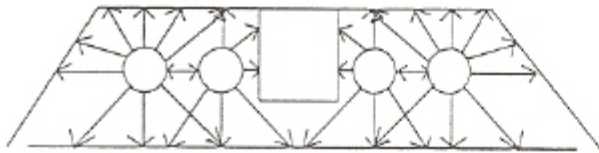




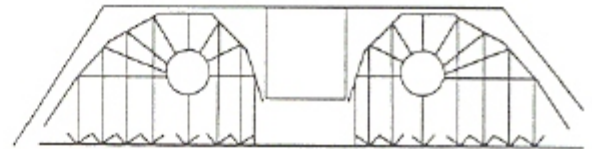
Reflectors

Save money by using reflectors in fluorescent fixtures

Reflectors are strips of highly reflective material that may be inserted into a fluorescent fixture. In a standard 4-lamp fluorescent fixture, a significant portion of the light given off by the lamps is trapped inside the fixture. When a reflector is inserted into such a fixture, most of the light reflects off the shiny surface and out of the fixture. Thus a 2-lamp fixture with reflectors gives off approximately the same light as a standard 4-lamp fixture without reflectors.



Before installing reflectors



After installing reflectors

Reflectors may also be used with other fixtures such as 8-foot fluorescents. It is imperative that the remaining lamps be centered within the fixture. Most reflectors include adapters that snap into the existing socket and adjust the position of the lamp.

Reflectors are usually made of either specular silver or aluminum. The specular silver is the most reflective (90% to 97%) of the two. It is also the most expensive of the two. Aluminum reflectors have reflectances in the range of 70% to 90%.

Considerations

Although reflector installation coupled with de-lamping can result in energy savings of 50%, they are not an appropriate retrofit in every case. Reflectors attract dust and other particulate matter, and must be cleaned frequently in order to maintain the light output from the fixture. In general, reflectors should not be specified for use in environments with high concentrations of airborne particulates.

Reflectors also tend to concentrate most of the light in a vertical plane, straight down from the fixtures. Therefore, they may not be an appropriate retrofit for areas over bookcases or shelves, where horizontal illuminance is needed.