

SUSTAINABLE DESIGN

INTRODUCTION

Sustainable design results in benefits for the building owner and occupier, as well as for the community and the environment, including:

- Reduced energy and water costs, resulting in savings for the building occupants, and/or owners;
- Conservation of water supplies;
- Reduced emissions of carbon dioxide and other greenhouse gases;
- Reduced levels of waste;
- Greater natural comfort and amenity level for building occupants; and
- Contribution to the maintenance of biodiversity and enhancement of ecosystems.

Accordingly, the City of Vincent recognises that it has become imperative for building design to incorporate elements that create more sustainable development, and minimise the impact of development on the environment. The City encourages the incorporation of such elements into the design of new building projects and renovations, where a renovation is an extension or addition to an existing building.

DEFINITIONS

Sustainable Building – Refers to a building which integrates building materials and methods that promote environmental quality, economic vitality, and social benefit through the design, construction and operation of the built environment. The design of Sustainable Buildings encompasses the following broad topics: efficient management of energy and water resources, management of material resources and waste, protection of environmental quality, protection of health and indoor environmental quality, reinforcement of natural systems, and integrating the design approach.

OBJECTIVES

1. To demonstrate the City's commitment to environmental, economic, and social stewardship, and to contribute to the City's goals of protecting, conserving, and enhancing the City's and the State's environmental resources.
2. To encourage the retention of existing buildings capable of reasonable adaptation and re-use.
3. To encourage the incorporation of sustainable design principles and features in existing and new development in the City of Vincent as standard practice.
4. To set out the City's expectations of the sustainability outcomes to be achieved by homeowners, developers and builders in new building and renovation projects.

POLICY STATEMENT

The City wishes to ensure that appropriate consideration is given to the planning and incorporation of sustainable design, resulting in Sustainable Buildings throughout the City of Vincent, and to this end makes the following statements:

Mandatory provisions relating to Sustainable Design

1. The City notes that all homeowners, developers and builders whose responsibilities include planning, designing, constructing or renovating are responsible for ensuring that buildings comply with the following provisions, relating to sustainable design:
 - 1.1 The Building Code of Australia (BCA). The BCA is the mandatory, nation-wide building standard which applies to every new development that requires a building licence.

The BCA includes energy efficiency provisions with which an applicant for a building licence must demonstrate compliance. Anyone proposing to build a new building should become familiar with the requirements of the BCA.
 - 1.2 All residential development within the City of Vincent is required to comply with:
 - a) The 'Design for Climate Requirements' of State Planning Policy No. 3.1 Residential Design Codes (Variation 1), which is published by the Western Australian Planning Commission; and
 - b) The City's Planning and Building Policy No. 3.2.1, relating to Residential Design Elements, which requires, in general terms, that residential development incorporates energy efficient design principles.

Re-use and Adaptation of Existing Buildings

2. The City encourages the retention of existing buildings capable of reasonable adaptation and re-use, in view of the value of the embodied energy of an existing building and the significant reduction of waste that results from re-using a building.

Sustainable Design Features

3. The City expects that those involved in the design of buildings or renovations proposed to be built in the City will strive to achieve the following in their building design, to create Sustainable Buildings, as follows:
 - 3.1 Passive Design:

To the maximum extent possible, buildings should:

 - a) be oriented;
 - b) incorporate appropriate features (for example, shading for north-facing windows, wide eaves, and roof ventilation); and

c) use appropriate building materials,

to maximise the benefit from the winter sun, minimise the impact of the summer sun, and make use of prevailing breezes with the result of reducing the need for energy-consuming artificial heating and cooling.

3.2 Energy Use:

Buildings should be designed with the intention of maximising the use of renewable energy (for example, through the use of a photovoltaic system) and minimising the use of non-renewable energy (for example, through the use of energy-efficient appliances).

3.3 Water Use:

Buildings should be designed to minimise the use of water, including by locating hot water systems close to those areas that will use hot water, and through the use of considered and appropriate “water wise” landscaping, including landscaping that has minimal impervious surfaces and minimises stormwater runoff.

3.4 Materials Use:

Buildings should be designed to maximise the use of locally sourced, recycled, recyclable and rapidly renewable materials in their construction.

Sustainability Resources and Encouragement

4. The City recognises and promotes the sustainable design of buildings through various initiatives and incentives.
5. The City takes a holistic approach to assessing planning applications, and may consider relaxing design requirements where the applicant can demonstrate that such relaxation is conducive to the design achieving a sustainable outcome that would otherwise not be achieved.
6. The City makes available for people who are considering building a new home or undertaking renovations, a [Sustainable Residential Design Checklist](#), which outlines some key considerations that should be discussed with a builder and/or designer at an early stage, to ensure that the home is constructed in a sustainable way.
7. The City promotes and encourages developers and architects to apply the [Green Building Council of Australia's Green Star Rating System](#), to achieve a rating of four stars or higher.
8. The City makes available a Sustainable Design Portal on the City's website, which includes detailed information relating to sustainable design, and provides up-to-date information, including information about available rebates and funding, to guide homeowners, developers and builders in the design of Sustainable Buildings.
9. The City encourages practising professionals and the general community to become more aware of the benefits of sustainable building design in terms of amenity and liveability, and in reducing the whole of life costs of a building.