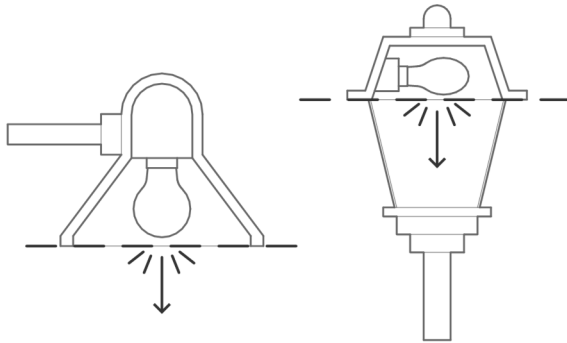


Sec. 107-~~39120~~. Lighting requirements.

(a) Definitions: As used herein:

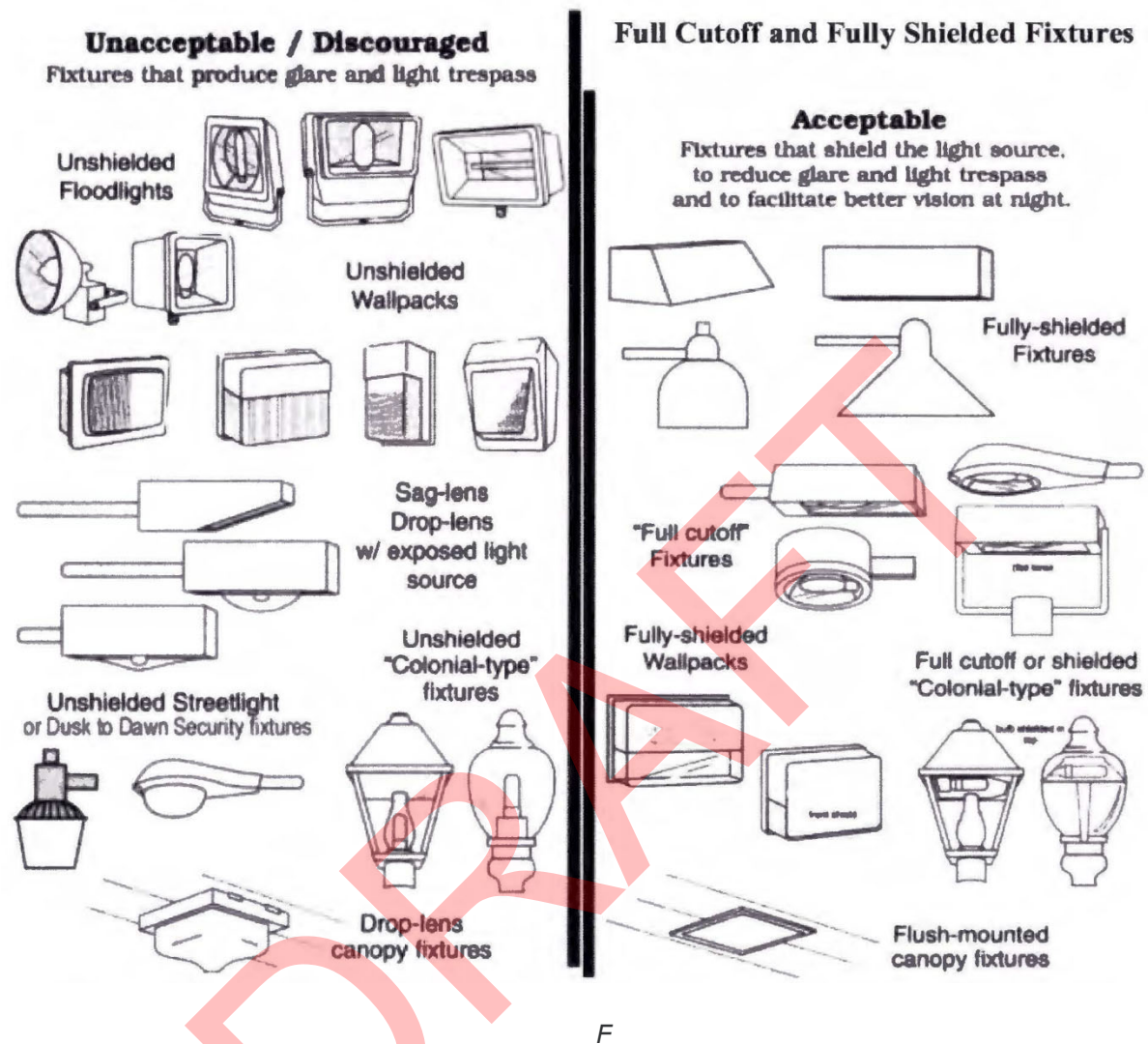
(i) "Shielded" means "installed in such a manner that all light emitted by the fixture, either directly from the bulb or a diffusing element, or indirectly by reflection or refraction from any part of the fixture, is projected below the horizontal plane immediately beneath the fixture's lowest light-emitting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



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.

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UNSHIELDED FIXTURES



(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 non-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.

(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 no longer than sixty (60) days; and
- (9) other temporary uses approved by the City Council (festivals, carnivals, fairs, night-time construction);

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

- (1) Lighting must be shielded and aimed downward so as to ensure that the illumination is only pointing downward onto the ground surface or into the building. No outdoor lighting fixture shall permit light to shine off the property on which it is installed.
- (2) The source of the light (the light bulb, light emitting diode, or any other light emitting device), a refractive or non-refractive lens cover, or reflector shall not be visible in a direct line of sight from any other property or public right of way.
- (3) Lighting must have a color temperature of no more than 3000 Kelvins (K).
- (4) For properties other than service stations, the maximum allowable intensity of lighting shall be 0.25 footcandle measured at the lot line. For service stations and other fueling facilities, the maximum allowable intensity shall not exceed 10.0 footcandle in the area surrounding pump islands, canopy lighting shall be recessed into the canopy, and neither canopy lighting nor overhead lighting shall trespass onto any other property.
- (5) Any lighting to illuminate parking lots, buildings or other structures shall not exceed the height of such buildings or structures, if attached thereto, or, if pole-mounted, a height of 24 feet. All lighting shall be installed in a manner which directs or shields the light away from nearby dwellings.
- (6) Outdoor lighting shall be designed to provide the minimum lighting necessary to ensure adequate safety, night vision, and comfort, and not create or cause excessive glare onto adjacent properties or public street rights of way.
- (7) Outdoor uplighting is prohibited except in cases where the fixture is shielded by a roof overhang or similar structural shield and a licensed architect or engineer has stamped a prepared lighting plan that ensures that the light fixtures will no cause light to extend beyond the structural shield. For spotlights and floodlights mounted overhead on poles and used for area lighting, the axis of illumination shall be adjusted to an angle not more than 20 degrees from the vertical line between the fixture and the ground. For spotlights and floodlights mounted at or near ground level and used to light a building, or other structure, the axis of illumination shall be adjusted to minimize the amount of light escaping above, below, and to the sides of the illuminated object.
- (8) The aggregate total of outdoor lighting on any property shall not exceed 25,000 lumens per acre or equivalent thereof for lots of less than an acre.

(9) For any location or structure not specified in paragraphs (1) through (8) above, the Building Official shall set acceptable levels of illuminance upon request based on guidelines established by the Illuminating Engineering Society of North America (IESNA).

(10) No light or illumination that flashes, moves, scrolls rotates, scintillates, blinks, flickers, varies in intensity or color, or uses intermittent electrical pulsations is permitted.

(e) Submittals. Applications for all building permits for new construction or redevelopment, including the installation of outdoor lighting fixtures, shall provide proof of compliance with this section. The submittal shall contain the following information as part of the permit application:

- (1) plans indicating the location, type, and height of lighting fixtures including both building mounted and ground mounted fixtures;
- (2) a description of the lighting fixtures, including lamps, poles or other supports and shielding devices, which may be provided as catalog illustrations from the manufacturer;
- (3) photometric data, which may be furnished by the manufacturer, showing the angle of light emission;
- (4) detailed site lighting plan illustrating the footcandle power measured throughout the site;
- (5) a certification by an engineer registered in the state as conforming to applicable requirements of this code, and
- (6) additional information as may be required by the Building Official in order to determine compliance with this section.

(f) Enforcement. The city shall have the power to administer and enforce the provisions of this Section, as provided in Section 107-443~~[Division, Article, Section XX]~~ of this Code. Any violation of this Section is hereby declared to be a nuisance. A civil penalty of up to ~~XX~~\$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.