

# Technical Clarifications

## Green Star Interiors NZv1.0 & NZv1.1

---



### Released January 2024

---

Technical Clarifications for Interiors NZV1.0 and NZV1.1, which represent NZGBC's answers to submitted Technical Questions, are published in this document to provide further guidance and reference to other projects. This list will be updated quarterly on the NZGBC Green Star Resources webpage.

There are two types of Technical Clarifications listed in this document. Please make sure you fully understand the difference between **General Clarifications** and **Project Specific Clarifications** before applying any clarification to your project.

**General Clarifications** are extensions to the guidance provided in the Submission Guidelines. They clarify and sometimes supersede the original Credit Criteria or Compliance Requirements. They set precedent for future project teams to follow. Should a project team wish to apply a general clarification to its project, there is no requirement for further Technical Questions to be submitted to NZGBC. NZGBC Assessors will also use them as precedents to assess submissions.

**Project Specific Clarifications** are published as references for other projects but, not like General Clarifications, they do not set precedent. They often relate to special situations where multiple prerequisites exist for a particular project and less likely to reoccur to another project. Therefore, rulings set for Project Specific Clarifications are often conditional and will likely vary for other projects. Each project still needs to submit its own Technical Questions and provides evidence relating to its own building in order to have a similar ruling approved for this specific building.

**Note:** A separate list of Technical Clarifications for Legacy rating tools is provided on this [webpage](#). Some of them may be applicable for projects registered under Green Star Design and As Built NZ. Should you wish to apply any Technical Clarification for legacy rating tools to your projects, please submit a Technical Question to the NZGBC to explain WHY and HOW it applies.

Please ensure you have downloaded the latest version of Technical Clarification list from the website at [www.nzgbc.org.nz](http://www.nzgbc.org.nz)

0. General	14. Quality of Amenities
1. Green Star Accredited Professional	15. Ergonomics
2. Commissioning and Tuning	16. Greenhouse Gas Emissions
3. Building Information	17. Sustainable Transport
4. Commitment to Performance	18. Potable Water
5. Metering and Monitoring	19. Life Cycle Impact
6. Responsible Construction Practices	20. Responsible Building Materials
7. Operational Waste	21. Sustainable Products
8. Indoor Air Quality	22. Construction and Demolition Waste
9. Acoustic Comfort	23. Sustainable Sites
10. Lighting Comfort	24. Light Pollution
11. Visual Comfort	25. Microbial Control
12. Indoor Pollutants	26. Refrigerant Impacts
13. Thermal Comfort	27. Innovation

Clarification type	Tool Version	Month Released	Sub-Credit No.	Sub-Credit Name.	Amendment/Approved Ruling
<b>General</b>					
General	V1.1	06/19	General	NA	Green Building Summary Sheets from EnviroSpec can be used in place of product data sheets, product certificates and manufacturer statements as valid supporting evidence to demonstrate compliance for products and materials.
General	V1.1	10/19	General	NA	All supported documentation listed for each credit in the Submission Guidelines are suggestions only, unless specified otherwise. Alternate documentation to those listed can be used by project teams to demonstrate credit compliance if it adequately supports the claims made within the Submission Templates.
General	V1.1	10/19	General	NA	'For Construction' drawings can be submitted in the As Built submission. The NZGBC requires evidence that the drawings supplied are as constructed, whether they have an 'As Built' stamp or not. 'For Construction' drawings are acceptable provided they are accompanied by formal confirmation from the head contractor or other relevant professional(s) that the 'For Construction' drawings depict the site asbuilt conditions.
General	V1.1	10/20	General	NA	Should a project target a design review rating using the new Design and As Built tool, please review and follow the <a href="#">Guidance on Submitting for Design Review</a> . Please note that while the Design Review process is a valuable tool to ensure the project is on track for achieving certification, it does not guarantee an As Built rating. The As Built submission assesses what has been completed and delivered on site, not the commitments. Built streamlining can be offered to projects that have been certified with design review ratings. But a list of eligible credits should be approved through a Technical Question submission to the NZGBC. Guidance for built streamlining is provided in a separate Technical Question ruling.
General	V1.1	10/20	General	NA	If a project has been awarded points under a Green Star NZ Design review rating, the project team may demonstrate Built compliance by confirming that the building has been constructed as per the information submitted and certified under the Design review rating in the place of full documentation.  Should a project wish to do built-streamlining, a Technical Question needs to be submitted to the NZGBC in order to propose and confirm credits and points that are eligible for built streamlining. A signed statement confirming the project has been constructed with no significant changes that would affect compliance with the credit criteria.  Note that where the submission guidelines recommend evidence to demonstrate that systems have been commissioned and installed as intended, a commissioning report (or similar) would still be required as part of the Built submission or Technical Question.

Clarification type	Tool Version	Month Released	Sub-Credit No.	Sub-Credit Name.	Amendment/Approved Ruling
					<p>The purpose of the signed statements is NOT to remove the requirement for project teams to produce documentation, but rather to stop project teams having to spend additional time and resources on the collation of the as-built documentation into a Green Star submission.</p> <p>Note: should there be any changes in design or material that would impact the results of the original assessment, full built documentation must be provided. If the project team would like to target additional points which were not achieved at Design stage, full built documentation must be provided for the additional points. The NZGBC Assessors reserve the right to request built documentation where they deem the difference between Design and Built stage to be substantive.</p>
General	V1.1	11/20	General	NA	Service risers should be entered into “Tertiary Spaces” part of the Area Definition form. Although these areas are non-habitable spaces, they should still be entered as a Tertiary Space, so they are captured under Credit 13 for Indoor Pollutants. This is because the requirement for Credit 13 is that all on site applications of paints, adhesives and sealants including both exposed and concealed applications are included in this credit.
General	V1.1	11/20	General	NA	For projects in New Zealand that are eligible for Green Star – Design & As-Built and Interiors ratings, a comparison between the Australian NCC Building Classifications and the New Zealand Building Code Clause A1 Classified uses is summarised below to help on the determination of projects’ eligibility.

Clarification type	Tool Version	Month Released	Sub-Credit No.	Sub-Credit Name.	Amendment/Approved Ruling																												
					<table><tr><th>NCC Building Class</th><th>NZ Building Code Clause A1 Classified Uses</th></tr><tr><td>• Class 1a: Detached or attached Residential Dwellings (e.g. terraced housing)*</td><td>• Housing – Detached dwellings &amp; Multi-unit dwellings*</td></tr><tr><td>• Class 1b: Boarding house, hostel or guest house under 300m2 and &lt; 12 residents*</td><td>• Communal Residential – Community Service*</td></tr><tr><td>• Class 2: Apartment buildings with sole occupancy units (SOU)*</td><td>• Housing – Multi-unit dwellings*</td></tr><tr><td>• Class 3: Residential buildings other than class 1 &amp; 2 (e.g. larger boarding house, hostel, care-type facilities not classified as class 9)*</td><td>• Housing – Group dwelling • Communal Residential – Community Service • Community Care - Unrestrained*</td></tr><tr><td>• Class 4: A dwelling or residence within a building of a non-residential nature*</td><td>• Housing – Multi-unit dwellings*</td></tr><tr><td>• Class 5: Office</td><td>• Commercial</td></tr><tr><td>• Class 6: Retail and hospitality</td><td>• Commercial</td></tr><tr><td>• Class 7a: carparks</td><td><i>Not applicable for green star</i></td></tr><tr><td>• Class 7b: Warehouses, storage buildings, wholesale distribution centres</td><td>• Industrial</td></tr><tr><td>• Class 8: Factories, industrial buildings, laboratories.</td><td>• Industrial</td></tr><tr><td>• Class 9a: Hospitals</td><td>• Community Care - Unrestrained</td></tr><tr><td>• Class 9b: Assembly buildings</td><td>• Communal non-residential - Assembly service &amp; Assembly Care</td></tr><tr><td>• Class 9c: Aged care buildings*</td><td>• Community Care - Restrained*</td></tr></table> <p>* Homestar is the preferred pathway</p>	NCC Building Class	NZ Building Code Clause A1 Classified Uses	• Class 1a: Detached or attached Residential Dwellings (e.g. terraced housing)*	• Housing – Detached dwellings & Multi-unit dwellings*	• Class 1b: Boarding house, hostel or guest house under 300m2 and < 12 residents*	• Communal Residential – Community Service*	• Class 2: Apartment buildings with sole occupancy units (SOU)*	• Housing – Multi-unit dwellings*	• Class 3: Residential buildings other than class 1 & 2 (e.g. larger boarding house, hostel, care-type facilities not classified as class 9)*	• Housing – Group dwelling • Communal Residential – Community Service • Community Care - Unrestrained*	• Class 4: A dwelling or residence within a building of a non-residential nature*	• Housing – Multi-unit dwellings*	• Class 5: Office	• Commercial	• Class 6: Retail and hospitality	• Commercial	• Class 7a: carparks	<i>Not applicable for green star</i>	• Class 7b: Warehouses, storage buildings, wholesale distribution centres	• Industrial	• Class 8: Factories, industrial buildings, laboratories.	• Industrial	• Class 9a: Hospitals	• Community Care - Unrestrained	• Class 9b: Assembly buildings	• Communal non-residential - Assembly service & Assembly Care	• Class 9c: Aged care buildings*	• Community Care - Restrained*
NCC Building Class	NZ Building Code Clause A1 Classified Uses																																
• Class 1a: Detached or attached Residential Dwellings (e.g. terraced housing)*	• Housing – Detached dwellings & Multi-unit dwellings*																																
• Class 1b: Boarding house, hostel or guest house under 300m2 and < 12 residents*	• Communal Residential – Community Service*																																
• Class 2: Apartment buildings with sole occupancy units (SOU)*	• Housing – Multi-unit dwellings*																																
• Class 3: Residential buildings other than class 1 & 2 (e.g. larger boarding house, hostel, care-type facilities not classified as class 9)*	• Housing – Group dwelling • Communal Residential – Community Service • Community Care - Unrestrained*																																
• Class 4: A dwelling or residence within a building of a non-residential nature*	• Housing – Multi-unit dwellings*																																
• Class 5: Office	• Commercial																																
• Class 6: Retail and hospitality	• Commercial																																
• Class 7a: carparks	<i>Not applicable for green star</i>																																
• Class 7b: Warehouses, storage buildings, wholesale distribution centres	• Industrial																																
• Class 8: Factories, industrial buildings, laboratories.	• Industrial																																
• Class 9a: Hospitals	• Community Care - Unrestrained																																
• Class 9b: Assembly buildings	• Communal non-residential - Assembly service & Assembly Care																																
• Class 9c: Aged care buildings*	• Community Care - Restrained*																																
General	V1.1	11/20	General	NA	<p>The current definition for Eligible Project in the section of Glossary refers to the NCC (the Australian Building Code) usage classification.</p> <p>As a clarification for New Zealand projects, the definition is amended as below:</p> <p>“Eligible Project - Any New Zealand-based new build or major refurbishment project of any eligible typology (see above for NCC Building usage classifications and relevant New Zealand Building Code Clause A1 Classified Uses), with a minimum occupancy of 1FTE, and</p>																												

Clarification type	Tool Version	Month Released	Sub-Credit No.	Sub-Credit Name.	Amendment/Approved Ruling
					meeting all other eligibility criteria available on the NZGBC website, may target a Green Star NZ – Design & As-built Certified Rating using the Submission Guidelines and this Addendum Document as guidance.”
General	V1.0	11/20	General	NA	Where the credit refers to “Schematic Design”, this can be clarified as Concept Design or Conceptual Design which is the terminology more commonly used in New Zealand
General	V1.0 & V1.1	12/20	General	NA	<p>Here are some extra guidelines for a better Green Star documentation:</p> <p>1. Even though credit templates seem to allow hyperlinks to be included, we encourage you to NOT use any hyperlinks in the submission as they sometimes break after the submission is shared between GSAPs, NZGBC, and Assessors and they may also incur issues on cybersecurity if they are linked to a cloud server.</p> <p>2. We encourage you to provide all the evidence in PDFs (except calculators) and each credit should stand on its own with the associated documents. Previous assessments have shown the disadvantage of cross-referencing documents in submissions.</p> <p>3. Highlights and mark-ups are recommended as better ways to present documentation, which will eliminate chances to do further clarifications.</p>
General	V1.0 & V1.1	12/20	General	NA	What Do Best Practice Green Star Submissions Look Like is a document established by the GBCA to guide best practice submissions. We highly encourage you to read and follow the 7”C”s principles outlined in the document to guide your Green Star documentation.
General	V1.1	06/22	General	NA	For the Nominated Area, toilets and end-of-trip facilities should be defined as Tertiary spaces.
<b>1. Green Star Accredited Professional</b>					
General	V1.0	07/20	1	Accredited Professional	<p>The following alternative Compliance Requirements can be used. When used, it must be applied holistically for 1.1 Accredited Professional.</p> <ol style="list-style-type: none"> <li>GSAP engagement from Green Star registration, or within one month following (rather than from schematic design);</li> <li>GSAP certificate validity from Green Star registration to construction completion; and</li> <li>GSAP involvement. To demonstrate GSAP involvement there must be at least one GSAP that: <ul style="list-style-type: none"> <li>- is part of the team delivering the Green Star certification from registration to completion;</li> </ul> </li> </ol>

Clarification type	Tool Version	Month Released	Sub-Credit No.	Sub-Credit Name.	Amendment/Approved Ruling
					<p>- is listed as a 'Project Contact' for the purpose of communication with NZGBC; and</p> <p>- Provides advice, guidance and support from project registration through to certification, by:</p> <p>- ensuring the project team has access to the information covering Green Star principles, structure, timing and process including:</p> <ul style="list-style-type: none"> <li>• Eligibility;</li> <li>• Environmental Categories</li> <li>• Points allocation and scores;</li> <li>• Documentation and Compliance Requirements;</li> <li>• Technical Questions;</li> <li>• Certification process; and</li> <li>• Green Star branding and marketing rules.</li> </ul> <p>- deliver at least one workshop addressing the topics above; OR the GSAP plans the Green Star submission and targets with the project team using the Submission Planner, Submission Guidelines and/or other relevant information;</p> <p>- participating in meetings/workshops with the design and construction team; Note: the GSAP does not need to attend all design and construction meetings. However, if the GSAP does not attend they are responsible for reviewing the meeting minutes to ensure appropriate Green Star advice, guidance and support is provided, to support the Green Star certification process.</p> <p>- reviewing all documentation for compliance; and</p> <p>- be responsible for the preparation and execution of the Green Star submission(s) for certification.</p> <p>The GSAP involvement tasks outlined above may be carried out by more than one GSAP. The GSAP role can be shared by multiple professionals involved in the project. This is acceptable as long as each GSAP individually meets the requirements above (apart from the workshop requirement) and this role has been fulfilled continually from registration to practical completion.</p> <p><b>Documentation Requirements - Design Review:</b></p> <p>Submission Template</p> <p>GSAP certificate(s)</p> <p>Letter of appointment of a GSAP from Green Star registration, or within one month following, with scope of works:</p> <p>as per Compliance Requirements OR</p> <p>as per the above GSAP involvement.</p> <p>Sample minutes or other written correspondence of the GSAP with the design team, addressing the GSAP involvement.</p> <p>Letter from the client confirming the GSAP satisfactorily fulfilled their engagement responsibilities as per the scope of works.</p> <p><b>Documentation Requirements - As Built:</b></p>

Clarification type	Tool Version	Month Released	Sub-Credit No.	Sub-Credit Name.	Amendment/Approved Ruling
					<p>Submission Template</p> <p>GSAP certificate(s)</p> <p>Letter of appointment of a GSAP from Green Star registration, or within one month following, with scope of works: as per Compliance Requirements OR as per the above GSAP involvement.</p> <p>Sample minutes or other written correspondence of the GSAP with the design and construction team, addressing the GSAP involvement.</p> <p>Letter from the client confirming the GSAP satisfactorily fulfilled their engagement responsibilities as per the scope of works.</p>
General	V1.0	12/20	1	Accredited Professional-Schematic Design	<p>Where the credit refers to “Schematic Design”, this should read “Preliminary Design” which is the term more commonly used in New Zealand.</p> <p>It is noted that legacy rating tools require “Concept Design” as the required start point to engage with a Green Star Accredited Professional. With this clarification issued, a Green Star Accredited Professional will need to be engaged at the preliminary design stage. This change has been discussed and identified acceptable as it still fulfils the aim of the credit. However, the NZGBC still encourages project teams to involve Green Star Accredited Professionals as early as possible, ideally from the concept design stage, to eliminate risks in pursuing a Green Star rating.</p>
General	V1.1	04/23	1	Accredited Professional	<p>Green Star Accredited Professionals (GSAPs) who have a valid accreditation under the Green Star Green Star - Design &amp; As Built GSAP program may use this certification when targeting Credit 1 - Green Star Accredited Professional for the Green Star - Interiors rating tools</p>
<b>2. Commissioning and Tuning</b>					
General	V1.0	11/19	2.5	Independent Commissioning Agent	<p>NZGBC would expect that an Independent Commissioning Agent (ICA) will have been appointed to advise, monitor, and verify the commissioning and tuning of the nominated building systems (at the very latest) from the beginning of the detailed design phase/ end of developed design phase onwards and through tender, construction, commissioning and tuning phases.</p> <p>This will allow the ICA to understand the design and make suggestions without overly complicating the agreed concept, preliminary and initial developed design phases. However, there is nothing to prevent the ICA from being engaged even earlier to ensure any potential issues are highlighted as soon as possible.</p>
General	V1.0	11/20	2.5	Independent Commissioning Agent	<p>Providing all other requirements of the Commissioning and Tuning - Independent Commissioning Agent credit criterion are met, an Independent Commissioning Agent (ICA) can be considered independent if they report directly to the building owner or the owner's designated representative, even if they are paid by the contractor.</p>
<b>3. Fitout Information</b>					



Clarification type	Tool Version	Month Released	Sub-Credit No.	Sub-Credit Name.	Amendment/Approved Ruling
<b>4. Commitment to Performance</b>					
General	V1.1	10/22	4.2	End of Life Waste Performance	<p>Does not having a Make Good clause meet the intent of the End of Life Waste credit?</p> <p>Yes. Not having a Make Good clause is considered to have an equivalent environmental outcome to having a best practice Make Good clause, where the project team can demonstrate there is a commitment from the building owner to pursue the re-use of the existing fitout by an incoming tenant.</p> <p>A joint commitment, wherein no Make Good works are required between Building Owner and Tenant, must still address the requirements of credit 4.2A.</p>
<b>5. Metering and Monitoring</b>					
General	V1.0	10/19	5.1	Metering	<p>Can energy metering of distinct uses be based off electricity demand rather than energy?</p> <p>Yes. In regard to energy meters for Metering Distinct Uses or Floors, NZGBC approves the criteria to be amended to "where the electrical load for a single item exceeds 5% of the total electricity (power) demand for the project, or 100kW, it must be individually metered".</p> <p>This is based on the understanding that the overarching metering strategy for Green Star is to ensure that all significant loads are individually metered.</p>
Project Specific	V1.0 & V1.1	11/20	5.1	Metering	<p>The alternative proposed method of determining the energy use of the lighting at each floor through calculations rather than meters is accepted, provided that all power uses are metered and compliant with the Submission Guideline requirements. Where floors have multiple tenancies or specialist lighting systems then these must be metered as per the Submission Guidelines.</p>
<b>6. Responsible Building Practices</b>					
General	V1.0	7/20	6.1	EMP	<p>Please find the latest version of the NSW Environmental Management Systems Guidelines for EMP compliance requirements <a href="#">here</a>. The requirements for EMPs, as outlined within the NSW Environmental Management Systems Guidelines, are considered best practice. The edition of the guidelines current at the time of construction must be used.</p>
General	V1.0	12/20	6.2	EMS	<p>It is granted conditionally for the project to demonstrate the compliance to this credit when the main contractor achieved ISO 14001 certification part way through the project.</p> <p>The Telarc assessment to achieve ISO 14001 goes through various stages to test and confirm that the applied business processes meet the standards as laid out by that particular ISO standard. The first stage is to access the company policies and management documents to ensure they comply. Once confirmed the Telarc auditors then return and assess the "systems in Action". For this to be granted, the following comments shall be addressed by further evidence.</p>

Clarification type	Tool Version	Month Released	Sub-Credit No.	Sub-Credit Name.	Amendment/Approved Ruling
					<p>1. If changes were made to the Company Policy and Process (as part of the stage 1 Telarc Audit) to achieve the accreditation, then the project could not have been operating to the required standard and therefore cannot demonstrate compliance as per the credit criteria. Please provide evidence of the company systems audit and summary of the process undertaken to prove compliance without any significant change.</p> <p>2. If the project was required changes to their process and/or significant defects were noted that were later remedied to meet the ISO requirements (Company processes) then this method of proving compliance with this credit cannot be approved. This in effect would show that the project was not set up to the required standard before and during the construction period. Please provide evidence that the project was operating to the required Standard and no significant deviations were identified.</p>
General	V1.0	10/19	6.3	High Quality Staff Support	<p>Who can be considered a 'responsible party' to deliver training on sustainable practices and initiatives?  'Responsible Party' refers to people employed by the contractor or subcontractor, who are involved in decision making and will be key to the delivery of the Green Star certification in their relevant trades.</p> <p>There is no requirement for a Responsible Party to be office based, site based or a combination, as long as they have relevant participation in the project. There are no specific roles defined or excluded from this definition. A contractor's Sustainability Consultant may be considered Responsible Party for the purposes of this Innovation Challenge.</p>
General	V1.0	10/19	6.3	High Quality Staff Support	<p>Can a single program or initiative be used to comply with High Quality Staff Support?  Yes, providing the program or initiative covers at least three distinct issues, with one of the three specifically addressing mental health impacts. For points to be awarded, project teams must clearly highlight the distinct issues and provide evidence in the submission demonstrating these being addressed on site.</p> <p>As outlined in the Submission Guidelines, issues addressed may be, but are not limited to, the following:</p> <ul style="list-style-type: none"> <li>• healthier eating and active living</li> <li>• reduced harmful alcohol and drug and tobacco-free living</li> <li>• increase social cohesion, community, and cultural participation</li> <li>• understanding depression</li> <li>• preventing violence and injury</li> <li>• suicide prevention</li> <li>• decreased psychological distress</li> </ul> <p>The following is a brief (but not exhaustive) list of programs and initiatives which could be implemented on site for, made available to, or discussed with all construction workers for the duration of construction. Each program may cover one or more distinct issue/s as required by the credit. Evidence must be provided for each issue addressed by a program.</p>

Clarification type	Tool Version	Month Released	Sub-Credit No.	Sub-Credit Name.	Amendment/Approved Ruling
					<ul style="list-style-type: none"> <li>Beyond Blue</li> <li>Mates in Construction</li> <li>Lifeline</li> <li>Headspace</li> <li>White Ribbon</li> </ul> Nutrition Organisation
<b>7. Operational Waste</b>					
General	V1.0	06/21	7	Operational Waste	<p>A Technical Question should be submitted to the NZGBC if there is any uncertainty in showing compliance to either pathway for the credit Operational Waste.</p> <p>Note that The City of Sydney's Policy for Waste Minimisation in New Developments has been updated to a newer version, which provide guidance to more building types other than offices.</p> <p>The new version is recognised as a third-party best practice guideline for operational waste credit compliance.</p>
General	V1.0	11/20	7A, 7B	Operational Waste	<p>Regarding the documentation requirements for Operational Waste, the NZGBC confirms the following:</p> <p><u>Performance Pathway</u> The requirements Submission Guidelines should be used.</p> <p><u>Prescriptive Pathway</u> NZGBC confirms that it is not a requirement of this pathway that the project implement an OWMP or engage a waste auditor. The project team may use the updated documentation requirements:</p> <ul style="list-style-type: none"> <li>Submission Template</li> <li>Site Plan and/or Architectural Plans — highlighting all relevant areas as referenced by the WMP, and demonstrating: <ul style="list-style-type: none"> <li>B.1 Separation of Waste Streams;</li> <li>B.2 Dedicated Waste Storage Area; and</li> <li>B.3 Access to Waste Storage Area.</li> </ul> </li> <li>B.1- Equipment list/schedule demonstrating that waste streams provided are met through adequate bins</li> <li>B.2- Calculations regarding waste generation and bin sizing and reference to how these figures meet third party best practice guidelines</li> </ul>

Clarification type	Tool Version	Month Released	Sub-Credit No.	Sub-Credit Name.	Amendment/Approved Ruling
					<ul style="list-style-type: none"> <li>B.3- Description of how waste collection areas adhere to best practices, as outlined within third-party best practice guidelines</li> </ul> <p>The key requirement is that evidence is provided to support each claim made within the Submission Template.</p>
<b>8. Indoor Air Quality</b>					
General	V1.0	11/20	8.1	Ventilation System Attributes	<p>Are ducted split system fan coil units (DX split/VRF/VRV) required to provide access to both sides of fan coil units?</p> <p>No, project teams do not have to provide access to both sides of coils for cleaning and maintenance purposes of such systems, provided the following conditions are met:</p> <p>1. Design teams may provide access to the upstream side of fan coil units where the coils are protected by a filter rated at MERV 8 or higher and:</p> <ul style="list-style-type: none"> <li>Provide heating only; or,</li> <li>Provide cooling only with the coil assembly no more than 4 rows deep; or,</li> <li>Provide dual heating/cooling with the coil assembly no more than 4 rows deep</li> </ul> <p><b>and</b></p> <p>2. For fan coil units or air handling units located within a ceiling void, in addition to the above criteria, the project team must fully demonstrate safe access for cleaning and maintenance. This may include:</p> <ul style="list-style-type: none"> <li>Access panels in unit / ductwork is in close proximity to the coil to be cleaned.</li> <li>Access panels in the ceiling below the unit is in close proximity to the unit / ductwork access panel.</li> <li>The upstream surface of the coil must be accessible within 1m of the ceiling panel.</li> </ul> <p><b><u>Documentation Requirements:</u></b></p> <p>Please provide the following in your submission:</p> <ul style="list-style-type: none"> <li>Evidence that all moisture-producing and debris-catching components such as cooling coils, heating coils, humidifiers and filters in the air handling unit are able to be sufficiently cleaned and maintained through single sided access.</li> <li>Section drawing demonstrating any ceiling units can be safely reached through the ceiling access panel.</li> <li>Plan drawing showing 100% of the upstream surface of the coil is accessible within 1m of the ceiling panel, allowing for obstructions.</li> <li>A copy of this response.</li> </ul>

Clarification type	Tool Version	Month Released	Sub-Credit No.	Sub-Credit Name.	Amendment/Approved Ruling
General	V1.0	11/20	8.2	Provision of Outdoor Air	<p>Despite the difference between NZS4303:1990 and AS1668.4:2012 and the intentional preclusion of AS 1668.2 in New Zealand Building Code with regards to provision of outdoor air, Green Star still recognises both standards as valid references for calculating achievement of criteria 9.2 Provision of Outdoor Air. This is because Green Star rewards points for a rate 50% and 100% greater than the minimum required by these standards rather than policing on code compliance. Recognising both standards does not conflict with building code conformance however brings more flexibility to project teams.</p> <p>The responsibility for minimum code compliance rests with the designer and is governed by existing regulatory bodies, while the intent of the tool is to improve outdoor air rates over minimum requirements.</p> <p>In view of the above, we are clarifying that when the section for 9.2A Comparison to Industry Standards only refers to the AS 1668.2:2012, it should read “the recognised standards listed in 9.2.3”.</p>
General	V1.0	11/20	8.3	Exhaust or Elimination of Pollutants	<p>The exhaust ventilation flow rate for a print and/or photocopy room must be at least 5l/s/m<sup>2</sup> AND at least 10% greater than the supply rate of air. This ensures the space is negatively pressurised and pollutants do not escape to neighbouring areas.</p>
General	V1.0	11/20	8.3	Exhaust or Elimination of Pollutants	<p>What standards can be used to demonstrate compliance with the credit criterion - Removing the source of Pollutants?</p> <p>For the purposes of credit criterion 8.3A - 'Removing the Source of Pollutants' in Green Star - Interiors and 9.3A 'Removing the Source of Pollutants' in Green Star - Design &amp; As-Built, where printing and/or photocopying equipment are present within the building, the Blue Angel certificate issued in accordance with one of the following test standards can be used to demonstrate compliance with the credit criterion:</p> <ul style="list-style-type: none"> <li>• RAL UZ 171 (expired 2017)</li> <li>• RAL UZ 205</li> <li>• DE-UZ 205</li> </ul>
<b>9. Acoustic Comfort</b>					
General	V1.0	05/19	9	Acoustic Comfort	<p>A qualified acoustic consultant should be a member of the Acoustical Society of New Zealand or equivalent international recognised body, or a qualified staff member within an Association of Australasian Acoustical Consultants (AAAC) member firm.</p>
General	V1.0	06/21	9.1	Internal Noise Level- Acoustic measurement period	<p>The time period selected for measuring Internal Noise Level should be representative of the source as in line with the NZS2107:2016.</p> <p>For clarification – naturally ventilated spaces might have a longer time period than a continuously operating mechanically ventilated space.</p>
General	V1.0	09/21	9.1	Internal Noise Levels	<p>The Submission Guidelines stipulate that “one (1) point is awarded where project teams demonstrate that internal ambient noise levels, in the nominated area, are no more than 5dB(A) above the lower figure in the range recommended in Table 1 of AS/NZS 2107:2016.”</p> <p>For the avoidance of doubt, where a single figure dBA value is provided in AS/NZS2107, the noise target shall be no larger than that single dBA value.</p>

Clarification type	Tool Version	Month Released	Sub-Credit No.	Sub-Credit Name.	Amendment/Approved Ruling
General	V1.0	11/20	9.2	Reverberation	<p>A supermarket would not be defined as a noise sensitive space.</p> <p>Displayed stock in supermarkets cannot be taken into account in reverberation time calculations. It is accepted that credit 9.2 can be Not Applicable for the supermarket shop area of the store, but not for the other more standard spaces such as offices and staff rooms.</p>
General	V1.0	11/20	9.2	Reverberation	<p>For the Reverberation Criterion, where 'note 3' applies, how do I apply the phrase '50% of the area in the space'?</p> <p>The performance of the installed acoustic absorption, irrespective of quantity or location installed, must result in a reverberation time equivalent to or lower than the reverberation time predicted for treating at least 50% of the combined floor and ceiling area with a material having a noise reduction coefficient (NRC) of at least 0.5. Alternatively, compliance can be demonstrated by treating 50% of the combined floor and ceiling area with a material having a NRC of at least 0.5. Acoustic absorption should be applied in locations appropriate to the function of the space, and located to maximise the acoustic performance of materials selected.</p>
General	V1.0	11/20	9.2	Reverberation	<p>Where the submission guidelines make reference to note 3 of Table 1 AS/NZS 2107:2016, the NZGBC clarifies that this is a minor discrepancy in the submission guidelines. The reference should be made to note 1 of Table 1 AS/NZS 2107:2016.</p>
General	V1.0	06/21	9.3	Acoustic separation	<p>When there are two adjacent Tertiary spaces, this criterion doesn't apply to the wall between these spaces as tertiary spaces are not noise sensitive and do not have privacy concerns.</p> <p>When a tertiary space is adjacent to either a Primary space or a Secondary space, the sound insulation requirement applies.</p>
General	V1.0	06/21	9.3	Acoustic separation	<p>The following guidance applies to the weighted sound reduction index for partitions:</p> <p>The partition between the spaces should be constructed to achieve a weighted sound reduction index (dB Rw) of:</p> <ul style="list-style-type: none"> <li>At least Rw 45; for all partitions separating enclosed spaces which are: <ul style="list-style-type: none"> <li>Fixed without a door; and/or</li> <li>Glazed partitions without a door</li> </ul> </li> <li>At least 40, for all partitions fronting a room (from an open plan area);</li> <li>At least 35 (in composite with door and partition) for all partition types that contain a door; and</li> <li>At least 50 through floors between occupied spaces</li> </ul>
General	V1.0	06/21	9.3	Acoustic separation	<p>Where there are key functional requirements for the spaces which are more important than the acoustic separation between spaces, the credit may be achieved even when the sound insulation target is exceeded.</p> <p>Please submit a Technical Question to justify in this case in order to preclude these spaces from the assessment.</p>

Clarification type	Tool Version	Month Released	Sub-Credit No.	Sub-Credit Name.	Amendment/Approved Ruling
General	V1.0	06/21	9.3B	Acoustic separation-Sound Insulation Measurement	<p>The sound insulation between internal spaces complies with: <math>D_w + LA_{eqT} &gt; X</math>.</p> <p>X = 75 except for:  X = 60 for any partition with a door  X = 80 for walls / partitions separating areas with elevated privacy requirements (e.g. meeting rooms, classrooms, wards, etc.)</p> <p>A Technical Question may be submitted to confirm areas with elevated privacy requirements.</p>
<b>10. Lighting Comfort</b>					
General	V1.0	11/20	10.2, 10.3, 10.4	General Illuminance and Glare Reduction, Surface Illuminance, Localised Lighting Control	<p>It is agreed that for the retail section of the supermarkets, the requirements of credits 10.2, 10.3, and 10.4 do not need to be applied. The more standard spaces, such as offices and staff rooms would still need to comply with these credits to achieve the points.</p>
General	V1.0	11/20	10.2	General Illuminance and Glare Reduction	<p>The guidance reference for 'Office Spaces' in the Lighting Comfort - General Illuminance and Glare Reduction credit criterion is updated to Table E1 of AS/NZS 1680.2.2:2008 'Interior and workplace lighting Part 2.2: Specific applications - Office and screen-based tasks'.</p> <p>This applies to:  Table 10.1.1 for Green Star - Interiors v1.0  Table 11.1.1 for Green Star - Performance v1, v1.1, v1.2</p>
General	V1.0 & V1.1	03/23	10.2	General Illuminance and Glare Reduction	<p>Projects can use a maintenance factor as calculated using AS/NZS 1680, since AS/NZS 1680 is considered a best-practice lighting design methodology, and that the generic 0.8 maintenance factor is not necessarily relevant or beneficial for all projects and lighting designs. Project teams may calculate the maintenance factor for their luminaires according to this standard and should provide a summary/justification of these calculations and inputs for assessment. The project team should include supporting documents for the inputs which may include:</p> <ul style="list-style-type: none"> <li>• Luminaire specific factors such as Lamp Lumen Maintenance Factor, Lamp Survival Factor, IP rating, luminaire type;</li> <li>• Reference to the relevant data from AS/NZS1680;</li> <li>• Description of the use of the space and its atmospheric impact (clean, dirty, etc); and</li> <li>• The planned luminaire cleaning maintenance programme or the inclusion of cleaning requirements within the tenants fit-out guide.</li> </ul> <p>Where inputs for the calculation of the maintenance factor are uncertain then projects must continue to use the 0.8 maintenance factor. Projects may also choose to continue to use the 0.8 maintenance factor if they wish.</p>

Clarification type	Tool Version	Month Released	Sub-Credit No.	Sub-Credit Name.	Amendment/Approved Ruling
General	V1.0	11/20	10.4	Localised Lighting Control	<p>The requirements of 11.4 may be achieved in the office spaces by providing a mixture of general non-dimmable ceiling lighting and local dimmable task lighting provided the task lighting is installed either as part of the base build or as part of an integrated fit-out. The local dimmable lighting must also be able to be turned on or off as per the requirements of the 11.4 in the Submission Guidelines. Where 11.2 is also being targeted then the requirements of 11.2 must be achieved alongside the recommendations for general and local lighting set out in AS1680.2.2-2008 Appendix E with the general lighting on and the local task lighting at its maximum illuminance. Note this applies to office spaces only.</p>
General	V1.0	11/20	10.4	Localised Lighting Control	<p>Where the Lighting Comfort credit has been achieved for the base building by installing a DALI system, and no change to the base building systems have been undertaken as part of the fitout works, the project team may claim the credit criteria 10.3 Localised Lighting Control by :</p> <ul style="list-style-type: none"> <li>Using base building documentation from the Green Star rated building and;</li> <li>Providing confirmation that a tenant fitout guide containing the relevant information about the DALI system has been provided to the tenant.</li> </ul> <p><b>Documentation Requirements:</b></p> <p>Please provide the following in your submission:</p> <ul style="list-style-type: none"> <li>Tenancy Fitout Guide (or similar)</li> <li>Confirmation that the tenant has received/has been provided with the Tenancy Fitout Guide (or similar)</li> <li>All other documentation requirements are as per the submission guidelines.</li> </ul> <p>A copy of this response.</p>
General	V1.0	08/21	10.4	Localised Lighting Control	<p>NZGBC notes that the intent of the criterion 'Localised Lighting Control' in Green Star - Design &amp; As-Built is to provide occupants with the ability to control the lighting in their immediate environment. In an open plan/ activity-based working environment, for example, an office setting or educational facilities i.e. libraries, project teams may demonstrate compliance by providing different lighting zones across 95% of the nominated area. It is noted that the lighting zones should be designed to suit different tasks, for example:</p> <ul style="list-style-type: none"> <li>Some areas may have soft lighting, such as areas with daylight during the nominated hours.</li> <li>Some areas may have a high degree of lighting control, including turning the lights on and off and adjusting their light levels and;</li> <li>Other areas where light is shone directly on the workstation.</li> </ul> <p>Where compliance is being demonstrated through varied lighting zones, project teams must demonstrate how all the regular occupants in the project have access to all the spaces provided. The localized lighting strategy should be complemented with a communication strategy, outlining how individual lighting control may be achieved by occupants by occupying different lighting zones. The project team may choose to use the tenant fit out guide to communicating this message. Where projects are delivered with cold shell spaces or where the scope of the rating is base building, project teams can demonstrate compliance by installing a DALI system within the base building which can be utilised by the tenant to deliver localised lighting control.</p>



Clarification type	Tool Version	Month Released	Sub-Credit No.	Sub-Credit Name.	Amendment/Approved Ruling
<b>11. Visual Comfort</b>					
Project Specific	V1.0	11/20	11.1	Glare reduction	The request to exclude vision glazing which is installed to provide sight-lines for clinical staff to observe patients from the credit minimum requirements is granted, due to clinical health and safety needs and the model of care being provided to patients.
General	V1.0	10/19	11.2	Visual Comfort – Daylight	There is no requirement to use a dynamic simulation software where the Visual Comfort credit is met through the Compliance Using Daylight Factor option. This is clarified in response to a formatting change that was included in the most current version of the Submission Guidelines under the Visual Comfort - Daylight criterion. The second paragraph under the heading 'Requirements for Modelling' is only intended to apply to the Compliance Using Daylight Autonomy option.
General	V1.0	11/20	11.2	Visual Comfort – Daylight	Daylighting is feasible in Supermarkets as demonstrated through numerous case studies. Therefore, supermarket projects cannot claim “Not Applicable” for credit 11.2.
General	V1.0	05/19	11.3	Views	The external 8 meters sight line is required to be entirely within the legal site boundary of the project and/or open public spaces and cannot extend into adjacent sites. For precinct developments, the compliance of this credit will be assessed case by case.  This TC is only specific to the 8m requirement for external views. We have seen a project demonstrating compliance through including a neighbour land which is likely to be developed with a new building soon. In such a way, the external view of the rated building can't be guaranteed for the long term and the assessors have suggested a TC clarify this.
General	V1.0	10/20	11.3	Views	For projects like supermarkets, to receive this credit, views will have to be made available to employees working in areas where staff would be expected to work for extended periods such as checkouts, deli counters and the like.
<b>12. Indoor Pollutants</b>					
General	V1.1	02/21	12	Indoor Pollutants	For clarity, Design and As Built NZ and Interiors NZ tools do not accept certificates or statements from the above programs as evidence to show compliance with the Indoor Pollutant credit. The NZGBC only accepts the following evidence for products and materials to demonstrate compliance with the Indoor Pollutant credit: <ul style="list-style-type: none"> <li>Recognised eco-labels in the Indoor Pollutant column as listed on the NZGBC website through this <a href="#">link</a>.</li> </ul> Or <ul style="list-style-type: none"> <li>Test certificates from accredited laboratories to show the nominated products meet relevant limits specified in the Submission Guidelines.</li> </ul>

Clarification type	Tool Version	Month Released	Sub-Credit No.	Sub-Credit Name.	Amendment/Approved Ruling
General	V1.0	02/21	12	Indoor Pollutants	<p>The following certifications and programs were recognised for demonstrating products and materials' VOC and formaldehyde compliance under the Green Star NZ legacy tools:</p> <ul style="list-style-type: none"> <li>• GuT</li> <li>• AgBB</li> <li>• UL Greenguard</li> <li>• Carpet and rug Institute (CRI) Green Label Plus</li> <li>• SCS Indoor Advantage Gold</li> <li>• FloorScore - Resilient Floor Covering Institute (RFCI)</li> <li>• Formaldehyde E0 or E1 compliance</li> <li>• EMICODE</li> <li>• Blue Angel</li> </ul> <p>For clarity, the new Design and As Built NZ and Interiors NZ tools do not accept certificates or statements from the above programs as evidence to show compliance with the Indoor Pollutant credit.</p> <p>The NZGBC only accepts the following evidence for products and materials to demonstrate compliance with the Indoor Pollutant credit:</p> <p>Recognised eco-labels in the Indoor Pollutant column as listed on the NZGBC website:  <a href="https://nzgbc.org.nz/news-and-media/ecolabels-for-homestar-and-green-star-credits">https://nzgbc.org.nz/news-and-media/ecolabels-for-homestar-and-green-star-credits</a></p> <p>Or</p> <p>Test certificates from accredited laboratories to show the nominated products meet relevant limits specified in the Submission Guidelines.</p>
General	V1.0	04/19	12.1	Paints, Adhesives, Sealants and Carpets	<p>The NZGBC acknowledges that the application of intumescent paint prior to weatherproofing may reduce the exposure of VOCs on a project however this is not sufficient reason for the paint to be excluded from this credit.</p> <p>The intent of credit 12.1 Paints, Adhesives, and Sealants is to reward project teams that demonstrate;</p> <ul style="list-style-type: none"> <li>• No paints, adhesives, sealants or carpets are used in the nominated spaces;</li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>• At least 95% of all internally applied paints, adhesives, sealants (by volume) or carpets (by area) meet the total VOC limits specified in 12.1.1 and 12.1.2 as applicable.</li> </ul> <p>Where exterior grade products are used in an internal application then these must also meet the requirements of the VOC limits specified in the Submission Guidelines.</p>

Clarification type	Tool Version	Month Released	Sub-Credit No.	Sub-Credit Name.	Amendment/Approved Ruling
					<p>It is recommended that intumescent paint should be classified under the following category, which has a limit of 250g/l TVOC.</p> <ul style="list-style-type: none"> <li>Acoustic sealants, architectural sealant, waterproofing membranes and sealant, fire retardant sealants and adhesives.g) the protection of protected customary rights.</li> </ul>
General	V1.0	10/19	12.1	Paints, Adhesives, Sealants and Carpets	<p>Concrete sealers applied on site can be classified under the category of 'Primer, Sealer and Prep Coats'.</p> <p>Glazes and sealants applied offsite will be excluded from the associated category and credit as outlined in the submission guidelines.</p>
General	V1.0	10/19	12.1	Paints, Adhesives, Sealants and Carpets	<p>The percentage of compliant products is calculated by volume (paints, adhesives and sealants) and area (carpets), not its cost.</p> <p>For example, at least 95% of all internally applied paints, adhesives, sealants (by volume) or carpets (by area) meet the total specified VOC limits.</p>
General	V1.0	10/19	12.1	Paints, Adhesives, Sealants and Carpets	<p>A product compliance rate of 95% or higher (with regards to VOC limits) must be demonstrated for each of the following categories separately in order to be eligible for (1) point:</p> <ul style="list-style-type: none"> <li>Paints</li> <li>Sealants and adhesive</li> <li>Carpets</li> </ul>
General	V1.0	10/19	12.2	Engineering Wood Products	<p>Current reference Standards for Formaldehyde emission limits.</p> <p>The EN 717-2 (DIN EN 717-2) test protocol for formaldehyde emission limit values, referenced in the Indoor Pollutants - Engineered Wood Products criterion of the Submission Guidelines, has been superseded by DIN EN ISO 12460-3:2016-03.</p> <p>Project teams may therefore use the updated standard in determining formaldehyde emission test limits for wood-based panels to demonstrating compliance to the criterion. The emission unit of measurement remains unchanged.</p>
General	V1.0 & V1.1	07/22	12.2	Engineered Wood Products	<p>1 point can be awarded when 95% of engineered wood products meet the formaldehyde emission limits by area. Project teams are not expected to calculate all the surface areas of each engineered wood product. Only the largest face of each product is to be calculated for credit compliance.</p>
General	V1.0	10/19	12.3	Indoor Plants	<p>Can indoor plants be excluded in tertiary spaces and other functional areas?</p> <p>Yes. For the purposes of "Indoor Plants" credit criteria (12.3) tertiary areas and certain other functional spaces may be excluded. Functional spaces can be considered as primary and secondary spaces in the nominated area that are not accessible to the plant maintenance contractor. These are areas where security access is unavailable, and the enclosed space is greater than 25m<sup>2</sup>.</p> <p>In the instance where there are areas excluded, the overall total requirement of planting will not be reduced. Planting provisions to be presented in tabular form in the submission to demonstrate how the functional areas have been included in the total planting soil area</p>

Clarification type	Tool Version	Month Released	Sub-Credit No.	Sub-Credit Name.	Amendment/Approved Ruling									
					requirements for the tenancy. Project teams should submit marked-up as-built drawings showing the nominated area used for "Indoor Plants" credit criteria (12.3). Any other spaces excluded due to functional reasons should be indicated on these drawings and a reason needs to be included in the submission as to why they have been excluded.									
General	V1.0	10/19	12.3	Indoor Plants	Plants in pots with surface soil areas less than 500 cm <sup>2</sup> can be used for the Indoor Plants criterion. The intent of the credit is to achieve 500 cm <sup>2</sup> total. This can be achieved using many smaller plants or etc. The benefit from having indoor plants is not diminished by having plants with smaller surface soil areas. To achieve these points the project team needs to comply with the requirement for at least 500 cm <sup>2</sup> of total soil surface area per 10 m <sup>2</sup> of the nominated area. The number of pots or plants does not count towards this credit. e.g. For a nominated area of 100 m <sup>2</sup> , at least 0.5 m <sup>2</sup> of total soil surface area must be provided.									
General	V1.0	10/19	12.3	Indoor Plants	In case of using vertical landscaping for the Indoor Pollutants - Indoor Plants credit. A technical question to demonstrate your approach should be submitted to the NZGBC for review and approval.									
General	V1.0 & V1.1	10/22	12.3	Indoor Plants	<p>Can project teams use 'Pot Diameter' to demonstrate compliance with the credit criteria 12.3.1 – Plant Distribution?</p> <p>Yes, as alternative to soil surface area method, the pot diameter method can be used as a method of demonstrating compliance with the credit criteria 'Indoor plants - Plant distribution',</p> <p>As a minimum, for every 10 m2 of the nominated area the diameter of the pots must be equal to at least 300mm in diameter.</p> <p>A combination of different pot sizes is acceptable, provided the diameter of all the pots combined is greater than or equal to 300mm for every 10m2 of the nominated area.</p> <p>Please include a copy of this response in your submission.</p>									
General	V1.0	11/20	12.1	Exceeding Benchmark	<p>For the Innovation - Improving on Green Star Benchmarks credit criterion in <i>Green Star - Interiors v1.2</i>, where it states:</p> <table><tr><td>Credit</td><td>Criterion</td><td>Benchmark</td></tr><tr><td>Indoor Pollutants</td><td>Ultra Low VOC paints</td><td>One (1) additional point may be awarded where over 50% of paints (by cost) specified in the building have a maximum TVOC content of 5g/L. This must be verified by one of the approved paint test methods. Theoretical TVOC calculations are not acceptable for this Innovation claim.</td></tr></table> <p>The following can be used instead:</p> <table><tr><td>Credit</td><td>Criterion</td><td>Benchmark</td></tr></table>	Credit	Criterion	Benchmark	Indoor Pollutants	Ultra Low VOC paints	One (1) additional point may be awarded where over 50% of paints (by cost) specified in the building have a maximum TVOC content of 5g/L. This must be verified by one of the approved paint test methods. Theoretical TVOC calculations are not acceptable for this Innovation claim.	Credit	Criterion	Benchmark
Credit	Criterion	Benchmark												
Indoor Pollutants	Ultra Low VOC paints	One (1) additional point may be awarded where over 50% of paints (by cost) specified in the building have a maximum TVOC content of 5g/L. This must be verified by one of the approved paint test methods. Theoretical TVOC calculations are not acceptable for this Innovation claim.												
Credit	Criterion	Benchmark												

Clarification type	Tool Version	Month Released	Sub-Credit No.	Sub-Credit Name.	Amendment/Approved Ruling																	
					Indoor Pollutants	Ultra Low VOC paints	One (1) additional point may be awarded where over 50% of paints (by volume) specified in the building have a maximum TVOC content of 5g/L. This must be verified by one of the approved paint test methods. Theoretical TVOC calculations are not acceptable for this Innovation claim.															
13. Thermal Comfort																						
General	V1.1	11/20	13.1.2A	Prescriptive Thermal Comfort Requirements	<p>The current clause regarding applicable climate zones for Prescriptive Thermal Comfort Requirements refers to NCC (the Australian Building Code) Climate Zones.</p> <p>As a clarification for New Zealand projects, the following amended clause will replace the original clause on page 148 for Design and As Built and page 126 for Interiors.</p> <p><i>“This option can be applied in climate zones 1-3, as identified on the climate zone map in NZS 4243.1:2007 Figure A1 – Climate Zones, except for the following regions which are required to demonstrate compliance via thermal modelling:</i></p> <ul style="list-style-type: none"><li>• <i>The central plateau of the north island</i></li><li>• <i>Queenstown lakes, Mackenzie, Western Waitaki, Central Otago”</i></li></ul> <table><tr><th>Zone</th><th>Territorial Regions</th><th>Representative Climate</th></tr><tr><td>1</td><td>Northland, Auckland Franklin District and the Coromandel Peninsula</td><td>Auckland</td></tr><tr><td>2</td><td>The rest of the North Island except the Central Plateau</td><td>Wellington</td></tr><tr><td>3A 3B</td><td>The Central Plateau of the North Island and all of the South Island except</td><td>Christchurch</td></tr><tr><td>3B</td><td>Queenstown-Lakes, Mackenzie, Western Waitaki, Central Otago regions</td><td>Queenstown</td></tr></table>			Zone	Territorial Regions	Representative Climate	1	Northland, Auckland Franklin District and the Coromandel Peninsula	Auckland	2	The rest of the North Island except the Central Plateau	Wellington	3A 3B	The Central Plateau of the North Island and all of the South Island except	Christchurch	3B	Queenstown-Lakes, Mackenzie, Western Waitaki, Central Otago regions	Queenstown
Zone	Territorial Regions	Representative Climate																				
1	Northland, Auckland Franklin District and the Coromandel Peninsula	Auckland																				
2	The rest of the North Island except the Central Plateau	Wellington																				
3A 3B	The Central Plateau of the North Island and all of the South Island except	Christchurch																				
3B	Queenstown-Lakes, Mackenzie, Western Waitaki, Central Otago regions	Queenstown																				
14. Quality of Amenities																						
15. Ergonomics																						

Clarification type	Tool Version	Month Released	Sub-Credit No.	Sub-Credit Name.	Amendment/Approved Ruling
<b>16. Greenhouse Gas Emissions</b>					
General	V1.0	12/20	16	Greenhouse Gas Emissions	<p>The definition for Reference Projects is amended as below:</p> <p>A hypothetical building of the same size, shape and floor area as the Proposed Building, but whose building fabric and building services characteristics are based predominantly on the Deemed-to-Satisfy provisions as defined in this document.</p>
General	V1.0	04/22	16	GHG Emissions-Calculation Guide	<p>We are issuing this clarification as we note that there is an error in the wording of the GHG Emissions Calculation Guide, where under table 26 HVAC and simulation parameters the guidance states: <i>“The reference project must operate within the temperature range 18 to 26°C for at least 98% of plant operating hours. Where the design temperature range is within the range, the Reference project shall use the same control band as the Proposed project. Where the design temperature range is outside of this range, the Reference project shall use lower and upper temperature control limits of 18 and 26°C respectively, as appropriate”</i> We note that the guidance is not specifically clear for mechanically ventilated warehouse spaces and increases the Reference building energy consumption unfairly.</p> <p>To clarify the Reference project must achieve the same space temperature conditions as the proposed project for greater than 98% of occupied hours. Alternatively, the analysis can be undertaken on the basis of both the Proposed and Reference project achieving a PMV of between -1 and 1 for 98% of occupied hours across 95% of the floor area. (The intent of this requirement is that the Reference Project generally achieves the same level of service as the Proposed Project).</p>
General	V1.0	02/20	16	GHG Emissions	<p>A ‘Reference Fitout Pathway’ for non-residential fitouts is now available under Green Star Interiors v1.0 - credit 16. Greenhouse Gas Emissions.</p> <p>This allows projects to demonstrate a specified reduction in the predicted energy consumption and GHG emissions of the proposed fitout when compared to a reference fitout.</p> <p>The updated credit is published as a Technical Clarification (attached) and will be incorporated into the next version of Green Star Interiors submission guidelines. Please refer to the NZGBC website for latest resources, i.e. Greenhouse Gas Emissions Calculator and Calculator Guide <a href="#">here</a>.</p>
General	V1.1	11/20	16	Greenhouse Gas Emissions	<p>At As Built, can I use the same energy modelling report that was submitted and awarded at Design Review?</p> <p>Yes, conditionally.</p> <p>At As Built, the same energy modelling report may be submitted for 15E Reference Building Pathway, if it was submitted and awarded at Design Review and no changes have been made to the design, on the following conditions:</p>

Clarification type	Tool Version	Month Released	Sub-Credit No.	Sub-Credit Name.	Amendment/Approved Ruling
					<ul style="list-style-type: none"> <li>The energy modelling report is to be accompanied by a confirmation letter stating that no changes have occurred between the design and as built stages of the project that may affect the outcome of the energy modelling report.</li> <li>Any comments that were raised by the Certified Assessor(s) at Design Review must be addressed at As Built to be awarded the point(s).</li> </ul> <p>As Built Documentation Requirements:</p> <ul style="list-style-type: none"> <li>Energy modelling report that was submitted and awarded at Design Review.</li> <li>A letter of confirmation from the relevant consultant confirming that the design of the building has not been altered between Design Review and As Built submissions.</li> <li>All other documentation requirements are as per the submission guidelines, including recommended documentation such as: <ul style="list-style-type: none"> <li>Extract(s) from the Specification(s) demonstrating that all inputs used in the energy simulation are reflected in the current design.</li> <li>Extract(s) from the Commissioning Report demonstrating (through supporting evidence) that the building has been commissioned and operates as intended by the design (i.e. as described in the energy modelling report).</li> </ul> </li> <li>As built drawings demonstrating that the facade details and materials are the same as described in the energy modelling report.</li> </ul>
<b>17. Sustainable Transport</b>					
General	V1.0	10/19	17	Sustainable Transport	<p>A correction to the example calculation for Number of services for each route in the Transport Calculator Guide for v3, Design &amp; As-Built NZ v1.0 and Interiors v1.0.</p> <p>Number of morning peak services = 4 (3 services ≤ 15minutes, 15minutes &lt; 1 service ≤ 30minutes)</p> <p>Number of afternoon peak services = 10 (9 services ≤ 15 minutes, 15minutes &lt; 1 service ≤ 30minutes) The updated Public Transport Calculator Guide has been uploaded on NZGBC website.</p>
General	V1.0	11/20	17	Sustainable Transport Calculator	<p>In less populated areas where buses do not start until after 6:30am then the start of the peak morning period may be taken as the second bus time for first compliant bus route. For example, if there are three bus routes that start at 6:45am, 7am and 7:15am and each run every half an hour then the peak morning period would be taken as 7:15am to 9:15am. The latest peak morning period that may be used is 7:30am to 9:30am. Time between services should then be calculated using the determined peak morning period as per the examples on page 4 of the Public Transport Calculator Guide.</p> <p>When determining if a route is compliant the Public Transport Calculator Guide states that more than half of the services need to be within the time period to be compliant, however achieving exactly 50% would be considered compliant.</p>

Clarification type	Tool Version	Month Released	Sub-Credit No.	Sub-Credit Name.	Amendment/Approved Ruling
					The average interval is to be calculated as the mean as per the Public Transport Calculator Guide. Numbers can be rounded up or down, for example 30.4mins can be considered 30mins.
General	V1.1	03/21	17A	Sustainable Transport Performance Pathway	<p>When NZGBC introduced the Design and As Built and Interiors tools, the Sustainable Transport Performance pathway was not incorporated into the new tools. Since then, we have worked with a third party and have created this performance pathway adapted to New Zealand. The v1.1 update to these tools will incorporate this pathway into the tool. Starting today, projects can choose this pathway.</p> <p>The new Sustainable Transport Calculator Guide and associated Sustainable Transport Calculator can be found <a href="#">here</a>.</p> <p>Please find the updated Submission Guideline section related to this new pathway for Credit 17 for Design and As Built below. The modification to the Interiors guideline will be the same with the exception that the total number of points available for this pathway is 7 points as compared to the Design and As Built 10 points.</p> <p>Updated beginning of Credit 17. The remainder of the credit remains the same.</p> <p><b>Sustainable transport</b></p> <p>Credit 17</p> <p>Points available: 10</p> <p><b>Aim of Credit</b></p> <p>To reward projects that implement design and operational measures that reduce the carbon emissions arising from occupant travel to and from the project, when compared to a reference building. This also promotes the health and fitness of commuters, and the increased liveability of the location.</p> <p><b>Credit Criteria</b></p> <p>This credit includes two alternative pathways for project teams to demonstrate improvements in the building's access to transport.</p> <p><b>17A Performance Pathway</b></p> <p><b>Up to 10 points</b> are available where projects provide access to sustainable transport infrastructure which decreases greenhouse gas emissions from transport, decreases mental and social impacts of commuting, and encourages the uptake of healthier active transport options.</p> <p><b>17B Prescriptive Pathway</b></p> <p><b>Up to 7 out of 10 points</b> are available where projects provide access to sustainable transport infrastructure as demonstrated using specified prescriptive criteria.</p> <p><b>Compliance Requirements</b></p> <p><b>17A Performance pathway</b></p> <p>The Performance Pathway only applies to <i>regular occupants</i> of the building.</p>



Clarification type	Tool Version	Month Released	Sub-Credit No.	Sub-Credit Name.	Amendment/Approved Ruling
					<p>Up to 10 points are awarded under this pathway. Points are awarded based on a holistic approach to reducing the impacts from transport, where the proposed building performance is improved when compared to a reference building across four indicators:</p> <ul style="list-style-type: none"> <li>· Emissions reduction;</li> <li>· Active mode encouragement;</li> <li>· Vehicle kilometres travelled reduction; and</li> <li>· Walkable location.</li> </ul> <p>Points are awarded by completing the <i>Sustainable Transport Calculator</i> with the predicted transport mode split as defined in a Travel Plan or Transport Plan specifically developed for the project. More information is available in the <i>Sustainable Transport Calculator Guide</i>.</p> <p>The Travel Plan or Transport Plan must be developed by a suitably qualified transport professional (see Definitions), as the plan will inform the inputs into the <i>Sustainable Transport Calculator</i>.</p> <p>This pathway may be most appropriate for those projects that are not located in Central Business Districts, which are typically well connected to public transport networks. Projects located in suburban or regional settings may find this pathway the most appropriate to their sustainability goals. Project teams should consult with their transport specialists for advice about which pathway to use.</p>
General	V1.0	08/21	17A	Sustainable Transport Performance Pathway	<p>Please be advised that project teams cannot use the Household Travel Survey or other NZ Stats data to demonstrate compliance through the performance pathway for Sustainable Transport. The data used in the performance pathway calculator is grouped by SA2, and so is specific to a small sub-regional portion of the country. Using the Household Travel Survey at a regional level is less accurate, as it can include areas with better public transport, or better walking/facilities than the specific sub-region in which the assessed project sits.</p>
General	V1.1	10/22	17B.3	Low Emission vehicle Infrastructure	<p>The NZGBC defines electric vehicle charging infrastructure as the provision of a standard domestic, commercial or industrial power outlet, or wiring to enable the future installation of electric vehicle charging equipment without the electric vehicle charging equipment itself being installed at the time of practical completion, thus making the project electric vehicle ready in the future.</p> <p>For projects registered under the Green Star – Interiors v1.1 and earlier versions, the GBCA recommends that for the 5% of the car parking spaces provided with the electric vehicle charging infrastructure as a minimum must have:</p> <ul style="list-style-type: none"> <li>• At least 2 car parking spaces provided with an electric vehicle charging unit with a dual-port; and</li> <li>• An industry-standard socket outlet to facilitate recharging an electric vehicle; and;</li> <li>• Has communications capabilities which may be used to enable a load management system.</li> </ul>
General	V1.0	10/19	17.4	Active Transport Facilities	<p>Showers located in statutorily required accessible bathrooms cannot be claimed in the count for shower facilities.</p> <p>Extra bathrooms/showers with disability access, not required statutorily, which meet the Sustainable Transport credit requirements can be counted.</p>

Clarification type	Tool Version	Month Released	Sub-Credit No.	Sub-Credit Name.	Amendment/Approved Ruling
General	V1.0	02/20	17.4	Active Transport Facilities	Please refer to the <a href="#">Green Star Cyclist Facilities credit guidance document</a> for some additional guidance on achieving points for cycling facilities on your project.
General	V1.0	07/20	17.4	Active Transport Facilities	Credit 17.4 Active Transport Facilities in Green Star Design & As-Built has been updated based on the feedback that NZGBC received and in-depth consultation with industrial professionals, the updates include changing the end-of-trip facilities requirements for Regular Occupants and its worked example. The updated credit <a href="#">here</a> shall be used for Green Star projects and it supersedes the one included in the Submission Guidelines.
General	V1.0 & v1.1	09/22	17B.4 or 17.5	Sustainable Transport Prescriptive Pathway-Walkable Neighbourhoods	To confirm amenities are within 400m or 800m of the project, the site plan should show the measured walking distance (instead of the radial distance) from the centre of the project following a designated path to the amenity to meet the credit requirement.  Note: The name of the criterion is Walkable Neighbourhoods. Its intent is to show that the amenity can be reached within a walkable distance (400-800m).
<b>18. Potable Water</b>					
General	V1.1	06/21	18	Potable Water	Rainfall data for NIWA weather stations can be found on the Cliflo website -> <a href="#">Welcome to the Climate Database (niwa.co.nz)</a>  Users (once subscribed) can choose a weather station and then the relevant data set.  It is acceptable to choose the last 10 years of data to get daily rainfall data for each of the last 10 years, and then to average each day over a ten-year period in order to have a data set that is the average rainfall for each calendar day for the last 10 years.
General	V1.0	04/22	18	Potable Water	Where a project cannot provide WELS certifications to demonstrate compliance for the Potable Water credit, onsite testing results can be acceptable in place of WELS certifications. In this case, the onsite testing should follow the Appendix F Onsite Compliance Schedule in the Homestar v5 <a href="https://12253-console.memberconnex.com/Attachment?Action=Download&amp;Attachment_id=44934">https://12253-console.memberconnex.com/Attachment?Action=Download&amp;Attachment_id=44934</a> . In order to achieve the point, the testing results still need to achieve the efficiency of the nominated fixture WELS rating as required in the Green Star Submission Guidelines.
General	V1.0	06/22	18	Potable Water	For existing buildings, refurbishment projects with no alterations to the stormwater catchment can be awarded 1 point for Stormwater Peak Discharge by providing a letter from the building owner stating that there have been no changes to the stormwater catchment (e.g. roofs, site landscaping, existing stormwater infrastructure etc.) as part of the project and therefore there is no increase in the post-development peak stormwater flows.

Clarification type	Tool Version	Month Released	Sub-Credit No.	Sub-Credit Name.	Amendment/Approved Ruling
General	V1.0	06/21	18B.1	Prescriptive Pathway- Sanitary Fixture Efficiency	Where specialist water fixtures and fittings are used e.g. anti-ligature in mental health faculties, project teams may still achieve points by demonstrating the specialist water fixtures and fittings are best in class, instead of meeting WELS requirements in the Submission Guidelines.
General	V1.0	10/19	18B.1	Sanitary Fixture Efficiency	Shower benchmarks for hotel developments in the Potable Water credit have recently undergone internal and external review. The current benchmark for showers is set at 3 Star WELS (9l/m). At the conclusion of the review, for hotel developments only, the shower benchmarks are changed from 3 Star WELS to 2 Star WELS (12l/m). All other benchmarks in the calculator remain unchanged, as does the methodology for populating the calculator. The amended calculator reflecting the changes can be provided by the NZGBC upon request via a free technical question. This change will be updated in future versions of the Green Star rating tools.
Project specific	V1.0	11/20	18B.1	Sanitary Fixture Efficiency	For the purposes of the Potable water credit 18B.1, the following fixtures and fittings may be excluded, as the water consumption will not be altered significantly by reducing the water flow: <ul style="list-style-type: none"> <li>Bath taps, laboratory taps, and taps dedicated to cleaning and facility management.</li> <li>Kitchen or café tap ware, where the primary use is for pot fill and container filling.</li> </ul> Kitchen/ Café Chilled, Boiling and Sparkling tap ware which are used to fill cups
General	V1.0	11/20	18B.1	Sanitary Fixture Efficiency	Water efficiency should be incorporated into the anti-ligature sanitary fixtures. Pressure needs to be put onto manufacturers of the products to make water efficient products that suit the application to move the industry forward.
General	V1.0	11/20	18B.1	Sanitary Fixture Efficiency	For showers, the water efficiency requirement is within one star of the Category F under WELS rating, which means showers must be either: <ul style="list-style-type: none"> <li>3 star Range E (6.0 - 7.5 L/min); or,</li> <li>3 Star Range F (4.5 - 6.0 L/min); or,</li> <li>4 Star Range E (6.0 - 7.5 L/min); or,</li> <li>4 Star Range F (4.5 - 6.0 L/min)</li> </ul> Note that a 3 Star WELS rating high pressure shower sitting at the range of 7.5-9L/m isn't compliant.
<b>19. Life Cycle Impact</b>					
<b>20. Responsible Building Materials</b>					
General	V1.0	10/19	20.2	Responsible Building Materials - Timber	If the 'Responsible Building Materials - Timber' credit criterion is made 'Not Applicable', the project is not eligible to claim the innovation point for timber furniture.

Clarification type	Tool Version	Month Released	Sub-Credit No.	Sub-Credit Name.	Amendment/Approved Ruling
General	V1.0	11/20	20.3	Permanent Formwork, Pipes, Flooring, Blinds and Cables	For the auditing requirements of the <a href="#">Best Practice Guidelines for PVC</a> , an appropriate method of compliance can be a simple statement that a limited assurance review according to ASAE 3100 Compliance Engagements has been completed.
General	V1.0	11/20	20.3	Permanent Formwork, Pipes, Flooring, Blinds and Cables	Is carpet underlay included as 'flooring' in Green Star? Yes, carpet underlay should be included as flooring for the purpose of the credit criteria Responsible Materials: Permanent Formwork, Pipes, Flooring, Blinds and Cables"
General	V1.0	11/20	20.3	Permanent Formwork, Pipes, Flooring, Blinds and Cables	An AA1000 Licensed Assurance Provider can provide Auditor Verification for Green Star PVC certification. The AA1000 Account-Ability Standards, an international methodology for sustainability-related assurance engagements, is considered an 'equivalent national or international auditor accreditation system' as endorsed by the Vinyl Council. A Licenced-Assurance Provider under this standard is qualified to sign off on PVC best practice audit/assurance documentation.
<b>21. Sustainable Products</b>					
General	V1.0	10/19	21	Sustainable Products	Costs entered into the Sustainable Products Calculator can either include or exclude labour and transport. However, this must be consistent for all costs entered. As such, all individual product costs, and the project's PCV, will either include or exclude labour and transport costs. Where project teams are provided with some costs that include labour and transport, and some that exclude it, it is acceptable to choose one approach (i.e. include or exclude these costs) and then adjust the non-conforming figures accordingly. As an example, the product costs available to a project team for loose furniture and floor coverings excludes labour and transport, but all other product costs include it. In this case, the project team could make educated estimates for the labour and transport costs associated with the installation of loose furniture and floor coverings and add these costs to the original values provided. If this kind of adjustment is performed, please describe the methodology and justification for these calculations in the credit's Submission Template.
General	V1.0	05/20	21	Sustainable Products	Up to 3 points are available when a proportion of all materials used in the project meet transparency and sustainability requirements under one of the following initiatives: Reused Products, Recycled Content Products, Environmental Product Declarations, Third-Party Certification, or Stewardship Programs.  As per the Submission Guidelines, Third-Party Certification levels A, B & C are defined in the GBCA's Framework for Product Certification Scheme. However, New Zealand projects are encouraged to use Third-Party Certifications listed on our website if the certification schemes are not defined in the GBCA's Framework for Product Certification Scheme as stated in the Submission Guidelines. This table will be reviewed again in December 2021.
General	V1.0	07/20	21	Sustainable Products	As per the Submission Guidelines, Third-Party Certification levels A, B & C are defined in the GBCA's Framework for Product Certification Scheme. However, New Zealand projects are encouraged to use Third-Party Certifications listed on our website <a href="#">here</a> if the certification schemes are not defined in the GBCA's Framework for Product Certification Scheme as stated in the Submission Guidelines. This table will be reviewed again in December 2021.

Clarification type	Tool Version	Month Released	Sub-Credit No.	Sub-Credit Name.	Amendment/Approved Ruling
General	V1.0	07/21	21	Sustainable Products	The credit of Sustainable Products takes account of all the products and materials including any interiors installed building services. Responsible and sustainable service systems that meet transparency and sustainability requirements in the credit can contribute to achieved points. Base building provided items are excluded from the assessment of this credit for an Interiors rating.
General	V1.0 & V1.1	05/22	21	Sustainable Products	<p>This TC supersedes the TC issued in July 2020 for Sustainable Products.</p> <p>The Eco-labels table which is found through this link <a href="#">here</a> has been reviewed and a new standard by Good Environmental Choice Australia (GECA) has been recognised for Sustainable Products and services undergoing a Life Cycle Assessment ( GECA SPSv2.0-2020 - 'Sustainable Products and Services (Life Cycle Assessment) ). To be eligible for this standard a client must first undergo an LCA, once the LCA has been completed they are required to meet a benchmark for best practice in their field. Once the benchmark is met, they can proceed to begin the ecolabel assessment under the Sustainable products and services standard.</p>
General	V1.1	05/22	21	Sustainable Products	<p>NZGBC understands that concrete is a challenging product to provide compliant EPDs for Green Star assessment, given that each batch can be made to a different recipe, yet EPDs focus on “standard” products. The technical solution for this (process EPDs) is an expensive option for New Zealand’s relatively small market size with relatively little uptake of supplementary cementing materials (SCMs) in concrete to date.</p> <p>To tackle this issue, NZGBC provides the following progressive pathways for concrete manufacturers to show Green Star compliance. Before 1st January 2024, EPDs for concrete can be recognised where:</p> <p>The concrete manufacturer has an EPD covering their major standard concrete mix designs, AND</p> <p>The concrete manufacturer provides a declaration akin to an EPD (but without verification) from a reputable source. Reputable sources include:</p> <p>The Global Cement and Concrete Association EPD Tool</p> <p>An in-house LCA calculator verified by an independent third party</p> <p>After 1st January 2024, EPDs for concrete will only be recognised where:</p> <p>The exact product is covered by an EPD (i.e., the customer purchases a standard mix design, or the concrete manufacturer creates a customer specific EPD), OR</p> <p>The specified product has a carbon footprint within +/-5% (for modules A1-A3) of a product declared in the EPD. The two products must have the same compressive strength (MPa) and a cement content within +/-0.5% weight/weight. The similarity in the carbon footprint must be proven through a reputable tool.</p>
General	V1.0 & V1.1	12/23	21	Sustainable Products	<p>The dates in the previously issued TC are being pushed back by one year to January 1st, 2025.</p> <p>We understand the challenge of providing product specific EPD’s for concrete, and we will continue to work with the concrete industry to come up with a more permanent solution.</p>

Clarification type	Tool Version	Month Released	Sub-Credit No.	Sub-Credit Name.	Amendment/Approved Ruling
					<p><b>Before 1st January 2025</b>, EPDs for concrete can be recognised where:</p> <ul style="list-style-type: none"> <li>○ The concrete manufacturer has an EPD covering their major standard concrete mix designs, <u>AND</u></li> <li>○ The concrete manufacturer provides a declaration akin to an EPD (but without verification) from a reputable source. Reputable sources include: <ul style="list-style-type: none"> <li>▪ The Global Cement and Concrete Association EPD Tool</li> <li>▪ An in-house LCA calculator verified by an independent third party</li> </ul> </li> </ul> <p><b>After 1st January 2025</b>, EPDs for concrete will only be recognised where:</p> <ul style="list-style-type: none"> <li>○ The exact product is covered by an EPD (i.e., the customer purchases a standard mix design, or the concrete manufacturer creates a customer-specific EPD), <u>OR</u></li> <li>○ The specified product has a carbon footprint within +/-5% (for modules A1-A3) of a product declared in the EPD. The two products must have the same compressive strength (MPa) and a cement content within +/-0.5% weight/weight. The similarity in the carbon footprint must be proven through a reputable tool.</li> </ul>
<b>22. Construction and Demolition Waste</b>					
General	V1.0	12/20	22	Construction and Demolition Waste	Project teams can refer to the REBRI standard (as stated here <a href="https://www.branz.co.nz/sustainable-building/reducing-building-waste/assessing-waste/volume-weight/">https://www.branz.co.nz/sustainable-building/reducing-building-waste/assessing-waste/volume-weight/</a> ) to undertake volume to weight conversion, instead of using the table for Waste Volume to Weight Conversion Factors in the Submission Guidelines.
General	V10	02/20	22	Construction and Demolition Waste	<p>The new Design and As-Built and Interiors tool, credit 22 has a minimum requirement that must be met BEFORE the other credits can be approved. The "Reporting Accuracy" credit criteria states the following: The minimum requirement is met where the waste contractors and waste processing facilities servicing the project demonstrate compliance with the <i>Green Star Construction and Demolition Waste Reporting Criteria</i>." <a href="#">Construction and Demolition Waste Reporting Criteria</a></p> <p>Where waste contractors or waste processing facilities do not hold a 'Compliance Verification Summary' (as explained in the credit criteria) they shall, at a minimum, disclose to the project team how much of the Reporting Criteria has been implemented. The 'Disclosure Statement' will take place of the 'Compliance Verification Summary' in the project team's submission. The Reporting Criteria and Disclosure Statements can be found here: <a href="https://new.gbca.org.au/construction-and-demolition-waste/">https://new.gbca.org.au/construction-and-demolition-waste/</a></p> <p>It is expected waste contractors or waste processing facilities will fill out the form in good faith and will show how they will be fully compliant with the Reporting Criteria within 12 months. If the waste contractors or waste processing facilities do not provide evidence of complying with the criteria or how the outstanding requirements will be complied within this timeline, the credit will not be awarded.</p>

Clarification type	Tool Version	Month Released	Sub-Credit No.	Sub-Credit Name.	Amendment/Approved Ruling
					<p>Waste contractors and waste processing facilities are given the 12 month implementation period only once.</p> <p>A simplified line diagram of the Criteria is attached. All effected parties are strongly encouraged to read the Reporting Criteria document.</p>
General	V1.0	05/21	22	Construction and Demolition Waste	<p>This TC is released to supersede the previous TC issued in May 2020 for credit 22.</p> <p>The new Design and As-Built and Interiors tool, Construction and Demolition waste credit (Credit 22) has a minimum requirement that must be met BEFORE the other credits can be approved. The "Reporting Accuracy" credit criteria states the following: "The minimum requirement is met where the waste contractors and waste processing facilities servicing the project demonstrate compliance with the Green Star Construction and Demolition Waste Reporting Criteria."</p> <p>Environmental Choice New Zealand (ECNZ) newly issued (EC-59-19) Construction &amp; Demolition Waste Services specification (found here <a href="https://environmentalchoice.org.nz/specifications/ec-59-19/">https://environmentalchoice.org.nz/specifications/ec-59-19/</a>) fulfils the Reporting Criteria minimum requirement.</p> <p>Therefore, if all the associated waste contractors and waste processing facilities are awarded a licence under this specification then the project meets the minimum requirement for this credit. Projects using ECNZ-licensed waste contractors also qualify for 1 credit related to 70% diversion from landfill, provided the ECNZ audit is completed withing two months after Practical Completion of the project in accordance with clause 6.3 c) of EC-59-19.</p>
General	V1.0	05/20	22.1	Construction & Demolition Waste- Reporting Accuracy	<p>The new Design and As-Built and Interiors tool, Construction and Demolition waste credit(Credit 22) has a minimum requirement that must be met BEFORE the other credits can be approved. The "Reporting Accuracy" credit criteria states the following: "The minimum requirement is met where the waste contractors and waste processing facilities servicing the project demonstrate compliance with the Green Star Construction and Demolition Waste Reporting Criteria."</p> <p>Environmental Choice New Zealand (ECNZ) newly issued (EC-59-19) Construction &amp; Demolition Waste Services specification (found here <a href="https://environmentalchoice.org.nz/specifications/ec-59-19/">https://environmentalchoice.org.nz/specifications/ec-59-19/</a>) fulfils the Reporting Criteria minimum requirement. Therefore, if all the associated waste contractors and waste processing facilities are awarded a licence under this specification then the project meets the minimum requirement for this credit.</p>
General	V1.1	11/21	22.1	Construction & Demolition Waste- Reporting Accuracy	<p>After extensive consultation with the New Zealand waste management industry the New Zealand Green Star Construction and Demolition Waste Reporting Criteria, or Reporting Criteria is released. It can be found <a href="#">here</a> on our website. All waste operators and waste processing facilities associated with Green Star projects pursuing the C and D waste credit in Design and As Built and Interiors NZ tools must be issued a Compliance Verification Summary which shows they are in compliance with the Reporting Criteria document.</p> <p>NZGBC has heard projects have stated they could not find Auditors to conduct the associated audits required for the Reporting Criteria. At the time of this TQ there are at least four organisations which have shown they have personnel which fulfil the Auditor Qualifications</p>

Clarification type	Tool Version	Month Released	Sub-Credit No.	Sub-Credit Name.	Amendment/Approved Ruling
					<p>in this document. In the interest of ensuring projects can find suitable auditors this list will be shared. NZGBC will NOT ensure this list is kept up to date. It is the responsibility of the project to ensure the Auditor is suitably qualified as per the Reporting Criteria document. The four organisations which have shown CVs of personnel which NZGBC understands can conduct these audits are:</p> <p>Organisation: Toitu Envirocare. Chris Bailey <a href="mailto:chris.bailey@toitu.co.nz">chris.bailey@toitu.co.nz</a></p> <p>Organisation: Tonkin and Taylor. Hannah Kelly <a href="mailto:hkelly@tonkintaylor.co.nz">hkelly@tonkintaylor.co.nz</a></p> <p>Organisation: ESG Audit Ltd. Anna D'Arcy <a href="mailto:anna@esgaudit.co.nz">anna@esgaudit.co.nz</a></p> <p>Organisation: Sunshine Yates Consulting. Sunshine Yates <a href="mailto:sunshine@sunshineyatesconsulting.co.nz">sunshine@sunshineyatesconsulting.co.nz</a></p>
General	V1.0	07/20	22.2	Percentage Benchmark	<p>In the Appendix for Non-Innovation claims, the Submission Guidelines state that improving on the benchmark for Construction and Demolition Waste: Percentage Benchmark will not be awarded an Innovation. This is contradictory and incorrect.</p> <p>The Innovation point is available to be awarded. The last line of the Submission Guidelines regarding Construction and Demolition Waste: Percentage Benchmark can be ignored.</p>
<b>23. Sustainable Sites</b>					
<b>24. Light Pollution</b>					
General	V1.1 & v1.0	10/19	24	Light Pollution	Skylights are not considered external for the Light Pollution credit. Where luminaires are mounted within an atrium or skylight, these must be included as an external light source.
General	V1.0	06/21	24	Light pollution	This is to clarify that light pollution to existing neighbouring buildings within campus may be excluded from the criteria for light pollution to neighbouring bodies.
General	V1.0	04/22	24	Light Pollution	<p>A newer version of AS4281 was released in 2019. The following values from Table 2.1 of AS 4282:2019 can be applied for compliance.</p> <ul style="list-style-type: none"> <li>- For Class 2 buildings (residential), the values are in Columns 4 and 5; or</li> <li>- For Class 3 to 9 buildings (non-residential), the values can be found in Column 3.</li> </ul> <p>We understand that the standards can be renewed overtime. Therefore, the project team may use a newer version of the standard that is required by the District Plan for the project.</p>
<b>25. Microbial Control</b>					



Clarification type	Tool Version	Month Released	Sub-Credit No.	Sub-Credit Name.	Amendment/Approved Ruling
<b>26. Refrigerant Impacts</b>					
<b>27. Innovation</b>					
General	V1.0	11/20	27.2	Market Transformation	<p>The following guidance is provided for projects wanting to target the Soft Landings Framework innovation point in the Commissioning and Tuning credit.</p> <p><b><u>Minimum Compliance</u></b></p> <p>All compliance requirements as per Credit 2: Commissioning and Tuning must be achieved prior to pursuing the 'Soft Landings Framework Innovation credit'.</p> <p><b><u>Documentation Requirements</u></b></p> <p><b>Design Review Submission</b></p> <ul style="list-style-type: none"> <li>Documentation to support how the 'Soft Landings Framework' approach will be implemented throughout the design, construction, commissioning and tuning phases; including meeting minutes and commissioning plans;</li> <li>CV of the project's Commissioning Agent detailing the qualifications and experience relevant to the project; and</li> <li>Confirmation from the building owner that indicates their commitment to incorporate the principles of the 'Soft Landings Framework' throughout design, construction, commissioning and into building operation.</li> </ul> <p><b>As Built Submission</b></p> <ul style="list-style-type: none"> <li>Supporting documentation to support how the 'Soft Landings Framework' approach was implemented throughout the design, construction, commissioning and tuning phases. Where the tuning phase may not have been undertaken at the time of submission, documentation should support how it will be implemented.</li> <li>Meeting minutes and workshop notes demonstrating involvement of the design team in the development and implementation of the 'Soft Landings Framework' throughout design, construction and commissioning, all stages of checklist completed as per the soft landing framework relevant at the time of submission and checklist for all future stages.</li> </ul>

Clarification type	Tool Version	Month Released	Sub-Credit No.	Sub-Credit Name.	Amendment/Approved Ruling												
					<ul style="list-style-type: none"><li>CV of the project’s Commissioning Agent detailing the qualifications and experience relevant to the project; and</li><li>Confirmation from the building owner that demonstrates the building owner’s commitment to incorporate the principles of the ‘Soft Landings Framework’ in to building operation.</li><li>Any other evidence to support claims made by the project team.</li></ul>												
General	V1.0	11/20	27.3	Improving on benchmarks	<p>For the Innovation - Improving on Green Star Benchmarks credit criterion in <i>Green Star - Interiors v1.2</i>, where it states:</p> <table><tr><td>Credit</td><td>Criterion</td><td>Benchmark</td></tr><tr><td>Indoor Pollutants</td><td>Ultra Low VOC paints</td><td>One (1) additional point may be awarded where over 50% of paints (by cost) specified in the building have a maximum TVOC content of 5g/L. This must be verified by one of the approved paint test methods. Theoretical TVOC calculations are not acceptable for this Innovation claim.</td></tr></table> <p>The following can be used instead:</p> <table><tr><td>Credit</td><td>Criterion</td><td>Benchmark</td></tr><tr><td>Indoor Pollutants</td><td>Ultra Low VOC paints</td><td>One (1) additional point may be awarded where over 50% of paints (by volume) specified in the building have a maximum TVOC content of 5g/L. This must be verified by one of the approved paint test methods. Theoretical TVOC calculations are not acceptable for this Innovation claim.</td></tr></table>	Credit	Criterion	Benchmark	Indoor Pollutants	Ultra Low VOC paints	One (1) additional point may be awarded where over 50% of paints (by cost) specified in the building have a maximum TVOC content of 5g/L. This must be verified by one of the approved paint test methods. Theoretical TVOC calculations are not acceptable for this Innovation claim.	Credit	Criterion	Benchmark	Indoor Pollutants	Ultra Low VOC paints	One (1) additional point may be awarded where over 50% of paints (by volume) specified in the building have a maximum TVOC content of 5g/L. This must be verified by one of the approved paint test methods. Theoretical TVOC calculations are not acceptable for this Innovation claim.
Credit	Criterion	Benchmark															
Indoor Pollutants	Ultra Low VOC paints	One (1) additional point may be awarded where over 50% of paints (by cost) specified in the building have a maximum TVOC content of 5g/L. This must be verified by one of the approved paint test methods. Theoretical TVOC calculations are not acceptable for this Innovation claim.															
Credit	Criterion	Benchmark															
Indoor Pollutants	Ultra Low VOC paints	One (1) additional point may be awarded where over 50% of paints (by volume) specified in the building have a maximum TVOC content of 5g/L. This must be verified by one of the approved paint test methods. Theoretical TVOC calculations are not acceptable for this Innovation claim.															
General	V1.0	11/20	27.3	Improving on benchmarks	<p>What do I provide to target Improving on Green Star Benchmarks for “Supplementary or Tenancy Fitout Systems Review”?</p> <p>When pursuing the "Supplementary or Tenancy Fitout Systems Review credit" under the Improving on Green Star Benchmarks Innovation pathway, the following are documentation requirements apply.</p> <p><b><u>Design Review Submission</u></b></p> <ul style="list-style-type: none"><li>Submission Template</li><li>CV of the project’s Commissioning Agent; and</li><li>Confirmation from the building owner that indicates the building owner’s commitment to incorporate the Supplementary or Tenancy Fitout Systems Review as a part of the services and maintainability review.</li><li>Scope of Works for the ICA.</li></ul> <p><b><u>As Built Submission</u></b></p>												

Clarification type	Tool Version	Month Released	Sub-Credit No.	Sub-Credit Name.	Amendment/Approved Ruling
					<ul style="list-style-type: none"> <li>Supporting documentation to support a comprehensive services and maintainability review of supplementary or tenancy fitout systems, in addition to all nominated base building systems as outlined the design, construction, commissioning and tuning phases; including meeting minutes and commissioning plans;</li> <li>CV of the project's Commissioning Agent; and</li> <li>A copy of the 'Service and Maintainability Report' evidencing the tenant systems was included in the review.</li> </ul> <p>All other requirements as per submission guidelines</p>
General	V1.0	4/20	27.4	Innovation Challenge	The compliance requirements for the Occupant Engagement Innovation Challenge have been updated. The update requires the post-occupancy survey to be completed at least 12 months after practical completion to ensure that occupants have experienced the building through all the seasons. The survey should, however, be completed as near as practicably possible to the 12 months post practical completion date. The updated Innovation Challenge can be found <a href="#">here</a>
General	V1.0	11/20	27.4	Innovation Challenge	<p>Can I use a Leesman survey to measure occupant satisfaction?</p> <p>Yes, however a technical question to demonstrate your approach must be submitted to the NZGBC for review and approval.</p> <p>The NZGBC approves in principle the use of a Leesman survey as an alternative method of compliance, on the basis that the survey core question set is expanded to address in detail occupant satisfaction, including the assessment of occupant well-being and interaction with their indoor environment.</p>
General	V1.0	11/20	27.5	Global Sustainability	<p>Can projects target the 6.1 Green Cleaning Policy credit from Green Star - Performance under the Innovation category?</p> <p>Yes. Projects pursuing a certification under Green Star - Design &amp; As Built, Green Star - Interiors may target credit 6.1 Green Cleaning Policy from Green Star - Performance v1.2 under the Global Sustainability credit.</p> <p>One (1) point is available where all compliance requirements for credit 6.1 Green Cleaning Policy from the Green Star - Performance v1.2 submission guidelines are addressed. This is on the condition that the Green Cleaning Policy must be implemented for a minimum of 10 years.</p>
General	V1.0 & V1.1	02/23	27.5	Global Sustainability - Digital Infrastructure	Digital Infrastructure can no longer be claimed as an Innovation under credit 29.5 Global Sustainability in the Design & As Built NZv1.0 and v1.1 tool. Digital Infrastructure initiatives that are limited to the boundary and immediate area outside of commercial buildings is deemed as standard industry practice and therefore is no longer Innovative.