

2004/10: Fluorescent Lighting IS Sexy

contributed by Sheryl Breze [field reporter / interior designer / lighting guru]

Tell me about your relationship with fluorescent lighting...

I have found it interesting that many specifiers prefer to avoid incorporating fluorescent lighting in their designs. It is also interesting that many are basing their feelings on the technology of their ancestors. You know, the fluorescent lighting of their garages and basements, old libraries and industrial facilities. I still hear comments such as...

"Fluorescent lighting makes me look and feel ill." "It takes away from the elegance of the space." "Fluorescents are just not a sexy lighting choice." However, when I hear this, I immediately realize that the designer is not aware of the incredible options fluorescent lighting offers. The fixtures and technology of T12* lamps* is pretty frightening. But guess what?!? That unattractive workhorse of the past has some very exciting, very cool, very sexy stuff to offer us in the 21st Century. And the luminaires* that are available today will knock your thigh-high boots off.*A little lesson on fluorescent options and lighting terminology in general before we go any further... In the design industry, what was commonly referred to as a "bulb" is now known as a lamp. It gets a bit confusing because the general public still thinks of a lamp as what sits on the nightstand beside their bed. What's even more confusing is that the term "lamp" is still a legitimate word for that decorative appliance housing a bulb that is usually covered by a shade. Now when you come across the word luminaire, it means a complete lighting unit. This word is used instead of "light" because the word "light" should really only refer to the electromagnetic radiation that allows us to see in the first place. Fun with words. Fluorescent lamps come in all kinds of different shapes, sizes, and lengths. If you go to a lighting store or your nearest Home Depot, you'll see the designations T8, T5, T2, and Compact Fluorescent Lamps (CFL). The "T" stands for "Tube", the lamp shape. The number is the diameter in 1/8's of an inch. So a T8 lamp is 8/8" or 1" in diameter. T12's have been around forever, but you really should not be using them these days. T8's are the most used with the most variety of colors. The new kid on the block is the T5. The T5 allows for much smaller fixtures. It also comes in a high-output (HO) version for a little more bang for the buck. The linear fluorescent lamps come in 2', 3' and 4' lengths, and the T5 also is available in a 5' length. T5 is also the diameter of most CFLs, which can do a very nice job in downlights for general lighting.

The most important things to know?

1) What is available.

2) What you want.

3) Getting what you want. How is THAT for sexy? The way fluorescent lamps are manufactured is where the romance begins. Fluorescent lamps contain some pretty serious chemicals such as rare-earth phosphors. These phosphors do the tango with the cathodes that produce very appealing light quality. Depending on the color temperature, and color rendering, you can get a warm, cool, or neutral light. One thing that we must realize with fluorescent technology is that it is a diffused source, rather than a point source like incandescent or halogen. The great thing about diffused light is that we can cover more space evenly and effectively. And with the groovy luminaries available, we can control the light, conceal it, or celebrate it. Why is fluorescent such a popular choice in large commercial facilities? ENERGY! The lamps use less energy, yet give more light. Long-term cost savings for a large installation can mean tens of thousands of dollars to the owner. Believe me – they like that. Fluorescent lighting is not for every application. There are times when point sources are necessary. Contrast and layering is the key to making lighting sexy and effective. And there are limitations... like dimming. Fluorescent dimming ballasts can add lots o' money to a fixture, but the cost is coming down. There are levels of dimming performance that are less costly that give less dimming range, so explore the client's budget and the ultimate function of the space to use what is appropriate. To help justify the cost remember the energy savings will usually pay for the dimming ballast in a short time. There are other tricks too like dual-switching and occupancy sensors. The more you know, the more valuable you are to your client. If you're not comfortable making the choices, don't be afraid to find a friendly lighting designer. Trust me, you don't want the engineer to have all the fun or making all the fluorescent lighting choices, do you? Readers, I welcome your lighting questions and comments. Let me know what you want to know. Email me at sbrezega@aol.com. I'll now sign off with my favorite Lighting Mantras:

- Good lighting makes a good design better. (It can even make a bad design better.)

- The lighting is what brings a space to life.

- The more you know, the more powerful you are. Coming soon: The Specification Process (aka What You Need To Know To Be More Fabulous Than You Already Are)