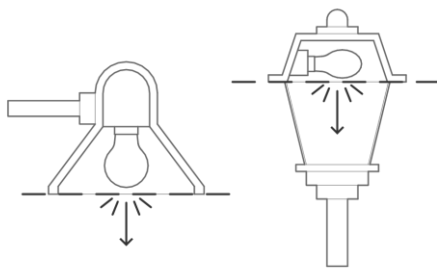


Sec. 107-81. Exterior Lighting requirements.

(a) Definitions: As used herein:

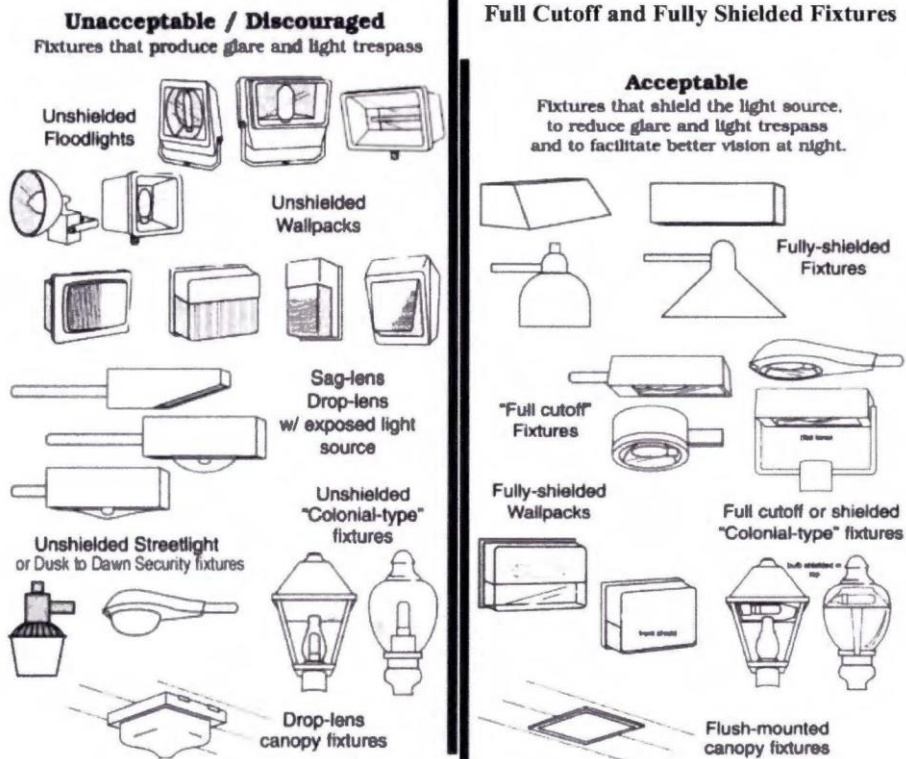
(i) "Shielded" means "installed in such a manner that all light emitted by the fixture, either directly from the bulb or a diffusing element, or indirectly by reflection or refraction from any part of the fixture, is projected below the horizontal plane immediately beneath the fixture's lowest light-emitting part."

Commented [AW1]: Note that as was done in the commercial lighting section, the graphics will be removed from the code and placed in a manual that can be adopted by the Council separately, and language will be added to reflect that the manual can be referred to for examples.



In Figure A (below), the lights on the left are nonconforming. Those on the right can be used in most cases. However, the mounting height and proximity to the property line may cause them to need additional shielding to prevent the luminous elements from being visible from any other property.

UNSHIELDED FIXTURES



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(ii) "Footcandle" as used herein shall mean: The illuminance produced on a surface one foot from a uniform point source of one candela and equal to one lumen per square foot.

(b) Applicability.

- (1) The regulations contained in this section are applicable to outdoor lighting fixtures installed on structures within the residential zoning districts of the City.
- (2) All outdoor lighting fixtures existing and legally installed and operating before the effective date of this section, or installed pursuant to a permit approved prior to the effective date of this Section, shall be brought into conformance with this Section upon the earlier of: (1) an application for a site plan or building permit for construction of a new building or modification of 50% or more of an existing structure, or (2) replacement or modification of an existing non-conforming fixture.

(3) This section does not apply to interior lighting; however, overly bright lighting emitted from a structure will be subject to this section if it is determined by the City Administrator or his/her designee that it creates a nuisance or a potential safety hazard.

Commented [AW2]: Should this be handled in a nuisance section, not zoning?

(c) Exemptions. The following are exempt from the provisions of this section:

- (1) publicly maintained traffic control devices;
- (2) street lights installed prior to the effective date of this section;
- (3) temporary emergency lighting (fire, police, repair crews);
- (4) lighting fixtures and illumination requirements imposed by TxDOT within TxDOT rights of way (ROW);
- (5) moving vehicle lights;
- (6) navigation lights (aircraft warning beacons on water towers and wireless transmission facilities) required by State or Federal law;
- (7) signs and associated lighting that conform to the city's sign regulations in Chapter 24;
- (8) seasonal decorations with lights in place illuminated no longer than sixty (60) days; and
- (9) other temporary uses approved by the City Council (festivals, carnivals, fairs, night-time construction);
10. Unshielded decorative lights meeting the standard (not exceeding .25 footcandle which mimic natural gas flickering lights.

(d) General Standards. The following standards shall apply to all outdoor lighting installed after the effective date of this section:

- (1) Except for street lighting in public right of way, all exterior fixtures must be hooded or shielded so that the light source is not directly visible from adjacent properties or properties within 250 ft of light source. As directed by city building official a submittal of exterior light fixtures shall be included with the building permit plans that includes lumens output, color temperature and a physical description.
- (2) Lighting must have a color temperature of no more than 3000 Kelvins (K).
- (3) Exterior lighting may not exceed .25 footcandle across the source property line.
- (4) No light or illumination that flashes, moves, scrolls rotates, scintillates, blinks, flickers, varies in intensity or color, or uses intermittent electrical pulsations is permitted other than low voltage lights permitted under item 8 above for the limited period allowed in C8. Light fixtures may be controlled by a motion detector that deactivates fixtures after no more than 15 minutes.
- (5) Light fixtures shall be controlled a photocell that restricts activation to night time use only.
- (6) Private walkway light fixtures shall not exceed 385 lumens each.
- (7) Setback lighting. No Light fixtures shall be installed in any setback except for lighting installed in accordance with (6) above and for two light fixtures at a driveway entrance.
- (8) Landscape/yard lighting. Light fixtures used for illuminating landscape features shall not be used after 11:00 PM. Individual Fixtures shall not exceed 530 lumens.

Commented [AP3]: The DarkSky Association requirement specifies full shielding only for fixtures over 1,000 initial lamp lumens, whereas the proposed language applies shielding to all exterior fixtures, regardless of lumen output. This is more restrictive.

Commented [AP4]: The DarkSky Association does not require timers or cut-off lighting for the minimum requirements to become certified. This would be more restrictive than the DarkSky requirements.

Commented [AP5R4]: The language also controls the movement of a light fixture that also is not a DarkSky Association requirement and would be more restrictive.

Commented [AP6]: The DarkSky Association does not have a requirement that restricts lighting to night-time only. This would be more restrictive than the DarkSky Association requirements.

Commented [AP7]: The DarkSky Association does not have setback requirements. This would be a more restrictive requirement.

Commented [AW8R7]: Could possibly be handled in the nuisance regulations as opposed to zoning.

Commented [AP9]: Same as above.

(9) Western Hills Athletic Club (WHAC) property. Lighting for new construction or over 50% renovation of facilities on WHAC property shall comply with this section.

(e) Enforcement. The city shall have the power to administer and enforce the provisions of this Section, as provided in this Chapter. Any violation of this Section is hereby declared to be a nuisance. A civil penalty of up to \$2,000 for each day a violation occurs may be assessed when it is shown that the defendant was actually notified of the provisions of this article and after receiving notice failed to take action necessary for compliance with this article.

Commented [AW10]: Because the WHAC is not zoned Residential, recommend removing this and providing for this regulation in the appropriate location.