

Awaken Your Interiors: 5 Tips for Designing with LEDs

Bonnie Littman of USAI Lighting brings us five tips for designing with LEDs.

by New York Spaces



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Energy-efficient LEDs continue to grow in popularity as technological advancements now allow them to beautifully render colors, warm and cool to mimic daylight, emit flicker-free illumination and even enhance health and wellbeing.

Navigating where and how to best apply LEDs when renovating is not always easy, though, so I've shared my five best tips for designing with this state-of-the-art light source.

1. Layer your light

A well-lit room layers and blends three different types of light, as explained by renowned lighting designer Richard Kelly. He coined these terms:

Ambient luminescence: General, background lighting that covers the entire room with soft, even and uniform illumination. Use a downlight (a light placed or designed so as to throw illumination downward) to create this pool of soft light.

Focal Glow: Draws attention, visually emphasizing areas of significance, like art and décor, and diminishing less important areas. Use a wall washer to accentuate art and an adjustable accent fixture that swivels and tilts to illuminate a sculpture or flowers on a table.

Play of brilliants: The striking effect from decorative lighting such as a shimmering chandelier or a beautifully lit, glittery glass wall. Incorporate this "architectural jewelry" to excite people and spark their curiosity.



This Aspen, CO home effectively layers all three lighting types for a stunning aesthetic.

Photographer: Steve Munding Photography

2. Pay attention to age

The visually impaired and elderly need more light than average to see because less light reaches the back of their eyes. Keep this in mind when designing lighting for your various occupants, as the lighting requirements for a senior's bedroom will be quite different from those of a child's playroom.

3. Match your lighting with your lifestyle

Each room in a home has its own lighting needs – and you do too, depending on your mood and activities.

Let's start with the kitchen -

When cooking or cleaning up, a bright punch of illumination makes the job easier. Recessed fixtures are my favorite way to light a counter-top. With a standard 8' - 9' ceiling, fixtures with a small aperture (the hole in the ceiling through which light passes) and 50 degree beam provide perfectly uniform lighting.

When unwinding over a meal or hosting a dinner party, it's important to create a relaxing environment. Consider a new LED technology that has recently become available called warm glow dimming. It causes LEDs to resemble the candlelit orange glow that incandescent and halogen lights emit when the LEDs are dimmed. The warm tone of incandescents and halogens is caused by a flaw in the burning of their carbon filaments; it is well admired as its orange color mimics the range of a romantic fire.



Recessed lighting illuminates the kitchen island.

Photographer: Atsushi Tomioka

In the bedroom, apply dimmable lighting with adjustable color temperature (color temperatures (K) indicate how "cool" or "warm" the light color is when illuminated; the higher the number, the whiter and then bluer the color) and lumens (brightness) to change your lighting as you wake, hang out, read and more. People are more relaxed when the light is warmer (2700K and lower), and more energized and productive when light is cooler (3000K and higher). You can also try indirect lighting in the bedroom for a soothing atmosphere (mount at least 6" from the ceiling for a cove and 2" for an uplight sconce to avoid hot streaks of light). Indirect lighting aims up and illuminates the ceiling softly.



Lighting in three color temperature and brightness settings

4. Clean up your ceiling

Using recessed LED lights can "clean up your ceiling" in more ways than one. Downlights with small apertures can be as tiny as 1", with thin trims or none at all to integrate seamlessly into architecture, creating a minimal, clean aesthetic. Whisper-thin trims and lenses that are flush with the ceiling also create a discreet look and unassuming presence.

Additionally, fixtures with color tunable lighting (that feature a range of color temperatures and lumens) remove the need for multiple lightbulbs in fixed color temperatures.



*Small light fixtures are discreetly featured in the ceiling of this residence.
Photographer: Brian Vanden Brink*

5. Bring the outdoors in

Research proves that surrounding ourselves with natural daylight over 24 hours synchronizes our circadian rhythms (the internal clocks that prompt our sleep/wake cycles), optimizing our health, mood and wellbeing. But what if you live in a tall skyscraper with limited access to daylight or in a basement with no windows?

Choose color tunable LED products that can mimic daylight indoors. Look for ones that range from 2200K - 6000K that can dim to best simulate the 24-hour cycle of the sun. Set them to a high intensity and color temperature to copy sunlight, and for a faux sunset, dim them low, setting them to 2200-2700K.

