 7-1). Examples include:

- New conditioned floor area added to a building.
- Newly conditioned space in an existing unconditioned building such as the remodel of a previously unheated basement, attic or garage.

Compliance Options for Additions

Any one of several options may be used in demonstrating compliance for an addition (*Standards* §152(a)):

- Show that the addition alone meets the applicable prescriptive requirements or the performance method energy budget.
- Show that the remodeled building including the addition uses the same or less energy than the unimproved building and a separate addition that meets the performance method

energy budget.

- Show that the whole existing-plus-addition building meets the prescriptive requirements or the performance method energy budget for the building as a whole.

NOTE: Existing structures with R-11 in the framed walls that show compliance with the Performance approach need not meet the R-13 mandatory wall insulation requirement.

Alterations

For the purposes of the energy compliance, building alterations are considered to be changes to the building which *do not increase both conditioned volume and conditioned floor area* (see *Standards* §101(b)). Examples include:

- Adding a new skylight (or window) to an existing building. If the skylight has a lightwell which cuts through an existing attic, the alteration adds conditioned volume to the building but is not an addition as it

does not add conditioned floor area.

- Adding a new greenhouse window to an existing building. This is an alteration rather than an addition because it adds conditioned volume to the building but not conditioned floor area.
- Adding a loft within the existing conditioned volume of a residence. This is an alteration rather than an addition because it adds conditioned floor area but not conditioned volume.

Standards §152(b) lists the energy requirements for alterations. Section 7.5 of this chapter discusses these requirements and explains options for showing compliance with them.

Repairs are not included in the definition of an alteration, and special energy requirements apply to repairs as discussed in Section 7.6.

NOTE: All additions and alterations are required to meet or exceed the applicable minimum mandatory measures listed in Chapter 2.

7.2 COMPLIANCE ANALYSIS OF AN ADDITION ALONE

Any addition - that is, the sum of all new conditioned spaces and associated new exterior walls, ceilings, and floors within the building - may be shown to meet the energy budget as a separate entity. This procedure does not involve the existing structure, except in some cases when the total number of water heaters in the building increases. The analysis may be performed using either a special prescriptive package according to the size of the addition or with the point system or any approved computer performance method. Additions of less than 100 square feet can also comply by using the requirements of prescriptive packages for additions up to 500 square feet.

Prescriptive Options: Addition Alone

Prescriptive options for showing compliance for an addition alone are divided into four categories depending on the size of the addition

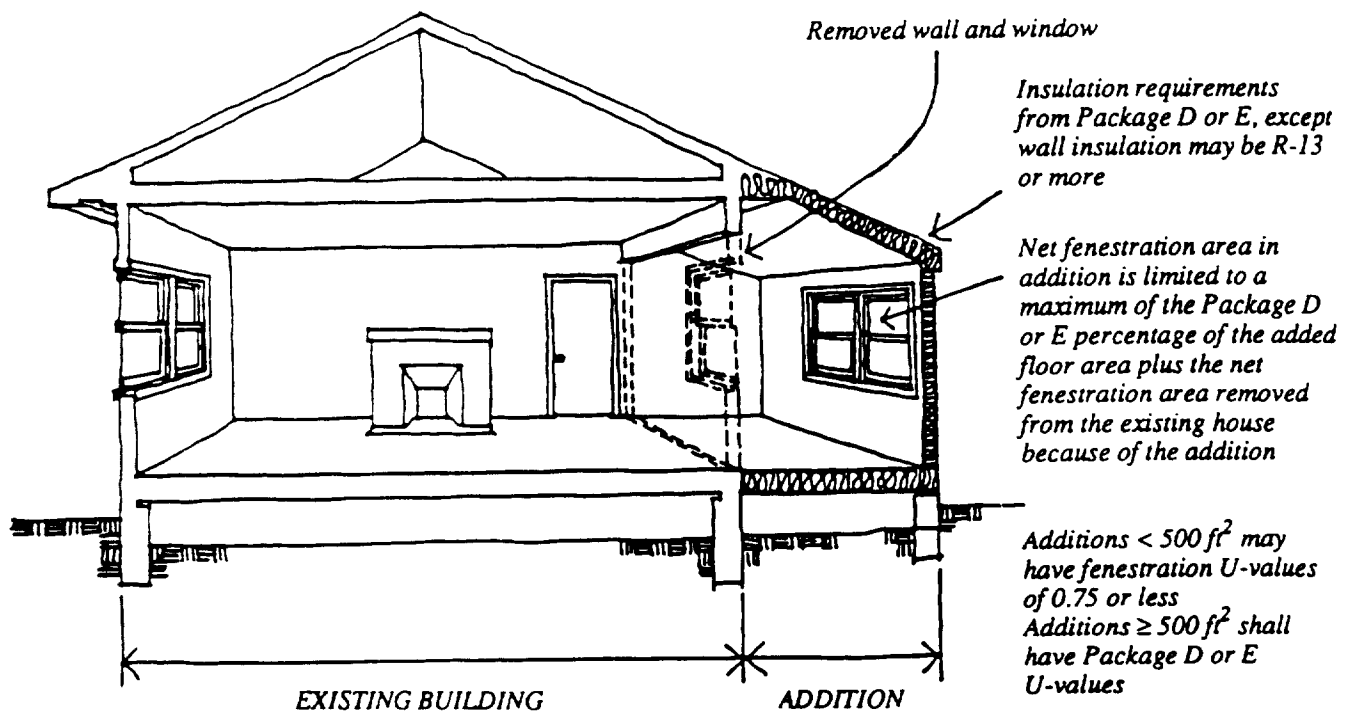


Figure 7-2: Compliance Option for Addition: Package D or E For Addition Alone (floor Area Between 100 and 1000 ft²)

- (5) Since the energy use of the existing-plus-addition (88.21 kBtu/yr-ft²) is less than its adjusted energy budget (92.74 kBtu/yr-ft²), the addition complies.

7.4 SPACE CONDITIONING EQUIPMENT FOR ADDITIONS

There are two options for sizing and installing HVAC equipment in additions.

The first is to perform design heating and cooling load calculations for the addition by itself and to install separate HVAC equipment for the addition which does not connect into the existing HVAC system.

The second is to calculate heating and cooling loads for the existing-plus-addition and install HVAC equipment for the whole dwelling unit which meets those loads. It is acceptable to use existing heating equipment to heat the existing-plus-addition, provided the existing equipment meets or exceeds the design heating load per *UBC* requirements (see Section 2.2).

Cooling load calculation requirements are specified in the *Standards* when cooling equipment is installed. If you are using an existing air conditioner to cool an addition, cooling load calculations for the existing-plus-addition are recommended.

NOTE: When existing heating and/or cooling equipment serves an addition, the existing equipment need not comply with the mandatory or compliance requirements of the *Standards*.

Electric Resistance Space Heating

Electric resistance space heating may not be installed in or in conjunction with additions unless it is shown to comply with the energy budget using the point system or a computer method.

7.5 ALTERATIONS

In the *Standards* (see §101(b)), alterations are distinguished from additions as remodels, or replacements which do not increase both the building's conditioned volume and conditioned

floor area. Alterations include changes to the building envelope, space conditioning system, water heating system and lighting system.
In any alteration:

- (1) *All the mandatory requirements that apply to the component being changed must be met.*
- (2) *All new fenestration products must have a U-value equal to or less than 0.75.*

Mandatory Measures

Any building alteration must comply with the relevant mandatory measures listed in §111 through §118 and §150 of the *Standards*. See Chapter 2, *Mandatory Measures*, for a full discussion of the required features and the Mandatory Measures Checklist (MF-1R) form. See also Chapter 1, Section 1.3, for a discussion of the Certificate of Compliance (CF-1R) required with all building permit applications subject to the *Standards*.

Fenestration Requirements

Another requirement for building alterations is that any new windows, skylight, glass door or other fenestration installed as part of an alteration must have a rated U-value of 0.75 or less (see Section 8.5 on Fenestration and §152(b) of the *Standards*). For the purposes of compliance for alterations, dual glazed greenhouse windows and skylights may be assumed to meet this requirement.

Fenestration products repaired or replaced, not as part of an alteration, are not required to meet a maximum U-value level (see Examples 7-3 and 7-4).

Example 7-3: Alteration with New Windows

An existing building has all single-pane windows. All of the windows will be replaced, and one wall will be altered to have french doors in place of an existing window.

The 0.75 U-value requirement applies only to the window replaced as part of an alteration. Therefore, with the exception of the french doors, the 0.75 U-value does not apply to the replacement windows. Mandatory requirements must still be met by the altered fenestration product (french door).

2.4 LIGHTING MEASURES

Lighting §150(k)

Installing energy-efficient lamps and fixtures can reduce lighting energy costs without sacrificing the quality or quantity of light available. As indicated in Table 2-5, a 40 watt standard fluorescent lamp is over four times as efficient as a 100 watt standard incandescent lamp.

Kitchen Lighting

The *Standards* require that general lighting in kitchens have an efficacy of *at least 40 lumens per watt* and be controlled by the most accessible switch(es) in the kitchen. The light switch location determines how the occupant will use the lighting. If more than one set of light fixtures exist which provide general lighting, those controlled by the most accessible switch are considered general lighting. Luminaries used only for specific decorative effects (and which are not the only luminaries in the kitchen) need not meet this requirement.

General lighting is lighting designed to provide a substantially uniform level of light distribution throughout a space. This can be achieved by

light fixtures in the ceiling or around the perimeter of the room. Lighting fixtures under cabinets may meet the general lighting requirements if they provide uniform light distribution in the kitchen (see Figure 2-11). A luminaire which is the only lighting in a kitchen will be considered general lighting.

Bathroom Lighting

The *Standards* require that each room containing a water closet must have at least one luminaire with lamps with an efficacy of *at least 40 lumens per watt*. As an alternative, this requirement may be met by installing the high efficacy luminaire in an adjacent room that has complementary plumbing fixtures.

If there is more than one luminaire in the room, the high-efficacy luminaire must be switched at an entrance to the room.

General

Luminaries installed to meet the 40 lumens per watt requirements cannot contain medium base incandescent lamp sockets, and must be on separate switches from incandescent lighting.

Table 2-5. Typical Efficacy of Luminaries

Light Source	Type	Rated Lamp Watts	Typical Efficacy Lumens/Watt ¹
Incandescent	Standard	40 - 100	14 - 18
	Halogen	40 - 250	See Note 2
Fluorescent (Lamp/Ballast Systems)	Full-Size, 4' Long	32 - 40	69 - 91 ³
	U-Shaped T-8 Bipin	16 - 31	78 - 90
	Compact Fluorescent	5 - 9	26 - 38
	Compact Fluorescent	13 +	42 - 58
Metal Halide	Metal Halide	32 - 175	50 - 90
High Pressure Sodium	White High Pressure Sodium	35 - 100	36 - 55

¹ Includes power consumed by ballasts where applicable.

² Halogen capsule incandescent lamps may be the most efficient light source for highlighting applications. Most halogen lamps are designed to produce a beam of directed light. Manufacturer's data typically list the "candlepower" intensity of that beam, rather than lumens (lumens measure total light output in all directions). The standard halogen capsule lamps will not exceed a maximum of 20 lumens/watt. A new technology using infrared reflecting films on the halogen capsules has increased output up to 30 lumens/watt for some high wattage lamps.

³ Efficacy of fluorescent lighting varies depending on lamp and ballast types.

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.		
§150(b): Loose fill insulation manufacturer's labeled R-Value.		
* §150(c): Minimum R-13 wall insulation in framed walls (does not apply to exterior mass walls).		
* §150(d): Minimum R-13 raised floor insulation in framed floors; minimum R-8 in concrete raised floors.		
§150(l): 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.		
§116-17: Fenestration Products, Exterior Doors and Infiltration/Exfiltration Controls		
a. Doors and windows between conditioned and unconditioned spaces designed to limit air leakage.		
b. Manufactured fenestration products have label with certified U-value, and infiltration certification.		
c. 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 §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.		
Space Conditioning, Water Heating and Plumbing System Measures		
§110 -13: HVAC equipment, water heaters, showerheads and faucets certified by the Commission.		
§150(i): Setback thermostat on all applicable heating systems.		
§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).		
2. First 5 feet of pipes closest to water heater tank, non-recirculating systems, insulated (R-4 or greater).		
3. All buried or exposed piping insulated in recirculating sections of hot water system.		
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.		
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..		
§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.)		
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.		