



FREQUENTLY ASKED QUESTIONS

ENVIRONMENTALLY SUSTAINABLE DESIGN

This FAQ
answers the
following
questions

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This page aims to help you with specific information you may be seeking about Environmentally Sustainable Design (ESD) in the planning process.

Why do I need to consider ESD at planning?

Darebin has an ESD policy Clause 22.12 which requires developments of 3 plus dwellings or 100sq.m+ for non-residential to submit information on how they are addressing Energy performance, Water resources, Indoor Environment Quality, Stormwater management, Transport, Waste Management and Urban Ecology. Addressing these issues at planning maximises the opportunity to address passive solar design, reduce heat gain in summer, increase passive ventilation, add external shading and provide adequate space for bikes, bins and water tanks.

Building to best practice standards today not only future-proofs occupants against the rising costs of power and water but commonly commands higher property returns in the future

What is the difference between FirstRate, BESS and Green Star?

The National Construction Code of Australia (NCC) outlines minimum standards to meet relevant health, safety, amenity and energy efficiency objectives. FirstRate is used to measure the assumed level of energy that will be required to heat and cool a residential dwelling to meet the minimum requirements in Section J of the NCC. Meeting the minimum 5 or 6 star standard through FirstRate does not reflect best practice and so councils decided to improve ESD standards through planning when key decisions are made. At present Darebin recommends thermal assessments for at least 20 to 30% of the dwellings in multi-residential development in varying orientations.

The BESS tool is designed to raise ESD standards at the planning stage and is managed by CASBE - Council Alliance for a Sustainable Built Environment which has over 30 member councils. It is free for planning applicants to use and the questions increase in complexity for larger developments of 10 plus dwellings or 100dsq.m plus for non-residential developments.

Large scale buildings or developments commonly demonstrate a best practice standard by obtaining a Green Star rating. Green Star is developed by the Green Building Council of Australia and used for large developments such as high rise apartments, universities, banks, hotels, etc.

How long will it take me to prepare an SDA?

A Sustainable Design Assessment (SDA) can generally be prepared by the applicant and commonly does not need to be prepared by an expert in the ESD field. Assuming that you have considered all applicable Key Sustainable Building Categories during your design phase and you have agreed on a minimum ESD standard, the preparation of an SDA including a BESS and STORM report can take as little as 2 hours.

Can the applicant complete a SMP?

In most situations a SMP will require expert advice from a suitably qualified person such as an environmental engineer or specialised ESD consultant. The qualifications, skills and experience of any consultant engaged to complete a SMP should be checked by the applicant prior to engaging their services. Being qualified to complete thermal ratings alone may not be sufficient to adequately complete a SMP.

What information will I need in order to prepare an SDA or SMP?

In addition to your architectural drawings with all ESD items clearly drawn, labelled or on a key on the plans you will generally require the following information:

- How all windows open.
- Anticipated minimum energy efficiency rating of appliances for heating, cooling and hot water
- On-site renewable energy devices (if applicable)
- Anticipated minimum water efficiency rating of taps and fittings (WELS ratings)
- Size and location of any water tanks, utility meters, all bins and areas for waste, bike parking
- Anticipated light fittings (e.g. compact fluorescent or LED)
- STORM or MUSIC rating, a free online tool from Melbourne water that measures your application's storm water management qualities
- Major construction materials and colours

Residential-only developments will also need to:

- NatHERS (e.g. FirstRate) Report or anticipated minimum standard
- Non-residential-only developments will also need to:
- BCA Section J assessment or anticipated minimum standard
- Expected NABERS rating

What do the abbreviations stand for?

ESD – Environmentally Sustainable Development or design

BESS - Built Environment Sustainability Scorecard

SDA – Sustainable Design Assessment

SMP – Sustainable Management Plan

STORM - Stormwater Treatment Objective Relative Measure

MUSIC - Model for Urban Stormwater Improvement Conceptualisation

IEQ – Indoor Environment Quality

NABERS - National Australian Built Environment Rating System

NatHERS - Nationwide House Energy Rating Scheme

GBCA – Green Building Council of Australia

Who do I speak to if I need further information?

If you would like to discuss your submission in more detail or obtain free expert ESD advice, you can contact your Darebin planner or the ESD Officer.