



ARCHITECTURAL STAR LIGHTING, LLC

Quartz Halogen T4 Relamp/Dimming Instructions

Each fixture MUST be installed by a qualified electrician. Quartz Halogen T4 fixtures are shipped from the factory with lamp. We recommend a frosted Sylvania or Ushio T4 Mini-can screw in base lamp. Examine all lamps before installation to make sure the lamp is free of scratches, cracks or damage of any kind. **To avoid electric shock, turn off power before attempting replacement of the lamp. To avoid skin burns allow the lamp to properly cool before handling.**

DO NOT at any time handle the lamp with your bare hands, the oil from your hands will burn when the lamp is ignited causing pre-mature violent end of life.

RELAMPING STEPS

STEP 1

Remove the lower reflector from the aperture by gently holding the flange and pulling the reflector from the aperture hole.

STEP 2

The lens holder is secured to the fixture by a safety chain which is installed from the factory. Let the mesh holder hang while in the relamping process.

STEP 3

Reach up into the housing unscrew the T4 lamp and replace accordingly.

Note: Be careful not to over tighten the lamp this may cause the lampbase to crack or break.

Replace all equipment/fixture covers to prevent personal injury or property damage.

(Hold with clean cloth or tissue when installing. If touched, wipe off fingerprints before lighting.)

QUARTZ T4 DIMMING

1. Halogen Lamps

Halogen lamps are incandescent lamps in which a small quantity of Halogen gas has been filled. The filament of an incandescent lamp is made Tungsten, because of its high melting temperature (about 3400 degrees C). The Tungsten filament gradually evaporates and moves to the bulb wall, reducing the brightness as much as 20%. Halogen helps to prevent this, thus maintaining the brightness and lengthens lamp life.

2. Halogen Cycle

The Halogen Cycle helps maintain the brightness and lengthens lamp life. As Tungsten evaporates from the filament, it combines with the Halogen gas and becomes tungsten halide. This tungsten halide state is maintained at temperatures between 250 degrees C and 1400 degrees C. If the temperature goes below 250 degrees C the tungsten separates from the halogen gas and blackens the bulb walls. When operating within the proper temperature range the tungsten separates from the tungsten halide when it nears the filament, re-depositing the tungsten on the filament. The freed halogen gas then repeats the halogen cycle.

3. Proper Dimming of Halogen Lamps

Lamp manufacturers all agree that in order to maximize lamp life and brightness all Halogen lamps must be brought to 100% of the design wattage on a regular basis. This ensures the Halogen Cycle re-deposits the tungsten onto the filament and doesn't blacken the walls of the lamp. As an example, if the Halogen lamps are set at a constant level of 80% within a couple of weeks you will begin to experience premature lamp failure. Osram Sylvania recommends leaving the Halogen lamps at least 100% at least 15 minutes per week. Philips recommends leaving the lamps at 100% for 1-2 minutes when they are first energized each day.