

**TOWN OF AVON, COLORADO  
ORDINANCE NO. 04-19  
SERIES of 2004**

**AN ORDINANCE AMENDING TITLE 15,  
MUNICIPAL CODE OF THE TOWN OF AVON, AS  
IT RELATES TO OUTDOOR LIGHTING  
STANDARDS**

BE IT ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF  
AVON, COLORADO:

Section 1. Amendment. Title 15, Avon Municipal Code, is amended by the addition of  
a new Chapter 15.30 as follows:

Chapter 15.30

OUTDOOR LIGHTING ORDINANCE

Sections:

15.30.010	Intent and Purpose
15.30.020	Definitions
15.30.030	Applicability
15.30.040	General Outdoor Lighting Standards
15.30.050	Lighting Plan
15.30.060	Violations
15.30.070	Figures and Diagrams

15.30.010 Intent and Purpose. The purpose of this ordinance is to reduce offensive lighting sources and reduce light trespass beyond property lines, including unnecessary upward lighting. The Town of Avon is experiencing a significant increase in the use of exterior illumination. Town residents and guests value small town character and the qualities associated with this character, including the ability to view the stars against a dark sky. They recognize that inappropriate and poorly designed or installed outdoor lighting causes unsafe and unpleasant conditions, and limits their ability to enjoy the nighttime sky.

This Chapter is intended to help maintain the health, safety, and welfare of the residents of Avon through the regulation of exterior lighting in order to:

- A. Promote adequate light for safety and security;
- B. Prevent inappropriate and poorly designed or installed outdoor lighting;
- C. Reduce glare;
- D. Reduce nighttime light pollution and to protect and reclaim the ability to view the night sky by restricting the unnecessary upward projection of light;

E. Phase out existing non-conforming fixtures that violate this chapter, including those owned by the Town; and

In order to determine the effectiveness of the ordinance, staff shall develop and implement the “Avon Dark Sky Preservation Initiative” program to measure observable lumen counts at fixed points on the valley floor. Baseline monitoring shall take place on an annual basis, and five (5) years after the implementation of this ordinance, the findings shall be presented to the Planning and Zoning Commission and the Town Council to determine whether or not the intent and goals of this chapter are being satisfied.

15.30.020 Definitions.

**Exterior Lighting.** Temporary or permanent lighting that is installed, located, or used in such a manner to cause light rays to shine outdoors. Luminaires that are indoors that are intended to light something outside are considered exterior lighting.

**Fixture Height.** The vertical distance from the ground directly below the centerline of the fixture to the lowest direct light emitting part of the fixture.

**Full cut-off fixture.** A fixture designed and installed where no direct light (as opposed to scattered light) is emitted at or above a horizontal plane running through the lowest point on the fixture.

**Fully shielded.** The luminaire incorporates a solid opaque barrier (the shield), which permits no light to escape through the barrier.

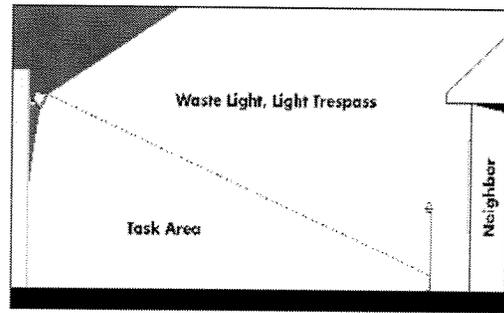
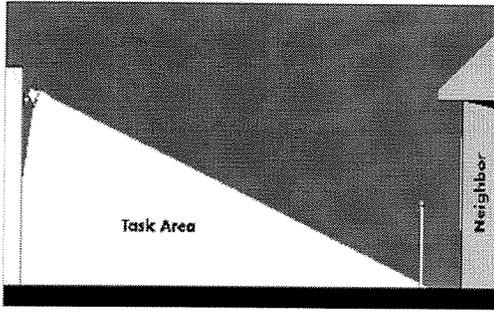
**Glare.** Stray, unshielded (including reflected) light striking the eye that may result in (a) nuisance or annoyance glare such as light shining into a window; (b) discomfort glare such as bright light causing squinting of the eyes; (c) disabling glare such as bright light reducing the ability of the eyes to see into shadows or (d) reduction of visual performance.

**Holiday (Seasonal) Lighting.** Temporary festive lighting intended to celebrate the winter season and the Thanksgiving, Christmas and New Year’s holidays.

**Light Pollution.** Any manmade light that diminishes the ability to view the night sky.

**Light Source.** The source of the light emitted by the fixture. Also referred to as ‘bulb.’

**Light Trespass.** Light falling on the property of another or the public right-of-way when it is not required to do so.



Controlled source and good aiming prevent light trespass      an      Light trespass from uncontrolled source

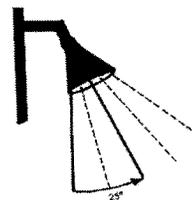
to all exterior lighting within the Town of Avon. All exterior lighting installed after the effective date of this Chapter shall conform to the standards established by this Chapter. All existing lighting installed before the effective date of this Chapter shall be brought into conformance with the Chapter within five (5) years from the date of adoption of this Ordinance, or by November 17, 2009.

15.30.040 General Outdoor Lighting Standards.

The following lighting standards shall apply to all properties located within municipal boundaries:

- A. The style, color, and design of the fixtures shall be compatible with the overall design concept and use of materials for the building, and site area of the lighting plan.
- B. All lighting shall be shielded such that the source of illumination (filament, frosted bulb or the reflection of those from a shiny surface) is not visible from the property line thereby reducing glare and interference with boundary streets and adjacent properties. Light fixtures near adjacent property may require special shielding devices to prevent light trespass.
- C. All lighting (including, but not limited to street, parking lot, security, walkway and building) shall conform with the definition for full cut-off fixtures with the light source downcast and fully shielded, with the following exceptions:
  - 1. Holiday lighting from November 15<sup>th</sup> to March 1<sup>st</sup>.
  - 2. Sensor activated luminaries, provided:
    - a. It is located in such a manner as to prevent glare and lighting onto properties of others or into the public right-of-way.
    - b. The luminaire is set to only go on when activated and to go off within five minutes after activation has ceased.
    - c. The luminaire shall not be triggered by activity off the property.
  - 3. All temporary emergency lighting needed by the Fire and Police Departments, or other emergency agencies.
  - 4. Floodlights with external shielding can be deflected up to twenty five (25) degrees from a vertical plane as measured through the central axis of the light beam from the luminaire, only if the luminaire does not cause glare or light to shine on adjacent property or public rights-of-way.

Compliant floodlight angle



5. Uplighting for flags, address markers, trees, architectural features, and low-voltage landscape lighting provided the luminaire is located, aimed, and shielded so that direct illumination is focused exclusively on the object and away from adjoining properties and the public street right-of-way. Architectural features may be illuminated by uplighting, provided that the light is effectively contained by the structure. In all cases, uplighting must not cause glare or light trespass.
6. Luminaires (light fixtures) that have a maximum output of one thousand lumens per fixture (equal to one sixty [60] watt incandescent light), regardless of the number of lamps, provided:
  - a. The bulb of the fixture is not visible; and
  - b. The fixture utilizes frosted, opalescent, clear, or iridescent glass; and
  - c. The fixture has an opaque top or is under an opaque portion of the building structure; and
  - d. If the fixture utilizes clear glass, the output of the fixture must be shielded by the architecture of the structure; and
  - e. All fixtures must not cause glare or light trespass beyond the property.
7. Temporary (2 days or less) high intensity discharge floodlighting may be used for sports lighting and Town sponsored events provided that the lighting be turned off no later than one hour after the event is concluded. The fixtures must be aimed so that their beams are directed and fall within the primary playing or performance area.
8. All permanent sports and event lighting shall be equipped with a glare control package (louvers, shields, or similar devices) and the fixtures must be aimed so that beams are directed and fall within the primary playing area and light trespass is minimized.

15.30.050 Lighting Plan. An outdoor lighting plan shall accompany all design and building permit applications and shall be submitted separately from other drawing information. All lighting plans (except single family and duplex applications, whose lighting fixtures and locations are reviewed under the Design Review Guidelines) shall be subject to approval through the design review process by the Planning and Zoning Commission. A user's guide with examples of compliant light fixtures is available in the Community Development office.

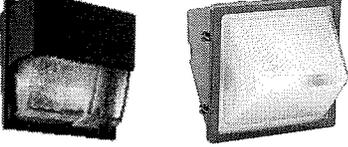
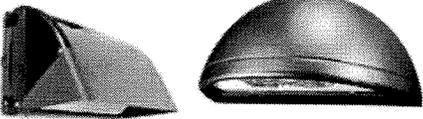
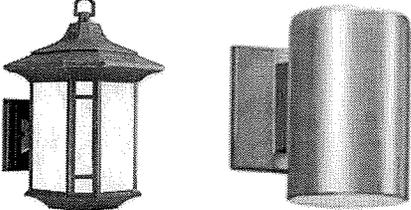
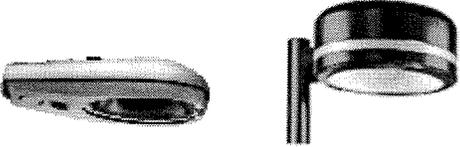
Those projects not requiring design review by the Town shall be required to submit a lighting plan that conforms to the standards outlined herein at the time of building permit for new construction. The lighting plan and/or specifications shall show:

- A. The type and luminous intensity of each light source and wattage (eg. Incandescent, halogen, high-pressure sodium);
- B. The type of fixture (eg. floodlight, full-cutoff, lantern, coach light);
- C. Fixture location and height above all proposed and existing light fixtures;
- D. Shielding and all mounting details;
- E. Manufacturer cut-sheet and/or specification materials with scaled drawings or photographs including: initial lumen rating, color rendering index, and wattage of each lamp;
- F. Any other information deemed necessary by the Community Development Inspector to document compliance with the provisions of this Chapter.

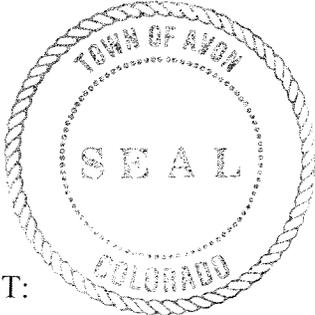
15.30.060 Violations. It is unlawful for any person to violate any provision or to fail to comply with any of the requirements of this Chapter. If the Community Development Inspector finds that any provision of this Chapter is being violated, the Community Development Inspector shall give notice by certified mail, return receipt requested, of such violation to the owner and/or to the occupant of such premises, requesting that the violation be abated within sixty (60) days of the date of mailing of the notice.

The Community Development Department staff shall be available to assist in working with the violator to correct said violation. If the violation is not abated within the sixty (60) day period, the violator shall be punished by a fine of not more than one hundred dollars for each and every day during which the violation of any provision for any single fixture of this Chapter is committed, continued, or permitted.

15.030.70 Figures and Diagrams. The following figures illustrate examples of acceptable and unacceptable types of outdoor lighting fixtures. Note that even those types of fixtures shown as “acceptable;” must be installed and aimed properly to comply with this chapter.

Unacceptable	Acceptable
<p><u>Area Floodlights</u></p>  <p><b>NO</b></p>	 <p><b>YES</b></p> <p><i>* Proper aiming is still required to prevent light trespass.</i></p>
<p><u>Spotlights</u></p>  <p><b>NO</b></p>	 <p><b>YES</b></p> <p><i>* Proper aiming is still required to prevent light trespass.</i></p>
<p><u>Wall Packs</u></p>  <p><b>NO</b></p>	 <p><b>YES</b></p>
<p><u>Decorative</u></p>  <p><b>NO</b></p> <ul style="list-style-type: none"> <li>• These fixtures may be acceptable if using a low wattage bulb.</li> </ul>	 <p><b>YES</b></p>
<p><u>Street Lighting</u></p>  <p><b>NO</b></p>	 <p><b>YES</b></p>

INTRODUCED, APPROVED, PASSED ON FIRST READING AND ORDERED POSTED the 26<sup>th</sup> day of October, 2004, and a public hearing on this ordinance shall be held at the regular meeting of the Town Council on the 9<sup>th</sup> day of November, 2004, at 5:30 P.M. in the Council Chambers, Avon Municipal Building, 400 Benchmark Road, Avon, Colorado.



Albert D. Reynolds  
Albert D. Reynolds, Mayor

ATTEST:

Patty McKenny  
Patty McKenny, Town Clerk

INTRODUCED, FINALLY APPROVED, PASSED ON SECOND READING AND ORDERED POSTED the 9<sup>th</sup> day of November, 2004.



Albert D. Reynolds  
Albert D. Reynolds, Mayor

ATTEST:

Patty McKenny  
Patty McKenny, Town Clerk

APPROVED AS TO FORM:

John W. Dunn  
John W. Dunn, Town Attorney