

MARICOPA COUNTY ZONING ORDINANCE

Chapter 11 – General Regulations

SECTION 1112. OUTDOOR LIGHT CONTROL PROVISIONS^{*13}

ARTICLE 1112.1. PURPOSE: These provisions are intended to control the use of outdoor artificial illuminating devices emitting rays into the night sky which have a detrimental effect on astronomical observations. It is the intention of this Ordinance to encourage good lighting practices such that lighting systems are designed to conserve energy and money, while increasing nighttime safety, utility, security and productivity.

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ARTICLE 1112.2. CONFORMANCE WITH APPLICABLE CODES:

- 1112.2.1. All outdoor artificial illuminating devices shall be installed in conformance with the provisions of this section and any building code now in effect or which may hereafter be enacted, as applicable.
- 1112.2.2. Where any provisions of the Arizona State Statutes, or any Federal law, or any companion Ordinance conflicts with the requirements of this outdoor light control provision, the most restrictive shall govern.
- 1112.2.3. The provisions of this section are not intended to prevent the use of any material or method of installation not specifically prescribed by this Ordinance.
- 1112.2.4. As new lighting technology develops which is useful in reducing light above the horizontal, consideration shall be given to use of state of the art technology in keeping with the intent of the Ordinance.

ARTICLE 1112.3. DEFINITIONS:

- 1112.3.1. ***Outdoor Light Fixtures:*** Outdoor artificial illuminating devices, outdoor fixtures, lamps and other devices, permanent or portable, used for illumination or advertisement. Such devices shall include, but are not limited to, search, spot or flood lights for:
1. Building and structures;
 2. Recreational areas;
 3. Parking lot lighting;
 4. Landscape lighting;
 5. Billboards and other signage (advertising or other);
 6. Street lighting.
- 1112.3.2. ***Approved bottom-mounted outdoor advertising fixture(s):*** An approved fixture design shall mean a system of lighting which is installed at the lower portion of an outdoor advertising sign board and consists of no more than **four** individual fixtures (or lamps) per sign face; produces a maximum of **40,000 lumens per fixture**; and spills or casts beyond the sign face no more than **1,017 lumens per fixture**.^{*14}

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1112.3.3. **Individual:** Shall mean any private individual, tenant, lessee, owner or any commercial entity, including but not limited to companies, partnerships, joint ventures or corporations. *14

1112.3.4. **Installed:** Shall mean the initial installation of outdoor light fixtures defined herein following the effective date of this Ordinance, but shall not apply to those outdoor light fixtures installed prior to such date, except as provided in Article 1112.6.1. below *14

ARTICLE 1112.4. GENERAL REQUIREMENTS:

1112.4.1. **Shielding:** All exterior illuminating devices, except those exempt from this Ordinance and those regulated by Article 1112.5.3. shall be fully or partially shielded as required in Article 1112.4.2.

1. "Fully Shielded" shall mean that those fixtures so designated shall be shielded in such a manner that light rays emitted by the fixture, either directly from the lamp or indirectly from the fixture, are projected below a horizontal plane running through the lowest point of the fixture where light is emitted.
2. "Partially shielded" shall mean that those fixtures so designated shall conform to the classification of "Cutoff", defined as follows:
 - a. A luminaire light distribution is designated as cutoff when the candle-power per **1,000 lamp lumens** does not numerically exceed **25 lumens** (two and one-half percent) at an angle of **90 degrees** above Nadir (horizontal), and **100 lumens** (ten percent) at a vertical angle of **80 degrees** above Nadir. This applies to any lateral angle around the luminaire.

1112.4.1. **Filtration:** Those outdoor light fixtures requiring a filter in Article 1112.4.2. shall have glass, acrylic or translucent enclosures (Quartz Glass does not meet this requirement).

1112.4.2. **Requirements for Shielding and Filtering:** The requirements for shielding and filtering light emissions from outdoor light fixtures shall be as set forth in the following table:

| FIXTURE LAMP TYPE | SHIELDED | FILTERED |
|------------------------------|----------|----------|
| Low pressure sodium <i>l</i> | None | None |
| High pressure sodium | Fully | None |

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| | | |
|---|-------------------------------------|------------------|
| Metal halide ⁵ | Fully | Yes |
| Fluorescent ⁷ | Fully ⁴ | Yes ² |
| Quartz ³ | Fully | None |
| Incandescent greater than 150 watts | Fully | None |
| Incandescent, 150 watts or less | None | None |
| Mercury vapor | Fully ⁶ | Yes ⁶ |
| Fossil fuel | None | None |
| Glass tubes filled with neon, argon, and krypton | None | None |
| Other sources | As approved by the zoning inspector | |

Footnotes:

1. *This is the preferred light source to minimize undesirable light into the night sky affecting astronomical observations.*
2. *Warm white and natural lamps are preferred to minimize detrimental effects.*
3. *For the purposes of this ordinance, quartz lamps shall not be considered an incandescent light source.*
4. *Outdoor advertising signs of the type constructed of translucent material and wholly illuminated from within do not require shielding.*
5. *Metal Halide display lighting shall not be used for security lighting after 11:00 p.m. (or after closing hours if before 11:00 p.m.) unless fully shielded. Metal Halide lamps shall be in enclosed luminaries.*
6. *Recommended for existing fixtures. The installation of Mercury Vapor Fixtures is prohibited effective ninety (90) days after the date of adoption of this Ordinance.*
7. *Outdoor advertising signs may use fluorescent fixtures. These fixtures must be mounted at the top of the sign structure and may be partially shielded, but not filtered.*

ARTICLE 1112.5. PROHIBITION:

- 1112.5.1. **Searchlights:** The operation of searchlights for advertising purposes is prohibited between the hours of **11:00 p.m.** and **sunrise.**
- 1112.5.2. **Recreational Facilities:** No outdoor recreational facility, public or private, shall be illuminated by non-conforming means after **11:00 p.m.**, except to conclude specific recreational or sporting event or any other activity conducted at a ball park, outdoor amphitheater, arena, or similar facility in progress prior to **11:00 p.m.**

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1112.5.3. ***Outdoor Building or Landscaping Illumination:*** The unshielded outdoor illumination of any building, landscaping, signing or other purpose is prohibited, except with incandescent fixtures of **150 Watts** or less, or low pressure sodium fixtures.

1112.5.4. ***Mercury Vapor:*** The installation of Mercury Vapor fixtures is prohibited effective **90 days** after the date of adoption of this Ordinance.

ARTICLE 1112.6. PERMANENT EXEMPTIONS:

1112.6.1. ***Non-Conforming Fixtures:*** All outdoor light fixtures installed prior to **January 1, 1985**, that are equipped with a permanent automatic shut-off device may remain unchanged, except that the subject light fixtures shall not be operated between the hours of **11:00 p.m.** and sunrise. All outdoor light fixtures installed prior to **January 1, 1985**, that are not equipped with an automatic shut-off device may remain unchanged. With respect to all outdoor light fixtures installed prior to **January 1, 1985**, whether with an automatic shut-off device or not, there shall be no change in use, replacement, structural alteration, or restoration after discontinuance of use for a period of **12** consecutive months, unless it thereafter conforms to the provisions of these regulations.

1112.6.2. ***Fossil Fuel Light:*** Produced directly or indirectly by the combustion of natural gas or other utility-type fossil fuels.

ARTICLE 1112.7 OTHER EXEMPTIONS FROM OUTDOOR LIGHTING PROVISIONS: ^{*14}

1112.7.1. ***Bottom-Mounted Outdoor Advertising Lighting:*** Outdoor advertising sign boards which exceed **301 square feet** per sign face and consist of panels which are designed to be removed from the top of the sign board are exempt from the provisions of this Ordinance if illuminated by an approved bottom-mounted outdoor advertising fixture equipped with an automatic device which shuts off the fixture between midnight and sunrise.

1112.7.2 ***Low Intensity Fixtures:*** Any outdoor lighting fixture which has a maximum candle power of less than **1,000 candelas** is exempt from these provisions, if equipped with an automatic device which shuts off the fixture between the hours of midnight and sunrise.

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ARTICLE 1112.8 PROCEDURES FOR COMPLIANCE:^{*14}

1112.8.1.

Applications:

1. Any individual applying for a Zoning Clearance and intending to install outdoor lighting fixtures shall, as a part of said application, submit evidence that the proposed work will comply with provisions in this ordinance.
2. Utility companies providing a notarized affidavit in which they agree to comply with the provisions of these regulations shall be exempt from applying for and obtaining a permit for the installation of outdoor light fixtures, including residential security lighting.

1112.8.2.

Contents of Application or Submission: The submission shall contain, but shall not necessarily be limited to the following, all or part of which may be part of or in addition to the information required elsewhere in the zoning regulations upon application for the required permit:

1. Plans indicating the location on the premises, the type of illuminating devices, fixtures, lamps, supports and other devices, etc.
2. Description of the illuminating devices, fixtures, lamps, supports and other devices, etc. This description may include, but is not limited to, manufacturers' catalog cuts and/or drawings (including sections where required).
3. The above required plans and descriptions shall be sufficiently complete to enable the Zoning Inspector to readily determine whether compliance with the requirements of this Ordinance will be secured. If such plans and descriptions cannot enable this ready determination by reason of the nature or configuration of the devices, fixtures, or lamps proposed, the applicant shall submit evidence of compliance by certified test reports as performed by a recognized testing lab.

Date of Revisions

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| *13 | Added 4-2-84 | *14 | Added 10-29-84 |
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