



105-28.4 SUSTAINABILITY

105-28.4.1 Purpose

This section is intended to promote sustainable development within the City of Dunedin by creating incentives for compact, mixed-use development patterns; encouraging solar and other alternative energy sources; promoting alternative means of transportation like bicycling and walking that can improve community health while helping reduce air pollution; protecting trees that absorb greenhouse gases and reduce storm water runoff and pollutants; and, encouraging water-efficient landscaping and protecting water resources.

105-28.4.2 Applicability

This section sets forth a range of site and building design options for sustainability to enhance other mandatory sustainability-related requirements integrated throughout this Code. For each development subject to this section, applicants shall select a sufficient number of sustainable site and building design options from [Table 105-28.4](#) to achieve the minimum number of points outlined for that type of development. Compliance with this section shall be determined as part of the entitlement review process.

- a. Nonresidential or Mixed-Use Development - consisting of new buildings or substantial renovations to existing buildings shall achieve a minimum score of 100 of 320 points available.
- b. Multifamily Residential Development - consisting of new buildings or substantial renovations to existing buildings shall achieve a minimum score of 100 of 320 points available.
- c. All Other Residential Development - consisting of new buildings or substantial renovations to existing buildings shall achieve a minimum score of 100 of 320 points available.
- d. Substantial Renovation for the purposes of this section shall include any renovation, rehabilitation, restoration, or repair work that includes an addition of floor area equal to 50 percent or more of the existing floor area; or the addition of new floors. The calculation shall include attached garages, but not include detached garages. For the purpose of calculation, the increase in floor area shall be aggregated over a three-year period.

105-28.4.3 Exemption

Any project not requiring design review.

105-28.4.4 Administration

- a. The Sustainability Worksheet shall be submitted with the application for Design Review. The required minimum sustainability points will be certified by the City's Sustainability Coordinator.
- b. 100 points of 320 are required utilizing at least four different categories.

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TABLE 105-28.4 MENU OF SITE AND BUILDING DESIGN OPTIONS FOR SUSTAINABILITY			
TOPIC	Points	Submitted Points	Graded Points
ENERGY Intent: Encourage on-site renewable energy production; promote the design and construction of energy efficient buildings; reduce air, water, and land pollution from energy consumption; and reduce the heat island effect.			
1.1 Renewable Energy Sources Design and incorporate on-site renewable energy generation technologies such as solar, wind, geothermal, or biomass. Two points granted for each 1% of the project's annual electrical energy demand generated up to a maximum of 30 points.	2 to 30		
1.2 District Heating and Cooling Design and incorporate into the project a district heating and/or cooling system for space conditioning and/or water heating of new buildings in the project (at least two buildings total must be connected).	4		
1.3 Heat Island Reduction Use any combination of the following strategies for 50% of the non-roof impervious site landscape (including roads, sidewalks, courtyards, parking lots, and driveways). <ul style="list-style-type: none"> • Provide shade from open structures such as those supporting solar panels, canopies, walkways, pergolas, all with a Solar Reflectance Index (SRI) of at least 29. (SRI is a measure of the roof's ability to reject solar heat; a higher SRI yields a cooler roofing choice). (2 points) • Use paving material with Solar Reflectance Index (SRI) of at least 29.(1 pt) • Use and open grid pavement system (at least 50% pervious). (2 points) 	1-4		
1.4 Cool Roofs/Walls Use roofing materials that have an SRI equal to or greater than 78 for low- sloped roofs (<2:12) or 29 for steep-sloped roofs (>2:12) for a minimum of 75% of the roof surface of all new buildings within the project. (2 points) -OR- Install a vegetated roof on a minimum of 50% of the total project roof area, or at least one vegetative exterior wall of structure. (5 points)	2—5		
1.5 Solar-Ready Design <ul style="list-style-type: none"> • For stand-alone buildings, design and build the project so that it will readily accommodate the installation of solar photovoltaic panels or solar thermal hot water heating devices, including roof load, roof pitch and orientation. (5 points) • For projects with multiple buildings, design and build at least 20% of 	2—10		

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the buildings to be solar-ready as described above. Two additional points granted for each additional 20% provided up to a total of 100% solar-ready buildings. (2—10 points)			
<p>1.6 Solar Heated Pool In lieu of gas or electric conventional heating:</p> <ul style="list-style-type: none"> • Private pool or hot tub (2 points) • Public pool (6 points each) <p>* Maximum of 30 per development</p>	2—30		
<p>RECYCLING AND WASTE REDUCTION Intent: Encourage recycling of household and commercial projects; reduce the amount of waste hauled to and disposed of in landfills, and promote the reuse of materials.</p>			
<p>2.1 Waste Reduction-Construction Make provisions to recycle/salvage at least 50% of non-hazardous construction and demolition debris.</p>	5		
<p>2.2 Waste Reduction-Composting Provide on-site composting station or location for all occupants with scheduled on site distribution.</p>	2		
<p>2.3 Recycling Stations/Dumpsters As part of the project, include at least one station per building dedicated to the collection, separation, and storage of materials for recycling including, at a minimum, paper, corrugated cardboard, glass, plastics, and metals. Establish a City-approved schedule and plan with the local trash hauler for retrieving the recyclable materials on a weekly basis.</p>	3		
<p>2.4 Recycle Containers In mixed-use and non-residential developments, include recycle containers adjacent with other waste-collection receptacles in areas accessible to pedestrians including streets, walkways, and common areas.</p>	2		
<p>2.5 Pet Waste Station One point per approved pet waste station, a maximum of 2 points.</p>	1—2		
<p>2.6 Cigarette Butt Station One point per approved cigarette butt station, a maximum of 2 points.</p>	1—2		
<p>2.7 Recycled Content in Infrastructure For new roadways, parking lots, sidewalks, and curbs (above-ground structured parking and underground parking are exempt from this option), any aggregate base and aggregate sub-base shall be at least 50% by volume recycled aggregate materials such as crushed cement concrete and asphalt concrete.</p>	5		
<p>2.8 Salvage Building Materials</p> <ul style="list-style-type: none"> • Use green building materials (recycled materials, locally-produced materials, sustainably-harvested wood, etc.) in the construction of the project. (5 points) • Use furniture made from recycled materials, locally-produced materials, sustainably-harvested wood, etc. in the project. (5 points) • Use flooring made from recycled or rapidly renewable materials such as PET carpeting, bamboo, cork flooring, etc. in the project. (5 points) 	5-15		

<p>URBAN NATURE Intent: Provide a variety of appealing and comfortable open spaces close to work and home; encourage physical activity and time spent outdoors, support natural resources and habitat conservation, and promote social networking, civic engagement, personal recreation and other activities.</p>			
<p>3.1 Minimum Open Space Provide common open space that exceeds the base requirements of <i>Section 105-22</i> by 10%. Five additional points granted for each additional 10% up to a total of 40% above code.</p>	5-20		
<p>3.2 Habitat Conservation Higher Standards For implementing higher standards on sites have significant habitat. For the purposes of this and the following item, "significant habitat" includes, but is not limited to (5 points every category with a maximum of 20 points):</p> <ul style="list-style-type: none"> • Habitat for species that are listed or are candidates for listing under state or federal endangered species acts; • Grand trees • Wetlands • Mangroves 	5-20		
<p>3.3 Organic Farming Community sustainable food such as eggs, milk, honey, or chicken. Co-op featuring the same items count for points.</p>	1—5		
<p>3.4 Community Gardens For residential or mixed-use projects dedicate permanent and viable growing space and related facilities (such as greenhouses) within the project at a minimum of 10 square feet per dwelling for 20% of the project. Provide fencing, watering systems, soil, and/or garden bed enhancements (such as raised beds), secure storage space for garden tools, solar access, and pedestrian access for these spaces.</p>	10		
<p>3.5 Tree Canopy Provide trees in an amount that exceeds the base requirements of <i>Section 105-35 Trees</i>, by 10%. Two additional points granted for each additional 10% up to 50% above Code.</p>	2-10		
<p>TRANSPORTATION Intent: Promote public health by encouraging daily physical activity associated with alternative modes of transportation such as walking and bicycling; encourage the use of transportation and, design parking facilities to minimize adverse environmental impacts to pedestrians.</p>			
<p>4.1 Charging Stations For new residential, nonresidential and mixed-use buildings, provide charging stations in the parking area. Two points per station - max of ten.</p>	2-10		
<p>4.2 Bike Sharing Program 1 point for every 10 bikes; 2 points maximum.</p>	2		
<p>4.3 Facilities for Bicycle Commuters Provide the following:</p> <ul style="list-style-type: none"> • Indoor or self-contained bicycle storage lockers equal to a minimum of 5% of the vehicle parking spaces provided. (2 points) • Shower and dressing areas for employees (2 points) 	2—4		
<p>4.4 Developer-Sponsored Transit For a minimum of three years, provide year-round, developer-sponsored transit service (vans, shuttles, or buses) from at least one central point in the project to major transit facilities and/or other major destinations such as a</p>	5		

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retail area, tourist destination or employment center.			
<p>4.5 Parking On SR 580, locate all new off-street surface parking lots at the side or rear of buildings, leaving building frontages and streetscapes free of surface parking lots. Building entrances must be easily accessible from the public way. (2 points) – (OR) –</p> <p>Provide structured parking to meet 20% of the total parking requirement for nonresidential and multifamily residential projects. Note: Two additional points will be granted for each additional 20% up to a total of 100%. In addition, as applicable on SR 580, locate all new off-street surface parking lots at the side or rear of buildings, leaving building frontages and streetscapes free of surface parking lots. (2—10 points)</p>	2—10		
<p>WATER Intent: Minimize water use in buildings to reduce impacts to natural water resources, and minimize outdoor water use for landscape irrigation.</p>			
<p>5.1 Water-Efficient Landscape Limit turf grass beyond base code requirements. • Single-family residential: Turf limited to 25% of landscaped area.</p>	2		
<p>5.2 Water-Efficient Plants To the extent possible, all landscaping plants, including those on green roofs, shall be selected from a list of water-efficient vegetation maintained by the Florida Yards and Neighborhoods Handbook from the University of Florida, and utilize the principles of Florida Friendly Landscaping.</p>	2		
<p>5.3 Landscape Irrigation System Drip or subsurface irrigation systems shall be utilized for all landscape irrigation systems when irrigation is necessary. Drip irrigation systems must be equipped with pressure regulators, filters, and emitters. Each drip emitter must be rated at less than 20 gallons per hour (gph). (1 pt for drip, 2 pts for subsurface)</p>	1—2		
<p>5.4 Surface Treatments Non-turf landscaped areas must be completely covered by a 2” minimum layer of air- and water-permeable mulch to reduce evaporation. Living groundcovers qualify as mulch provided the individual plants are installed at sufficient density to assure 100 percent ground coverage at maturity. If a weed barrier is used beneath the mulch, it must be manufactured to be air- and water-permeable to reduce evaporation and run-off.</p>	1		
<p>5.5 Vault System or Treatment Wetland Stormwater Treatment • Utilization of a vault system for stormwater management to aid in the increased flow rate due to development. - or - • Installation of a treatment wetland that creates a natural environment for flora and fauna and aids in the removal of nutrients from stormwater.</p>	8		
<p>5.6 Rain Barrels Reduce water use, stormwater runoff, and erosion by the utilization of rain barrels or cisterns to collect rain water. The installed rain barrel or cistern shall be directly connected to the on-site irrigation system (1 point per barrel, up to 4 points).</p>	1—4		

ADDITIONAL STRATEGIES FOR SUSTAINABILITY			
Intent: Implement strategies of existing above-code programs or explore and implement new, unique or innovative ways to increase the sustainability of the project and community.			
<p>6.1 Above-Code Programs Design and build the project to meet the standards of an above-code program such as LEED, Green Globes, Energy Star, FGBC, etc. As a good faith demonstration of the developer’s intent, the applicant will utilize solar energy to power the project or achieve green building certification demonstrating the method that will be used to achieve said certification. The most recent LEED scorecard, most recent version of the FGBC checklist, or equivalent green building certificate checklist shall be submitted depending on the certification the developer is seeking.</p>	20		
<p>6.2 Innovative Products or Strategies Provide documentation of an innovative product or strategy that increases the sustainability of the project or community but is not provided in this Section (i.e. Stormwater Placard). Up to five Innovative Products or Strategies may be submitted for review. Points awarded at the discretion of the Development Review Committee based on the capacity of the proposed product or strategy to increase the sustainability of the project in any of the above categories. (1—5 points for each Innovative Strategy)</p>	1—15		
<p>6.3 Higher Flood Plain Management Standards Three points for each 1 foot of freeboard above the required minimum, for a maximum of 15 points.</p>	3-15		
<p>6.4 Phased Development For projects consisting of 5 acres or greater, and capable of constructing in phases (i.e. a combination project of retail and multi-family housing, a housing development with multiple housing types), the utilization of phased construction in which a section is completed to final stabilization prior to commencement of construction on a subsequent phase of the project. Points based on size and number of phased to be completed. 3 points for 5-10 acre project with two phases. 4 points for 10-15 acre project with three phases. 5 points for projects over 15 acres with at least three phases of development.</p>	3-5		
<p>6.5 Sustainable Art Installation Points awarded by the City’s Arts & Culture Committee</p>	1-5		
<p>6.6 Hurricane Hardening Designed and constructed to meet a recognized hurricane hardening certification standard.</p>	20		
TOTALS			