TECHNICAL: 
Energy efficiency provisions and the use of solar offsets

This Advisory Notice provides information about the energy efficiency provisions and the use of solar offsets.

BACKGROUND

All new homes and extensions built in South Australia must meet the minimum energy efficiency provisions prescribed in the National Construction Code (NCC).

The energy efficiency performance requirements have been developed to ensure that the building fabric and the buildings domestic services be dealt with separately. On-site renewables are seen as a companion to, and not a replacement for good levels of building fabric performance. This is a result of government objectives to promote longevity through good levels of building fabric in favour of engineering solutions that may only provide short term solutions and have limited life spans.

DISCUSSION

The NCC Volume Two contains two distinct and separate Performance Requirements which are to be addressed individually:

- **Performance Requirement 2.6.1** to ensure a level of thermal performance that facilitates the efficient use of energy
  The thermal performance requirements include measures to reduce heating and cooling loads, thermal insulation in roofs, walls and floors; adequate glazing performance, appropriate building sealing and draught proofing as well as adequate ventilation and air movement.

- **Performance Requirement 2.6.2** to ensure features that facilitate the efficient use of energy
  The services requirements include insulation of services such as ductwork and piping; appropriate sealing of heating and cooling ductwork, performance of artificial lighting and the use of renewable energy sources.

In South Australia, a variation to the NCC permits P2.6.2 to offset P2.6.1 in certain limited circumstances. The variation permits a one star offset (5 star rating in lieu of 6 stars) for new elevated Class 1 buildings with a lightweight flooring system that are constructed on or off site and are capable of being moved (including transportable buildings). However the 1 star offset can only be used when the Class 1 building is located in either Climate Zone 4 as defined in the NCC or a local government area specified in NCC SA Variation 3.12.0.1(a).
The additional energy consumed by a 5 star elevated building must be offset by the installation of a renewable energy source (such as an appropriately sized photovoltaic system determined in accordance with Minister’s Specification SA 3.12.0.1 (a)).

The variation also permits Class 1 buildings with a floor area less than 60m², regardless of their location, achieve a house energy rating of not less than 5 stars without the requirement to offset the additional energy consumed.

The Department does not support ‘Alternative Solutions’ which allow the use of solar offsets in order to achieve compliance outside of the above criteria. Individuals or businesses that claim the Department supports this approach are incorrect. The Department requests that should such claims be made, the Department is advised so that appropriate action can be taken.

**ADDITIONAL INFORMATION**

**Downloads**

Advice on addressing the energy efficiency requirements as individual elements is available in an information handbook [Using onsite renewable and reclaimed energy sources](#) published by the Australian Building Codes Board.

**Photovoltaic panel installation information**

The Energy Advisory Service in the Department of State Development can assist with information to determine the size of a photovoltaic installation as being a residential (small embedded generator) or commercial (large embedded generator) application and the relevant approvals.

Phone: 08 8204 1888  
Email: [energyadvice@sa.gov.au](mailto:energyadvice@sa.gov.au)

This Advisory Notice is for general information only and should not be relied upon as legal advice or an accurate statement of the relevant legislation provisions. If you are uncertain as to your legal obligations you should obtain independent legal advice.