ARTICLE 14. - SOLAR ENERGY SYSTEMS

• Sec. 4-1401. - Purpose.

The purpose of this article is to establish provisions for using an alternate source of energy apart from the prevailing energy sources of natural gas and electricity, namely solar energy, and to provide standards for the construction and use of solar energy systems.

(Code 1986; Code 2003)

• Sec. 4-1402. - Restrictions.

Except as provided in this article, no solar energy system or solar collection device shall be erected, constructed, altered or maintained on any lot within the city, without first receiving a permit to do so.

(Code 1986; Code 2003; Ord. No. 968, § 1, 7-16-2018)

• Sec. 4-1403. - Standards.

All new or proposed structures complying with height and location criteria will provide a solar ready zone as defined by this section on any new or proposed structure. Additions and renovations to existing structures are not subject to the solar ready requirement. Said zones will be defined in construction documents and include certification of allowable roof loading for the defined solar ready zone to accommodate permanently mounted solar collection devises. The solar ready certification shall be posted and visible near the electrical load distribution center of said structure.

- SOLAR-READY ZONE- A solar-ready zone shall be located on the roof of buildings that are five stories or less in height above grade plane and are oriented between 110 degrees and 270 degrees of true north or have low-slope roofs. Solar-ready zones shall comply with applicable design standards.
- 2. **EXCEPTIONS-** New and proposed structures may be exempted from the solar ready requirements of this section if they meet any of the following criteria:
 - A building with a permanently installed, on-site renewable energy system.
 - A building with a solar-ready zone that is shaded for more than 70 percent of daylight hours annually.
 - A building where the licensed design professional certifies that the incident solar radiation available to the building is not suitable for a solar-ready zone.
 - A building where the licensed design professional certifies that the solar zone area required by this section cannot be met because of extensive roof-top equipment, skylights, vegetative roof areas or other obstructions.
- **3. STANDARDS AND CONDITIONS-** All solar energy systems or solar collection devices shall meet the following standards and conditions:
 - (a) All solar energy systems or solar collection devices shall be incorporated into a building (which may be either a principal or accessory building) and shall be visually integrated

into the basic form and main structure of such building as viewed from the public right of way.

- (b) Any panel or apparatus which is used to receive, collect or transfer solar energy, shall be mounted on the roof of a building and such panels or apparatus shall be integrated into the roof either directly mounted against the roof and visually integrated into the roof so it visually forms a part of the roof itself as viewable from the right of way.
- (c) Mounting arrangements which allow panels or apparatus to project more than 12 inches above the roof line are prohibited.
- (d) No panels or apparatus shall be free standing or mounted on the ground.
- (e) All mechanical piping, electrical conduits, motors and similar items which comprise a solar energy system shall be concealed within the building envelope or through a diverse design, preventing view from either adjoining properties or the road right of way. For the purposes of this section, "Building Envelope" shall be defined as the physical separator between the conditioned and unconditioned environment of a building, including the resistance to air, water, heat, light, and noise transfer. The building envelope consists of a roof, subfloor, exterior doors, windows, and exterior walls.
- (f) All exposed metal, including the framework of active collector panels or exposed mullions and framework of passive systems shall be of finished warm earth tones, or black, in color and unpainted aluminum is prohibited.
- (g) All solar energy system components shall be located as to be accessible for required routine maintenance without trespassing on adjoining property or disassembling any major portion of the structure or building.
- (h) All solar energy system components must be obtained from manufacturers who regularly engage in production of solar energy apparatus. The design and drawings of any system or apparatus shall be completed and sealed by a licensed design professional.

The construction or erection of a solar energy system or solar collection device shall conform to the requirements of Chapter 4 of this Code.

(Code 1986; Code 2003; Ord. No. 968, § 2, 7-16-2018)

• Sec. 4-1404. - Permit Required.

No solar energy system or solar collection device shall be constructed, erected, added to or materially altered, structurally or otherwise changed, or improved nor any other work commenced upon any lot, tract or parcel of land unless the owner, contractor or agent of either shall first have applied for and received from the Building official or Governing Body a permit therefore as provided for in this chapter.

(Code 1986; Code 2003)

• Sec. 4-1405. - Application for Permit.

Any application for the permit required hereunder shall show that the proposed construction meets the requirements set forth in this chapter.

Should any submittal in the opinion of the Building Official contain design elements that are substantially unique and outside the normal configuration of typical solar array components,

design or system requirements, the application for permit shall be forwarded to the City Council for action. The City Council's decision will be final.

(Code 1986; Code 2003; Ord. No. 968, § 3, 7-16-2018)

• Sec. 4-1406. - Issuance of Permit.

Any permit issued pursuant to the provisions of this article for the construction, erection or modification of a solar energy system or solar collection device shall only be issued after the Building Official has determined the proposed construction meets the requirements of <u>Section 4-1403</u> and that the design of the solar system or solar collection device is in general conformity with the style and design of surrounding structures.

(Code 1986; Code 2003; Ord. No. 968, § 4, 7-16-2018)