GREEN STAR MULTI UNIT RESIDENTIAL DOCUMENTATION GUIDELINES FOR NEW CREDIT

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green star™ environmental rating system for buildings — Multi Unit Residential PILOT

™green building council australia

This document provides guidance on the documentation required in support of claims for credits under the Green Star – Multi Unit Residential PILOT Rating Tool. Compliance criteria are subject to change, and GBCA recommends that project teams regularly check for updates to this document on the GBCA website and subscribe to the GBCA newsletter.

Where credits already exist in Green Star – Office rating tools, projects must submit documentation per 'the letter' of the most recent version of the Green Star – Office Design v3 Technical Manual. For credits where benchmarks were changed to accommodate the multi unit residential sector, the benchmarks in the PILOT rating tool take precedent over benchmarks in the Green Star – Office Design v3 rating tool and Technical Manual.

For credits that are new to the PILOT rating tool, please refer to the guidelines below. As the tool is in the PILOT stage, there may be some flexibility in interpreting these guidelines and the final assessment will be left to the Certified Assessors. The knowledge gained from this will in turn determine the Compliance Requirements section of the 'version 1' Technical Manual.

MANAGEMENT

Man-1 'Green Star Accredited Professional'

In addition to the Compliance Requirements stipulated in the Green Star – Office Design v3 Technical Manual the following is also required:

- A copy of the Green Star Accredited Professional's letter of appointment that lists his/her scope of works including the requirement of the GSAP to be involved in the compilation of the documentation submission.

Man-2 'Commissioning - Clauses'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual.

Man-3 'Commissioning – Building Tuning'

Projects must provide documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual. Note that points remain as per the Green Star – Multi Unit Residential PILOT rating tool.

Man-4 'Commissioning – Commissioning Agent'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual.

Man-5 'Building Users / Occupants Guide'

The following documentation is required to demonstrate compliance:

- A copy of the Building Users/Occupants' Guide containing all the information described below in Additional Guidance;
- A copy of a contract between the building owner (or owner's representative) and the relevant members) of the design team that demonstrates the Building Users / Occupants Guide is included in the design team member's commission; and
- Extract(s) of the relevant specification demonstrating signage and information is provided in high visibility common areas.

ADDITIONAL GUIDANCE:

The Building Users/Occupants' Guide must include the following information:

- Energy & Environmental Strategy
  Description of the building initiatives intended to enhance energy efficiency and minimise greenhouse gas emissions, including an overview of the potential savings, as stated for economic and environmental impact.
- Monitoring and Targeting
  Details of energy, water, indoor environment quality and emissions targets and benchmarks for the building such as W/m2 (Watts per square Meter) and the metering & sub-metering strategy.
- Building Services
  Description of basic function and operation of the following, with simplified system diagrams and explanation of energy saving features:
  - Ventilation;
  - Heating System;
  - Cooling System;
  - Electrical Systems;
  - Lighting; and
  - Domestic Hot Water (DHW)
- Transport Facilities
  Car parking requirements and provision of cycling facilities, conditions of access, and appropriate use. Also provide, where applicable, local public transport information, maps and timetables, and details or links on alternative methods of transport to the workplace, such as car sharing.
- Environmental Health and Mission Statement
  This must be prepared by the Design team for use by the facility's management to complement the facility's functional design program. This statement shall be retained by the facility with the other design

data to ensure that future alterations, additions, and program changes are consistent with the intent of the environmental health and mission statement.

- Materials & Waste Policy
  Include instructions on proper use for less common practices such as composting as well as information on recycling including:
  – What can be recycled;
  – Where the recycling storage areas are; and
  – Schedules for waste and recycling removal.
- Expansion / Re-fit Considerations
  Include a list of environmental recommendations for consideration, highlighting in particular the areas covered in the Building Users'/ Occupants guide.
- References & Further Information
  Should include links to other information such as websites, publications, and organisations relating to energy and water conservation, efficient building operation, indoor air quality or sick building syndrome, and environmentally friendly design features.

Man-6 'Environmental Management'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual. Note that points remain as per the Green Star – Multi Unit Residential PILOT rating tool.

Man-7 'Waste Management'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual.

Man-8 'Smart-metering'

The following documentation is required to demonstrate compliance:

- A copy of the relevant section of the specification demonstrating the provision of meters to each dwelling; and
- Manufacturers data sheet(s) for the meters being installed demonstrating the capacity to:
  – Visually display the consumption for electricity, gas, CO2 emissions and water in real time;
  – Analyse the above information at regular intervals i.e. on a daily /weekly /monthly /quarterly and annual basis; and
  – Provide information on the costs associated with this usage.

INDOOR ENVIRONMENT QUALITY

IEQ-1 'Ventilation Rates'

For the first two points to be awarded, the following documentation is required to demonstrate compliance:

- Drawings demonstrating the ventilation inlets have been incorporated to the design; and
- Calculations confirming that trickle ventilation inlets provided in the façade equivalent to 0.05% of the floor area of each apartment.

For the additional point to be awarded, the following documentation is required to demonstrate compliance:

- Extract of the relevant specification or inclusions schedule forming part of the contract documentation demonstrating that 90% of kitchens are effectively naturally ventilated or mechanically ventilated with dedicated exhausts;
- Drawings highlighting ductwork from the range hood to the outside of the building for kitchens that achieve the Credit Criteria; and
- Calculations demonstrating the percentage of kitchens that meet the Credit Criteria.

For the credit to be considered 'Not Applicable' the following documentation is required to demonstrate compliance:

- A copy of the specification demonstrating that no air conditioning will be installed in any apartment or common area.

IEQ-2 'Air Change Effectiveness'

The following documentation is required to demonstrate compliance:

- Drawings highlighting the dwellings that contain dual aspect design; and
- Calculations demonstrating the percentage of dwellings containing dual aspect design.

Please note that Certified Assessor(s) will not award points where drawings and calculations do not correlate.

For the additional point to be awarded, the following documentation is required to demonstrate compliance:

- Drawings and elevations highlighting the area of typical common lobbies with natural ventilation equivalent to 5% of the net floor area on a floor by floor basis; and
- Calculations demonstrating the percentage of common lobbies meeting these criteria.

IEQ-3 'Daylight'

The following documentation is required to demonstrate compliance:

- A Daylight Modelling Report describing the software or calculation methodology and variables used for the daylight modelling and providing daylight results for each area claimed to have a Daylight Factor of 2.5%. The Daylight Modelling Report must provide all information nominated in the 'Additional Guidance' section of the Green Star – Office Design v3 Technical Manual;
- Copies of architectural façade and roof drawings and elevations to show the transparent façade materials in the design (drawings must be isometric, not 3D);
- Copies of architectural plan drawings clearly showing those areas considered to have a Daylight Factor of 2.5% with the percentage of habitable rooms, kitchens, bathrooms and ensuites of each section clearly shown (drawings must be isometric, not 3D);
- Copies of the sections of the specification where all glazing properties and minimum visual transmittance levels are nominated; and
- A copy of the site plan in the context of the surrounding area showing heights and location of surrounding buildings and average reflectance for those buildings (drawings must be isometric, not 3D).

As an alternative to computer modelling, projects may use the Manual Calculation method from the Green Star - Office Design v3 Technical Manual.

IEQ-4 'Thermal Comfort'

The following documentation is required to demonstrate compliance:

- Short report which includes assumptions made and calculations demonstrating the average loads achieved;
- Architectural plans, elevations and sections;
- Specifications/drawings confirming materials used in the assessment;
- Evidence that the software used complies with the "Protocol for House Energy Rating Software (Version 2006.1)".

IEQ-5 'Hazardous Materials'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual.

IEQ-6 'Internal Noise Levels'

The following documentation is required to demonstrate compliance:

- For both points to be awarded, a copy of the acoustic professional's letter of appointment that lists his/her scope of works covering design, construction and post construction phases of the project along with a copy of the acoustic professional's CV demonstrating appropriate qualifications;
- A copy of the noise design report, prepared by a qualified acoustics consultant, describing all relevant internal and external noise sources and the design features required to demonstrate the Credit Criteria has been achieved; and
- A copy of architectural plans, sections and details to demonstrate noise control design features which are included in the design;

The following documentation is required to demonstrate that the bounding construction exceeds the requirements of the BCA by 10%:

- Plans highlighting the different bounding wall and floor/ceiling types along with sectional details of each type;
- Test certificates from a National Association of Testing Authorities (NATA) registered acoustic laboratory verifying that the wall and floor/ceiling systems used meet the credit criteria or, where site testing is undertaken, test certificates from a qualified acoustic engineer verifying that the bounding construction as installed meets the credit criteria. The details on these certificates must correspond with the details shown on the sectional details noted above.

IEQ-7 'Volatile Organic Compounds'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual.

IEQ-8 'Formaldehyde Minimisation'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual.

IEQ-9 'Private External Space'

The following documentation is required to demonstrate compliance:

- Drawings and calculations demonstrating that 90% of dwellings have private external space that meets the following criteria:
  - Each external space is at least 15% of the size of the internal floor space;
  - Each external space is directly accessible from the dwelling; and
  - Each external space must be a minimum 2.0m wide x 3.0m long.

For Climate Zones 5, 6, 7 and 8 the following documentation is also required to demonstrate compliance:

- Daylight modelling or shadow diagrams demonstrating that all private external spaces provide a minimum 3 hours of direct sunlight between 9am and 5pm in mid winter.

The Certified Assessor(s) will not award points unless it is clearly demonstrated that the minimum direct sunlight requirement has been met, and that the modelling has been undertaken for the specific site, taking into account overshading.

For Climate Zones 1, 2, 3, and 4 the following documentation is also required to demonstrate compliance:

- Daylight modelling or shadow diagrams demonstrating that all private external spaces provide a minimum 3 hours of shade from direct sunlight between 9am and 5pm in mid summer.

The Certified Assessor(s) will not award points unless it is clearly demonstrated that the minimum shading from direct sunlight requirement has been met, and that the modelling has been undertaken for the specific site.

IEQ-10 'Electric Lighting Levels'

The following documentation is required to demonstrate compliance:

- An extract from the specification confirming design lighting levels of kitchen sinks, cook tops, stoves and vanity basins are a minimum of 320 Lux;
- A copy of the reflected ceiling plan for each typical ceiling layout; and
- A list of each typical lighting layout in the nominated spaces, showing minimum lighting levels for each space, at the working plane (900mm above floor level).

IEQ-11 'External Views'

Living spaces are defined as living rooms, dining rooms, meals areas and family rooms.

If compliance is achieved through external views, the following must be observed:

- The view must extend (unblocked by solid structures) for 25m from the perimeter of the building (i.e. there must not be another building within 25m);
- The area behind any solid portion of the perimeter of the external wall or atrium must be excluded from the calculations; and
- The sight line is to be measured by extending a perpendicular line from the atrium or window; a line at 45 degrees can be used at the corners of atria or windows, as per below:

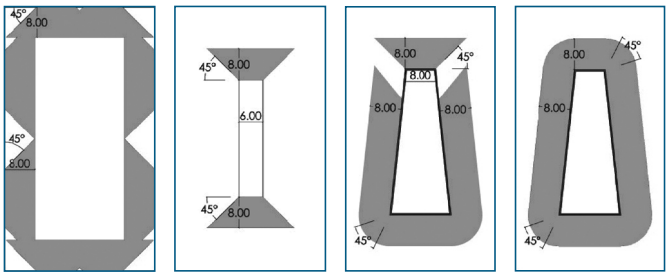


Diagram 2; Models showing possible building floor plates, Left model showing how windows are to be considered on the floor plate, The three to the right illustrate various atria; shaded areas are those areas that meet the Credit Criteria.

The following documentation is required to demonstrate compliance:

- Drawings showing the floor layout highlighting all living areas, location of vision glazing, sight lines (see above) and area which meets the Credit Criteria. Sight lines must take into account thickness of external walls (must be a clear line of sight to outside) and must extend 25m from the perimeter of the building (i.e. there must not be another building within 25m); and
- Calculations showing the percentage of living spaces that comply with the Credit Criteria (the area behind any solid portion of the perimeter of the external wall or atrium must be excluded from the calculations).

Please refer to the Green Star – Office Design v3 Technical Manual for further details on the calculation methodology for external views.

ENERGY

Ene- Conditional Requirement & Ene-1 'Energy Improvement'

The following documentation is required, at a minimum, to demonstrate compliance:

- A copy of the completed Energy Calculator;
- An energy modelling report describing the modelling process for the base building in accordance with the Energy Calculator Guide; and
- Extracts from the design brief, specification(s) and design drawings to clearly demonstrate that all modelling data used in the energy simulations reflects the current design.

Note: The 'Energy Calculator Guide' is available on the Rating Tools section of the GBCA website.

Ene-2 'Energy Sub-metering'

The following documentation is required, at a minimum, to demonstrate compliance:

- An extract of the specification detailing the installation requirements for electrical sub-meters that meets the Credit Criteria (for either one or two points); and
- Clearly marked schematic electrical drawings showing the locations of meters; and
- An extract from the specification showing that the electrical sub-meters are to be connected to the Building Management System (BMS); and
- A copy of the BMS point schedule showing the connection of electrical sub-meters to the BMS.

Ene-3 Peak Energy Demand Reduction

For buildings with air conditioning installed:

- Projects must provide the Compliance Requirements stipulated in Green Star – Office Design v3.

For non air conditioned buildings:

The following documentation is required, at a minimum, to demonstrate compliance:

- A copy of the specification demonstrating that no air conditioning will be installed in any apartment or common area; and
- The project has been awarded 2 points for IEQ-4 'Thermal Comfort' (please provide documentation as per IEQ-4 Compliance Requirements).

Ene-4 'Unoccupied Spaces'

Mechanically Ventilated:

Dwelling Areas

The following documentation is required at a minimum, to demonstrate compliance:

- An extract from the HVAC specification outlining the design criteria demonstrating compliance with the Credit Criteria, or demonstrating that each apartment will automatically shut down after set periods of time of non-use.

Common Areas

The following documentation is required at a minimum, to demonstrate compliance:

- An extract from the HVAC specification outlining how the HVAC design complies with the Credit Criteria, or demonstrating that common areas will automatically shut down after set periods of time of non-use.

Naturally ventilated:

Dwelling Areas

The following documentation is required at a minimum, to demonstrate compliance:

- A copy of scale architectural sections and elevation drawings for each naturally ventilated apartment showing openings and ventilation inlets and outlets;

AND one of the following:

- A sheet listing the opening sizes and floor area for each naturally ventilated apartment demonstrating that the deemed-to-comply requirements of AS 1668.2-2002 are met;

OR

- Copies of all empirical calculations to be submitted to the local authorities to demonstrate compliance with AS 1668.2-2002. Note: Until such time as AS 1668.2-2002 is adopted into the BCA, it is sufficient to submit to the Green Building Council's Certified Assessor(s), empirical calculations demonstrating that the deemed-to-comply requirements of AS 1668.2-2002 are met;

OR

- A copy of the computer modelling report to be submitted to the local authorities which demonstrates that the design meets the intent of AS 1668.2-2002. Note: Until such time as AS 1668.2-2002 is adopted into the BCA, it is sufficient to submit to the Green Building Council's Certified Assessor(s), a modelling report demonstrating that the deemed-to-comply requirements of AS 1668.2-2002 are met,

Common Areas

The following documentation is required at a minimum, to demonstrate compliance:

- A copy of scale architectural sections and elevation drawings for each naturally ventilated common area space showing openings and ventilation inlets and outlets;

AND one of the following:

- A sheet listing the opening sizes and floor area for each naturally ventilated common area space demonstrating that the deemed-to-comply requirements of AS 1668.2-2002 are met;

OR

- Copies of all empirical calculations to be submitted to the local authorities to demonstrate compliance with AS 1668.2-2002. Note: Until such time as AS 1668.2-2002 is adopted into the BCA, it is sufficient to submit to the Green Building Council's Certified Assessor(s), empirical calculations demonstrating that the deemed-to-comply requirements of AS 1668.2-2002 are met;

OR

- A copy of the computer modelling report to be submitted to the local authorities which demonstrates that the design meets the intent of AS 1668.2-2002. Note: Until such time as AS 1668.2-2002 is adopted into the BCA, it is sufficient to submit to the Green Building Council's Certified Assessor(s), a modelling report demonstrating that the deemed-to-comply requirements of AS 1668.2-2002 are met,

Ene-5 'Energy Efficient Appliances'
The following documentation is required at a minimum, to demonstrate compliance:

- A copy of the specification where the star rating of all refrigerators, clothes washers, clothes dryers and dishwashers are nominated;
- A copy of the section of the specification where it states that the contractor is required to obtain approval of the design team or client before substituting any of the appliances listed above.

Where no clothes dryers are provided, the following documentation must be provided:

- A copy of the specification where external clothes drying facilities are nominated and located for all dwellings.

TRANSPORT

Tra-1 'Car Parking Minimisation'
Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual.

Tra-2 'Fuel Efficient Transport'
For the first two points to be awarded, please provide documentation as per the Green Star – Office Design v3 Technical Manual.

For the additional point to be awarded the following documentation is required to demonstrate compliance:

- A copy of registration in a documented car share program, for which contractual evidence or preparatory agreements must be submitted.

Tra-3 'Cyclist Facilities'
Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual.

Compliance criteria and documentation relating to Showers and Changing facilities are not required for multi unit residential facilities.

Tra-4 'Commuting Public Transport'
Projects must provide the Compliance Requirements as stipulated in the Green Star – Office Design v3 Technical Manual, but for the seven day week (not the 5 day working week as requested in Green Star – Office Design v3).

Tra-5 'Trip Reduction Mixed Use'
In order for the credit to be awarded, the following documentation is required to demonstrate compliance:

- A copy of the site plan in context of the surrounding area showing the location of the local amenities and the distance from the site to each amenity (via a dedicated safe and accessible connection for pedestrians and cyclists); and
- Evidence of the location and type of each local amenity, such as White Pages address listing.

WATER

Wat-1 'Occupant Amenity Water'
Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual.

Wat-2 'Water Efficient Appliances'
The following documentation is required at a minimum, to demonstrate compliance:

- A copy of the specification where the star rating (as per Australian Energy Label and AS/NZS 2007.2:2005) of all dishwashers or washing machines are nominated;
- A copy of the section of the specification where it states that the contractor is required to obtain approval of the design team or client before substituting any dishwasher or washing machine.

Wat-3 'Water Meters'
Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual.

Wat-4 'Landscape Irrigation'
Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual.

Wat-5 'Heat Rejection Water'
Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual.

Wat-6 'Fire System Water Consumption'
Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual.

Wat-7 'Swimming Pool/Spa Water Efficiency'
The following documentation is required at a minimum, to demonstrate compliance:

- An extract from the specification nominating the provision of a pool blanket for all swimming pools and spas within the project;

AND ONE OF THE FOLLOWING

Swimming pool filtration system
- Short report from a suitably qualified person (e.g. hydraulic engineer) describing how the swimming pool filtration system has reduced water consumption by at least 70% compared to traditional sand filtration; and
- Extracts from the relevant specifications demonstrating these systems will be installed

OR

Backwash Water
- Short report from a suitably qualified person (e.g. hydraulic engineer) describing how at least 70% of backwash water is collected and treated for reuse on site; and
- Extracts from the relevant specifications demonstrating these systems will be installed.

For the credit to be 'Not Applicable' the following documentation is required to demonstrate compliance:

- Site drawings clearly demonstrating that no swimming pool is included in the development.

MATERIALS

Mat-1 'Recycling Waste Storage'
For the first point to be awarded, the following documentation is required at a minimum, to demonstrate compliance:

- Short report prepared by a suitable professional that describes how the Credit Criteria have been met by:
  - Calculations demonstrating compliance with the sizing requirements for the dedicated separation, collection and recycling storage area;
  - Describing how the area is accessible to building occupants and recycling companies; and
  - Describing the provisions for on-site compost and green waste disposal and reuse.

- Tender drawings marked up to show:
  - The location of the recycling storage area(s), with dimensions indicated; and
  - The route connecting the recycling storage area(s) to building occupants and recycling companies;
- Extract(s) of specification(s) demonstrating:
  - Where waste chutes are provided, both recycling and general garbage chutes are provided in close proximity to each other; and
  - Facilities for on-site disposal and reuse of compost and green waste.

For the additional point to be awarded, the following documentation is required at a minimum, to demonstrate compliance:

- Tender drawings marked up to show the location of the common area space provided for the collection of oversized household items for recycling within the development; and
- Extract(s) of specification(s) demonstrating appropriate signage for the collection and recycling of household items.

Mat-2 'Building Reuse'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual.

Mat-3 'Concrete'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual.

Mat-4 'Steel'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual.

Mat-5 'PVC Minimisation'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual.

Mat-6 'Sustainable Timber'

In addition to the Compliance Requirements within the Green Star – Office Design v3, the project must also provide:

- Calculations clearly demonstrating the percentage of timber that complies with the Credit Criteria. These calculations must correlate with other documentation provided.

Mat-7 'Recycled-Content & Reused Products and Materials'

The following documentation is required at a minimum, to demonstrate compliance:

- Short report prepared by a suitable professional that describes how the Credit Criteria have been met by:
  - Documenting all separate uses of reused products and materials in the project;
  - Providing calculations that demonstrate that the total value of the reused products/materials accounts for at least 2% of the total project value; and
  - If the actual value of the reused products/materials is not yet known, it can be estimated by a qualified Quantity Surveyor;
- Extract(s) from specification(s) where the recycled-content and reused products and materials in the project as well as the associated quantities of these materials are stipulated;
- Extract(s) from schedule(s) listing products/materials in the project; and
- Extract(s) from the contract that includes the project's total value.

Reused products and materials must either be pre-existing in the building or purchased from a second hand retailer.

Mat-8 'Dematerialisation'

Projects must submit documentation as stipulated in the Green Star – Office Design v3 Technical Manual for Structure; Ductwork; Finishes; Cladding and Piping.

The following documentation is required at a minimum, to demonstrate compliance for Unit Sizes; Prefabricated Kitchens; Prefabricated Bathrooms; and Bathroom to Bedroom ratio:

- Short report prepared by a suitable professional that describes how the Credit Criteria have been met by:
  - Referencing supporting documentation and describing, with calculations and summary tables wherever appropriate, how the Credit Criteria have been achieved; and
- Extract(s) from specification(s) that indicate and quantify, wherever necessary, the requirements relevant for the areas of this credit being claimed (i.e. prefabricated bathrooms and/or kitchens); and
- Floor plans marked up to show, and quantify associated areas (i.e. unit sizes and/or bathroom to bedroom ratio).

The Certified Assessor(s) will not award this credit unless the reduction in material requirement has been clearly justified through sufficient supporting documentation. Based on the design, documentation in excess of the outline above may be necessary.

Mat-9 'Floor Coverings'

To be advised. GBCA will release an addendum addressing this credit.

Mat-10 'Universal Design'

In order for the credit to be awarded, the following documentation must be provided:

- Extract(s) from the relevant specifications demonstrating dwellings comply with Class "C" requirements of AS4299;
- Drawings clearly demonstrating areas that comply with Class "C" requirements of AS4299; and
- Calculations demonstrating the percentage of dwellings that comply with Class "C" requirements of AS4299.

Mat-11 'Shell & Core'

In order for the credit to be awarded, the following documentation must be provided:

- Short report prepared by a suitable professional that describes how the Credit Criteria have been met by:
  - Providing a tabulated summary that identifies all GFA spaces in the building and their areas, nominates whether they are delivered as shell and core and confirms that compliant spaces jointly account for at least 30% of the buildings GFA;
- Extract(s) from the specifications demonstrating compliance with the shell and core criteria and the area of the GFA claimed;
- Tender documents demonstrating compliance with the shell and core criteria and the area of the GFA claimed; and
- Tender drawings for all areas:
  - Indicating whether they are delivered as shell and core; and
  - Demonstrating that no ceilings, floor coverings, lighting systems and partitions walls are installed, and that ducts from the air supply and return risers finish within 1m of the face of the riser.

LAND USE & ECOLOGY

Eco- 'Conditional Requirement'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual.

Eco-1 'Reuse of Land'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual.

Eco-2 'Reclaimed Contaminated Land'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual.

Eco-3 'Change of Ecological Value'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual.

Eco-4 'Topsoil'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual.

Eco-5 'Communal Garden Facilities'

In order for the credit to be awarded, the following documentation must be provided:

- Short report prepared by a suitable professional that describes how the Credit Criteria have been met by:
  - Referencing supporting documentation and describing, with calculations and summary tables wherever appropriate, how the Credit Criteria have been achieved; and
- Site drawings and calculations demonstrating that 25% of the site is allocated for communal use and include the required number of communal facilities outlined below; and
- Extract(s) from the specifications demonstrating the number and type of facilities that are to be provided.

Please note that Certified Assessor(s) will not award points unless it is clearly demonstrated that 25% of the site is allocated for communal use and includes the required number of communal facilities outlined below. If there is doubt that the communal facilities will be provided, or that the area dedicated for communal use is not of adequate size, credits will not be awarded.

The communal facilities that can be included to achieve the credit can include:

- Compost facilities
- Garden plots that can be tendered by residents
- Communal or individual vegetable gardens
- On-ground deep soil planting capable of supporting large trees
- Landscaped areas for quiet contemplation
- Landscaped areas for active play
- Natural clothes drying facilities
- Playground area
- Outdoor entertainment area with integrated BBQ facilities.

EMISSIONS

Emi-1 'Refrigerant ODP'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual.

Emi-2 'Refrigerant GWP'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual.

Emi-3 'Refrigerant Leaks'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual.

Emi-4 'Watercourse Pollution'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual.

Emi-5 'Discharge to Sewer'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual.

Emi-6 'Legionella'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual.

Emi-7 'Insulant ODP'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual.

Emi-8 'Light Pollution'

Projects must submit documentation as per the requirements for Design projects in the Green Star – Office Design v3 Technical Manual.