

Green Star SA – Retail Centre Rating Tool

Green Star SA – Retail Centre validates the environmental initiatives of the design phase of new retail centre construction or base building refurbishment or construction and procurement phase of a retail centre building.

Green Star SA – Retail Centre is a design and/or as built phase rating tool that aims to:

- Encourage the implementation of new and emerging technologies
- Reduce the environmental impact of development through direct and indirect initiatives (e.g. it is difficult to quantify the environmental benefit of metering water and energy, but this will clearly enable the building to be better managed during operation)
- Encourage a new approach to designing and constructing buildings by rewarding best practice and excellence
- Ensure that effective design strategies are implemented without overlay of operational management and user behaviour and
- Allow different designs to have their environmental initiatives fairly benchmarked.

The rating tool is used to assess both the Design and As Built phases of new retail centre development or base building refurbishment. The same Green Star SA - Retail Centre tool is used for both Design and As Built certifications, but different documentation is required by the project team. The Green Star SA – Retail Centre Design certification was created to ensure that environmental impacts were considered at the design stage of a building, and the documentation to validate these conditions is specific to that which can be demonstrated at the design stage only. Green Star SA – Retail Centre As Built certification assess the same design initiatives, but the validation documentation differs in that it is retrospective and therefore assesses that which is relevant to the construction of the building. The primary difference between the Green Star SA – Retail Centre Design and the Green Star SA – Retail Centre As Built is that the documentation required to verify environmental initiatives varies depending on whether the building is at the design phase or has been built/refurbished.

Green Star SA – Retail Centre addresses both the Green Star SA – Retail Centre Design and Green Star SA – Retail Centre As Built certification in one Technical Manual.

ASSESSMENT CREDITS

Green Star SA – Retail Centre is divided into nine environmental categories, each of which has a number of credits.

For each credit the following topics are described in this Technical Manual:

- Aim of Credit
- Credit Criteria
- Documentation Requirements
- Additional Guidance
- Background and
- References.

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Points are awarded within credits for achieving performance-based objectives and for adopting policies and procedures to improve a project's environmental impact.

In some instances credits may not be applicable. This situation usually depends on the nature of the building and the inclusion or otherwise of a variety of typical building features. These specific instances are clearly defined in this Technical Manual. Whenever a credit is deemed 'Not Applicable', points are not awarded, and instead are excluded from the Points Available, used to calculate the Category Score. This modification prevents distortion of the Category Score (up or down) for issues that can not be addressed and are not applicable to the project.

For example, a naturally ventilated building may have no need for refrigerants. In this case, it would be impossible to demonstrate that the building allows for an automatic refrigerant recovery system. In this instance, points awarded for including an automatic refrigerant recovery system would not be available to the project and would not contribute to the overall project weighted score.

CONDITIONAL REQUIREMENTS

Green Star SA – Retail Centre v1 has two criteria that must be achieved (known as 'Conditional Requirements') in order to obtain a Green Star SA – Retail Centre v1 Certified Rating. The Conditional Requirements fall within the Energy and Land Use and Ecology categories. Please refer to these sections of the Technical Manual for further details.

ALLOCATION OF CREDITS WITHIN CATEGORIES

The credits in each category have an effective weighting by virtue of the number of points awarded versus the total points available. The points available correlate with, but are not always linearly proportional to, the environmental impact.

It is not the intent of Green Star SA – Retail Centre v1 to benchmark the operational performance of buildings and, as a result, the tool provides comparable benchmarked outcomes rather than estimates of actual performance.

Green Star SA Certification

A design, project or building cannot publicly claim a Green Star SA rating unless the GBCSA has certified the rating. The GBCSA will commission one or more third-party Assessors to check and validate the project's self-rating and recommend (or oppose) a Green Star SA Certified Rating.

Green Star SA – Retail Centre v1 certification identifies projects that have demonstrated a commitment to a specific level of environmental sustainability by informing the industry of the design performance of the project in terms that are widely understood and accepted.

The benefits of certification include:

- Gaining market recognition as a leader in the green building industry
- Establishing a competitive commercial advantage when seeking occupants/users of the facility and
- Validating the achievement through third party assessment.

ELIGIBILITY

To be eligible for Green Star SA assessment, projects must meet all four provisions of the Green Star SA Eligibility Criteria detailed below.

1. Spatial Differentiation
2. Space Use
3. Conditional Requirements
4. Timing of Certification

CONFIRMING ELIGIBILITY

It is the responsibility of each project team to check the most current Eligibility Criteria on the GBCSA website at the time of registration and to ensure that their project is eligible.

Whenever unsure, project teams can request an eligibility confirmation from the GBCSA by forwarding a brief description of the project to greenstarsa@gbcsa.org.za.

Registration does not guarantee assessment no project will be assessed if it is deemed ineligible against the Eligibility Criteria current at the time of registration.

The GBCSA reserves the right to deny eligibility to assessment of any project that is deemed to compromise the Green Star SA brand, and to revise these criteria to better achieve the goals of the Green Star SA rating tools.

ELIGIBILITY CRITERION 1: SPATIAL DIFFERENTIATION

To meet the Spatial Differentiation criterion, the project must be clearly distinct. A Green Star SA rating must provide a meaningful result, and send a clear message to the marketplace, about a distinct project. Only distinct projects are eligible for assessment project components are not eligible.

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Shared building services (such as electrical, HVAC plant, water treatment etc.) or amenities (waste rooms, bicycle facilities, car parks etc.) do not affect the building's eligibility for Green Star SA assessment. For further information, refer to the 'Guidelines for Interdependent Projects' below.

The following describes projects that meet this Eligibility Criterion:

- Functionally autonomous buildings that are:
 - Freestanding or
 - On top of public infrastructure (e.g. transport hubs) or
 - Connected to other buildings for secondary access only or
 - Laterally adjacent to other functionally autonomous buildings or
 - Buildings that are being extended.
- Building extensions (eligible for a BUILDING EXTENSION Rating, see Options for Building Extensions below).
- Multiple building developments (See Options for Multiple-Building Developments below).

Options for Building Extensions:

There are two options available for an assessment of a building extension:

1. The building extension and the initial building are rated as one building.
2. The building extension is rated separately and will receive a Green Star SA – Retail Centre v1 BUILDING EXTENSION rating if successful.
 - The Green Star SA rating achieved by the extension will only relate to and can only be marketed for the extension, as will be made evident on the Certificate and logo (i.e., Green Star SA — Retail Centre v1 BUILDING EXTENSION), and will not extend to the remainder of the building or any part thereof.
 - The primary building does not need to have, or qualify for, a Green Star SA certified rating in order for the extension to be eligible.

A project can qualify for assessment as a building extension if it meets all of the following criteria:

- a. The extension has full functional independence from the initial building
- b. The extension has a distinct address or name, e.g. West Wing
- c. The initial building's main function is not to service the extension
- d. If the project scope includes work to the initial building, it only includes refurbishment or modification to the initial building's spaces/structures that support the extension. If the modifications affect primary spaces/structures in the initial building, the entire development will be deemed one building
- e. There is a clearly defined Project site used consistently throughout the submission:

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- i. for a vertical extension, the site will be defined as the area occupied by the extension's footprint only or
 - ii. for a lateral extension, the site will be defined as the area occupied by the extension's footprint plus adjacent area extending to the boundary of the site of the initial building
- f. All services and incoming mains supplies are separated or sub-metered (or the entire system(s) must comply with the Credit Criteria) and
- g. Either of the following attributes applies to the extension:
- i. It has a different street address from the initial building OR
 - ii. It accounts for at least 20% of the total GFA and is no smaller than 1,000m² GFA.

Options for Multiple-Building Developments:

It is recognised that developments are commonly split over several buildings. Such developments have the following options for Green Star SA assessments:

1. Single building certification, where selected campus buildings individually undergo assessment and receive individual ratings OR
2. Single certification for multiple buildings, where all the buildings are certified at the same time and awarded one rating.

A multiple-building development can be eligible for a single rating if it meets all the following criteria:

- h. It consists of buildings individually eligible for assessment under the same Green Star SA tool
- i. It is under one ownership OR under single property management and control
- j. It is recognised by a distinct name
- k. It represents one project scope (even if buildings within that scope are completed at different times) and
- l. All buildings on the site are certified.

A submission for a multiple-building development must comply with the additional guidance provided by the GBCSA on their website.

Guidelines for Interdependent Projects:

If well-designed and operated, shared services and amenities can result in outcomes which are superior to individual solutions. The following guidelines apply to any shared services and amenities:

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Energy generation, refrigeration and water treatment services

- a. Both shared and off-site services can contribute to a project's Green Star SA rating however, in all cases a Credit Interpretation Request (CIR) must be submitted to initiate a GBCSA ruling on the manner in which the Certified Assessors are to evaluate compliance.
- b. The GBCSA strongly supports the use of shared/ centralised energy or treatment facilities (sometimes beyond the site boundary of the development being assessed). Energy, Water and Emissions credits can be achieved with a shared plant as long as the use of such facilities by the development seeking Green Star SA certification is not subject to operational uncertainty.
- c. For shared mechanical plants, projects must justify how the plant is apportioned energy modelling is then conducted for the building as if it were served by a dedicated plant.
- d. For shared grey- and blackwater treatment facilities, projects must justify how the treatment plant is apportioned. For Wat-1 'Occupant Amenity Water', the Potable Water Calculator will estimate the potable water consumption of the building. Any project can use the manual calculations option and enter the final estimated potable water consumption in L/person/day (1 person per 15m²), taking into account reused water bought from off-site (or the use of cooling tower discharge, condensed water, etc.), and provide evidence to substantiate the offset.

As Green Star SA rating tools assess the inherent attributes of buildings, external amenities can only be rewarded if they are provided for the life of the building to the same degree of service and certainty as internal facilities. As a result, the following applies to amenities that are located on separate premises and not within the assessed building:

- The scope of assessment is not extended beyond the assessed building, i.e. the building within which the amenities are housed does not need to meet the Credit Criteria of any claimed credits - only the amenities will be assessed against the Credit Criteria of the credit towards which they contribute
- The assessed building and the amenities must be under the same ownership and cannot change ownership separately (i.e. they are on the same title or equivalent)
- The assessed building and the amenities must be under the same management and cannot change management separately (e.g. the same facility management to ensure recycling waste storage is processed as designed)
- The amenities must be completed by the date of practical completion of the assessed building and
- The amenities must fully meet the Credit Criteria and be documented in strict accordance with the Technical Manual.

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Should any of the above conditions not be met, the external amenities cannot contribute to the Building's Green Star SA rating unless a Credit Interpretation Request (CIR) is submitted to the GBCSA and granted to acknowledge alternative yet equivalent compliance.

ELIGIBILITY CRITERION 2: SPACE USE

Retail centres with a minimum of 80% of GFA (measured to exclude internal car parks) comprised of retail usage (SABS 0400 occupancy class F1, F2 or F3) are eligible for assessment under Green Star SA – Retail Centre.

For the purposes of South Africa retail centres, the following SAPOA definitions shall be used as well as those defined in the glossary (GFA & UA):

- Rentable Area – The area dedicated to the use of the tenant (SAPOA clause 2.2.3)
- Primary Common Area – All building area that is not rentable area (SAPOA clause 2.2.5)
- Retail Area – Space containing shop units for the purpose of selling goods and services directly to the general public (SAPOA clause 2.3.1)

Retail centres with a minimum of 80% of the GFA classified as Retail space including Primary Common Area dedicated to the Retail space (as per the SAPOA definitions above) are eligible for a Green Star SA – Retail Centre v1 assessment.

For the purposes of this tool, retail centres are considered to be centres that include:

- More than one retail business/tenant
- Common mall area(s) and
- Shared building infrastructure among tenancies

Retail tenancies and tenant fitouts are not eligible for assessment under Green Star SA - Retail Centre. Stand alone retail premises are also not eligible for assessment.

ELIGIBILITY CRITERION 3: CONDITIONAL REQUIREMENTS

The Green Star SA rating tools have a number of Conditional Requirements (such as minimal energy efficiency and protecting land of high agricultural value). Regardless of how many other credits the building achieves, it will not be eligible for a Green Star SA Certified rating unless all of the rating tool's Conditional Requirements are met.

There are two Conditional Requirements in Green Star SA – Retail v1:

- Ene – 0 Conditional Requirement
Refer to the energy category further details.
- Eco – 0 Conditional Requirement
Refer to the Land Use and Ecology category for further details.

ELIGIBILITY CRITERION 4: TIMING OF CERTIFICATION

Green Star SA rating tools correspond to specific phases within a building project, and as such certification must be achieved within the timeframe applicable to the relevant rating tool.

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- **Submissions for a 'Design' Certified Rating** can be lodged as soon as the required evidence is available this could be prior to commencement of construction. The Certified Rating can be achieved prior to practical completion, but must be achieved no later than 24 months after practical completion.
- **Submissions for an 'As Built' Certified Rating** can be lodged following the practical completion of the project. The Certified Rating must be achieved within 24 months after practical completion.

CERTIFICATION PROCESS

Up to date information on the certification process is outlined in detail on the GBCSA website: <http://www.gbcsa.org.za>. Templates, forms and checklists are available on this website to guide projects through the process.

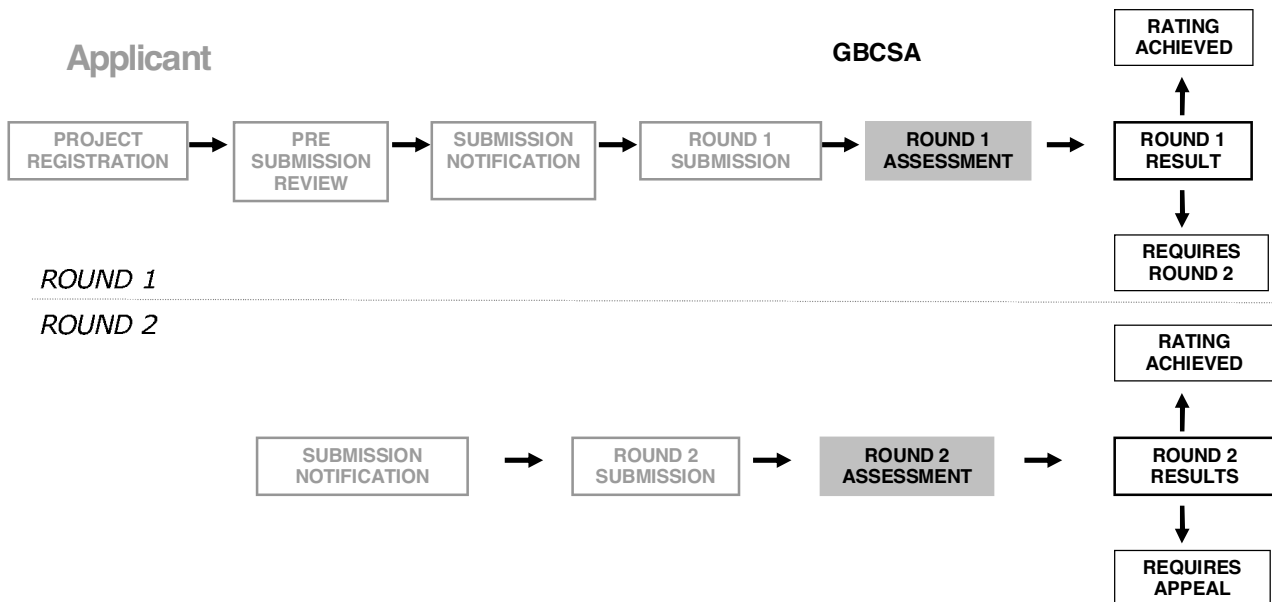


Figure 2: Overview of certification process

Registration

Registering a building project with the Green Building Council of South Africa declares the intent to pursue certification under a specific rating tool and is the first step in the certification process. Registration establishes a connection with the GBCSA and gives the project access to essential information and assistance with the submission process. Projects should register as soon as possible during the project, though there is no deadline during the design or construction process. Registration takes place through a form in the Green Star SA certification section of the GBCSA website www.gbcsa.org.za.

Part one of the Certification Fee (50%) must be paid to the GBCSA upon registration of a project, and an executed Certification Agreement (sent to the project owner upon registration) must be received by the GBCSA to finalise a project's registration. Details of the Certification

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Fees can be found on the GBCSA website www.gbcsa.org.za. (Part two of the certification fee – the other 50% - is due when the project submits for certification.)

Please Note: Registering a project simply declares the intent to pursue certification and should not be confused with actual project certification which is awarded by the GBCSA once a project has demonstrated its achievement of a certain rating level.

Preparing the Submission(s)

Once your project is registered, the project team should prepare documentation, drawings and calculations to satisfy the Green Star SA credit requirements. If appointed, the Green Star SA Accredited Professional should take responsibility for the quality of submission.

It is important to ensure that documentation for all claimed credits adheres to the Documentation Requirements outlined in the Green Star SA – Retail Centre v1 Technical Manual as there are only two rounds of Assessment and one opportunity for resubmission (Appeal) available.

Assessors will not award the point(s) unless it is demonstrated that all the requirements have been met exactly as detailed in the Technical Manual. See the GBCS website for the most up to date templates and submissions forms.

Round 1 Submission

To ensure receipt of the Round 1 assessment results within six weeks of the submission date, the project contact must inform the GBCSA of the date of submission at least two weeks prior to the anticipated submission date (see notification form on the GBCSA website). Due to the costs associated of arranging an Assessment Panel, any late submissions are subject to a minimum penalty fee of R 1000. Once an initial submission date has been forfeited, a new date must be scheduled with the GBCSA. The same conditions apply to the revised date.

Part two of the Certification Fee (50%) must be paid to the GBCSA on or before the submission date, and projects must also provide the pre-submission checklist found on the GBCSA website when they submit.

Please note that if a Credit Interpretation Request (CIR) has been submitted, an assessment cannot take place until it has been resolved.

The GBCSA reserves the right to conduct a pre-assessment review of a project submission prior to the commissioning of a review by the Assessors. A project may be required to resubmit if the pre-assessment review suggests that the quality of the submission would result in an excessive number of credits denied or credits 'To Be Confirmed'. There is no fee associated with this additional pre-assessment.

Round 1 Assessment

The Assessment Panel, containing one or more third-party Assessors and an Independent Chair, will review the submission. Recommendations will then be made to the GBCSA. The GBCSA reserves the right to question the findings of the Certification Assessment Panel.

The GBCSA will forward the results of the Round 1 assessment to the project contact and the applicant. The project may accept the results as the final rating or request to resubmit documentation for credits 'to be confirmed' for a Round 2 assessment.

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Round 2 Submission

Upon receipt of the results of the Round 1 Assessment, the project may request to resubmit documentation for credits 'to be confirmed'. Each project has only one opportunity for resubmission, which may include:

- Additional/revised documentation to demonstrate fulfilment of Credit Criteria
- Alteration to project design that results in meeting Credit Criteria and
- Credit Interpretation Requests (CIRs) to clarify alternative compliance.

To ensure receipt of the Round 2 assessment results within four weeks of submission, the project contact must inform the GBCSA of the date of submission at least two weeks prior to submission (see notification form and any templates on the GBCSA website). Due to cost of arranging an Assessment Panel, late submissions are subject to a minimum penalty fee of R 1000.

Projects must also provide the Round 2 pre-submission checklist found on the GBCSA website when they submit.

Round 2 Assessment

Assessment of the Round 2 submission will follow the procedures outlined above for Round 1 assessment.

Certified Rating Awarded

If the assessment validated the project's achievement of the score of 45 or above, the GBCSA will award a Certified Rating and notify the Applicant via an award letter.

Certified Rating not Awarded

If a desired Certified Rating is not achieved, the project may be eligible to Appeal select credits for a fee to re-asses. Please see the GBCSA website for further details.

Technical Clarifications and Credit Interpretation Requests

The Green Star SA Technical Clarifications (TC) and Credit Interpretation Request (CIR) rulings provide an essential source of information to all projects undertaking Green Star SA assessment. They are available on the GBCSA website <http://www.gbcsa.org.za>.

Technical Clarifications often represent the GBCSA answers to technical queries and complement Green Star SA Technical Manuals (e.g. the Assessment Team will use the Technical Clarifications as public precedent). They do not amend but clarify the Credit Criteria or Compliance Requirements. They are an extension of the Technical Manual it is the responsibility of the project teams to stay up-to-date with this section of the GBCSA website.

The CIR rulings offer alternative compliance options whenever those have been deemed equivalent in meeting the Aim of Credit. A registered project may submit a CIR if the project team feels that the Aim of Credit has clearly been satisfied via a solution that does not adhere to the stated Credit Criteria/Additional Guidance of the relevant Technical Manual.

Updating Green Star SA – Retail Centre

Green Star SA – Retail v1 was developed on the basis of information available at the time of its development. Some issues have not been addressed in Green Star SA – Retail Centre v1 due to the following:

- Cost of undertaking assessment and concerns of the reliability and accuracy of data relevant to South Africa (e.g. embodied energy, Life Cycle Assessment etc.)
- Lack of clear benchmarks or guidelines relating to buildings (e.g. electro-magnetic radiation) and
- Lack of standards of measurement in South Africa and availability of suppliers' data (e.g. material toxicity).

As more research is undertaken in the green building area, Green Star SA rating tools are updated to reflect new information, practices, tools and references.

Green Star SA rating tools may also be updated as a result of credit interpretations from the certification process. In these cases, the GBCSA reviews the credit and, if the new credit interpretation is adopted, the relevant Green Star SA rating tool and the associated Technical Manual is updated to reflect the change. All Green Star SA tools have an allocated version number to reflect these changes.

Green Star SA rating tools may also be revised on the basis of stakeholder feedback.

FEEDBACK ON GREEN STAR SA – RETAIL CENTRE V1

Ongoing Feedback

The GBCSA encourages feedback on all Green Star SA rating tools, including Green Star SA – Retail Centre v1. Feedback is to be sent to greenstarsa@gbcsa.org.za for consideration by the GBCSA.

