

Bright Ideas

Smart Choices In Restaurant Lighting

Whether you choose off-the-shelf or custom, you'll want your lighting design to be on-trend with current styles in restaurant interior design. Your guests are blogging, posting, tweeting and otherwise spreading the word about how your restaurant looks and feels so you've got to have lighting that's both attractive and up to date.

By Stephani Robson

Starting up a restaurant is an expensive proposition and one of the big investments is usually the interior design. Good restaurateurs often fall back on the two interior design elements that offer the greatest flexibility for the lowest installation price: paint and lighting. That also applies if you are redecorating and redoing your interior. You should update the look of your restaurant every seven to eight years to keep it fresh for existing customers.

While most people feel comfortable picking out and applying paint, choosing and installing lighting may feel much more daunting. Because today's restaurants rely heavily on creative light solutions, it's a good idea to build your lighting know-how and learn from what other restaurant operators are doing to make their dining areas shine.

ENLIGHTENMENT

Before examining current trends in restaurant lighting, it's helpful to nail down a few terms and metrics unique to lighting so that you can select the right lighting elements with your designer or from a supplier when the time comes. Let's start with the source of the light itself. What everyone calls a "bulb" is actually more correctly known as a "lamp." Lamps come in a variety of types, wattages, colors and shapes, and making the right choice for your operation requires a bit of background.

Lamp type. Today's choices in lighting types continue to expand. Walk through the lamp aisle of your local home improvement warehouse store and you'll see conventional incandescent (although not for much lon-

ger; these are being phased out because they are not energy efficient), compact and linear fluorescent, halogen, light-emitting diode (LED), and ceramic metal halide (CMH) lamps, and even some specialty lamps for uses like illuminating parking lots.

Incandescent lighting, which includes halogen, generates a great deal of heat along with light and for this reason is not an economical choice, although most people like the light quality that comes from incandescent lamps. Fluorescent lamps give off a very even light and are a good choice for utility applications but lack the flexibility and drama of other lamp types. LED lamps are expensive to buy but have a long life and use a fraction of the energy of most other lamp types, and can look great in a restaurant interior. Lastly, CMH lamps tend to be most appropriate in settings like retail areas where their intense light shows off products to best effect.

Lamp brightness. When we talk about a light's brightness, we're talking about how much light is given off by the lamp when it is fully exposed. It's a common misconception that the wattage of a lamp refers to its brightness but wattage is really just a measure of energy use; what we perceive as brightness is actually measured in lumens or, outside the United States, in lux. (Another measure of brightness that you'll sometimes see is the foot-candle. There are differences in what lumens, lux and footcandles actually measure, but for our purposes we can treat all of these as measures of lamp brightness.)

A 75-watt incandescent lamp might give off 1,050 lumens, for example. You can find the lumens for any given

lamp usually right on the packaging. Select the lamp brightness that will give you the necessary lumens per square foot for the space you are lighting while recognizing that shades and other parts of the fixture might diffuse or dampen the lamp's brightness.

Floors in restaurant dining areas should be around 15 lumens per square foot while the light on the tables needs to be around 30 lumens per square foot but not much more — you want your guests to see the menu and the food, but not feel like they are in a hospital operating room.

A big concern with lighting design is avoiding glare. If the contrast between what we're focusing on and the light behind it is too great, our eyes have trouble adjusting. That's why we avoid mounting a TV or monitor across from a window: The brightness of the daylight makes it impossible to see the screen. A more typical source of glare in a lighting scheme is from unshielded lamps that are in a direct line of sight from your guests' seats.

Some states will have local codes that will specify a minimum number of lumens per square foot for public spaces so it's a good idea to check. Multiplying the square footage of the space you want to light by the needed lumens per square foot will give you a total number of lumens that your lamps will need to provide. Try to find the lowest-energy lamps you can that will give you the desired level of brightness after accounting for any diffusion or dampening effects of the fixture or its shade. You can buy an inexpensive light meter to see how your chosen fixture affects the light given off by your selected lamp, or if you have a smartphone, you can buy a light meter app online.

Lamp color. If you've ever seen a large space lit with fluorescent lighting, chances are you've seen the patchwork effect that results when the maintenance crew replaces burned-out lamps with ones that give off a slightly different color of light. Light color is called its correlated color temperature (CCT), which is expressed in kelvins (K). Warm light is generally 3,000 K or lower, typical fluorescent is around 4,000 K and what is termed "artificial daylight" or "full-spectrum" lights are around 5,500 K or more.

A lamp's light color is not to be confused with its color rendering index or CRI, which is how well the light renders colors of the elements it shines on. A CRI of 100 means colors are rendered most effectively — incandescent light and halogen light generally have CRI = 100; different types of fluorescent are lower (some as low as 50).

Fixture types. The fixture is the lighting element that holds the lamp in place and supplies it with its power source. Fixtures can be suspended from the ceiling ("pendant"), attached to the wall (a "sconce"), recessed into the ceiling (typically called a "can," depending on the shape), or attached to some kind of track so that lamps can be finely positioned for just the right effect.

Lighting controls. Once you have a lamp in a fixture and it is connected to your building's electrical service, you'll want some way to control when the light is on and, ideally for restaurants, the light level provided. It is common practice to put restaurant lights on a dimmer switch to give the operator maximum control over ambience while saving energy. Many restaurants have taken this a step further and installed sophisticated programmable lighting systems that allow you to create preset lighting scenes and control them from your laptop, tablet or smartphone.

With these components, you can create just about any kind of lighting effect in your restaurant. There are tremendous online resources for purchasing just about any kind of lamp and any kind of fixture, and local craftspeople are often well-versed in creating custom light fixtures, which don't have to be wildly expensive.


PRINCIPLES OF GOOD LIGHTING

In addition to identifying the kinds of fixtures and lamps you want, you'll need to decide where to install them. The basics of good restaurant lighting are fairly simple: provide multiple light sources, ensure you have contrast and keep light levels comfortable.


The best lighting design has three distinct components. Ambient lighting is your lighting plan's foundation and is the generally consistent light level that allows people to see the whole space and safely use it. Ambient light can come from natural daylight as well as from either direct fixtures that shine light directly onto surfaces, or from indirect fixtures that bounce the light off the ceiling or walls. The next component of good lighting is task lighting, which is brighter light provided just where you need it, such as on the tabletop or at the underbar. Lastly, you'll want some kind of accent lighting to make particular elements of your restaurant's décor stand out. Picture lights, uplighting on walls or columns, and colored lighting on your back bar are all examples of accent lighting. A good lighting designer will balance all three of these types of lighting to create a dynamic look that also al-

lows you to run the restaurant efficiently and safely. You want some variation in light levels around the space to create visual interest and keep the room from looking too flat or uniform.

A big concern with lighting design is avoiding glare. If the contrast between what we're focusing on and the light behind it is too great, our eyes have trouble adjusting. That's why we avoid mounting a TV or monitor across from a window: The brightness of the daylight makes it impossible to see the screen. A more typical source of glare in a lighting scheme is from unshielded lamps that are in a direct line of sight from your guests' seats. A mismatch between the size of the lamp and its shade is often the culprit here, as is choosing too bright a lamp for the application. Except in special cases, you shouldn't be able to see the lamp inside its fixture from any seat in the house.



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TRENDS IN RESTAURANT LIGHTING

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LED all the way. Perhaps the biggest trend in designer lighting is spelled L-E-D. Incredibly flexible, energy efficient and downright gorgeous, light-emitting

diode lighting is rapidly becoming the light of choice for restaurant interiors. Major chains are using it to reduce energy costs while bringing their front-of-house designs up to date.

Red Robin, for example, is saving more than \$100,000 a year in energy costs by replacing existing lamps with LEDs in more than 150 restaurants. LED lighting offers an enormous array of colors and patterns, and can be applied in standard fixtures or in prewired tapes and matrices to create just about any lighting effect you want. It also gives off less heat than other lamp types, which also can save you money in cooling costs. However, some LED lamps can be problematic on a dimmer, and they are much more expensive to purchase than halogen or compact fluorescent lamps.

Industrial fixtures used in creative ways. Just as today's popular menu ingredients are authentic and used in innovative ways, so too are the light fixtures in many of the hottest new restaurants. A common theme is "reconsidered industrial." The kind of lights you'd expect to see on a factory floor or a high school gymnasium in 1965 are being used in restaurant dining rooms at both the casual and more upscale ends of the spectrum. Lockeland Table in Nashville, Tennessee, is a great example of this trend, with institutional-looking domed pendants hanging above the dining room. Forequarter in Madison, Wisconsin, takes a different approach, with utilitarian ceiling fixtures mounted on the wall above a banquette, connected by exposed conduit runs. The look is earnest and rough-hewn but still stylish.

Grouping pendant fixtures. The current trend for midcentury modern design has brought back the multi-level pendant cluster as a viable lighting choice, especially in parts of the restaurant you want to highlight. Hanging a group of similarly shaped and sized pendants so that their shades and lamps are at different heights can be a dramatic accent over a booth or host area. Other designers install pendants in a regimented line that emphasizes their uniformity.

Clear glass shades. Say goodbye to the fabric or craft paper lampshades of yore. Now it's all about clear glass: hand-blown into wire cages, repurposed from cake plate covers or vintage barware, or shaped into round globes or fat teardrops. Combined with a warm-colored lamp inside, these glass shades add sparkle to the dining room and maximize light output. Glassblowers are once again in demand for producing custom shades and if you can dream it, chances are a glass artist can make it to your specifications, although to be on trend, stick with clear rather than colored or translucent glass. (You might think that this trend toward clear glass shades would translate into glare because these shades make the lamp not only visible but actually highlight it. Here's where making the right lamp choice becomes paramount. Work with your lighting specialist to make sure that you're selecting the right kind and brightness of lamp

and that these lamps are relatively easy to obtain and replace as time goes by.)

Dramatic uplighting at bars. It's well-established that making the back bar into a focal point really sells drinks, particularly those containing top-shelf premium liquors. Restaurant lighting designers have long used creative approaches to highlighting the bar including colored backlighting or track lights that pinpoint the telltale shapes of many of the best-known call brands and that highlight gleaming glassware. Currently, the trend in bar lighting is toward uplighting along the back bar.

LED lights are placed along the rear edge of the back bar shelving and spaced so that they provide pops of light rather than a continuous wash, and when positioned directly behind a bottle of any transparent liquor, these lamps create a striking effect that merchandizes your call brands very effectively. Some designers combine colored LED lighting with frosted glass or Plexiglas panels behind the back bar to wash the entire area with color and texture.

Using wall washers on textured walls. Another way that restaurant designers are using uplighting is to show off the texture of popular wall finishes like untreated wood or hand-applied plaster. (Downlighting or sidelighting can work here too, but uplighting seems to be more popular at the moment.) The sharp angle of the light catches any variation in the surface it shines upon, creating sharp shadows that give the walls life and dimension. These wall washer fixtures are sometimes tucked behind booths or banquettes, or embedded in the top of wainscoting. And while you can get LED wall washers in almost any color, most restaurants use only white or gently warm light: food and people look much better under white light than they do under intense colors. But if your operation does a lively bar business on weekend nights, you may want to consider using some color in those areas, with blue, red and magenta being popular choices for high-end lounges.

Exposed incandescent on cords. It's not clear where the trend toward ultra-minimalist light fixtures began, but now literally hundreds of places use a simple lamp on the end of a suspended cord as a key element in their lighting designs. The lamp is always incandescent, which gives off a warm, soft glow, even more so when so-called "radio" or "Edison" lamps are used. These lamps have an exposed filament and a lower light output than the type of incandescent lamps that up until recently were the standard in most people's homes, and lend a retro feel to dining spaces. While Edison lamps on their own will not be sufficient to light much of anything, they make great accents when suspended over a bar or communal table.

Low light levels in general. The one lighting trend that gets taken a bit far in some operations is the penchant

for very low light levels. A dark environment can be seen as sexy or dramatic, but needs to be coupled with pinpoint lighting to bring tabletop light levels high enough for guest comfort and with adequate ambient light for safe circulation. The popularity of Edison lamps has led some operators to underlight their dining rooms to make these lighting elements stand out in an otherwise dim space. Make sure your lighting conforms to state regulations regarding lumens per square foot, and download a light meter app for your smartphone or tablet so you can make sure that staff aren't turning the dimmers down too low during service.

A FINAL NOTE ON COSTS

Having the latest, coolest lighting may seem like a great way to make your restaurant stand out in a crowded field, but make your lighting design decisions with care. The power needed for front-of-house lighting (and sometimes the cooling load that some lighting choices impose) can add up to as much as one-third of your electric bill each month, and full-service restaurants tend to have among the highest electrical costs per square foot of any building type, with QSRs (quick-service restaurants) close behind. Detailed consideration of issues like replacement cost and maintenance needs should be made before you commit to a lighting design; if you need special equipment to change a lamp, you won't do it as often, or you'll do it all at once whether they need it or not, which isn't a particularly sustainable practice.

In general, LEDs will be your most economical choice for front-of-house lighting in the long run. True, their initial purchase price is several times that of other lighting types, which for a start-up operator can feel like too much to spend when capital budgets are tight. But the long life and much reduced energy use of these lights combined with their minimal effect on cooling load make LEDs cheaper than incandescent over time. You'll be replacing incandescent more often too, so there's the time and labor involved with swapping out lamps to be considered as well as energy costs.

If you work with a design professional, they can help you determine how many fixtures you'll need and what they might look like, but it pays to know something yourself about the right lighting for your operation.

Plan your lighting design concurrently with laying out your front-of-house seating so that you don't end up overlighting or underlighting the space but instead maximize the value of each and every lamp and fixture you choose. Unless they really improve the appeal of your restaurant, those antique chandeliers from Venice had better be something you really love. The next buyer might not consider them worth paying for. Try to make physical improvements that increase the asset value and sustainability of revenue of your business, such as replacing incandescent with LED lights.

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