

Incandescent Lamps - General Information

Incandescent Lamps

Light from incandescent lamp is generated by heating the filament to incandescence. The hotter the filament, the more efficient it is in converting electricity to light. However, when the filament operates hotter, its life is shortened so the design of each lamp is a balance between efficiency and life. This is why lamps of equal wattage may have different lumen ratings and different life ratings. Recent technological advances have made increases in lamp efficiency possible with no loss in lamp life. These improvements have been incorporated into Energy Saver incandescent general service lamps.

Protection From Moisture: Bulbs that are made from special thermal shock-resistant glass are indicated by (HRG). External protection of the lamps may be needed to prevent breakage of the bulb due to direct contact with water during operation. In cases where bulbs are not marked (HRG) the lamp will require protection from exposure to mist or condensation as well as direct contact with water during operation.

Average Life: Average life values are based on a large number of representative lamps under controlled conditions. Individual lamps or groups of lamps may vary from the average life shown. Average life is a median value of life expectancy at which 50% of any large number of initially installed lamps are expected to still be operating under normal conditions.

Halogen Incandescent Lamps

The halogen lamp is a special group of lamps that fall under the category of incandescent lamps. The halogen lamp provides a very white and highly efficient light source. Each of this lamp contain a small tungsten halogen tube inside of a reflector housing. Since the halogen light source is very small, the light emitted is easily controlled and directed by specially designed reflectors. This lamp comes in a wide variety of beam patterns i.e. spot and flood.

Another advantage of halogen lamp is the halogen regenerative cycle. This cycle minimizes bulb wall blackening by keeping the tungsten particles which evaporate from the filament from depositing on the bulb wall.

Warning: The halogen tubes used inside of these lamps are pressurized and operate at very high temperatures. If the outer glass appears broken or damaged, replace the entire unit. Do not continue to use a damaged lamp even if it appears operable.