



Technical Clarifications and CIR Rulings

Generated between 7th and 18th December 2007

The complete list of Technical Clarification and CIR Rulings is available on the GBCA website, <http://nolog.gbcaus.org/gbca.asp?sectionid=106&docid=972>.

General

Switching between versions of Green Star rating tools

Projects registered to receive a Green Star Certified Rating may choose to be assessed using a more recent version of a Green Star Rating Tool as long as it is applied across the entire project (i.e. no partial upgrade is acceptable). The GBCA staff must be notified in writing prior to receiving the project's submission for assessment. Please note that no project can be assessed under an earlier version (i.e. the version that was superseded by the version in the project's registration).

Initial condition

For the purposes of credits that require comparison between the initial and resulting conditions of the site, e.g. Mat-2 'Reuse of Façade', Mat-3 'Reuse of Structure' or credits in the Land Use and Ecology Category, the initial condition is defined as the condition at the time of site purchase, and can be documented through evidence (e.g. aerial photographs or site plans) generated at or before the time of purchase.

Round 2 Submission

Where the Certified Assessor(s) request that a piece of evidence be resubmitted in order for the credit to be awarded, it is the responsibility of the project team to resubmit the entire credit, and the related credits, if the revised evidence changes the basis on which the rest of the evidence was accepted in Round 1. The Certified Assessor(s) will seek to confirm that all evidence clearly and consistently confirms compliance, and reserve the right to withdraw credits awarded in Round 1 if a subsequently demonstrated change would necessitate re-assessment.

'As Built' assessment

Projects that have achieved a 'Design' Certified Rating have a choice of undergoing 'As Built' assessment using either the same or the more recent version of the applicable 'As Built' tool.

Alternatives to specifications

CIR Ruling: The CIR to deem the inclusion of the details of the design criteria within the base building scope of works contract equivalent to the inclusion of the same information within the structural specification is **granted**. The Certified Assessor(s) will, however, look for a similar level of certainty as to that which they would look for within structural specifications.

CIR Ruling: The CIR to deem construction drawings equivalent to a specification is **granted conditionally** on the project's ability to clearly demonstrate the following:

- The construction drawings contain all the information required in the Technical Manual to define the design and scope of work;
 - A short report from a suitably qualified Engineer is provided and describes how the Credit Criteria is met; and
 - All other documentation for this credit is provided in accordance with the Technical Manual.
- The Certified Assessor(s) will look for a similar level of certainty as to that which they would look for within specifications.

Site definition

The 'site' is defined by the scope of Green Star assessment. If a development consists of several buildings, the site must be defined for each registered building.

Staged projects

It is understood that buildings/tenancies are often delivered or refurbished in stages. However, this does not alter the requirements for Green Star submissions, as this would compromise the comparability of Green Star ratings. As such, the entire building/tenancy design is assessed for a 'Design' rating, and the documented evidence for each credit must be in full accordance with the Technical Manual. If some aspects of the design have not been completed, projects may not be able to claim affected credits. Similarly, no design documentation will be accepted for an 'As Built' assessment and all stages of the project (base building or tenancy, whichever is relevant) must reach practical completion prior to submission.

Shell and Core or Integrated Fitout projects

Any space within a project delivered as a Shell and Core or Integrated Fitout will be assessed on the basis of:

- The traditional scope of fitout provided by the base building (e.g. not furniture);
- The fully documented design for Green Star – Office Design; and
- The as-built base building provisions (for a shell and core project) and any fitout provisions installed as part of an integrated fitout for Green Star – Office As Built.

Where any component of the project is delivered as Shell and Core or Integrated Fitout, the General Section of the submission must include an area summary listing each area within the project and indicating whether it is delivered as a standard fitout, integrated fitout or shell and core. In addition, the mode of delivery must be clearly indicated on all documentation to allow for the Certified Assessors to confirm compliance.

For a Green Star – Office Design Certified Rating, the fully documented design will be assessed regardless of how it is delivered. Where an integrated fitout is designed into the project, all documentation submitted for assessment, including tender drawings, must reflect the changes requested by the tenant(s).

For a Green Star – Office As Built Certified Rating, the project must demonstrate compliance with the Credit Criteria regardless of how the project is delivered (to the extent provided by the base building). Any areas that remain as shell and core (i.e. have not been fitted out) at the time of submission cannot contribute towards the compliance requirements for a credit.

Green Star – Office Design v1 & v2 and Green Star – Office As Built v1 & v2

Management

Man-1 'Green Star Accredited Professional'

It is understood that in some circumstances, the role of the Green Star Accredited Professional is fulfilled by different individuals throughout the project. This is acceptable as long as each Green Star Accredited Professional individually meets the requirements of this credit and this role has been fulfilled continually from the beginning of the schematic design.

Man-2 'Tenant Fitout Commissioning'

As stated in the Credit Criteria section of the credit, this credit addresses the commissioning of all systems, not just of the mechanical systems. ASHRAE addresses mechanical systems only; therefore, if used, it must be supplemented by CIBSE for all other systems.

Man-4 'Commissioning – Commissioning Agent'

CIR Ruling: The Credit Interpretation Request (CIR) to deem independent commissioning agent(s) sufficiently independent if they report directly to the building owner or the owner's designated representative, even if they are paid by the contractor, is **granted**.

Man-7 'Waste Management'

This credit applies to all waste from construction activities, including existing carpet and ceiling tiles. Please note that the Additional Guidance clearly identifies these materials as having the potential to be re-used / reconditioned or recycled.

CIR Ruling: The Credit Interpretation Request (CIR) to exclude the demolition waste associated with the demolition of the existing building(s) from the total amount of waste generated on the project from the credit requirements is **denied**, as this would contradict the current Credit Criteria.

Indoor Environment Quality

IEQ-4 'Daylight'

For all Green Star – Office Design and Green Star – Office As Built assessments, only base-building installed partitions (e.g. load bearing walls) must be included; tenant-installed partitions should not be included in the modelling/calculations.

CIR Ruling: The Credit Interpretation Request (CIR) to allow the use of Overcast Sky for modelling rather than the Uniform Sky (as stipulated in the Technical Manual) is **denied** because it would not generate an equivalent outcome and can compromise equitable assessment of all projects.

IEQ-5 'Daylight Glare Control'

The Credit Criteria can be met through a combination of compliant fixed shading devices and automated internal blinds.

IEQ-16 'Tenant Exhaust Riser'

The Green Star – Office Design and Green Star – Office As Built rating tools focus on base building attributes, not tenancy attributes or tenant behaviour. Requiring the tenants to install the fans negates the ability of the base building to claim this initiative as its provision. The tenant exhaust riser, if provided in accordance with the Technical Manual, would be a base building responsibility both in terms of provision and in terms of energy consumption.

IEQ-13 'Volatile Organic Compounds'

Paints, sealants and adhesives used in car parks (internal / external) do not require documentation and are excluded from this credit.

CIR Ruling: The Credit Interpretation Request (CIR) to provide a letter from the architectural practise manager (stating that low-VOC paints were used) instead of the inclusion of VOC levels within the specification is **denied**. The two are not considered equivalent.

IEQ-14 'Formaldehyde Minimisation'

Products made completely of laminate that are not pressed onto a wood-product substrate, (e.g. High-Pressure Laminate and Compact Laminate) are not considered to be composite wood products for the purposes of Green Star and are therefore not subject to the Credit Criteria of this credit.

The following applications are not addressed by this credit and are therefore not subject to its Credit Criteria:

- Any composite wood products used in exterior applications (e.g. decorative façade);
- Formwork;
- Internal car park applications;
- Reused composite wood products; and

- Raw timber.

Energy

Ene-1 'Energy' / Ene-2 'Energy Improvement'

CIR Ruling: The CIR to deem the inclusion of the design criteria details within the base building scope of works contract equivalent to the inclusion of the same information within the Mechanical specification is **granted**. However, the Certified Assessor(s) will look for a similar level of certainty as to that which they would look for within Mechanical Specifications.

As stated on page 3 of 6 of Ene-1 'Energy (Conditional Requirement)' in Green Star – Office As Built v2, "A formal AGBR Pre-Commitment Agreement is not required to achieve this credit."

As per Green Star – Office Design, the Ene-1 or Ene-2 credits within a Green Star – Office As Built submission are assessed purely on predictive energy modelling, not on operational performance. No period of operation is necessary; the submission for assessment can be made at any time after, and within two years of, practical completion.

Each variable in the Energy Modelling Report (e.g. building form, materials or air-conditioning system(s)) must be referenced consistently throughout the rest of the submission (i.e. in related credits such as IEQ-1 'Ventilation Rates' or Ene-7 'Peak Energy Demand Reduction') and clearly justified by the documented design (for Green Star – Office Design v2 assessment) or by the as-built evidence (for Green Star – Office As Built v2 assessment).

Ene-7 'Peak Energy Demand Reduction'

CIR Ruling: The Credit Interpretation Request (CIR) to allow energy efficiency initiatives (such as thermal mass, energy efficient envelope, services or lighting) to contribute to the overall reduction of peak energy demand is **denied**. This credit rewards the installation of specific peak energy demand reduction systems that reduce the pressure on municipal infrastructure; the overall (rather than peak) reduction in the project's energy demand is already rewarded within the Ene-1 or Ene-2 'Energy Improvement' credits.

Transport

Tra-2 - 'Car Parking'

Revised CIR Ruling: Whenever mandatory parking requirements for the project exist, either within the local planning allowances or Development Approval requirements, they must be used. However, in cases where requirements:

- do not exist at all; OR
- are not specified for the building; OR
- are optional; OR
- are recommended;

the following two options are available to projects:

- 1) Clearly demonstrate that parking is not provided in excess of one parking space per 100m² of NLA to achieve one point or one parking space per 200m² to achieve two points;

OR

- 2) Submit a Credit Interpretation Request (CIR) to substantiate an argument for equivalent yet alternative compliance with the Credit Criteria.

Tra-3 'Cyclist Facilities'

Even if they are fitted out as changing rooms, the minimum number of disabled toilets mandated by statutory requirements cannot contribute to the total number of changing facilities provided, as this may detract from their availability for use by disabled persons. Disabled showers do contribute towards the total number of showers provided, as long as they are not stipulated in statutory requirements for the project.

Changing/shower facilities do not have to be aggregated. However, access must be guaranteed and convenient for all building occupants (e.g. not through another tenancy). If changing/shower facilities are located within tenancies rather than in common area, they must be adequately sized for each tenancy based on the default occupancy rate of one person per 15m², and each location must individually meet the Credit Criteria (e.g. providing excess facilities within one tenancy will not compensate for insufficient facilities in another).

To support the Aim of the Credit, lockers must be located within the changing facilities. Showers must be located within or immediately adjacent to the changing facilities.

Changing facilities (with lockers and showers) do not have to be in the same location as the secure bicycle storage. It is not necessary to provide weather-protected access from the secure bicycle storage to the changing/shower facilities. However, the access between the changing/shower facilities and the occupied space (e.g. office) must be weather protected.

CIR Ruling: The Credit Interpretation Request (CIR) to deem a particular bicycle parking system appropriate for meeting the Credit Criteria is **granted conditionally** on the project's ability to demonstrate, through its submission for this credit, how the attributes of this system meet the criteria of AS2890.3.

CIR Ruling: The Credit Interpretation Request (CIR) to deem the location of visitor bicycle parking in the third level of basement equivalent to "near a public entrance" is **denied** because the proposed location is not considered to be suitable for visitor bicycle parking and does not meet the Aim of the Credit.

CIR Ruling: The Credit Interpretation Request (CIR) to provide visitor bicycle parking in two different locations is **granted conditionally** on the projects ability to demonstrate that the two different locations individually meet the Credit Criteria.

Water

Wat-1 'Occupant Amenity Potable Water Efficiency'

It is understood that in many cases, the relevant authority will not grant approval of the water reuse/recycling systems until they have been commissioned. For a Green Star – Office Design submission it is acceptable to provide the authority's preliminary approval, or if no objection to the system(s) by the authority, the documented design of the system(s) on the basis of relevant state and local standards. The authority must confirm that it is only able to approve operational systems. The authority's subsequent approval of the operation system(s) may be conditional on the project's ability to clearly demonstrate compliance with relevant regulation or standards, which may be cited. The relevant authority's approval of the operational system(s) will still be necessary to confirm compliance for Green Star – Office As Built.

If showers are installed but no points are claimed under Tra-3 'Cyclist Facilities', projects do not have to document the water efficiency of the showerheads and can chose 'no showers installed' from the drop-down menu of the Potable Water Calculator. Please note that this will affect the calculation of the total amount of greywater generated, and may significantly reduce the amount of greywater deemed available to offset potable water demand.

Materials

Mat-2 'Re-use of Façade' & Mat-3 'Re-use of structure'

The 'Not Applicable' clause within the Technical Manual should read as follows:

"If the site is a Greenfield site.... **or contained no buildings at the time of purchase...** or the total floor area of existing buildings demolished on-site is less than 30% of the NLA of the new building then the credit is 'Not Applicable' and is excluded from the points available to calculate the Materials Category Score."

Mat-8 'Sustainable Timber'

Products made completely of laminate that are not pressed onto a wood-product substrate, (e.g. High-Pressure Laminate and Compact Laminate) are not considered to be composite timber products for the purposes of Green Star and are therefore not subject to the Credit Criteria of this credit.

Land Use & Ecology

Eco-1 'Ecological Value of Site'

CIR Ruling: The Credit Interpretation Request (CIR) to submit the following documentation instead of the local development control plan and development zone map stipulated in the Technical Manual is **granted**:

1. Relevant domain map;
2. Relevant 'special facilities' schedule from the Local Council Planning Scheme together with the approved Master Plan; and
3. Original Rezoning Agreement referred to in the Local Council Planning Scheme.

Eco-3 'Reclaimed Contaminated Land'

The Credit Criteria must be met prior to construction completion (and in accordance with the relevant regulation, as stipulated); '*completion.*' should be inserted at the end of the first sentence of the Credit Criteria.

Eco-5 'Topsoil and Fill Removal from Site'

CIR Ruling: The Credit Interpretation Request (CIR) to provide a letter from the architect stating that the project has no cut and fill or removal of topsoil from the site as evidence for Eco-5 'Topsoil and Fill Removal from site' instead of the documentation required by the Technical Manual is **denied** as this would not equivalently demonstrate compliance.

The 'site' is defined by the scope of Green Star assessment. If a development consists of several buildings, the site must be defined for each registered building. Stockpiling of soil on sites of the other buildings within the development is not acceptable.

Emissions

It is understood that a number of different systems may be installed on a project. Whenever Emi-1 'Refrigerant ODP' through Emi-4 'Refrigerant Recovery' are claimed, evidence must account for and describe all systems within the project. Where a system meets the Credit Criteria for Emi-1 'Refrigerant ODP' and Emi-2 'Refrigerant GWP', as documented in accordance with the Technical Manual, such system does not need to meet the requirements for Emi-3, and Emi-4.

Emi-3 'Refrigerant Leak Detection'

CIR Ruling: The Credit Interpretation Request (CIR) to deem an R123 system inherently sufficient for meeting the Aim of the credit because the system is under negative pressure when operating is **denied**. The Aim of the credit is to detect any leaks of refrigerant from the vessel at any time, including those that occur when the system is not in operation.

Emi-5 'Watercourse Pollution'

CIR Ruling: The Credit Interpretation Request (CIR) to use a shared blackwater treatment facility is **granted** on the basis that a suitably qualified professional has indicated that it is sized sufficiently to serve all nominated uses. Please refer to the 'Interdependent Projects' clarification.

Emi-6 'Reduced Flow to Sewer'

It is understood that in many cases, the relevant authority will not grant approval of the water reuse/recycling systems until they have been commissioned. For a Green Star – Office Design submission it is acceptable to provide the authority's preliminary approval, or if no objection to the system(s) by the authority, the documented design of the system(s) on the basis of relevant state and local standards. The authority must confirm that it is only able to approve operational systems. The authority's subsequent approval of the operation system(s) may be conditional on the project's ability to clearly demonstrate compliance with relevant regulation or standards,

which may be cited. The relevant authority's approval of the operational system(s) will still be necessary to confirm compliance for Green Star – Office As Built.

Green Star – Office Interiors

Management

Man-1 'Green Star Accredited Professional'

It is understood that in some circumstances, the role of the Green Star Accredited Professional is fulfilled by different individuals throughout the project. This is acceptable as long as each Green Star Accredited Professional individually meets the requirements of this credit and this role has been fulfilled continually from the beginning of the schematic design.

Man-2 'Tenant Fitout Commissioning'

As stated in the Credit Criteria section of the credit, this credit addresses the commissioning of all systems, not just of the mechanical systems. ASHRAE addresses mechanical systems only; therefore, if used, it must be supplemented by CIBSE for all other systems.

Man-7 'Waste Management During Tenancy Fitout'

This credit applies to all waste from construction activities, including existing carpet and ceiling tiles. Please note that the Additional Guidance clearly identifies these materials as having the potential to be re-used / reconditioned or recycled.

Indoor Environment Quality

IEQ-2 'Carbon Dioxide Monitoring and Control'

CIR Ruling: The Credit Interpretation Request (CIR) to meet the Credit Criteria by installing, within each enclosed space that is less than 100m², a combination of a wall-mounted CO₂ sensor linked to a BMS system and a VAV box that supplies outside air to that space is **granted conditionally** on the project's ability to demonstrate that:

- The CO₂ sensors are able to control the volume of outside air that is provided to the enclosed spaces;
- The quality of the air and the temperature settings within the enclosed space will not be compromised by the CO₂ sensors operating the VAVs;
- Any impact that these proposed strategies will have on related credits (such as energy consumption) is reflected consistently throughout the submission;
- The quality of air and temperature supplied to other spaces within the same duct is not compromised when a CO₂ sensor within a space activates the VAV system. See the Technical Clarifications section of the GBCA website for additional information on this point;
- Any assumptions made with regards to the operation of this system are justified in a conservative and robust way throughout the submission;
- The Aim of the Credit has been clearly met; and
- All of the documentation is as-built/as-installed in strict accordance with the Green Star – Office Interiors v1.1 Technical Manual.

IEQ-3 'Daylight'

CIR Ruling: The Credit Interpretation Request (CIR) to allow the use of Overcast Sky for modelling rather than the Uniform Sky, as stipulated in the Technical Manual, is **denied** because it would not generate an equivalent outcome and can compromise equitable assessment of all projects.

IEQ-6 'Electric Lighting Levels'

CIR Ruling: The Credit Interpretation Request (CIR) to use dimmers combined with lumen sensors as an alternative, but equivalent strategy for meeting the Aim of the Credit is **denied**. The energy benefits of the proposed solution are picked up in the Energy Category; this credit is specifically intended to avoid over-design of lighting systems.

CIR Ruling: The Credit Interpretation Request (CIR) to meet the Credit Criteria through a suspended overhead task lighting system that illuminates up to two workstations at a time is **granted conditionally** on the project's ability to clearly demonstrate the following:

1. The suspended overhead task lighting is connected to both workstations for individual control;
2. The overhead task lighting must be connected to the tenants' light control system;
3. The Lux levels specified in the Credit Criteria must be met for the specified NLA; and
4. The system installed and any assumptions made are reflected throughout the rest of the design and submission (e.g. in submissions for Ene-1, Ene-2, Ene-4, IEQ-5, etc.).

IEQ-11 'Volatile Organic Compounds'

CIR Ruling: The Credit Interpretation Request (CIR) to provide a letter from the architectural practise manager (stating that low-VOC paints were used) instead of the inclusion of VOC levels in the specification is **denied** because the two documents are not considered equivalent.

IEQ-12 'Formaldehyde Minimisation'

Products made completely of laminate that are not pressed onto a wood-product substrate, (e.g. High-Pressure Laminate and Compact Laminate) are not considered to be composite wood products for the purposes of Green Star and are therefore not subject to the Credit Criteria of this credit.

Transport

Tra-2 'Car Parking'

Revised CIR Ruling: Whenever mandatory parking requirements for the project exist, either within the local planning allowances or Development Approval requirements, they must be used.

However, in cases where requirements:

- do not exist at all; **OR**
- are not specified for the tenancy; **OR**
- are optional; **OR**
- are recommended;

the following two options are available to projects:

- 1) Clearly demonstrate that parking is not provided in excess of one parking space per 100m² of NLA to achieve one point or one parking space per 200m² to achieve two points;
OR
- 2) Submit a Credit Interpretation Request (CIR) to substantiate an argument for equivalent yet alternative compliance with the Credit Criteria.

Tra-3 'Cyclist Facilities'

Even if they are fitted out as changing rooms, the minimum number of disabled toilets mandated by statutory requirements cannot contribute to the total number of changing facilities provided, as this may detract from their availability for use by disabled persons. Disabled showers do contribute towards the total number of showers provided if they are not stipulated in statutory requirements for the project.

Changing/shower facilities do not have to be aggregated. However, access must be guaranteed and convenient for all building occupants (e.g. not through another tenancy). If changing/shower facilities are located within tenancies rather than in common area, they must be adequately sized for each tenancy based on the default occupancy rate of one person per 15m²., and each location must individually meet the Credit Criteria (e.g. providing excess facilities within one tenancy will not compensate for insufficient facilities in another).

To support the Aim of the Credit, lockers must be located within the changing facilities. Showers must be located within or immediately adjacent to the changing facilities.

Changing facilities (with lockers and showers) do not have to be in the same location as the secure bicycle storage. It is not necessary to provide weather protected access from the secure bicycle storage to the changing/shower facilities. However, the access between the changing/shower facilities and the occupied space (e.g. office) must be weather protected.

CIR Ruling: The Credit Interpretation Request (CIR) to deem any specific bicycle parking system appropriate for meeting the Credit Criteria in respect to bicycle storage is **granted conditionally** on the project's ability to demonstrate, through its submission for this credit, how the attributes of this system meet the criteria of AS2890.3.

CIR Ruling: The Credit Interpretation Request (CIR) to deem the location of visitor bicycle parking in the third level of basement equivalent to "near a public entrance" is **denied** because the proposed location is not considered to be suitable for visitor bicycle parking and does not meet the Aim of the Credit.

CIR Ruling: The Credit Interpretation Request (CIR) to provide visitor bicycle parking in two different locations is **granted conditionally** on the projects ability to demonstrate that the two different locations individually meet the Credit Criteria.