

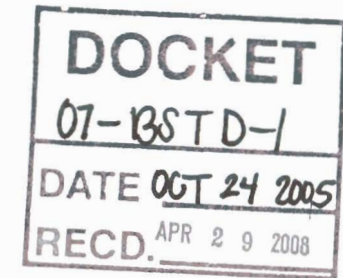
Residential Key Topics

2008 California Building Energy Efficiency Standards

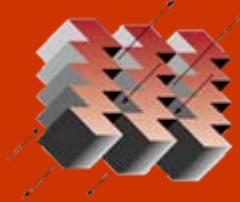
Public Workshop
October 24-25, 2005



Architectural
Energy
Corporation



C. Reference Computer Program

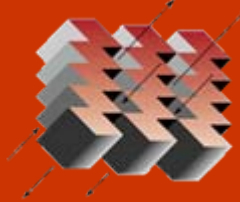


- An evaluation of EnergyPlus has been completed by PG&E
- Gaps have been identified between the capabilities of EnergyPlus and the requirements of the residential and nonresidential ACM manuals.
- Work is continuing, funded by PG&E, PIER and others
- For 2008, the goal is to enable EnergyPlus based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

Res and Nonres



L. Residential Construction Quality

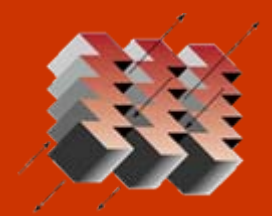


- **Existing protocols and calculation methods will be updated:**
 - Duct Sealing
 - Supply Duct Location, Surface Area, and R-factor
 - Improved Refrigerant Charge
 - Installation of Thermostatic Expansion Valve (TXV) (some questions have been raised about the effectiveness of TXVs)
 - Maximum Cooling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

Residential



P. Residential Lighting Improvements



- **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)**

Residential

