



TWO HILLS STUDIO, INC.

*Fine Lighting &*

*Decorative Metal Work*

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## **OPERATING & MAINTENANCE INSTRUCTIONS**

### **INSTALLER NOTE: PLEASE READ BEFORE INSTALLING FIXTURES AND FORWARD THESE INSTRUCTIONS TO THE OWNER/USER OR MAINTENANCE STAFF FOR THEIR RECORDS**

Because of the wide variety of fixture designs and options available, not all of these items may apply to your order.

#### **INSTALLATION**

Installation is to be done by a qualified electrician in accordance with all applicable electric codes. Refer to the Installation Instructions sheet packed with the fixture. Because of the custom nature of our business, some slight differences may occur between the actual fixture and the printed instructions. If this is a custom order, you may also need to refer to the custom shop drawing that we prepared. If your Installation Instructions have been misplaced or if you have further questions, please contact us for clarification before attempting the installation.

#### **U.L. LABELING**

Except in some special situations, all of our fixtures bear fixture labeling for Underwriters Laboratories for either dry, damp or wet locations. Do not attempt to install fixtures in locations that do not adhere to this labeling. Dry locations are for interior fixtures. Damp locations are for exterior situations where the fixture is not exposed directly to blowing rain or snow. Wet locations are for direct exposure to rain or snow.

#### **SUPPORT BLOCKING**

Typically our larger and heavier hanging lanterns and chandeliers require solid wood blocking above the ceiling for a safe and proper installation. This includes blocking to support the electrical junction box as well as blocking surrounding the junction box for attachment of larger canopies. In some cases, steel all-thread support rods are to be provided by others from structure above. Refer to the installation instructions or custom shop drawings for this important information. Contact us before installation if you are unsure about the blocking requirements.

#### **ROUTINE MAINTENANCE**

**Fixture Body** – To avoid risk of fire, check the fixture on a regular basis to avoid build-up of bird and insect nests. This is especially important for exterior fixtures. In extreme cases of exposure the inside of the lamp socket may need to be cleaned of insect debris to maintain contact between the lamp and socket and to avoid an electrical short or fire hazard. This can be accomplished by using a hand-held can of compressed air such as that used to clean computers or office equipment. Turn off the power to the fixture, remove the lamp(s) and blow the debris clear. Do not spray the fixture with insect spray as it could damage the metal finish and could result in electrical shock or fire if it comes in contact with live electrical parts. Do not spray the fixture with a water hose.

**Fixture Glass** – Decorative glass lenses on any type of fixture and clear glass tops on wall sconces and lanterns may be cleaned with any mild glass cleaner. After turning off the power to the fixture, apply glass cleaner to a clean, soft cloth and apply directly to the glass surface by hand. Do not spray the fixture with the glass cleaner as it could damage the metal finish and could result in electrical shock or fire if it comes in contact with live electrical parts. Do not spray the fixture with a water hose.

#### **METAL FINISHES**

We offer a number of metal finishes on solid copper or brass and your order may even have a combination of these on a single fixture. It is important to understand that these finishes are hand-applied and while we endeavor to make these as consistent as possible, the actual finish may vary from the examples in our sample kit. Because of the many variable

factors involved, some variations may occur and we can not guarantee an exact match. All finishes are coated with a clear sealer and should not require any maintenance other than occasional dusting if desired. Do not spray the fixture with any type of cleaner as it could damage the metal finish and could result in electrical shock or fire if it comes in contact with live electrical parts.

For exterior fixtures, the clear sealer is intended only as a protection barrier during handling and installation. Since it is exposed to the elements, the sealer will eventually wear off and the metal finish may darken, dull or mottle depending on its exposure to weather. With copper and brass, this is the nature of the material as it seeks to create its own rich patina.

Our “hammered” coatings are a durable painted coating over electro galvanized metal. The “hammering” is actually a texture created as the coating cures and can vary slightly from the examples in our sample kit.

## **LAMPING**

**Labeling** - Lamps (bulbs) are not provided with our fixtures. Each fixture is labeled with the maximum wattage allowed. In some cases the exact type of lamp is specified such as A-19, A-15, candelabra-base, etc. Do not attempt to use any type of lamp that is not recommended and do not exceed the maximum wattage. Failure to do so may result in a risk of fire.

**Incandescent Lamping** - One of our trademarks is the dramatic light patterns that our fixtures provide. For incandescent fixtures with punching or open notches for light patterns, we recommend the use of clear lamps (not frosted) for the best results. For longest lamp life, we recommend using lamps rated at 130 volt which are often advertised to provide approximately 5000 hours of life. There are also lamp manufacturers such as *Litetronics International, Inc.* (708-389-8000) ([www.litetronics.com](http://www.litetronics.com)) who make lamps that are advertised for an approximate life of 20,000 hours.

**Self-Ballasted, Compact Fluorescent Lamping** - Self-ballasted, compact fluorescent lamps can also be used in our fixtures that are wired with standard medium-base or candelabra-base lampholders. We recommend using lamps with a correlated color temperature of 2700K for best results. Please note that, while very efficient, these types of lamps do not produce the sparkle or crisp light patterns in our fixtures with hand-punched holes or open notches on the sides.

**GU24-Base Compact Fluorescent Lamping** – We offer this lamping in most of our fixtures and recommend using lamps with a correlated color temperature of 2700K for best results.

**4-Pin Base Compact Fluorescent Lamping** - For fluorescent fixtures requiring the ballast to be a part of the fixture, we use only electronic ballasts, which require 4-pin lamps. These may include a separate ballast inside the fixture or a GU24-base ballasted lampholder. Most compact fluorescent lamps have an advertised life of approximately 10,000 hours. Only use lamps with wattage matching the labeling on the fixture. Note that on fixtures which have two lamps powered by one ballast, both lamps must be operational for either to work. If one lamp fails, the other will not function. We recommend using lamps with a correlated color temperature of 2700K for best results.

**LED (Light Emitting Diode) Lamps** - Lamps using LED technology have entered the consumer marketplace and offer extremely long life with very low energy usage. These can be used in standard medium-base and candelabra-base lampholders. The current offerings do not yet provide the 360 degree throw of light that is needed in most decorative light fixtures. However, the technology is changing rapidly and we look forward to seeing better options in the near future.

## **WARRANTY**

We guarantee our products for a period of one year for parts and workmanship. This does not pertain to damage caused by misuse or improper installation. This warranty begins on the date the fixtures are received or on the date of substantial completion of the project, whichever is latest.