

CHAPTER 23.20

SOLAR ENERGY

23.20.010 Title. This Chapter shall be known as the "Solar Energy Ordinance." (Ord. 306)

23.20.020 Purpose and Intent. This Chapter is intended to implement adopted federal, state and local policies by decreasing the City's dependence upon non-renewable energy systems for sources through the encouragement of solar energy systems for the heating of buildings and water. It is intended that the energy requirements from conventional sources for space heating shall be reduced by sixty percent or more for each structure falling within purview of this Chapter. If swimming pools are to be heated, all heat will be provided by solar systems. Emphasis shall be given to the design of a total passive or hybrid solar energy system, as opposed to a less efficient mechanical system. Care shall be taken by the designer to aesthetically integrate the solar equipment into the architecture of the structure or landscaping. [Ord. 682]

23.20.030 Definitions. The following words and phrases are herein defined for use in the administration of this Chapter:

Active Solar System. A system using a mechanical device, such as pumps or fans and energy in addition to solar energy, to transport a conducive medium (air or water) between a solar collector and the interior of a building for heating or cooling.

Backup System. A conventional energy system used to supplement the output of the solar system, and/or to provide energy if the solar system is inoperable for any reason.

Collection Area. The heat-absorbing surface area of solar collectors.

Conventional Energy Source. Includes all fossil fuel forms of energy and electrical energy generated off-site.

Direct Radiation. Solar radiation that comes straight from the sun, casting shadows on a clear day.

Floor Area Ratio. The numerical value obtained by dividing the total floor area of a structure or structures by the total lot area of its lot or premises (see DMMC, Chapter 30, Article III).

Hybrid Solar System. A system which utilizes combined passive and active solar systems.

Passive Solar System. A system that uses direct heat transfer from thermal mass instead of mechanical power to distribute collected heat. Passive systems rely on building design and materials to collect and store heat and to create natural ventilation for cooling.

Retrofit. The addition of materials and/or devices to an existing building.

Solar Access. Access which protects solar energy collection areas from being blocked or shadowed from direct sun exposure between the hours of 10:00 a.m. and 2:00 p.m.

Solar Energy System. Any solar collector or other solar energy device; or any structured design or a building whose primary purpose is to provide for the collection, storage, and distribution of solar energy for space heating or cooling or for water heating.

23.20.040 Space Heating and Cooling of New Structures.

A. Space Heating. All new structures proposed or required to be heated shall be provided with an active, passive, or hybrid solar space heating system. The solar space heating system shall be considered acceptable if it is designed to minimize the use of conventional energy sources consistent with the stated intent of this Chapter. The City Council may, from time to time, adopt by resolution, solar space heating guidelines intended to assist in the implementation of this Section. Required solar space heating systems shall at minimum meet or exceed said guidelines adopted by the City Council, or shall consist of an alternative design, which, in the opinion of the City, is sufficient to meet or exceed the stated intent of this Chapter.

B. Space Cooling. The installation of conventional air refrigeration systems shall be discouraged in all new structures. Permits for conventional air refrigeration systems when proposed, shall be at the discretion of the Design Review Board, or City Council on appeal. This Section shall not apply to rooms where air refrigeration systems are necessary, such as medical treatment rooms or rooms designed for the storage, maintenance, or processing of temperature sensitive materials or equipment.

23.20.050 Water Heating. Repealed. [Ord. 682]

23.20.060 Swimming Pool Heating. All swimming pools proposed to be heated, or plumbed, or otherwise connected to a spa or jacuzzi, shall be equipped with a solar pool heating system. Conventional swimming pool heating systems shall be prohibited, except those spas or jacuzzis whose water surface area is less than seventy-five (75) square feet may be heated by conventional means. Swimming pools which are plumbed or otherwise connected to a spa or jacuzzi utilizing conventional heaters shall include a solar swimming pool heating system which contains an unglazed solar collector area of not less than one-half of the surface area of the swimming pool, or shall consist of an alternative design, which, in the opinion of the City, is sufficient to meet or exceed the stated intent of this Article.

23.20.070 Remodels of Existing Structures.

A. Reserved. [Ord. 682]

B. Remodels. Any remodel of a structure on which the structural alterations encompass fifty percent or more of the floor area of the structure as it existed prior to said alteration, shall cause the entire structure to conform to Section 23.20.040 and 23.20.050 of this Chapter. [Ord. 682]

C. Reserved. [Ord. 682]

23.20.080 Modifications of Height, Setback, and Floor Area Restrictions to Accommodate Solar Energy Systems.

A. Height. In solar retrofit installations, solar energy collectors, storage tanks and equipment, roof ponds, and/or other solar equipment appurtenant to a solar energy system may exceed by three feet the maximum height limits established by zoning, subject to approval by the Design Review Board following a Board finding that there is no suitable alternative.

B. Front, Rear, and Sideyard Setbacks. In solar retrofit installations, solar greenhouses, and/or other solar equipment appurtenant to a solar energy system may project into a required front, rear, and sideyard setback area, subject to approval by the Design Review Board following a Board finding that there is no suitable alternative.

C. Floor Area. Structures or space within structures used solely for the capture, distribution, or storage of solar energy, shall not constitute "floor area" as defined in Section 30-3.2 of the Del Mar Municipal Code, and therefore, shall not affect the computation of the permitted floor area to lot area ratio.

23.20.090 Reduction of License Fees for Solar Contractors and Designers. The business license fee for licensed work within Del Mar is limited to the design and/or installation of solar energy collection and distribution systems, shall pay a reduced business license fee pursuant to Section 12-22 of the Del Mar Municipal Code.

23.20.100 Rights to Solar Access. In the event adjacent landscaping deprives a site of reasonable solar access, and/or shades an existing solar collection device, the owner of a site so affected may petition the City Council for abatement of the foliage as a public nuisance. Upon receipt of such a petition, the City Clerk shall set the matter for a public hearing and provide due notice to affected parties. Following said hearings, and upon a finding by the City Council that the subject foliage be trimmed or removed sufficient to provide adequate solar access to the adjacent property. Failure to abate the nuisance by trimming or removing the foliage as so ordered shall constitute a misdemeanor, and subject the owner to penalties as provided for in Chapter 1 of the Del Mar Municipal Code.

23.20.110 Plan Processing. Solar energy systems required shall be delineated on preliminary plans and submitted to the City Planning Department prior to Design Review Board review. The plans shall contain a statement briefly describing the solar system and affirming that the system is designed to meet the requirements of this Chapter; said statement shall be signed by a licensed architect, registered engineer, or qualified solar consultant or solar installation contractor who is classified under Chapter 8, Title 16, of the California Administrative Code to design and install the type of solar system proposed.

A. Staff Review and Approval. Any application scheduled to appear on the Design Review Board Consent Calendar shall be reviewed by the Planning Department to determine whether or not there is compliance with this Chapter. Upon a finding by staff that there is compliance, no further review shall be required except as may be mandated by other sections of this Chapter and of the Del Mar Municipal Code. A determination by the Planning Department may be appealed to the Design Review Board within ten days by any interested party. The Planning Department shall report its determination in writing to the applicant and Design Review Board no later than the Design Review Board Consent Calendar hearing date.

B. Design Review Board Review. Any application required by other provisions of the Del Mar Municipal Code to be heard by the Design Review Board on its regular agenda shall be concurrently reviewed by said

Board for compliance with the provisions of this Chapter. Upon approval of the Design Review Board, no further review shall be required except as may be mandated by other sections of the Del Mar Municipal Code. A determination by the Design Review Board may be appealed to the City Council within ten days by any interested party. Fees for appeals as provided for in this Section shall be set by resolution of the City Council.

23.20.120 Use of Solar Systems and Monitoring Equipment. Each solar system installed shall include for the owner a set of operating instructions which describe how the system functions, what is expected from the system in terms of minimum service levels, and how to operate the system for maximum efficiencies. Each solar hot water storage tank shall be equipped with a thermometer to permit the owner to self-monitor the effectiveness of the system.

23.20.130 Conflict with Other Municipal Policies and Ordinances. Nothing in this Chapter does, or is intended to abrogate the owner's responsibility to meet all other municipal policies and ordinances applicable to the development of real property within the City of Del Mar, including, but not limited to, the preservation of private and public views, the quality of architectural design, the preservation of historic landmark structures, or the like.

23.20.140 Exemptions. An exemption or partial exemption from the requirements of this Chapter may be granted by the Design Review Board upon a finding by the Board that required conformity with the requirements of this Chapter would constitute an unreasonable economic or physical hardship to retrofit an existing structure or swimming pool, and/or that solar access to the proposed building site is excessively limited due to terrain, adjacent structures, or adjacent landscaping which cannot, or, in the opinion of the Board, should not be abated. Pursuant to Section 25985 of the Public Resources Code, the provisions of the California Solar Shade Control Act shall be exempted for said adjacent landscaping which cannot, or, in the opinion of the Board, should not be abated. Within the meaning of this Section, "excessively limited solar access" means that direct radiation to a reasonably sized and located solar collection area would likely be blocked or shadowed between the hours

of 10:00 a.m. and 2:00 p.m. on December 21 of any year, for ten percent or more of its collection area. The burden of proof necessary to demonstrate such facts to the Board rests with the applicant; however, the Board may, at its discretion, employ a solar consultant to assist in the determination. The selection of the solar consultant shall be at the discretion of the Department of Planning and Community Development. All costs incurred by said consultant review shall be borne by the project applicant, and shall be paid by the project applicant in advance of the City executing the solar consultant contract. The decision of the Board regarding the request for exemption may be appealed to the City Council within ten calendar days of the Board's decision. Said appeal shall not require a noticed public opportunity to present the appeal to the City Council. Following said appeal, the City Council shall render a decision based on the information presented and the written findings of the Design Review Board and/or the solar consultant. The decision of the City Council shall be final.

23.20.150 Exemptions for Projects in Process.
Repealed. [Ord. 682]