



Getting
the facts when
shopping for
LEDs

By DENNIS ALLEN
Photo by Jim Bartsch

Natural and artificial lighting in our living and working spaces is critical to our well-being. Natural lighting normally comes into our structures through windows and skylights. Locating these openings on two adjoining or opposite walls of a room or on a ceiling and wall produces the most effective and comfortable lighting. If remodeling or building from the ground up, it's wise to pay attention to this strategy when locating windows and skylights. Apartment dwellers have fewer options but shouldn't automatically close drapes or blinds during the day for reasons of privacy.

We want artificial lighting to do many things: create ambiance, avoid glare, provide good task illumination, be efficient and gentle on our electrical bills, and when provided by wall or ceiling mounted fixtures, be attractive. For these reasons, it's advisable to work with a lighting consultant on remodeling and new construction projects. Unfortunately, there aren't many "experts" who have combined experience in and knowledge of efficiency, effectiveness, and aesthetics.

There have been big changes in lighting technology in the past several decades. LEDs (light emitting diodes) are now available with great longevity, low power usage, and a wide range of color hues, even matching the beloved color rendering of incandescent lamps. Today, most LEDs are made in China. Quality can be uneven, however, as corners are sometimes cut in the push to drive down prices. Quality is always important, but especially if a bulb is to last for its advertised life expectancy.

When selecting an LED bulb, the best advice is to learn to read and understand the "Lighting Facts" label on the packaging. The two most important specifications to review are the following:

Color Rendering Index (CRI): Look for a CRI of 90 or higher. While 80 is more commonly available, this rating is linked to uneven quality and harshness of color.

Correlated Color Temperature (CCT): Most residential customers prefer 2,700K, which most closely emulates incandescent coloring. You may encounter 4,000K and 5,000K LEDs advertised as "daylight." This may sound appealing but most users find LEDs in this "whiter end" of the color spectrum too stark for residential use.

If an LED bulb does not have a "Lighting Facts" label, that should be a warning of a product to avoid. The Energy Star stamp, on the other hand, indicates quality.

Most but not all LED bulbs are dimmable. If dimming is desired, be sure to check for a "dimmable" symbol on the packaging.

Lighting contributes greatly to how we feel in an indoor space. Choosing the best products is important, especially as one ages and the eyes need more lumens to perform tasks well. LEDs have taken over artificial lighting in the past decade and for good reason, but there are pitfalls to be avoided. The compatibility between switches, transformers, fixtures and bulbs is complex so working with qualified professionals helps with peace of mind.

Dennis Allen is the founder of Allen Construction Company. www.buildallen.com