

ZONING

§ 180-20.2 Outdoor Lighting [Added 12-16-97, Ord. No. 97-19; Amended 06-28-05, Ord. 05-14; 2-13-07, Ord. 07-04, 05-13-08, Ord. 08-09]

A. Purpose.

The purpose of this section is to establish regulations to allow for outdoor illumination levels which are appropriate for the visual task, safety and security while minimizing the undesirable side effects of excessive illumination such as glare, sky glow and light pollution. Over time, it is the intent that this section will allow for reasonably uniform illumination levels in our community. It is also the purpose of this section to establish recommendations for the design of outdoor lighting fixtures that will enhance the small mountain town atmosphere of Frisco.

B. Applicability.

Outdoor lighting fixtures installed for new structures and the expansion or remodeling of existing structures as well as new or replaced lighting fixtures shall meet the requirements of this section.

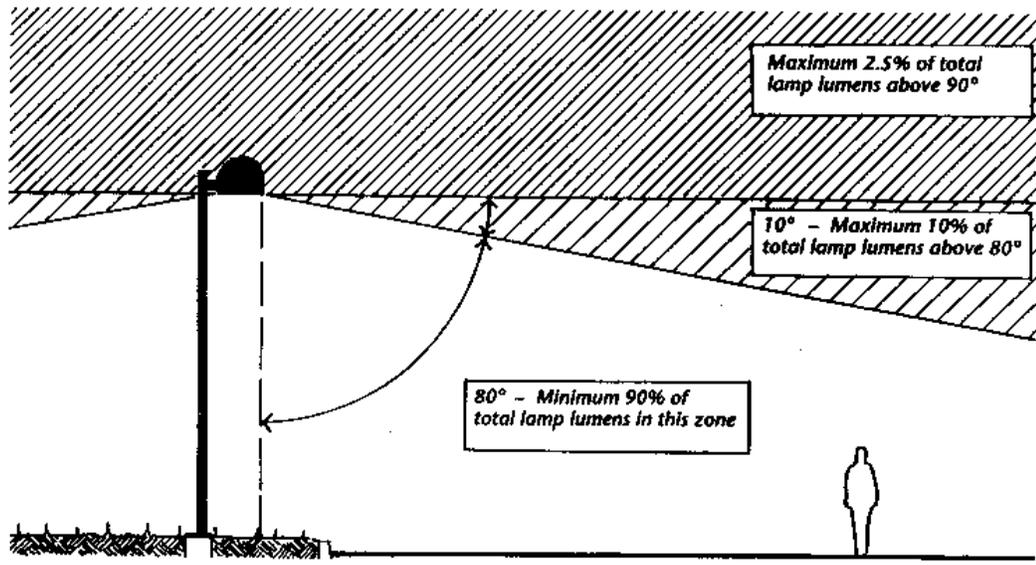
C. Approval Required.

The Planning Commission shall review and approve a preliminary lighting plan as part of an application for all large projects as defined in Section 180-5. Approval of a final lighting plan from the Community Development Department is required prior to the issuance of any building permit for large projects, except for a Foundation Only Permit. All other outdoor lighting installations or replacements may be approved by the Community Development Department.

D. General Requirements.

1. Exterior light fixtures on commercial, multi-family, duplex and single family residence properties shall conform with the Illuminating Engineer Society of North America (IESNA) criteria for full cut-off fixtures. Any structural part of the fixture providing this cutoff angle must be permanently affixed.

ZONING



Full cut-off fixture as defined by IESNA.

2. Outdoor light fixtures shall be positioned so that there is no direct light emission onto adjacent properties.
3. To minimize the indiscriminate use of illumination, it is recommended that outdoor lighting, except as required for security, be extinguished during non-operating hours.
4. Emergency exterior exit lighting, as required by the Building Department, is exempt from the full cut-off requirement for fixtures installed as lighting to be used only in emergencies.
5. Wherever practicable, it is encouraged that lighting installations include timers, dimmers, and/or sensors to reduce overall energy consumption and unnecessary lighting.
6. The use of compact fluorescent light bulbs, Light Emitting Diodes (LED), or similar technology is encouraged.

E. Height.

The mounting height of light fixtures shall be as follows:

1. The height of wall-mounted light fixtures shall not exceed the height of the wall to which it is mounted.
2. For commercial developments, mixed-use developments and residential developments with 5 or more units, exterior freestanding light fixtures shall be mounted no more than fifteen (15) feet high.

ZONING

3. For residential developments with fewer than 5 units, exterior freestanding light fixtures shall be mounted no more than eight (8) feet high.
4. Freestanding light fixtures installed along Highway 9 shall be mounted no more than forty (40) feet high.
5. Freestanding light fixtures installed within public roadway right-of-ways other than along Highway 9 shall be mounted no more than thirty (30) feet high.

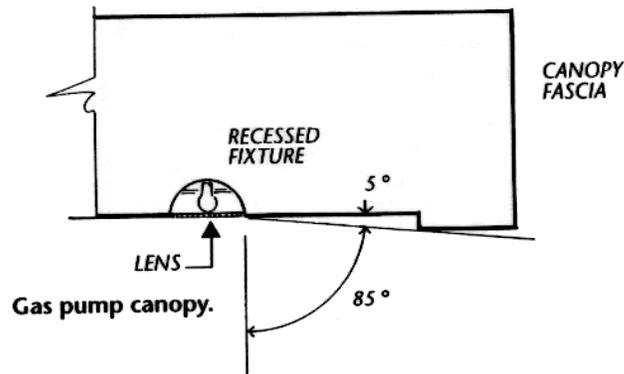
F. Parking Lot Lighting Standards.

Parking lot lighting shall not exceed light levels necessary for safety and locating vehicles at night. To achieve this and minimize light spillage onto adjacent properties, fixtures which cut off light at 90 degrees or less from the vertical shall be used as outlined in subsection 180-20.2.D. 1. In addition, the lighting plan shall be designed so that the parking lot is lit from the outside perimeter inward, and/or incorporate design features with the intent of eliminating off-sight light pollution. It is required that the maximum light spillage onto adjacent properties and rights-of-way not exceed .4 to .9 candle feet. It is required that the average level of illumination on the surface of the lot not exceed 2 foot candles, based on the IESNA's recommendation for parking lot lighting.

G. Canopy Lighting Standards.

Lighting levels for canopies and aprons of commercial facilities shall be adequate only to facilitate the activities taking place in such locations and shall not be used to attract attention to the businesses. It is required, based on the IESNA's recommendation for canopies, that the maximum level of illumination not exceed 20 foot candles. The following standards shall be met:

1. Light fixtures mounted on canopies shall be recessed so that the lens cover is recessed or flush with the bottom surface (ceiling) of the canopy and/or shielded by the fixture or the edge of the canopy so that light is restrained to no more than 85 degrees from vertical, as shown in the illustration below.



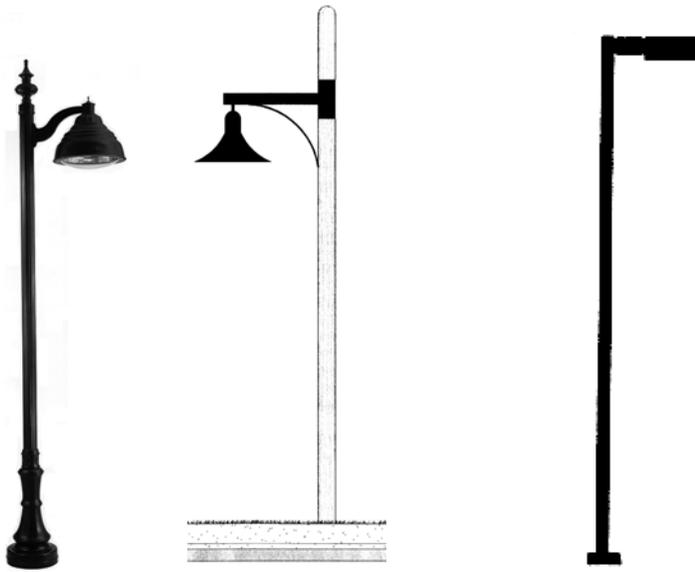
2. Lights shall not be mounted on the top or sides (fascias) of the canopy or apron, and the sides (fascias) of the canopy or apron shall not be illuminated.
3. Canopies shall be constructed of non-light-emitting material.

ZONING

H. Design.

It is required that light fixture designs reflect the small mountain town character of Frisco by meeting all of the following design criteria:

1. Use of non-contemporary, non-shoebox style light fixtures;
2. Use of wooden, vintage or other decorative style light poles;
3. Use of materials such as log or stone or other materials that simulate natural materials when there is a base for the pole.



Example: permitted fixture designs

Shoebox fixture - not allowed

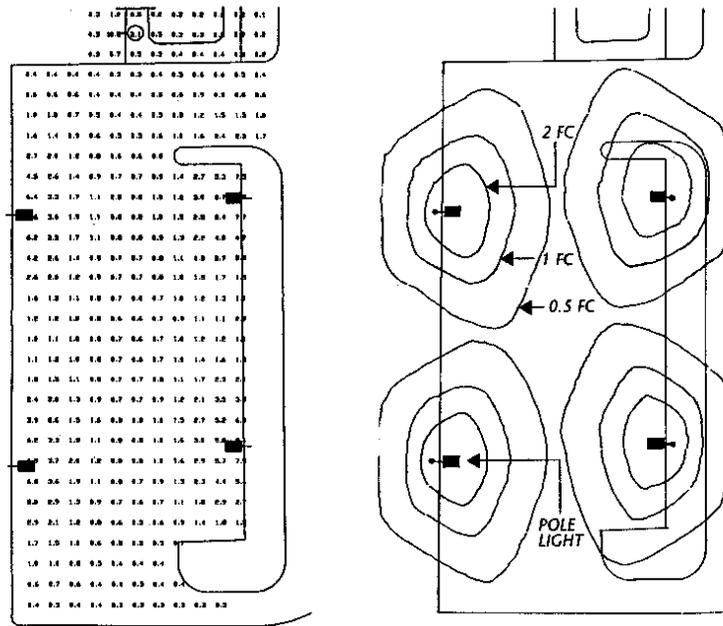
Consideration of items such as the overall appearance of the light fixture and pole, the placement of the light, surrounding landscaping for screening, and design features to eliminate off-sight light spillage will be used when determining whether the proposed lighting accomplishes the purpose and intent of this subsection, H., Design.

I. Lighting Plan.

Applications for large projects (as defined in Section 180-5. Definitions) shall submit for approval by Planning Commission a preliminary lighting plan which includes the following:

1. Site plan with location of all light fixtures and a numerical grid of lighting levels (in foot-candles) that the fixtures will produce on the ground (photometric report).

ZONING



PARKING LOT LIGHTING PLANS

Computer generated light level grid.
Readings in tenths of foot-candles.

Iso-illuminance circles. Each circle indicates an even light level. Readings in foot-candles.

2. Area of illumination.
3. Lamp type and wattage.
4. Mounting height of all fixtures.
5. Cut sheet showing the design and finishes of all fixtures and designation as IESNA "cut-off" fixtures.
6. Drawings of all relevant building elevations showing the location and aiming points of the fixtures.

J. Special Zones.

In order to preserve the natural amenities and atmosphere of certain areas of Town, the following special lighting zones and standards are established:

1. Dillon Reservoir. For all shorelines and marina properties adjacent to Dillon Reservoir, the following lighting standards shall apply:
 - a. Within 200 yards of the shoreline, all exterior light sources shall be fully shielded (totally concealed) from shoreline viewing, except as required for safety.
2. Parks. Light fixtures in municipal parks, pocket parks and fields shall employ full cut-off fixtures or fixtures designed to direct light downward. Where it is established that

ZONING

there is a need for some up light, such as a baseball park, "sharp cut off" fixtures, ones in which there is very good beam control of the light output, shall be used.

3. Open Space. Lighting is discouraged on undeveloped open space lands. Any lighting installed on open space lands shall be in compliance with this section.

K. Prohibited.

The following lighting is prohibited as follows:

1. Blinking and flashing lights.
2. Exposed strip lighting used to illuminate building facades or outline buildings.
3. Neon tubing, except as otherwise permitted under Section 180-22, Signs.
4. Any light that may be confused with or construed as a traffic control device except as authorized by the Federal Government, the State of Colorado, or the Town of Frisco.
5. Beacons and search lights, except as used for rescue operations by the Lake Dillon Fire Authority or other rescue organization.

L. Exemptions.

Provided that no dangerous glare is created on adjacent streets or properties, the following lighting is exempt from the regulations of this section:

1. Holiday-style lights;
2. Street lighting installed by the Town of Frisco or other authorized government entity for the benefit of safety.

M. Nonconforming.

As of the effective date of this section, all outdoor lighting that does not conform to this section, Section 180-20.2 shall be legal nonconforming outdoor lighting. A legal nonconforming outdoor light fixture shall not be changed or altered without being brought into compliance with the provisions of this section. A nonconforming structure that is nonconforming in terms of its outdoor light fixtures may be expanded, changed, or altered provided that all outdoor light fixtures on the structure, new and old, are brought into compliance with the provisions of this section.