


Building Industry Institute

Protocol Documentation

Energy Efficiency

Houses shall be designed, built and inspected to demonstrate they are at least 15% more energy efficient than the California Title 24 energy efficiency standards and that they meet the other CGB components.

Typical Residential Energy Usage:

Residential energy usage is affected by many interactive energy features incorporated into houses. The list below is typical of single family homes:

1. **Heating, Ventilating and Air Conditioning System:**
 - a. No engineered method or guideline is used to design HVAC Systems;
 - b. Ducts have 12% or greater leakage and substantial loss of efficiency; and
 - c. No standardized Scopes of Work are used for installation contracts.
2. Houses meet minimum Title 24 Energy Efficiency requirements.
3. Windows, insulation, caulking and sealing and water heaters are only inspected for compliance with building and/or plumbing codes.

CGB Energy Efficiency Requirements:
ComfortWise®

ComfortWise is a turnkey program that provides all of the required energy efficiency features of CGB plus marketing support. Please call 1.800.526.6765 for details.

Builders agree to meet the energy efficiency requirements by either: building ComfortWise homes, or by meeting the following five requirements.

1. HVAC system shall be designed to the Air Conditioning Contractors of America Manuals J, S, and D or recognized equivalent protocols. HVAC design shall be stamped by an engineer registered in the State of California.
2. HERS computer analysis shall demonstrate that the home is at least 15% more energy efficient than Title 24 requires, or is equivalent to an ENERGY STAR® Home.
3. The California Energy Commission's "Lowered Duct Leakage" criteria shall be met.
4. Contractor shall use Scopes of Work (www.TheBII.org), and notify installing subcontractors (insulation, windows, and HVAC) that the Scopes of Work will be used as the basis for quality inspections.
5. HERS inspection and diagnostic evaluations shall be made. They include insulation, caulking, windows, water heating, and HVAC systems. Duct blaster and blower door tests shall be performed by a certified HERS rater.

CGB Worksheet Information:

The CGB Worksheet consists of four sections (energy efficiency, air quality, waste management, and water conservation). CGB builders shall complete *each* section for the application to be valid. The builder shall complete one application and worksheet for each home plan in the community (subdivision). If the builder chooses to type in the information then print the form, calculations will be made automatically. If the builder chooses to print the form and fill it out by hand, the builder shall perform the calculations.

How to complete the Energy Efficiency Requirements section of the Plan Worksheet

Enter your % above T-24 from the Title 24 Form CF-1R in the space provided.