

## WHAT IS COLD CATHODE LIGHTING?

Developed over seventy years ago, cold cathode was the first commercially available form of fluorescent lighting. Each cold cathode lamp is handmade and can be sized and shaped to conform to virtually any architectural space or detail. The lamps are manufactured so they can be butted end-to-end, thus eliminating dark socket shadows given off by standard fluorescent fixtures. Lamp life is extremely long, with a truly impressive color palette from which to choose.



Surface-mounted lampholders



Recess-mounted lampholders

The photos shown above depict two typical sections of a cold cathode system. One utilizes lampholders that install directly to the mounting surface. The other utilizes lampholders that are recessed into the mounting surface, reducing the overall height of the fixture. Notice that the lamps are constructed differently than regular fluorescent lamps. When installed, they create the appearance of one continuous lamp.

## WHY USE COLD CATHODE LIGHTING?

A cold cathode lighting system offers some unique advantages not found in any other lighting product. The illumination from cold cathode lighting appears to come from a single, continuous lamp. Lamp ignition is instantaneous and flicker-free. Cold cathode lamps are easily dimmed and are compatible with a wide variety of commercially available lighting control systems (an important feature to consider when specifying lighting products for presentation rooms, theaters, and restaurants). A cold cathode system allows you to install power supplies (either transformers or ballasts) in remote locations, allowing for virtually silent operation of the lighting system. With a wide variety of power supplies to choose from, depending upon the system type, one power supply can either operate one lamp (up to 8 feet long) in a parallel electrical wiring circuit, or multiple lamps (up to 80 feet in combined length) in a series electrical wiring circuit.

While initial costs may sometimes be higher, cold cathode lighting delivers substantial long-term savings compared with other systems. It is energy efficient and, depending upon the system, will consume as little as 7.5 watts per foot. Lamps will last 50,000 hours and beyond, and unlike standard fluorescent lamps, lamp life is not affected by the number of times the system is turned on and off. A cold cathode system not only decreases energy costs, but also lowers lamp replacement and maintenance costs.