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2 **CHAPTER 29A: OUTDOOR LIGHTING**

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14 **9-29A-1: PURPOSE:**

15 The general purpose of an outdoor lighting ordinance is to protect and promote the public health,
16 safety and welfare, while preserving and protecting the scenic and aesthetic values and natural
17 resources of Blaine County by establishing regulations and a process for review of outdoor lighting.
18 This chapter establishes minimum standards for regulating outdoor lighting in order to eliminate or
19 reduce the nuisance and hazards of light pollution, including, but not limited to: glare, light trespass,
20 sky glow, energy waste, and negative impacts on the nocturnal environment.

21 **9-29A-2: ~~NEW LIGHTING~~ APPLICABILITY:**

22 A. New Lighting: All outdoor lighting installed after the effective date of this chapter shall conform to
23 the standards established by this chapter. (~~Ord. 2010-06, 5-25-2010~~)

24 B. Existing Lighting: All outdoor exterior lighting installed before the effective date hereof shall be
25 brought into conformance with this chapter, except section 9-29A-7 of this chapter, as follows:

26 1. All outdoor exterior lighting located on a subject property that is part of an application for a
27 conditional use permit, subdivision, Planned Unit Development, or a building permit is
28 required to be brought into conformance with this chapter before issuance of a certificate of
29 occupancy, final inspection or final plat recordation, when applicable. For other permits, the
30 applicant shall have a maximum of thirty (30) days from date of permit issuance to bring the
31 lighting into conformance.

32 2. All existing exterior lighting on property used for residential, institutional, public and
33 semipublic uses are required to be brought into conformance within thirty six (36) months
34 from the date of adoption hereof.

35 **9-29A-3: DEFINITIONS:**

36 FLOODLIGHT: A lamp that is designed to flood a well-defined area with light.

37 FULL CUTOFF LUMINAIRES: A luminaire designed and installed where no light is emitted at or above
38 a horizontal plane running through the lowest point on the luminaire.

39 FULLY SHIELDED: The luminaire incorporates a solid barrier (the shield), which permits no light to
40 escape through the barrier.

1 GLARE: Stray, unshielded light striking the eye that may result in: a) nuisance or annoyance glare
2 such as light shining into a window; b) discomfort glare such as bright light causing squinting of the
3 eyes; c) disabling glare such as bright light reducing the ability of the eyes to see into shadows; or d)
4 reduction of visual performance.

5 HOLIDAY LIGHTING: Strings of individual lamps, where the lamps are at least three inches (3") apart-
6 and the output per lamp is not greater than fifteen (15) lumens. Holiday lighting may be displayed
7 between November 15 and February 1.

8 KELVIN: Temperature scale, in this context used to describe color of light.

9 LAMP: The generic term for an artificial light source, to be distinguished from the whole assembly (see
10 definition of Luminaire). Commonly referred to as "bulb".

11 LED: A type of lamp which uses one or more light emitting diodes which can be of any of several
12 colors.

13 LIGHT COLOR: Color temperature specified in degrees Kelvin.

14 LAMP: The generic term for an artificial light source, to be distinguished from the whole assembly (see
15 definition of Luminaire), or commonly referred to as "bulb".

16 LIGHT: The form of radiant energy acting on the retina of the eye to make sight possible.

17 LIGHT POLLUTION: Any adverse effect of manmade light including, but not limited to, discomfort to
18 the eye or diminished vision due to glare, light trespass, uplighting, the uncomfortable distraction to the
19 eye, or any manmade light that diminishes the ability to view the night sky.

20 LIGHT TRESPASS: Light falling on the property of another or the public right of way when it is not
21 required to do so.

22 LIGHTING: Any or all parts of a luminaire that function to produce light.

23 LUMEN: The unit used to quantify the amount of light energy produced by a lamp at the lamp. Lumen
24 output of most lamps is listed on the packaging. For example, a sixty (60) watt incandescent lamp
25 produces nine hundred fifty (950) lumens while a fifty five (55) watt low pressure sodium lamp
26 produces eight thousand (8,000) lumens.

27 LUMINAIRE: A complete lighting unit, consisting of a lamp or lamps together with the parts designed to
28 distribute the light, to position and protect the lamps and to connect the lamps to the power. When
29 used, includes ballasts and photocells. Commonly referred to as "fixture".

30 NONESSENTIAL LIGHTING: Lighting that is not necessary for an intended purpose after the purpose
31 has been served. Does not include any lighting used for safety and/or public circulation purposes.

32 OUTDOOR LIGHTING: Temporary or permanent lighting that is installed, located or used in such a
33 manner to cause light rays to shine outdoors. Luminaires that are indoors that are intended to light
34 something outside are considered outdoor lighting for the purpose of this chapter.

35 PARTIALLY SHIELDED: A luminaire incorporating a semiopaque barrier or partial shield around the lamp that allows
36 some light to pass through the barrier while concealing the lamp from the viewer and incorporates a translucent lens.

37 SECURITY LIGHTING: Unshielded outdoor lighting for security purpose and not associated with an
38 outdoor activity that requires illumination.

39 SKY GLOW: The overhead glow from light emitted sideways and upward. Sky glow is caused by the
40 reflection and scattering of light by dust, water vapor and other particles suspended in the atmosphere.
41 Sky glow reduces one's ability to view the night sky.

1 TRANSLUCENT: Permitting the passage of light; transmitting and diffusing light so that objects beyond
2 cannot be seen clearly.

3 UPLIGHTING: Fully shielded lighting that is directed in such a manner as to shine light rays above the
4 horizontal plane.

5 **9-29A-4: OUTDOOR LIGHTING STANDARDS:**

6 All outdoor lighting, unless exempted in 9-29A-7, shall comply with the regulations set forth in this
7 Section.

8
9 A. Light Fixtures: Any light source shall be downcast and fully shielded. Fixtures shall be mounted such
10 that no light is emitted above the horizontal plane of the fixture. Luminaires that are partially shielded
11 provided that the lamp is not visible, and the luminaire has an opaque top or is under an opaque structure.

12 1. Examples of Unshielded (Prohibited) and Fully Shielded (Allowed) lights and luminaires limiting
13 light to the horizontal plane are shown below.

14 A. Outdoor Luminaires: All outdoor lighting shall not cause the lamp to shine directly on adjacent property or public
15 rights of way. Outdoor lighting luminaires shall be one of the following:

16 1. Full cutoff and fully shielded.

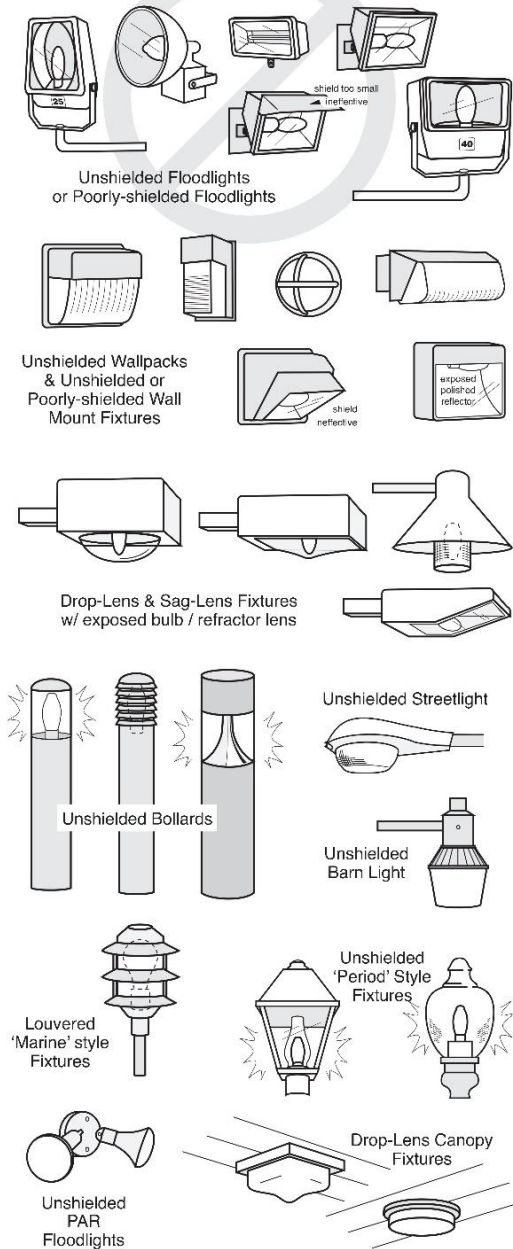
17 ~~2.1. Luminaires that are partially shielded provided that the lamp is not visible, and the luminaire has an~~
18 ~~opaque top or is under an opaque structure.~~

19 ~~3. Floodlights with external shielding shall be angled provided that no light is directed above a twenty five degree~~
20 ~~(25°) angle measured from a vertical line from the center of the light extended to the ground.~~

21 ~~4. Holiday lighting from November 1 to March 1.~~

Unacceptable/Not Compliant

Fixtures that produce glare and light trespass



Acceptable/Compliant

Fixtures that shield the light source to minimize glare and light trespass and to facilitate better vision at night

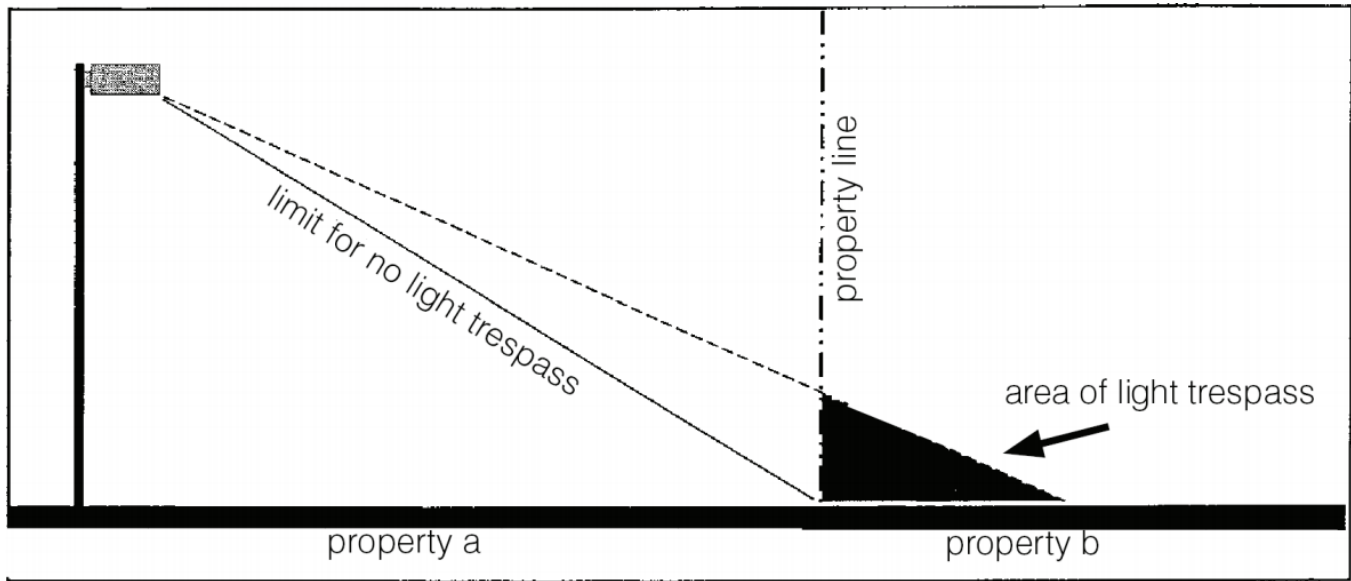


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B. Light Color: Correlated color temperature of any exterior light source shall not exceed 3000 Kelvin.

C. Light Trespass: All light fixtures, including security lighting, shall be aimed and shielded so that the direct illumination shall be confined to the property boundaries of the source. Refer to the diagram below. Particular care is to be taken to assure that the direct illumination does not fall onto or across any public or private street or road. Motion sensing light fixtures shall be fully shielded or properly adjusted, according to the manufacturer's instructions, to turn off when detected motion ceases.



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2 **B.D. Placement and Height Of Luminaires:**

3 **1.a. Parking area luminaires shall be no higher than seventeen feet (17') in height. as measured**
 4 **from the ground to the top of the highest light source.**

5 **2. Freestanding luminaires in residential zones shall be no higher than fifteen feet (15') in height.**

6 **b. All freestanding area lights within a residential zone, except streetlights, shall be mounted at a**
 7 **height equal to or less than the sum of $H = 3 + (D/3)$, where D is the distance in feet to the**
 8 **nearest property boundary, but shall not exceed twelve feet (12') from ground level to the top of**
 9 **the luminaire, whichever is less.**

10 **3.c. Streetlights used on arterial roadways shall be no higher than twenty feet (20') in height.**

11 **4.d. The height of any light fixture or luminaire shall be no higher than thirty feet (30') in**
 12 **height.**

13 **E. Controls. All nonresidential lighting fixtures shall employ automatic lighting controls that extinguish**
 14 **exterior lighting when sufficient daylight is available. Such controls include, but are not limited to:**
 15 **timers, wireless remote monitoring with turn on/off capabilities, photo sensitive light controls,**
 16 **photoelectric switches, occupancy sensors, astronomic time switches or equivalent functions from a**
 17 **programmable lighting controller, building automation system or lighting energy management**
 18 **system, all with battery or similar backup power or device.**

19 **1. Exceptions:**

20 **a. Lighting required by Building Code;**

21 **b. Lighting necessary for public safety;**

22 **c. Lighting under canopies.**

23

24 **F. Lighting reduction: All nonessential outdoor commercial, recreational, and residential lighting shall**
 25 **be turned off after business hours and/or when not in use. Lights on a timer shall be used. Sensor**
 26 **activated lights shall be used to replace existing lighting that is desired for security purposes.**

27 **G. No lighting shall be installed within the public right of way without first receiving approval for any**
 28 **such application by the Land Use & Building Services Department Director.**

1 **9-29A-5: COMPLEX USES:**

2 A. Uses in complexes such as stadiums, ball diamonds, playing fields, outdoor rinks, ski areas, special
3 events, tennis courts, construction sites, parking structures, urban parks, ornamental and
4 architectural lighting of bridges, public monuments, statuary and public buildings, correctional
5 facilities, and industrial sites all have unique requirements for nighttime visibility and often have
6 limited hours of operation. They shall be exempted from the standards in 9-29A-4, if the below
7 standards are met and if their lighting has been approved via issuance of a Conditional Use Permit,
8 Building Permit or other Zoning Permit.

- 9 1. The applicant shall demonstrate that every reasonable effort to mitigate the effects of light on
10 the environment and surrounding properties has been taken, supported by a signed statement
11 describing the mitigation measures.
- 12 2. Maximum height. Exterior luminaires shall not exceed a maximum post height of 60 feet.
- 13 3. Fully Shielded. Each luminaire shall be fully shielded in either its orientation or by landscaping
14 to prohibit glare and light trespass to adjacent residential property and must be installed and
15 maintained with minimum aiming angles of 25 degrees downward from the horizontal.
- 16 4. Lights Extinguished. Lights shall be extinguished by 10:00 PM or at the conclusion of the
17 event, whichever is later. Lighting is not allowed to remain on overnight.

18 **9-29A-6: PROHIBITED LIGHTING:** The following forms of outdoor lighting are prohibited from being
19 installed or used.

- 20 1. Except as otherwise allowed by this title, any lighting that is flashing, blinking, rotating,
21 chasing, or rapidly changing in color or intensity is prohibited, except for holiday lighting as
22 defined.
- 23 2. Searchlights, beacons, laser source, neon lighting, and other high-intensity light fixtures.
- 24 3. Strings or strands of lights used to highlight a sign, perimeter of a sign, or any portion of a
25 building are not permitted, except for holiday lighting as defined.
- 26 4. Lighting in which any single luminaire exceeds 20,000 initial lumens.
- 27 5. Uplighting is prohibited in all zoning districts.

28 **9-29A-7: EXEMPTIONS:** The following forms of outdoor lighting are exempt from the provisions of this
29 chapter and are not required to comply with its terms:

30 A. Lighting used primarily for agricultural activities including the farming or ranching of land. a.

31 Includes: i

- 32 1. cultivation of the soil;
- 33 2. production of forage, crops, or timber;
- 34 3. growing of ornamental or landscaping plants;
- 35 4. greenhouses; and
- 36 5. rearing, feeding, and management of livestock.. Security lighting needs to comply.

37 B. Traffic control, roadway, vehicular lights and all temporary emergency lighting.

38 C. Open flame gas lamps.

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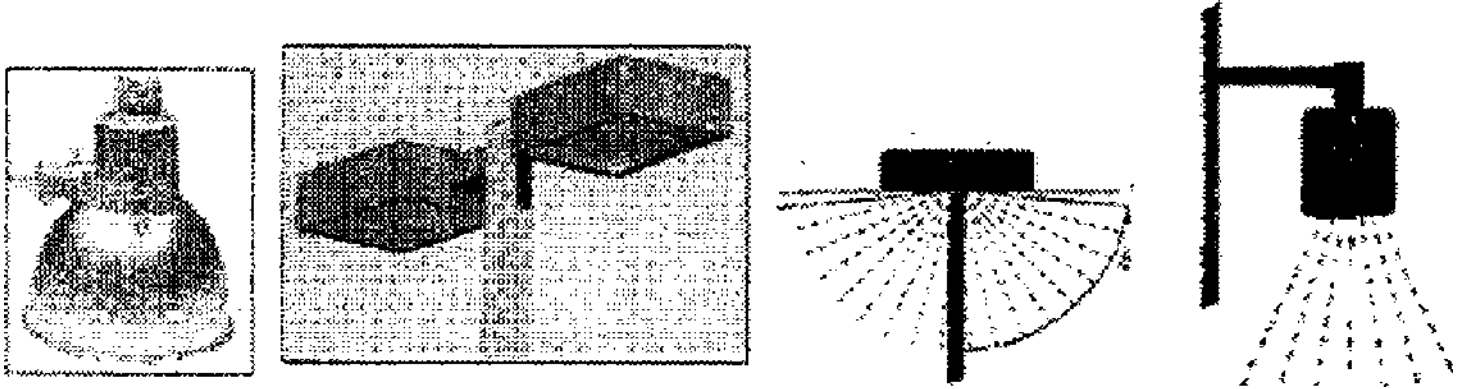
D. Flagpole lighting that is shielded and directed downward from the top of the flagpole, provided the flag is of a government. Flags are encouraged to be taken down at sunset to avoid the need for lighting.

E. Underwater lighting in swimming pools and other water features.

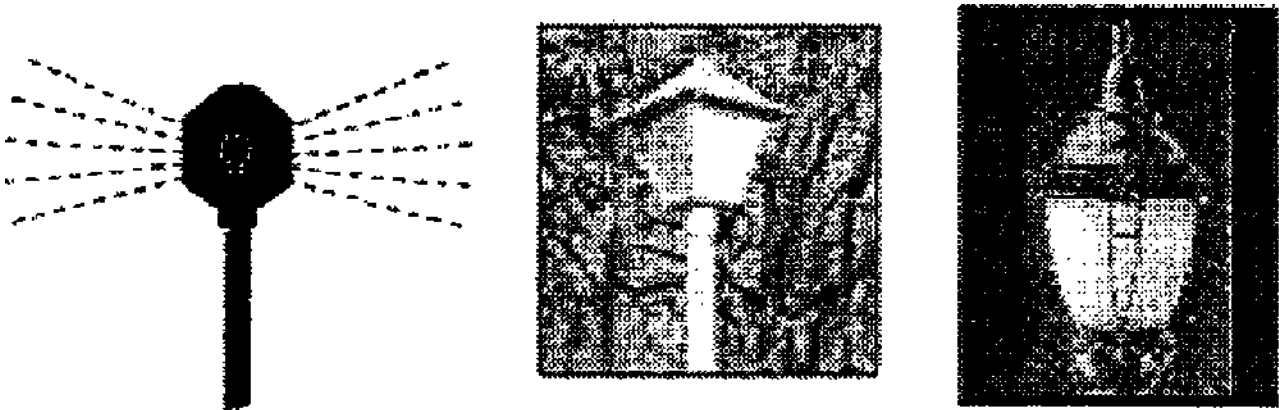
F. Lighting that is required to meet the federal aviation authority's compliance standards.

G.—Examples:

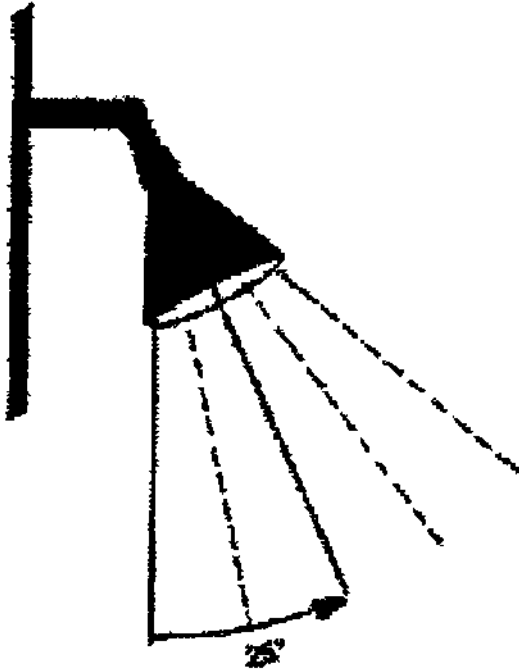
1.— Full cutoff luminaires with the light source downcast and fully shielded.



2.— Luminaires that are partially shielded with the lamp not visible and has an opaque top or is under an opaque structure.



3.— Floodlights with external shielding shall be angled provided that no light is directed above a twenty five-degree (25°) angle measured from a vertical line from the center of the light extended to the ground.



(Ord. 2010-06, 5-25-2010)

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2 **9-29A-5: 9-29A-8: PROCEDURE:**

3 ~~A.~~ A. Applications; Lighting Plan Required: All applications for zoning conditional use permits,
4 planned unit developments, subdivision ~~and,~~ recreation development plans, applicable sign permits, or
5 building permits shall include lighting plans showing location, type, height, color temperature, amount
6 of all proposed and existing fixtures and boundary of light:lights.

7 ~~B.~~ B. The administrator shall review any new or existing outdoor lighting on the subject property
8 that is part of an application ~~for zoning permit, subdivision or building permit,~~ to determine whether the
9 lighting complies with the standards of this chapter. The administrator shall convey in writing a
10 recommendation whether the lighting complies with the standards of this chapter to the building official,
11 the board of county commissioners, planning and zoning commission or hearing examiner before
12 issuing approval of any zoning permit, subdivision application, or certificate of occupancy.

13 ~~C.~~ C. For all other lighting which must conform to the requirements of this chapter, the
14 administrator shall issue a decision whether the lighting complies with the standards of this chapter.
15 The administrator, prior to issuance of its decision, may request additional information from the
16 applicant.

17
18 **9-29A-6: EXEMPTIONS:**

19 ~~The following forms of outdoor lighting are exempt from the provisions of this chapter and are not required to comply~~
20 ~~with its terms:~~

21 ~~A.~~ A. Agricultural lighting when used for agricultural purposes. Security lighting needs to comply.

22 ~~B.A.~~ B.A. Lighting required for safe nighttime operation in light industrial, heavy industrial, commercial, and agricultural
23 zones. Security lighting needs to comply.

24 ~~C.~~ C. A single light for the sole purpose of uplighting of a flag.

1 ~~D. Sports, recreation and entertainment lighting required for public events.~~

2 ~~E.A. Lighting that is required to meet the federal aviation authority's compliance standards.~~

3 ~~F.A. Traffic control, roadway, vehicular lights and all temporary emergency lighting.~~

4 ~~G. Lighting activated by a motion sensor with a cutoff timer set for five (5) minutes or less.~~

5 **9-29A-7: PENALTIES:**

6 A violation of this chapter shall be a misdemeanor, and subject to penalty as provided in section ~~1-4-1 of~~
7 ~~this code.~~ 1-4-1 of this code. Each day that such a violation continues shall constitute a separate
8 criminal offense. The landowner, tenant, subdivider, builder, public official or any other person who
9 commits, participates in, assists in or maintains such violation may be found guilty of such a violation.