The state’s energy efficiency standards for new buildings and appliances have saved consumers billions in reduced electricity and natural gas bills. The building standards include better windows, insulation, lighting, air conditioning systems and other features that reduce energy consumption in homes and businesses. Since 1978 these standards have helped protect the environment by reducing more than 250 million metric tons of greenhouse gas emissions (or the equivalent of removing 37 million cars off California roads).

**HIGH EFFICACY LIGHTING**
All lighting in new homes must be efficient. Installation of high quality lighting with controls that nearly halve the energy required for lights in new homes.

**HIGH PERFORMANCE WALLS**
Increased wall insulation keeps the sun’s heat out of your home during hot summer months and warm air in during winter months, improving comfort and reducing energy consumption.

**HIGH PERFORMANCE ATTICS**
Attics with additional insulation at the roof deck keep attic temperatures closer to ambient, improving the home’s heating and cooling performance. Extra insulation at the roof deck, in addition to the ceiling insulation, will reduce the attic temperature by 35 degrees or more during hot summer days.

**IMPROVED WATER HEATING SYSTEM EFFICIENCY**
Installing tankless water heating technology and better distribution systems reduces the energy needed to provide hot water to the home by about 35 percent.

These are cost effective measures that home builders may consider to achieve new levels of efficiency. They can be traded for other efficient technologies such as higher efficiency HVAC units, higher efficiency water heaters, etc.

**CALIFORNIA’S 2016 — RESIDENTIAL BUILDING ENERGY EFFICIENCY STANDARDS**

The California Energy Commission's 2016 residential building energy efficiency standards include:

- Increased wall insulation
- Manchester™ high performance walls
- Attics with additional insulation at the roof deck
- High performance attics
- Installing tankless water heating technology and better distribution systems

These measures provide significant energy savings and environmental benefits.

**SAVINGS OVER A 30 YR. MORTGAGE**
$7,400
**INITIAL COST**
$2,700
The state’s energy efficiency standards for new buildings and appliances have saved consumers billions in reduced electricity and natural gas bills. The building standards include better windows, insulation, lighting, air conditioning systems and other features that reduce energy consumption in homes and businesses. Since 1978 these standards have helped protect the environment by reducing more than 250 million metric tons of greenhouse gas emissions (or the equivalent of removing 37 million cars off California roads).

**DOOR AND WINDOW INTERLOCKS**

Sensors on doors and windows adjust the thermostat to turn off the heating or cooling if a door or window is left open for more than five minutes. This allows occupants to take advantage of outside temperatures and save on heating and cooling costs.

**DIRECT DIGITAL CONTROLS**

For larger heating, ventilation and air conditioning systems, installing digital controls enables communication with building energy management systems, allowing managers to tailor the building’s heating and cooling demands and prevent waste.

**ELEVATORS**

Efficient ventilation fans and lighting sources installed within the elevator, along with controls that turn off the cab lighting and fans when the elevator is empty, save energy both when the elevator is in use and when empty.

**OUTDOOR LIGHTING**

The general power allowance for outdoor lighting has been lowered to include newer, more efficient luminaires which are widely available and commonly used for outdoor lighting applications.

**ESCALATORS**

Requires escalators and moving walkways in transit areas to run at a lower, less energy-consuming speed when not in use.

These are cost effective measures that builders may consider to achieve new levels of efficiency. They can be traded for other efficient technologies such as higher efficiency HVAC units, higher efficiency water heaters, etc.