

## HOW TO USE COLD CATHODE LIGHTING

A cold cathode system is most often used in indirect lighting applications and is particularly effective for cove and coffer design schemes. The result of a high-quality, well-designed system is a rich, uniform light without any dark shadows or hot spots. Cold cathode can also be used as direct lighting to “draw”, or follow, any architectural detail with light. Stunning results can be achieved when lamps are used to outline a wall or ceiling, and the low glare levels of cold cathode lighting reduce eyestrain.

## SYSTEM LAYOUT

Designers and electrical engineers should be aware of the unique characteristics of the various cold cathode lighting systems we offer. Each system has its own set of guidelines with respect to installation and application. Examples of typical system configurations may be found in the *Technical Information* sections for each system type. If you require additional assistance with your design, we encourage you to call or e-mail the factory to discuss your application.

## UL LISTING

Our products carry multiple UL (Underwriters Laboratories) and C-UL (Canadian UL) listings. Not only are our components individually listed, but our lighting systems as installed are listed under a special UL category:



*IFAY: Field-Installed Electric Discharge Lighting Systems.* This listing provides assurance that the system, whether commercial or residential, has been engineered and manufactured to the highest levels of safety and quality.

## HOW ENERGY EFFICIENT IS COLD CATHODE LIGHTING?

Cold cathode offers very good energy efficiency compared with a broad spectrum of lighting products utilized for similar applications. Cold cathode is a fluorescent lamp and is inherently energy-efficient. Most of the energy consumed is converted to visible light and not to heat (as in an incandescent lamp). When compared with standard fluorescent lamps, cold cathode is generally 15-20% less efficient due to the construction and operation of the lamp. However, cold cathode lamps are made to last a very long time. The materials and production techniques utilized to make these lamps are geared toward long life and trouble-free operation as a primary goal. Some energy efficiency is sacrificed in favor of lamp longevity. A lamp life of 8-10 years (based on a 12-hour-per-day, 365-days-a-year burning cycle) means that cold cathode lighting is virtually maintenance free.

In addition to excellent energy efficiency, maintenance costs are reduced as well, as relamping is not a regular occurrence. We recommend group relamping at the end of the useful life of our lamps.