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Shedding New Light on Old Kitchens

main
story

by Carolyn Murray

Folks who rehabilitate an old-house kitchen often breeze past one of the most important concerns--the lighting. It's a common oversight because lighting technology is little understood by homeowners, and lighting's potential for enhancing kitchen ambiance is often missed by architects and designers. Then, too, homeowners mistakenly believe that they have to forego a kitchen that looks of a period with the rest of the house in order to use it in a contemporary way. The truth is that with good design, common sense, and some of the latest lighting technology, your kitchen can remain the center of life in your house while providing plenty of light for your work.



Why flood a kitchen that's clearly from the 1930s with Disco-era downlights? Instead, use the original milk-glass ceiling and sink fixtures to provide authentic ambient light, while almost invisible can lights stand ready to shine on the stove.

Even though kitchens and electric light go back over 100 years (see [sidebar](#)), none of the historic approaches will provide adequate light for the way we live today. The question, then, is how to achieve an improved quality of light while maintaining or restoring the period ambiance of your kitchen. The answer is so basic that we often miss it: Put the light where you need it. When it comes to meeting the lighting requirements of kitchens, "there is no single light fixture that can perform all the functions," according to Randall Whitehead of Lighting Design Services in San Francisco. Instead, there needs to be layers of light.

Lighting Types and Terms

There are three major types of lighting that you can layer to illuminate a kitchen. The first, ambient light, is the general light in the room. Good ambient light allows you to work safely while giving the room its period look. The second, task light, provides higher and more-focused levels of light to a particular work area. The third, accent light, is even more focused and highlights objects or areas you want to show off, such as artwork, glassware, or special pottery.

It also helps to understand some common terms people throw around when they discuss lighting. The luminaire is the light fixture, and a lamp is what most people know as a light bulb. Light has color, which is measured in degrees Kelvin and commonly summed up as being either cool or warm. The higher the temperature, the more white the light. Incandescent lamps normally produce light from 2,600K to 3,100K in temperature, a range that has a lot of yellow in it. Fluorescent lamps vary in color from 3,000K to 4,200K. Their higher numbers represent the "cool white" lamps sold in hardware stores that tend towards the blues. Fluorescent light has come a long way in the last five years, expanding tremendously in color range and installation flexibility. There are dimmable compact fluorescents, electronic ballasts that eliminate flickering, and tubes as tiny as a pencil.

Now that you grasp the basics, let's address the unique lighting challenges that owners of old-house kitchens face. Very likely, your lighting is inadequate or unpleasant. There may be a single light source, or you may be working with a remuddled kitchen that has track lights, fluorescent lights, or recessed can lights in the ceiling. If any of these are the case, you are probably working in your own shadow most of the time. You may have wiring that is not up to code or insufficient to power the light levels you want. You may want to keep a wonderful original light fixture, but it is too small for modern needs or doesn't provide enough light. Your ceilings could be really low or really high. Or you may be working with solid masonry walls or pristine lath and plaster that you are loathe to cut into for wiring. Rest easy. There are solutions for all of these challenges.

Ambient Options

How do you use the three lighting types of light to most effectively illuminate your kitchen? Let's start with the fundamentals. Since ambient light's purpose is limited to safety and appearance, don't try to make it serve as task light. If you do, you will actually end up with less light where you need it--on the work surface. The reason is that when you stand at the counter, you will cast a shadow on your work from any light source above or behind you. However, since ambient light functions as general light, it will provide the means to give the room its period look. This is where you show off that vintage pendant or ceiling-mounted fixture that is historically appropriate for your house. Moreover, it's possible to reproduce a favorite light fixture so you have the number of luminaires you need to achieve good scale and sufficient light. (Or you might reuse it in a mud room, small hallway, or powder room.) Whatever the fixture, you can place it over a table, in the center of the room, or in a run of two or more if the kitchen is long. Then control the circuit on a dimmer for a variety of light levels. Dimmers are especially effective for creating a welcoming and flattering environment for family and friends when you open your kitchen to the rest of the house.

Another place to locate ambient light is at the top of cabinetry. Consider installing fluorescent tubes (now made as small as a T-2 size, about the diameter of a pencil), low-voltage light strips, or wall sconces on the soffit above the cabinets (an idea I picked up in Whitehead's book *Lighten Up*). Or, if your ceiling is very high, you can mount lighting along the inside of a crown moulding to create a glow around the perimeter of the ceiling. When the ceiling is high, hang your pendant light fixtures about 7' to 7' 6" above the floor. This lends a warm, more human scale to the room. If your ceiling is very low, flush-mounted ceiling fixtures are the only possibility for light in the center of the room. When this is the case, minimize the use of upper cabinets, and put sconces on the wall at about 6' high to make the room feel more balanced.

Taking Light to Task

The next layer to tackle is task lighting--in essence, getting light to shine where you need it. First think about where you need the highest levels of light to see what you are doing, then put a light source there. The most common practice is to mount fluorescent tubes along the bottom of the upper cabinets. This is an effective approach but not the only option. Other possibilities for under-cabinet lighting are halogen light strips and low-voltage "puck" lights. Looking much like their hockey namesakes, puck lights are housings about 2 5/8" in diameter by as little as 7/8" thick that hold tiny reflector bulbs. They recess into the plywood or composite board used to make the cabinets but give off a fair amount of heat, so don't store perishable foodstuffs directly above them. A technology rarely considered for this application, but which has definite benefits, is fiber optics. Fiber optic strip lights, for example, give off no heat at all. Fiber optics works by carrying light along hair-thin filaments of glass. The light source, which can be either an MR16 up to 250 watts or a 400-watt metal halide bulb, is kept in an illuminator--a separate housing that is located in a pantry or closet. This installation makes changing bulbs or repairs delightfully simple.

With under-cabinet lighting, be sure to consider the nature of the surface material it will illuminate. If the surface is glossy, as in stainless steel and polished marble or granite, the counter will become a mirror reflecting the image of the light source. You'll avoid this problem if you aim the light on the backsplash--unless that is glossy too. Always bring the fixture forward and block the face so it doesn't shine in your eyes when you sit at a nearby table.

Suppose you need light on a countertop where there are no upper cabinets. Two solutions come to mind. One is mounting wall sconces so they cast light down toward the counter. The other is discriminating use of recessed downlights. When you choose downlights, be sure they have housings with small apertures (openings). Also, make sure the color inside the housing and on the trim blends with the ceiling. For example, for a white ceiling you might pick a low-voltage downlight in a 4" aperture with white trim and inside. Mount downlights no more than 18" from the wall so they shine on the counter, not on your head. The MR16 lamp should be a flood type--that is, one that covers about a 40-degree spread. Your electrician can help you determine how many downlights you will need, but be careful not to overdo it. These fixtures are anachronisms in any historic period and best kept to a strict minimum.

Where else do you need task light? How about in closets, pantries, cabinets, or drawers? Here take advantage of small light sources, such as appliance bulbs or fiber optic heads, mounted inside these spaces and controlled with a momentary contact or jamb switch. When you open the space, the light goes on; when you close it, the light goes off. The result is very efficient and effective.

Artful Accents

The third layer of light is accent lighting--a type that can add ambiance to your kitchen very effectively. Think of the glass cabinets you plan to install. Lighting them with dimmable "puck" lights, strip lights, or fiber optics can add a warm glow to the room. If you prefer solid shelving rather than glass, follow Whitehead's advice: Rout out about 1" of the back of the shelf and install a light strip behind it. This creates a glow that runs up and down, plus it gives you back-lighting for your glass objects. You can also employ accent lighting to draw the eye to certain objects, like art or collections, or to accent a texture on a wall--perhaps old brick or stone that tells the story of your house. Accent lighting is the only type where you should consider track lights. These fixtures are now available as low-profile tracks (2" thick) and with very small heads. They do attract attention to themselves, however, and give off a lot of heat, so use them sparingly. A better solution is fiber optics. With very

small heads and no heat or ultraviolet emissions, they are ideal for lighting valuable objects.

The ideas presented here vary greatly in up-front price tags, but long-term cost is relative to efficiency. For example, the typical 100-watt light bulb costs around 50 cents and lasts about 700 hours--roughly 29 days of constant use. The T-2 fluorescent tubes mentioned above cost about \$2.80 yet last about 22,000 hours. That translates into 916 days, or nearly 3 years. Another item to consider for efficiency and energy savings is the compact fluorescent. Standard line-voltage light fixtures cost less than low-voltage (6- to 24-volt) systems. Fiber optics is more expensive. Fluorescent lighting provides the most light for the least money but has its limitations.

Before making a decision about what will work best for your own project, review all the possibilities with a lighting designer, a knowledgeable interior designer or architect, or a reputable electrician. Since a lot of these products and ideas are relatively new, be prepared for a little research too. Most important, remember that you don't have to overlight the kitchen to achieve good lighting. By lighting your work, not the top of your head, you can get the light levels you need while enhancing the charm of your period kitchen.



Carolyn Murray is the principal of Heritage Design Group based in San Francisco; (415-922-8404). Order Lighten Up by Randall Whitehead from Lightsource Publishers (415-626-1277).

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