



## **SMART LIGHTING TECHNOLOGIES**

Home lighting has a direct effect on the overall quality of life. Did you know that the aging eye needs three to five times more light than that of younger adults to perform the same visual task with equal speed and accuracy? Eskaton's collaborating partner, California Lighting Technology Center (CLTC), researches and explores lighting systems that benefit the older consumer. One of the lighting systems demonstrated in the home, the smart vanity light, was originally piloted in an Eskaton community. Below are some smart lighting technologies featured in the Eskaton National Demonstration Home.

### **LED LIGHTING (Light Emitting Diode)**

- LED technology uses very little energy, is small in size and has a very long lamp life.
- LEDs continue to improve in efficiency and color quality, which makes them good candidates for down light and under cabinet applications in living rooms, hallways and kitchens.
- The long life of LED products can be more than 20 times longer than that of incandescent and five times longer than most compact fluorescents.

### **PROTOTYPICAL LED "SMART" VANITY LIGHTING**

- The smart vanity fixture was prototyped by CLTC and features an LED down light that acts as a night light.
- For additional light, the main lamp can be turned on, which illuminates at a very slow pace giving the eye time to adjust properly.
- High quality compact fluorescent lights (CFL) are used for the main lamp.
- The combination of high efficiency CFLs and LEDs generate a 50% energy savings resulting in lower electrical costs and fewer light bulb replacements per year.

### **PROTOTYPICAL LED CARRIAGE PORCH LIGHT**

- The carriage porch light combines long life LEDs, photocell and motion sensors to maximize energy savings.
- Photocell technology ensures that the unit only operates at night.
- Motion sensor technology turns on the main lamp when pedestrians or vehicles approach.
- The LED standby light remains on throughout the night regardless of whether the main light is turned on. This ensures that, even if the main lamp burns out, there is still enough light to indicate home and pathway locations.
- This combination of features reduces energy consumption, reduces light pollution and increases safety for the resident.