**Topic:** Solar Energy; Zoning

Resource Type: Regulations
State: Colorado
Jurisdiction Type: Municipal

**Municipality:** City of Fort Collins

**Year:** 2014

**Community Type – applicable to:** Rural; Suburban; Urban

**Title:** City of Fort Collins Code § 3.2.3(E)(1) -

Solar Access Regulations; Solar Zoning

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## **Abstract**

The City of Fort Collins, Colorado adopted solar access, orientation, and shading provisions in its site plan regulations. These provisions require an applicant to locate and design all physical elements in the development plan so that they accommodate active and/or passive solar installations to the extent reasonably feasible. Subsection [C] requires at least 65 percent of lots less than 15,000 square feet in area in single- and two-family residential developments to conform to the regulatory definition of "solar-oriented lot" to preserve the potential for solar energy usage. The elements of development plans must also be located and designed to protect solar access to the maximum extent possible. Applicants are further required to ensure a development plan's physical elements do not cast unreasonable shadows onto adjacent properties and structures, except for structures within certain high-density zoning districts. City of Fort Collins, CO, Code § 3.2.3(E)(1).

## Resource

## 3.2.3 - Solar Access, Orientation, Shading

(A) **Purpose.** It is the City's intent to encourage the use of both active and passive solar energy systems for heating air and water in homes and businesses, as long as natural topography, soil or other subsurface conditions or other natural conditions peculiar to the site are preserved. While the use of solar energy systems is optional, the right to solar access is protected. Solar collectors require access to available sunshine during the entire year, including between the hours of 9:00 am and 3:00 pm, MST, on December 21, when the longest shadows occur. Additionally, a goal of this Section is to ensure that site plan elements do not excessively shade adjacent properties, creating a significant adverse impact upon adjacent property owners. Thus, standards are set forth to evaluate the potential impact of shade caused by buildings, structures and trees.

- (B) *General Standard*. All development shall be designed throughout to accommodate active and/or passive solar installations to the extent reasonably feasible.
- (C) **Solar-Oriented Residential Lots**. At least sixty-five (65) percent of the lots less than fifteen thousand (15,000) square feet in area in single- and two-family residential developments must conform to the definition of a "solar-oriented lot" in order to preserve the potential for solar energy usage.
- (D) *Access to Sunshine*. The elements of the development plan (e.g., buildings, circulation, open space and landscaping) shall be located and designed, to the maximum extent feasible, to protect access to sunshine for planned solar energy systems or for solar-oriented rooftop surfaces that can support a solar collector or collectors capable of providing for the anticipated hot water needs of the buildings in the project between the hours of 9:00 a.m. and 3:00 p.m. MST, on December 21.

## (E) **Shading**.

- (1) The physical elements of the development plan shall be, to the maximum extent feasible, located and designed so as not to cast a shadow onto structures on adjacent property greater than the shadow which would be cast by a twenty-five-foot hypothetical wall located along the property lines of the project between the hours of 9:00 am and 3:00 pm, MST, on December 21. This provision shall not apply to structures within the following high-density zone districts: Downtown, Community Commercial, and Transit-Oriented Overlay District.
- (2) The impact of trees shall be evaluated on an individual basis considering the potential impacts of the shading and the potential adverse impacts that the shading could create for the adjacent properties in terms of blocking sunlight in indoor living areas, outdoor activity areas, gardens and similar spaces benefiting from access to sunlight. Shading caused by deciduous trees can be beneficial and is not prohibited.
- (F) **Alternative Compliance**. Upon request by an applicant, the decision maker may approve an alternative site layout that may be substituted in whole or in part for a plan meeting the standards of this Section.
  - (1) *Procedure*. Alternative compliance plans shall be prepared and submitted in accordance with submittal requirements for plans as set forth in this Section. The plan shall clearly identify and discuss the modifications and alternatives proposed and the ways in which the plan will better accomplish the purpose of this Section than a plan which complies with the standards of this Section.
  - (2) *Review Criteria*. In approving an alternative plan, the decision maker shall find that the proposed alternative plan accomplishes the purposes of this Section equally or better than a plan which complies with the standards of this Section.
    - In reviewing the proposed alternative plan, the decision maker shall take into account whether the alternative design enhances neighborhood continuity and

connectivity, fosters nonvehicular access, and preserves existing natural or topographic conditions on the site.

(Ord. No. 165, 1999 §16, 11/16/99; Ord. No. 087, 2002 §5, 6/4/02; Ord. No. 091, 2004 §10, 6/15/04; Ord. No. 025, 2013 §1, 2/26/13; Ord. No. 086, 2014 §32, 7/1/14)