

# Energy Efficiency Actions and 2008 Title 24 Changes



## New Solar Homes Partnership Staff Workshop April 10, 2009

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# NSHP Energy Efficiency Actions



## ❖ Typical Energy Efficiency Measures

- By climate zone, custom/production, 2005 vs. 2008
- To be posted on-line
  - HVAC, windows, HERS measures most popular

## ❖ Training: (2008 Title 24 Standards)

- to reduce hurdles to solar system installations
- to improve verification of energy efficiency features of homes
  - *CABEC: Certified Energy Plans Examiners (CEPE)* – software training
  - *Home Energy Rating Systems (HERS)* providers
  - *IOUs / POUs* offer training on 2008 Title 24 Standards



# Home Energy Rating Systems (HERS) Raters



## ❖ **Future NSHP training workshops**

- Help applicants better understand the HERS verification process early in the process.

## ❖ **Better coordination between HERS providers**

- Access to provider registries
- CF-4R-NSHP Above Code Verification Form
  - Coordination between providers
  - Consistency of verification of energy efficiency measures



# 2008 Title 24 Changes

## *Low-rise Residential Buildings*



### Stringency Boost –

**2008 Standards 15% More Stringent Than 2005 Standards**

### Mandatory Measure Changes

- **New - Mechanical Ventilation** – ASHRAE 62.2 Ventilation for IAQ
- **Lighting** – limited changes

### Prescriptive Requirement Changes

- **Higher performance windows**
- **Cool roof reflectance requirement**
  - Varying by roof slope, roofing type, climate zone
  - **Exception:** Roofing area with building integrated photovoltaic panels.





# 2008 Title 24 Changes

## *Low-rise Residential Buildings*



### Prescriptive Requirement Changes

#### **New HERS Requirements (cz 2, 8-15)**

- Refrigerant charge verification

#### **New HERS Requirements (cz 10-15)**

- Air flow and fan watt draw verification

#### **New HERS Requirements (all climate zones)**

- Central fan Integrated Ventilation Systems if installed.



# 2008 Title 24 Changes

## *Low-rise Residential Buildings*



### Performance Method Changes

#### New/Expanded Compliance Options

- Low leakage ducts
- Low leakage air handlers
- Air conditioner right sizing
- Quality Installation of Insulation (QII)
- Building envelope sealing
- Insulation above the roof deck



# Effective August 1, 2009



## **New NSHP Tier Levels for Energy Efficiency Residential New Construction**

- **Tier 1** – 15% better than 2008 Standards
- **Tier 2** – 30% better than 2008 Standards

### **To align with:**

**SB 1 Guidelines, Second Edition, December 2008  
and 2008 Title 24 Energy Efficiency Standards**



# Proposed Energy Efficiency Requirements for Multifamily Common Area Projects



## ❖ Issues:

### ➤ Unconditioned common area spaces

(i.e. lobbies, corridors, pool rooms, parking lots/structures)

- Currently no energy efficiency improvement requirements
- Confusion regarding application submittal requirements

## ❖ Proposal:

### ➤ Implement SB 1 Tier levels for Energy Efficiency for newly constructed commercial buildings

- Tier 1 – 15% better than 2008 Standards
- Tier 2 – 30% better than 2008 Standards
- ✓ Include requirements of **lighting** energy use reductions





2008 Documents Available at  
<http://www.energy.ca.gov/title24/2008standards/>

?? ? QUESTIONS ? ? ?

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