Residential Key Topics

2008 California Building Energy Efficiency Standards

Public Workshop
October 24-25, 2005

Architectural Energy Corporation
C. Reference Computer Program

- An evaluation of EnergyPlus has been completed by PG&E
- Gaps have been identified between the capabilities of EnergyPlus and the requirements of the residential and nonresidential ACM manuals.
- Work is continuing, funded by PG&E, PIER and others
- For 2008, the goal is to enable EnergyPlus based compliance tools to meet the ACM requirements
L. Residential Construction Quality

Existing protocols and calculation methods will be updated:
- Duct Sealing
- Supply Duct Location, Surface Area, and R-factor
- Improved Refrigerant Charge
- Installation of Thermostatic Expansion Valve (TXV) (some questions have been raised about the effectiveness of TXVs)
- Maximum Cooling Capacity
- Building Envelope Sealing
- High Quality Insulation Installation

Adequate airflow through ducts will be considered as a prescriptive requirement

Fan energy will be considered (covered as separate topic)

Advanced framing systems will be considered for credit
Removing the controls exemption for support areas such as laundry rooms, utility rooms, and garages, making energy efficiency sources the only option

Require one high efficacy source on a separate switch in bathrooms larger than 140 square feet (safety issue)