



Project Address	Permit No.
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**Projects that need to comply with the State Energy Efficiency Standards**

All residential additions to an existing living unit shall comply with the Energy Efficiency Standards. This worksheet addresses small additions with less than 1,000 sf of new conditioned floor space. The standards on this worksheet represent the simplest method of documenting compliance with the state Energy Efficiency Standards and may be used by an applicant. If this simplified form is used, the applicant must comply with all applicable improvement and/or conditions listed below. There are other methods available including prescriptive packages, a point system and computer programs. However, these methods are complicated and normally require the services of a certified energy consultant to provide compliance documentation.

**Construction Activity and Minimum Standards**

**Comply with each and every applicable condition listed below - no exceptions.**

<b>Windows</b>	Maximum area of all new windows, skylights and glass doors combined can not exceed <b>20%</b> of the new floor area plus any existing removed windows. Windows shall be dual glazed at a minimum. Window upgrades may be needed (see <i>Space Heating or Cooling</i> below). Caulk window frames.
<b>Doors</b>	Any new exterior door shall have weather stripping at all four edges. Caulk door frame.
<b>Ceilings</b>	All new ceilings shall be insulated with minimum <b>R-30</b> insulation.
<b>Walls</b>	All new exterior walls shall be insulated with minimum <b>R-13</b> insulation
<b>Floors</b>	All new raised wood framed floors shall be insulated with minimum <b>R-19</b> insulation
<b>Lighting</b>	If a kitchen and/or bathroom is added, primary lighting shall be provided by fluorescent fixtures.
<b>Replace Water Heater</b>	Any existing water heater which is replaced shall meet state Appliance Efficiency Regulations. The first 5 feet of hot and cold water lines at the water heater shall be insulated with R-4 pipe insulation. Water heater shall be strapped to wall. Temperature and pressure relief valve and drain line shall be installed. If a new water heater is installed, in addition to the existing water heater, this simplified form cannot be used.
<b>Replace Space Heating or Cooling</b>	If new ducts are connected to an existing space heating and/or cooling system, the following standards shall be met: a) setback thermostat installed; b) new ducts shall have minimum R-4.2 insulation; c) new ducts and fittings shall be sealed air tight; d) existing duct and fittings shall be resealed; e) entire duct system tested by certified tester for maximum 6% leakage. As an option, applicant may install upgraded windows rather than perform improvements in "d" and "e" above. Upgraded windows shall have a minimum U rating of 0.55 and the label identifying window performance shall remain attached to the windows until after inspection by the City. Replacement of an existing space heater and/or air conditioner is acceptable provided the replacement unit meets state Appliance Efficiency Regulations and is sized to meet design load. <b>No</b> electric resistance heating units may be installed. If a new space heater and/or air conditioner is installed, in addition to an existing unit, this simplified form cannot be used.
<b>Fireplace</b>	If a masonry or factory built fireplace is installed, it shall have metal or glass doors covering the entire opening of the firebox and which can be closed when the fire is burning. A combustion air intake shall be installed to draw air from the outside of the building directly into the firebox (not required if fireplace is installed over a concrete slab and not located on an exterior wall). Units shall have a flue damper with readily accessible control.



This worksheet can be used for additions to existing single family dwellings when the new conditioned floor space does not exceed 1,000sf. Each and every applicable condition must be complied with. Exceptions and substitutions are not allowed. This form replaces the Certificate of Compliance, CF-1R form and the Mandatory Measures Summary MF-1R form. This form shall be attached to the approved drawings.

Revised February 14, 2006

Project Address		Date	
Project Description	New Conditioned Floor Area	Compliance Method <b>Prescriptive Package D</b>	Climate Zone <b>3</b>
<b>Construction Activity and Minimum Standards</b> <b>Comply with each and every applicable condition listed below - no exceptions or substitutions.</b>			
<b>Windows</b>	<sup>a</sup> 20% of floor area = _____ sf <sup>b</sup> Area of removed windows = _____ sf <sup>c</sup> Total window area allowed = _____ sf ( <sup>a</sup> + <sup>b</sup> ) <sup>d</sup> Proposed total window area = _____ sf ('d' must be equal to or less than 'c')  Proposed maximum U-Factor of windows Standard = 0.67, Upgrade to 0.42 in lieu of HERS duct testing <input type="checkbox"/> U-factor = 0.67 <input type="checkbox"/> U-factor = 0.42	Maximum area of new windows, less area of removed existing windows, is 20% of the new conditioned floor area. The maximum U-Factor for new or relocated existing windows is 0.67. Caulk window frames. The maximum U-Factor shall be lowered to 0.42 as an alternate to duct sealing. See section on <i>Heating and A/C</i> .	
<b>Doors</b>	New exterior doors <input type="checkbox"/> yes <input type="checkbox"/> no	New exterior doors shall have weather stripping at all four edges and frame caulked. Doors with more than 50% glass are windows and shall be included in <i>Window</i> requirements.	
<b>Ceilings</b>	Ceiling w/ attic use R-30 <input type="checkbox"/> yes <input type="checkbox"/> no Ceiling/roof use R-19 <input type="checkbox"/> yes <input type="checkbox"/> no	All new ceilings below attics shall be insulated with minimum <b>R-30</b> insulation. New wood framed ceiling/roof assemblies shall have at least <b>R-19</b> insulation.	
<b>Walls</b>	Actual R-value of wall insulation installed = R - _____	All new exterior walls shall be insulated with minimum <b>R-13</b> insulation	
<b>Floors</b>	Raised wood floor <input type="checkbox"/> yes <input type="checkbox"/> no	All new raised wood framed floors shall be insulated with minimum <b>R-19</b> insulation	
<b>Kitchen Lighting</b>	Kitchen added/modified <input type="checkbox"/> yes <input type="checkbox"/> no All fixtures fluorescent <input type="checkbox"/> yes <input type="checkbox"/> no or Fluorescent fixture watts = _____ watts Incandescent fixture watts = _____ watts Percent provided by fluorescent = _____ % (amount provided by fluorescent shall not be less than 50%)	If a kitchen is added or an existing kitchen lighting is completely replaced, no less than 50% of the wattage of all kitchen lighting shall be provided by fluorescent fixtures. If only a portion of an existing kitchen lighting is modified, all new or replaced lighting shall be provided by fluorescent fixtures or 50% of the wattage of all kitchen lighting (new/added/replaced) shall be provided by fluorescent fixtures. Typical fixture wattage = 2' under counter fluorescent = 30 watts Halo recessed 26w fluorescent can light = 39 watts	
<b>Bathroom Lighting</b>	Bathroom added/remodeled <input type="checkbox"/> yes <input type="checkbox"/> no Fluorescent fixture <input type="checkbox"/> yes <input type="checkbox"/> no Occupant sensor <input type="checkbox"/> yes <input type="checkbox"/> no	If a bathroom is added/remodeled, all new or replaced lighting shall be provided by fluorescent fixtures. Incandescent fixtures may be installed if switching is provided by manual-on / auto-off occupant sensors. A bathroom is any room which contains a bathtub, or shower, or toilet, or sink, or combination thereof.	
<b>Indoor Lighting</b>	Fixed lights <input type="checkbox"/> yes <input type="checkbox"/> no Fluorescent <input type="checkbox"/> yes <input type="checkbox"/> no Auto/dim switch <input type="checkbox"/> yes <input type="checkbox"/> no	All permanently installed interior light fixtures shall be fluorescent unless controlled with either a dimmer or occupant sensor switch.	

**Energy Efficiency Standards  
Amended CF-1R & MF-1R Forms  
Residential Additions < 1,000 sf**

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<b>Garage, Laundry or Utility Room Lighting</b>	Garage, Laundry or Utility Room added <input type="checkbox"/> yes <input type="checkbox"/> no Fluorescent fixture <input type="checkbox"/> yes <input type="checkbox"/> no Occupant sensor <input type="checkbox"/> yes <input type="checkbox"/> no	If a garage, utility room or laundry is added/remodeled, all new or replaced existing lighting shall be provided by fluorescent fixtures. Incandescent fixtures may be installed if switching is provided by manual-on / auto-off occupant sensors.
<b>Outdoor Lighting</b>	Fixed lights <input type="checkbox"/> yes <input type="checkbox"/> no Fluorescent <input type="checkbox"/> yes <input type="checkbox"/> no Auto sensor <input type="checkbox"/> yes <input type="checkbox"/> no	All new or replaced outdoor lighting mounted to the exterior of dwelling units shall be fluorescent unless controlled by a motion sensor switch or photo control. Replacement of existing surface mounted light fixtures due to maintenance does not trigger the fluorescent fixture requirement.
<b>Water Heater</b>	Existing water heater replaced <input type="checkbox"/> yes <input type="checkbox"/> no  If replaced, type of existing <input type="checkbox"/> Gas fired storage <input type="checkbox"/> Electric storage  Type of replacement water heater <input type="checkbox"/> Gas fired storage (____ gals) <input type="checkbox"/> Electric storage (____ gals) <input type="checkbox"/> Gas instantaneous tankless BTUH input - _____ <input type="checkbox"/> Electric instantaneous tankless Watts = _____	Replaced water heaters shall meet state Appliance Efficiency Regulations and be installed per plumbing code.  Electric water heaters can be replaced by electrical or gas storage type water heaters, or electric or gas instantaneous tankless water heaters. Gas water heaters must be replaced with gas storage type water heaters or gas instantaneous tankless water heaters. Gas water heaters cannot be replaced by any type of electric water heater.  Gas fired instantaneous tankless water heaters shall have an Energy Factor of 0.80 or higher. Electric instantaneous tankless water heaters shall have an Energy Factor of 0.93 or higher.  If a new water heater is installed in addition to the existing water heater resulting in more than one water heater, then this form cannot be used.
<b>Heating and A/C Units</b>	New or replaced heating and/or air conditioning system <input type="checkbox"/> yes <input type="checkbox"/> no AFUE _____ SEER _____ Input rating of new/replaced heater = _____ BTUH	New or replaced heating and/or A/C equipment shall meet energy efficiency standards. Minimum heater AFUE of 78%. Minimum air conditioner SEER of 13.0. Values may be increased if options to duct sealing and testing are employed. Setback thermostat required. Heat loss calculations may be required to demonstrate that existing or new heating unit is large enough to serve the addition.
<b>HVAC Ducts</b>	Extend or replace existing ducts <input type="checkbox"/> yes <input type="checkbox"/> no	New ducts shall have minimum R-6.0 insulation and sealed air tight. The requirement that if more than 40 lineal ft. of duct is installed or replaced or a heater is replaced, the entire duct system must be sealed air tight and certified by a HERS tester DOES NOT APPLY TO ZONE 3. Duct layout shown on drawings may be required.
<b>Fireplace</b>	New fireplace installed/rebuilt <input type="checkbox"/> yes <input type="checkbox"/> no	Glass doors covering the entire opening of the firebox required. Outside combustion air intake required. Flue damper with readily accessible control required.

A copy of this document shall be attached to the City approved construction documents.

This document shall be retained in perpetuity with the permit record.